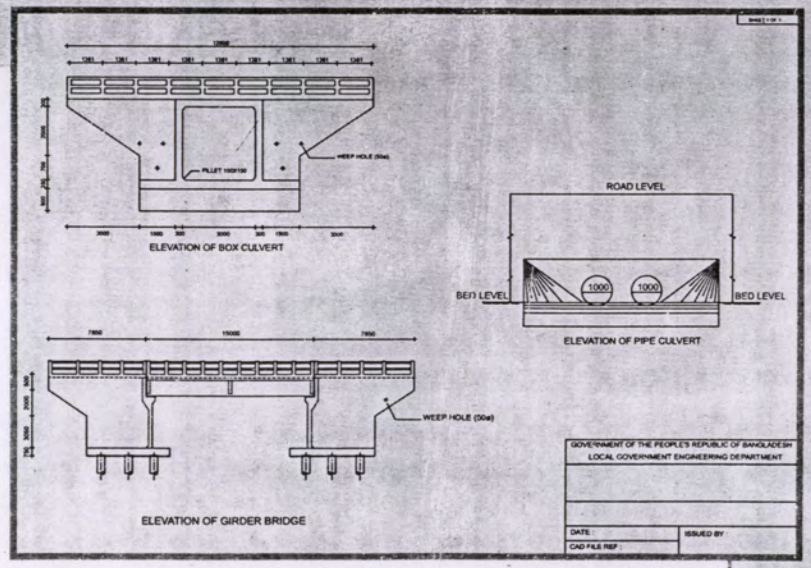
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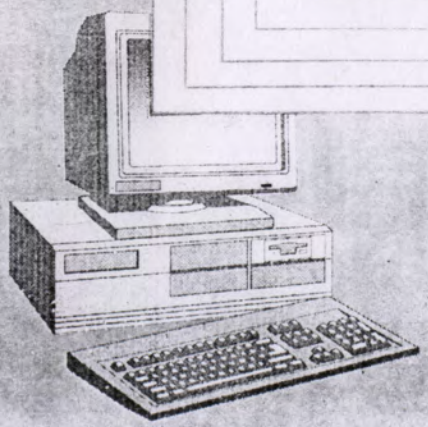
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT & COOPERATIVES

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

ROAD STRUCTURES MANUAL

PART B: STANDARD DESIGNS





VOLUME - 2

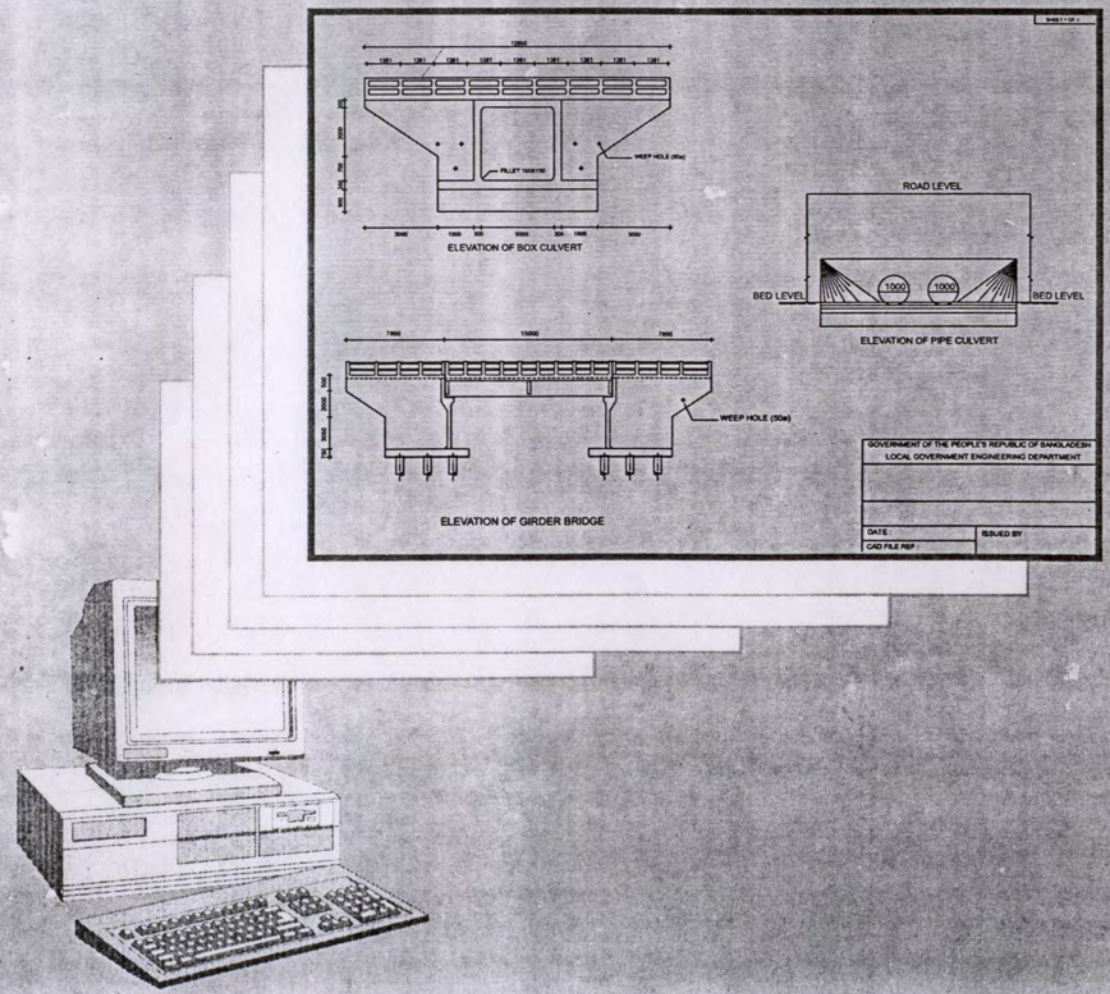
SLAB CULVERT
GIRDER BRIDGE
BRICK ABUTMENT
RCC OPEN ABUTMENT

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CARE BANGLADESH

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SLAB CULVERT

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SELECTION OF STANDARD DESIGN

SLAB CULVERTS :

Introduction

Standard design of slab culverts with span length ranging from 1.5m to 5.5m with an increment of 0.5m and having three types of live loading AASHTO H10, H15, and H20 are presented in the Manual. Each structure has been assigned a reference code based on span length and type of loading.

Procedure of Selection

Selection of a slab culvert will be determined by following the flow chart given in Chapter 13 of Part A of the Manual. For FRB 3.66m carriageway width (cw) and H20 loading, for RR1 & RR2 3.66m (cw) and H15 loading and for RR3 2.44m (cw) and H10 loading will be followed. Detailed drawings of the required culvert(s) along with schedule are available in this section.

Selection of a suitable structure may also be done with the assistance of Structure WORKS, a computer software. See Part C of the Road Structure Manual for more information.

Quantity Estimate

The estimates of quantities involving different items of works are presented in the form of a Table in the following pages. Estimate for a particular design can be obtained from these tables.

The items of works whose quantities depend on the particular site conditions are included in the table, but their quantities are kept blank. Those are to be determined after actual field measurements.

In preparing the bill of quantities the full description of the related items should be taken from Chapter 16-Bill of Quantities.

List of all Slab culverts are summarized below :

Structure List of Slab Culverts

Sl. No.	Reference Code	Structure Description	Page No.
1	GNRL\S000R201	General Arrangement Slab Culvert; CW 3.66; Full Depth Abutment	SC-1
2	GNRL\S000R101	General Arrangement Slab Culvert; CW 2.44; Full Depth Abutment	SC-2
3	GNRL\S000S201	General Arrangement Slab Culvert; CW 3.66; Stub Abutment	SC-3
4	GNRL\S000S101	General Arrangement Slab Culvert; CW 2.44; Stub Abutment	SC-4
5	GNRL\S000B201	General Arrangement Slab Culvert; CW 3.66; Brick Abutment	SC-5
6	GNRL\S000B101	General Arrangement Slab Culvert; CW 2.44; Brick Abutment	SC-6
7	GNRL\S000O201	General Arrangement Slab Culvert; CW 3.66; Open Abutment	SC-7
8	GNRL\S000O101	General Arrangement Slab Culvert; CW 2.44; Open Abutment	SC-8
9	CULV\S0101501	Slab Culvert; Load H10; S1.5m;	SC-9
10	CULV\S0102001	Slab Culvert; Load H10; S2.0m;	SC-10
11	CULV\S0102501	Slab Culvert; Load H10; S2.5m;	SC-11
12	CULV\S0103001	Slab Culvert; Load H10; S3.0m;	SC-12
13	CULV\S0103501	Slab Culvert; Load H10; S3.5m;	SC-13
14	CULV\S0104001	Slab Culvert; Load H10; S4.0m;	SC-14
15	CULV\S0104501	Slab Culvert; Load H10; S4.5m;	SC-15
16	CULV\S0105001	Slab Culvert; Load H10; S5.0m;	SC-16
17	CULV\S0105501	Slab Culvert; Load H10; S5.5m;	SC-17
18	CULV\S0201501	Slab Culvert; Load H15; S1.5m;	SC-18
19	CULV\S0202001	Slab Culvert; Load H15; S1.5m;	SC-19
20	CULV\S0202501	Slab Culvert; Load H15; S2.0m;	SC-20
21	CULV\S0203001	Slab Culvert; Load H15; S2.5m;	SC-21
22	CULV\S0203501	Slab Culvert; Load H15; S3.0m;	SC-22
23	CULV\S0204001	Slab Culvert; Load H15; S3.5m;	SC-23
24	CULV\S0204501	Slab Culvert; Load H15; S4.0m;	SC-24
25	CULV\S0205001	Slab Culvert; Load H15; S4.5m;	SC-25
26	CULV\S0205501	Slab Culvert; Load H15; S5.5m;	SC-26
27	CULV\S0301501	Slab Culvert; Load H20; S1.5m;	SC-27
28	CULV\S0302001	Slab Culvert; Load H20; S2.0m;	SC-28
29	CULV\S0302501	Slab Culvert; Load H20; S2.5m;	SC-29
30	CULV\S0303001	Slab Culvert; Load H20; S3.0m;	SC-30
31	CULV\S0303501	Slab Culvert; Load H20; S3.5m;	SC-31
32	CULV\S0304001	Slab Culvert; Load H20; S4.0m;	SC-32
33	CULV\S0304501	Slab Culvert; Load H20; S4.5m;	SC-33
34	CULV\S0305001	Slab Culvert; Load H20; S5.0m;	SC-34
35	CULV\S0305501	Slab Culvert; Load H20; S5.5m;	SC-35

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SLAB CULVERT

Quantity Estimate: The estimates of quantities of the various items of work required in the construction of slab culverts are presented below in E.Q. (Estimate of Quantities) Table No. 4. The estimates for a particular design loading can be obtained from this table by choosing the appropriate column corresponding to respective Design Loading. **E.Q. Table No. 4** contains only a brief description of the items intended for ready reference. In preparing the bill of quantities, the full description of items should be copied from 'Road Structural Manual, Part-A (Chapter 16. Table No. 16.1)' for the corresponding item numbers.

Estimate Of Quantities For Slab Culverts (Super-Structure)

E.Q Table No. 4

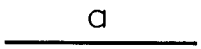
Clear Span (m)				1.5			2			2.5			3			3.5			4			4.5			5			5.5		
Carriage way Width (m)				3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44	3.66		2.44
Type of Loading				H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																											
1.	15	a) Reinforcement	Kg	330	310	175	465	430	240	590	525	315	725	660	395	860	780	460	975	915	550	1185	1085	660	1320	1250	745	1500	1400	875
2.	24	R.C.C Works (1:2:4)																												
		f) Deck Slab	Cu.m	2.10	2.10	1.50	2.65	2.65	1.90	3.50	3.50	2.30	4.80	4.80	2.65	5.50	5.50	3.65	6.65	6.65	4.10	7.40	7.40	4.55	9.30	9.30	5.80	10.15	10.15	6.35
		g) Wheel Guard/Curb	Cu.m	0.25	0.25	0.25	0.32	0.32	0.32	0.40	0.40	0.40	0.45	0.45	0.45	0.50	0.50	0.50	0.56	0.56	0.56	0.65	0.65	0.65	0.70	0.70	0.70	0.75	0.75	0.75
		m) Railing & Post	Cu.m	0.30	0.30	0.30	0.35	0.35	0.35	0.40	0.40	0.40	0.45	0.45	0.45	0.50	0.50	0.50	0.55	0.55	0.55	0.60	0.60	0.60	0.65	0.65	0.65	0.70	0.70	0.70
3.	26	Wearing Course (1:1.5:3.0)	Cu.m	0.40	0.40	0.30	0.50	0.50	0.35	0.55	0.55	0.40	0.65	0.65	0.45	0.70	0.70	0.50	0.80	0.80	0.60	0.90	0.90	0.60	1.00	1.00	0.70	1.05	1.05	0.70

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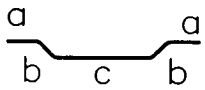
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SHEET 1 OF 1

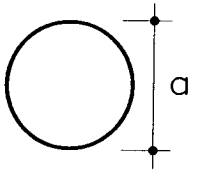
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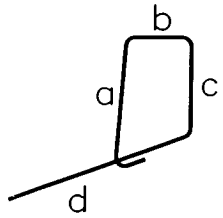
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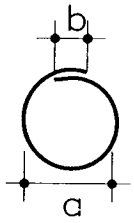
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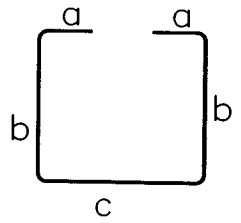
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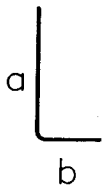
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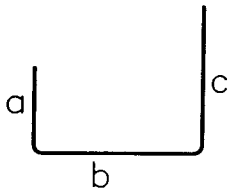
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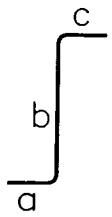
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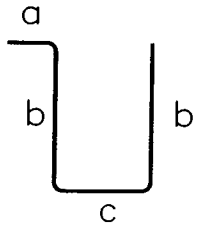
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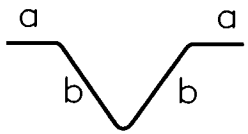
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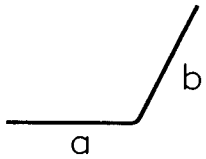
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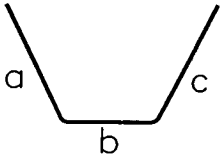
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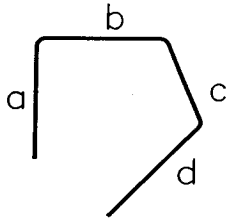
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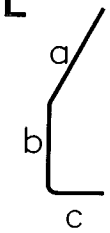
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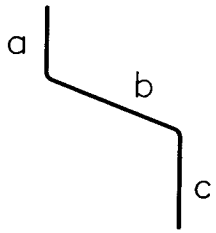
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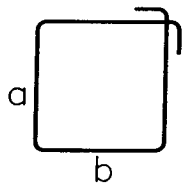
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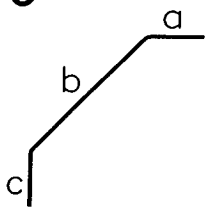
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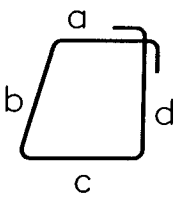
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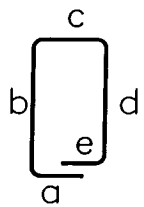
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STANDARD BAR SHAPE & SHAPE CODE

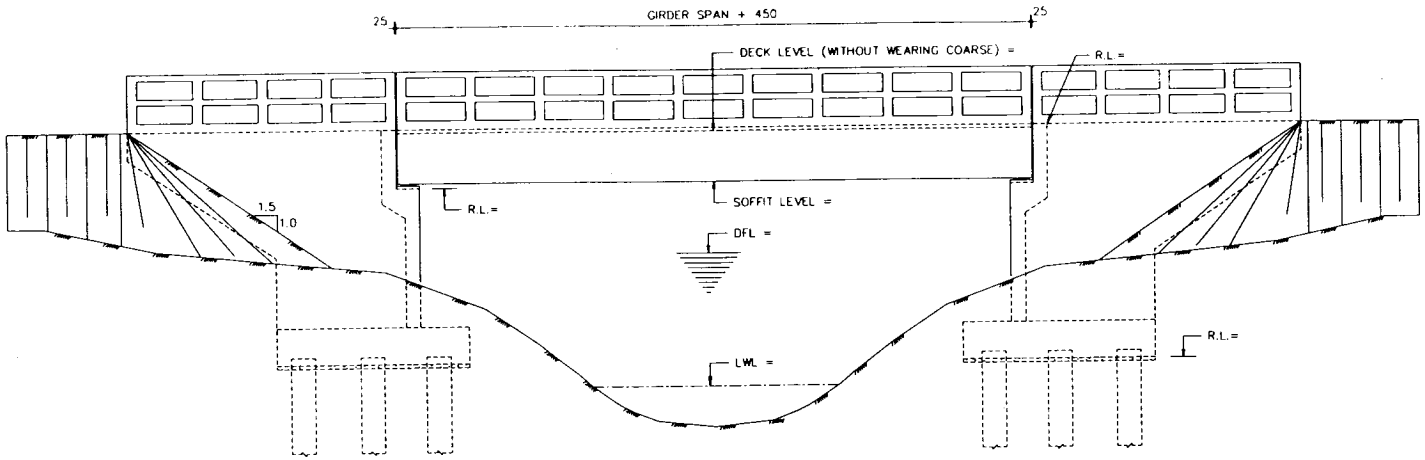
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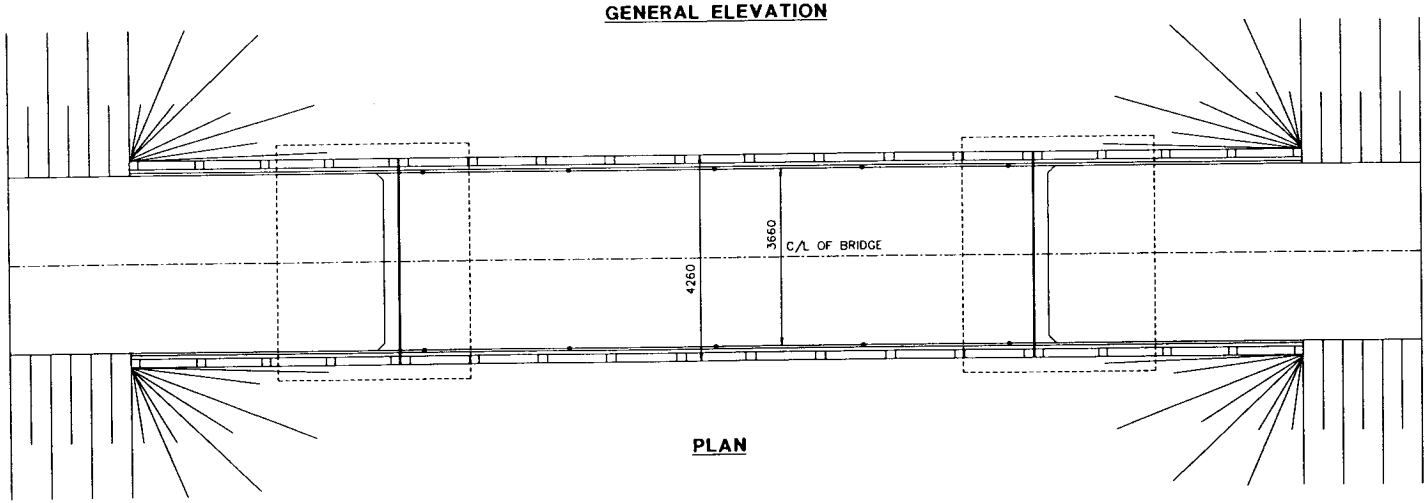
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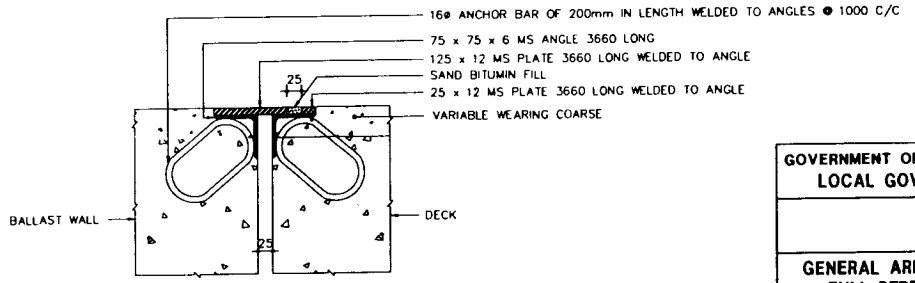
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

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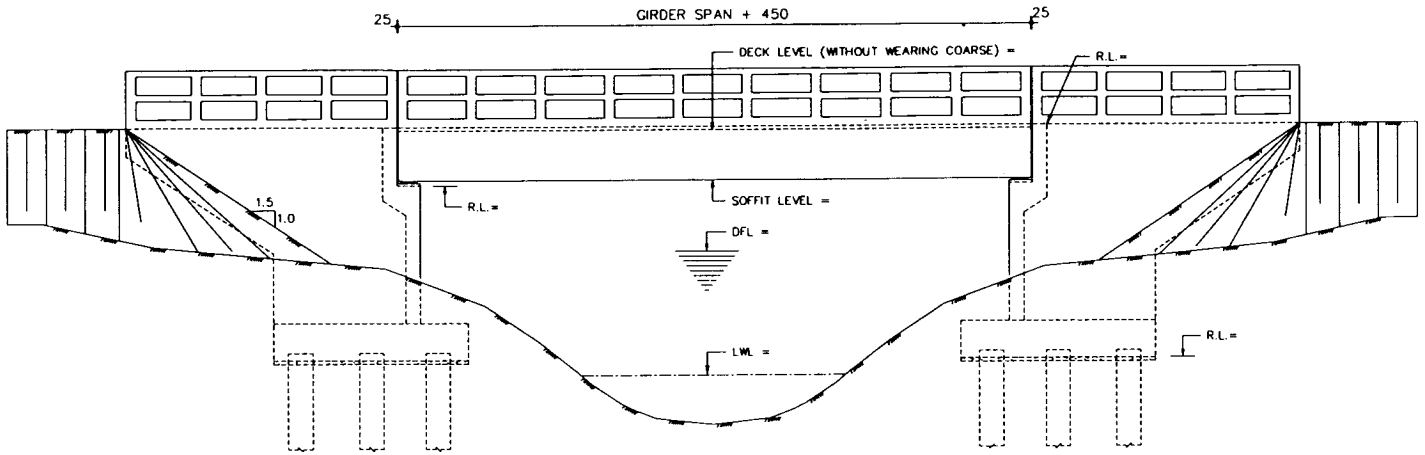
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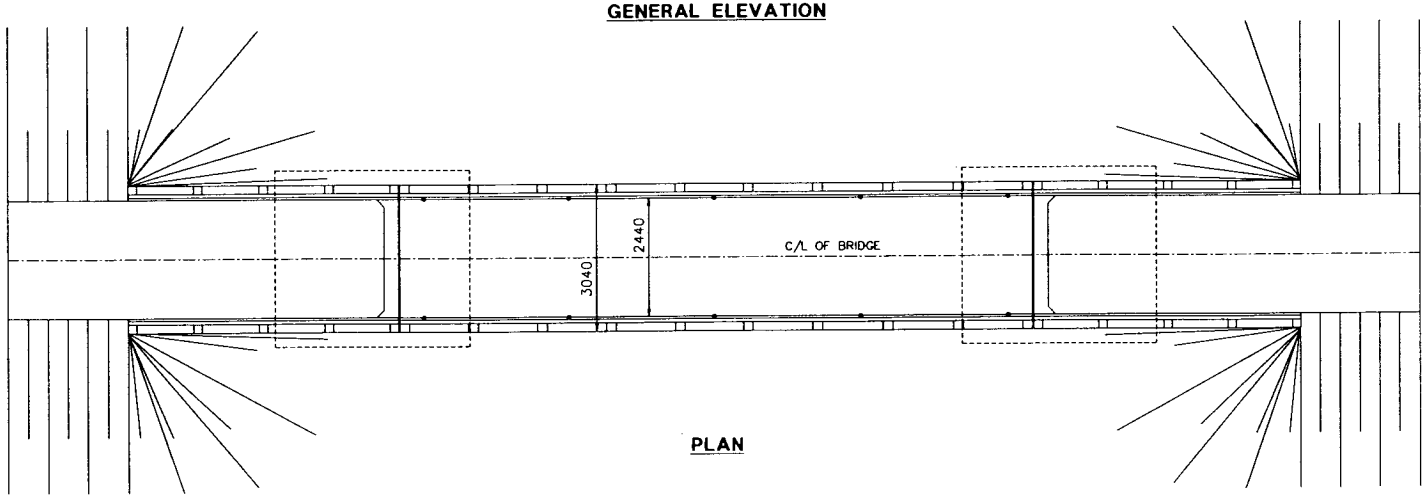
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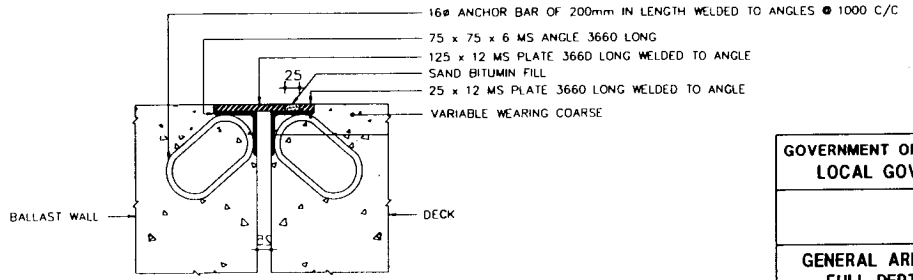
SHEET 1 OF 1
SIDEWALK — ■0



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

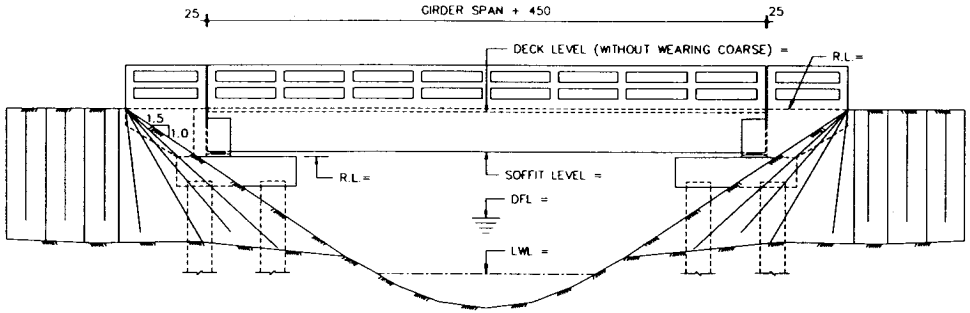
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
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GENERAL ARRANGEMENT OF SLAB CULVERT WITH FULL DEPTH ABUTMENT, DECK WIDTH : 3.04m.

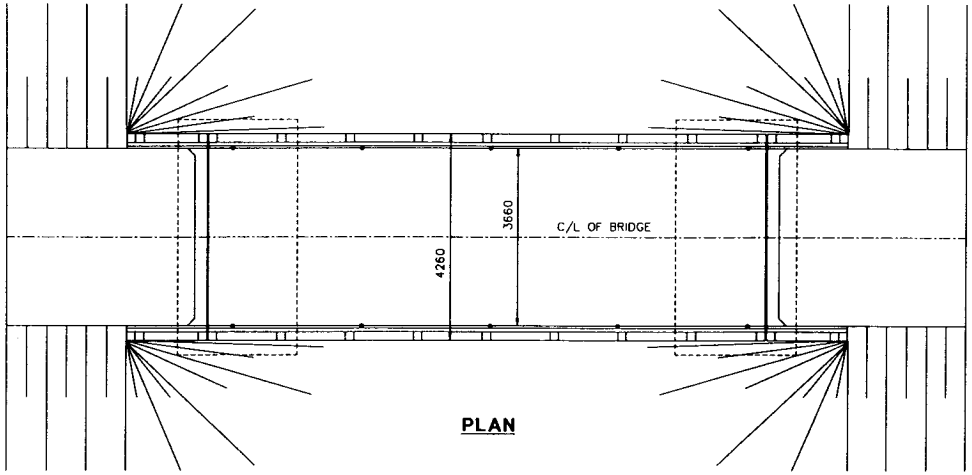
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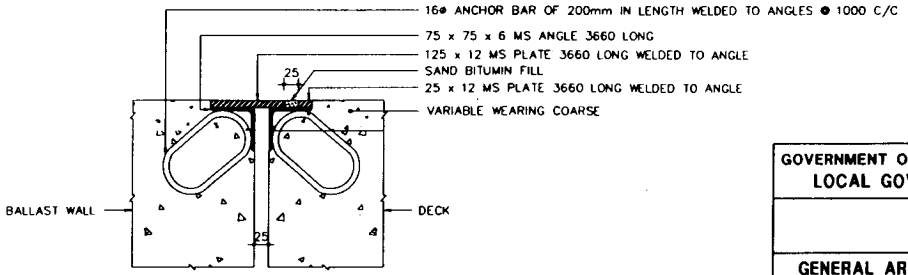
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

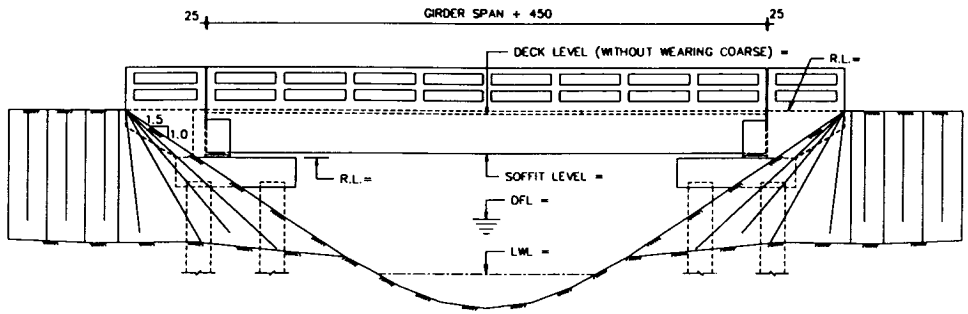
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

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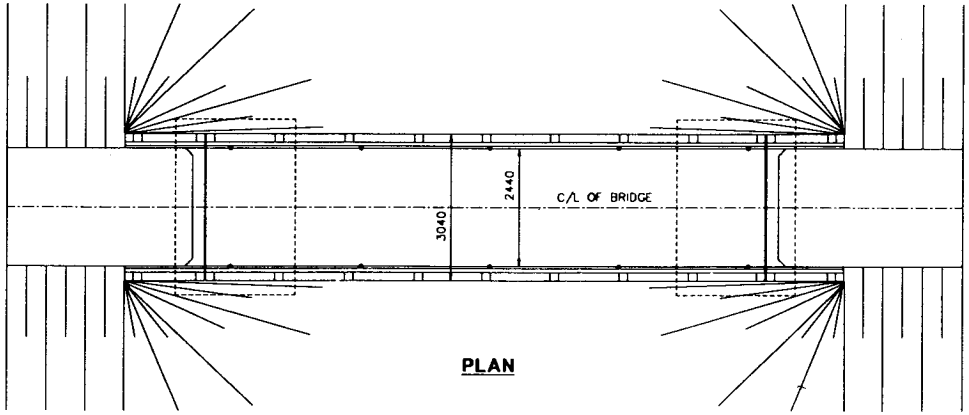
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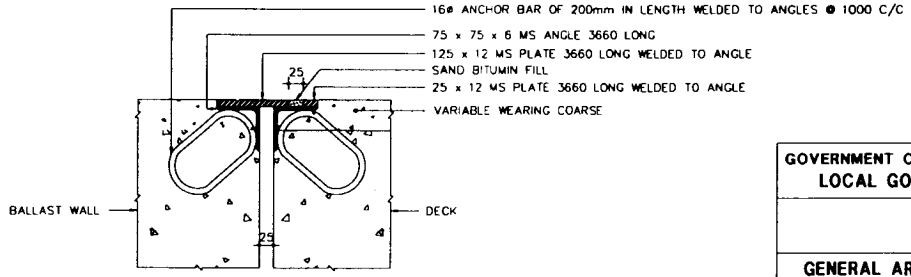
SHEET 1 OF 1
SIDEWALK - NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

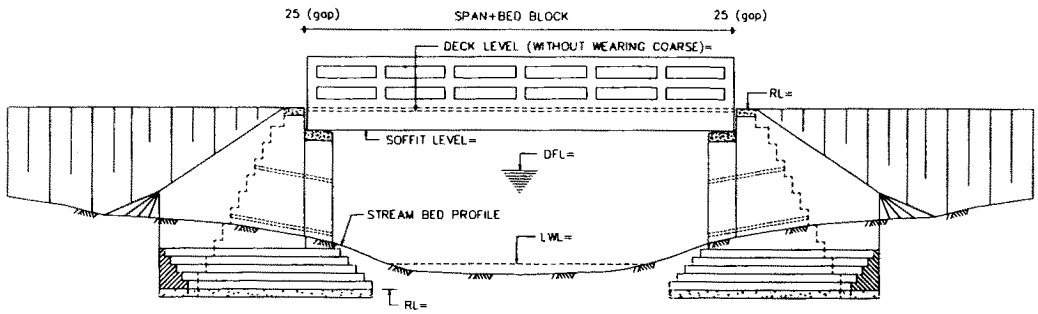
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF SLAB CULVERT WITH STUB ABUTMENT, DECK WIDTH : 3.04m.

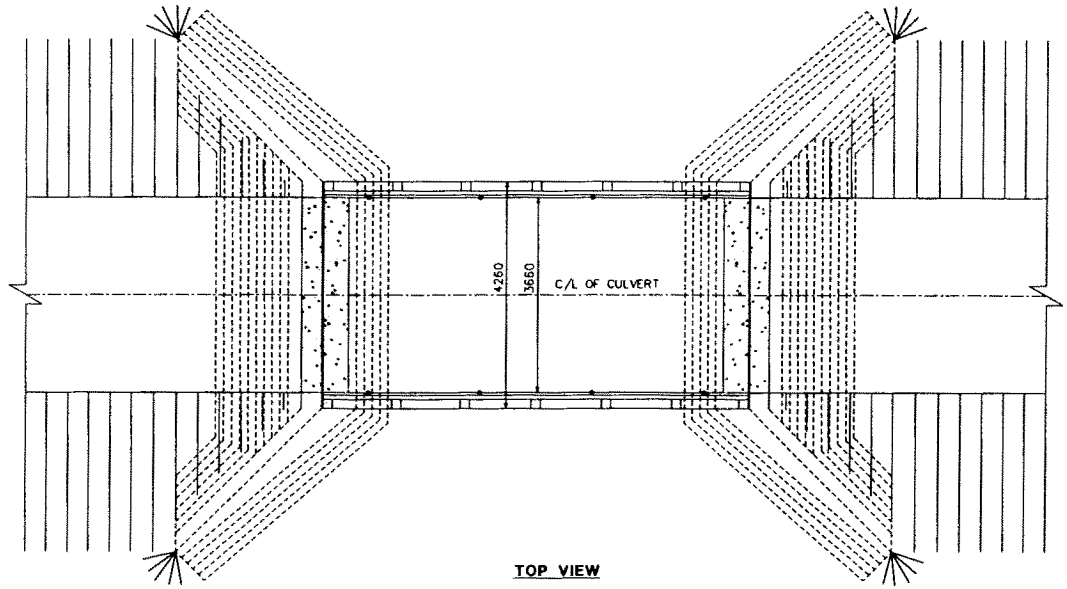
DATE :
ISSUED BY :
CAD FILE REF : GNRL\S000S101

Web Copy

SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



TOP VIEW

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. General Arrangment of Slab Culvert is hereby presented on the basis of Appropriate Combination of Structure as follows :
   A) Clear Slab Culvert Span : 5 m (Loading H10)
   B) Depth of Slab : 350 mm
   C) Brick Abutment Height : 3.5 m

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

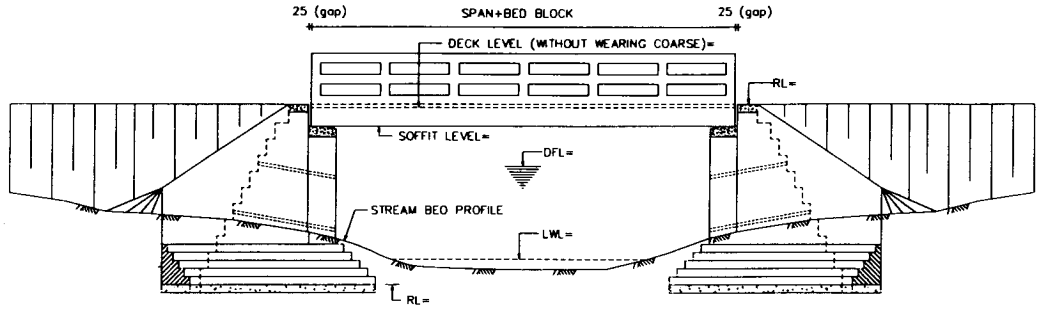
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF SLAB CULVERT WITH BRICK ABUTMENT., DECK WIDTH : 4.26m.

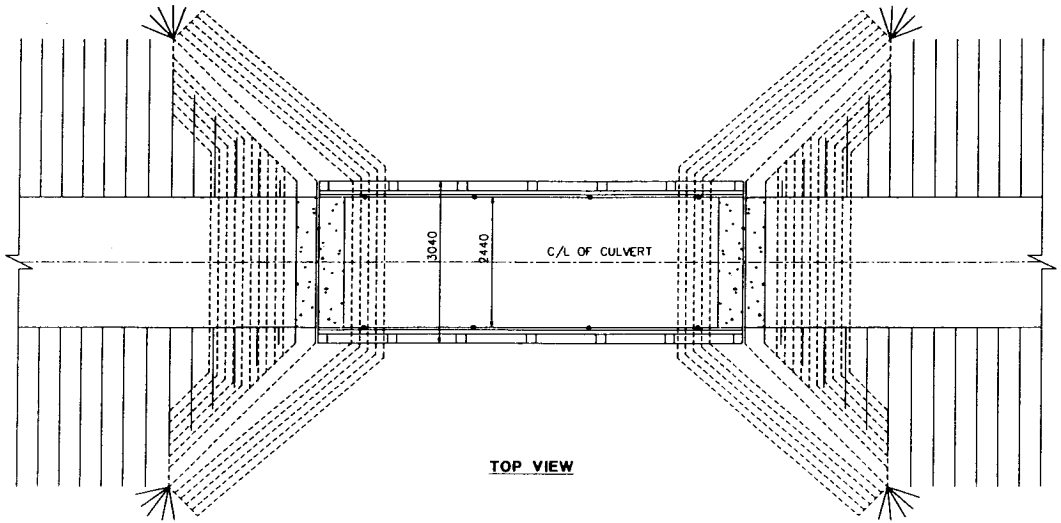
DATE :	ISSUED BY :
CAD FILE REF : GNRL\S000B201	

Web Copy

SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



TOP VIEW

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. General Arrangment of Slab Culvert is hereby presented on the basis of Appropriate Combination of Structure as follows :
   A) Clear Slab Culvert Span : 5 m (Loading H10)
   B) Depth of Slab : 350 mm
   C) Brick Abutment Height : 3.5 m

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

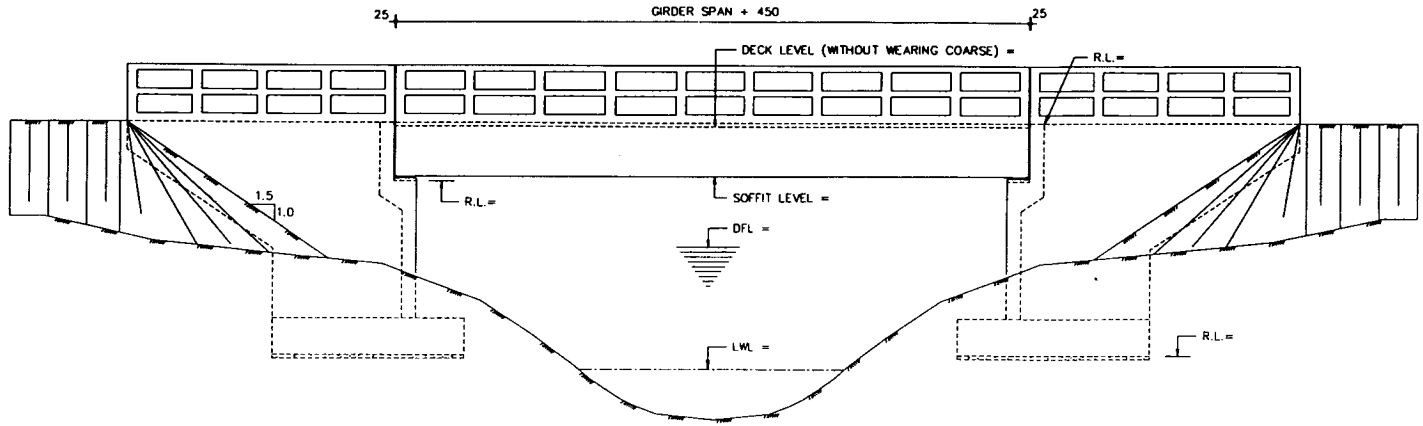
GENERAL ARRANGEMENT OF SLAB CULVERT WITH BRICK ABUTMENT., DECK WIDTH : 3.04m.

DATE :	ISSUED BY :
CAD FILE REF : GNRL\S000B101	

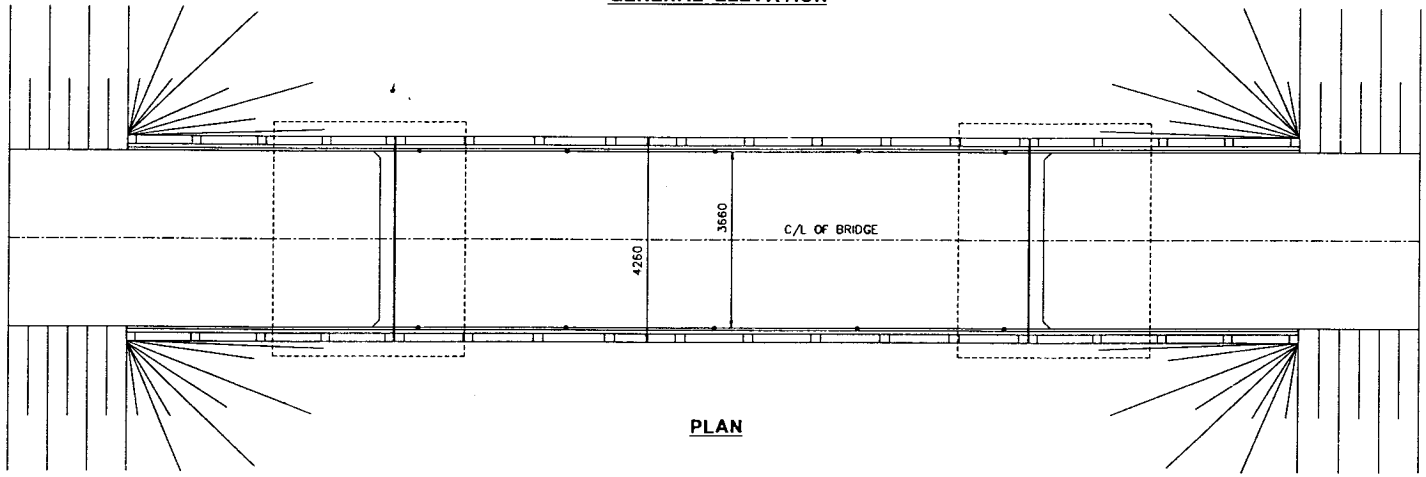
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SC-7

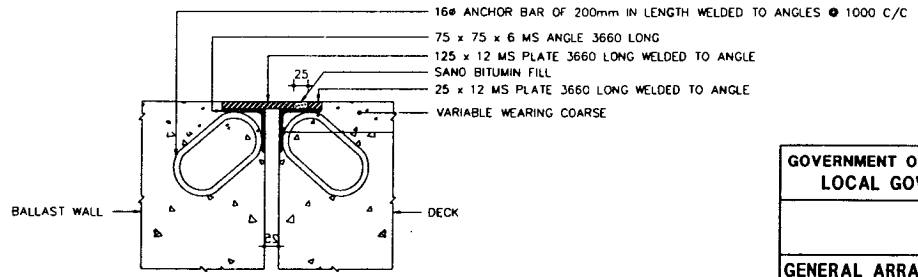
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF SLAB CULVERT WITH OPEN RCC ABUTMENT, DECK WIDTH : 4.26m.

DATE :

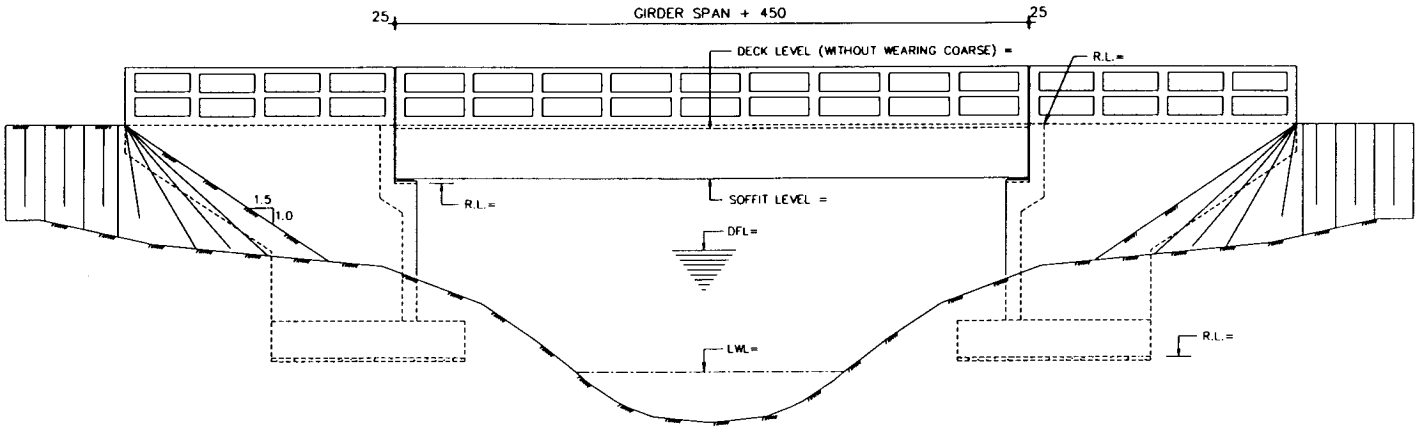
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CAD FILE REF : GNRL\S0000201

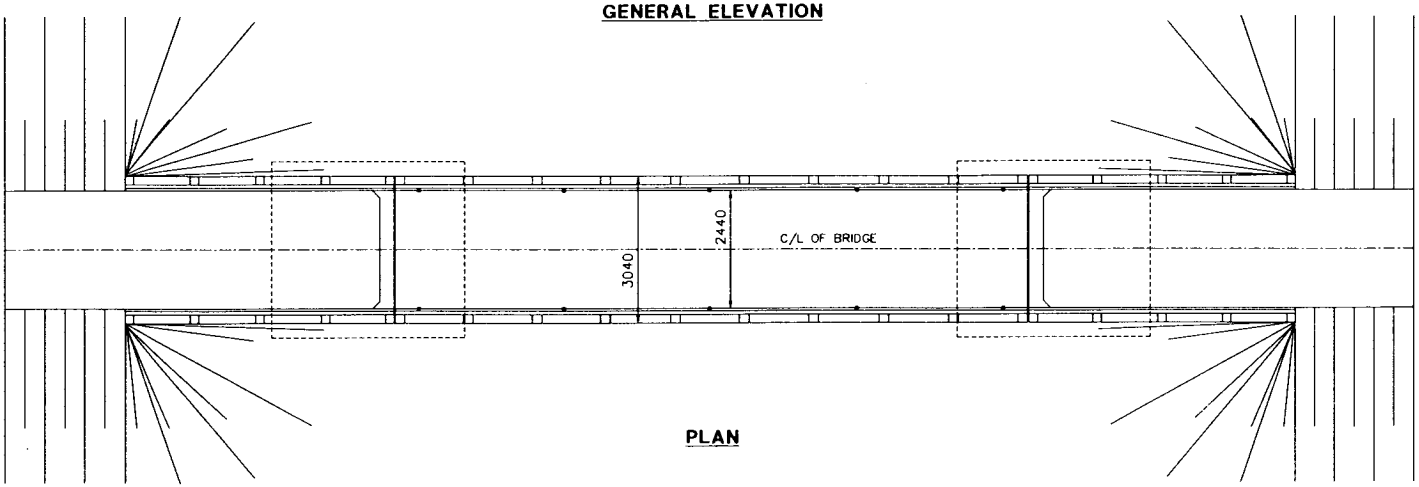
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SC-8

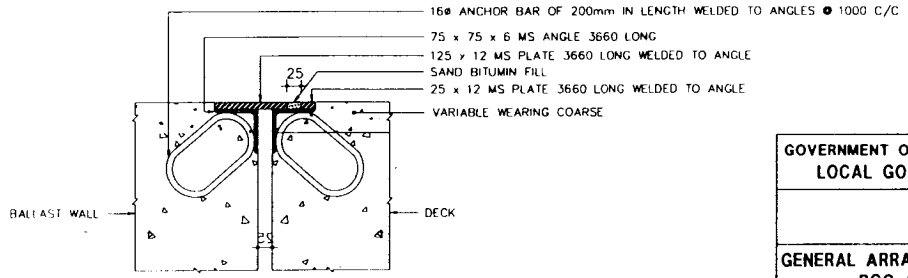
SHEET 1 OF 1
SIDEWALK - NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

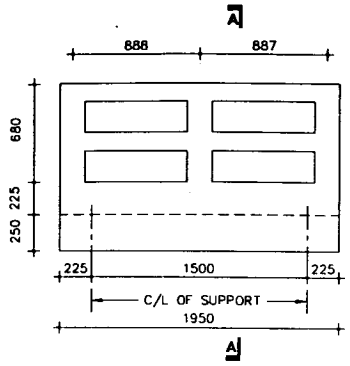
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF SLAB CULVERT WITH OPEN RCC ABUTMENT, DECK WIDTH : 3.04m.

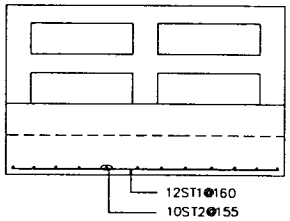
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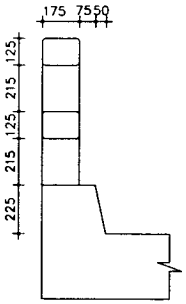
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



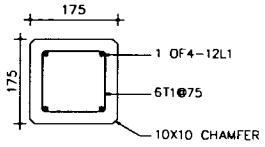
SIDE ELEVATION



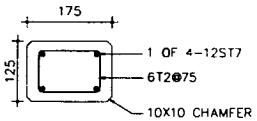
REINF. DETAILS OF SLAB



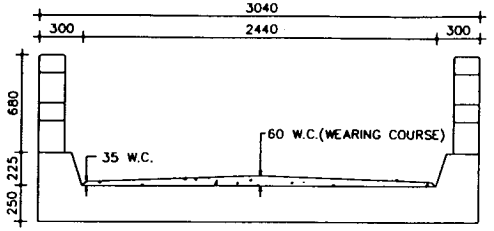
GENERAL ARRANGEMENT OF CURB & RAILING



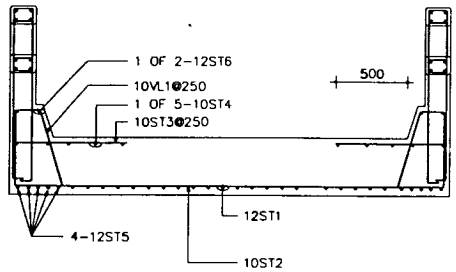
REINF. DETAIL OF POST



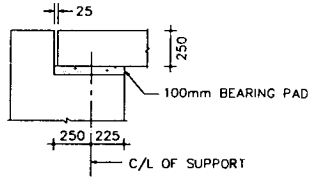
REINF. DETAIL OF RALING



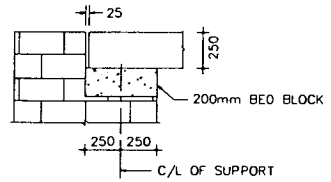
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	12	ST1	14	1870				1870
	10	ST2	13	2990				2990
	10	ST3	16	775				775
	10	ST4	10	1870				1870
	12	ST5	8	1870				1870
CURB	12	ST6	4	1870				1870
	10	VL1	16	200	411	305	398	1434
POST	12	L1	24	1083	72			1155
	6	T1	36	135	135			576
RAIL	12	ST7	16	1910				1910
	6	T2	80	85	135			476

NOTES :

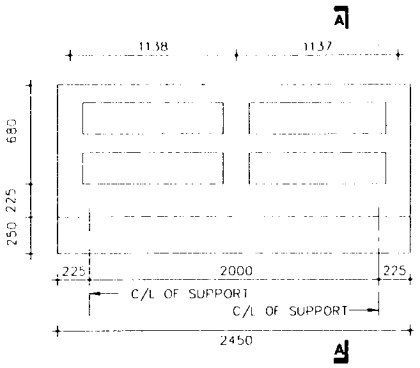
1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

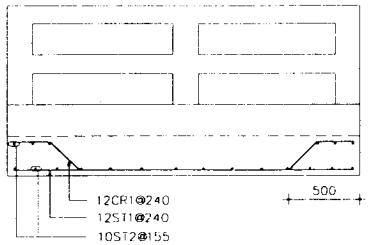
DETAILS OF 1.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 2.44m

DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0101501

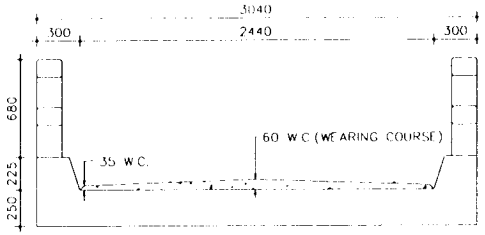
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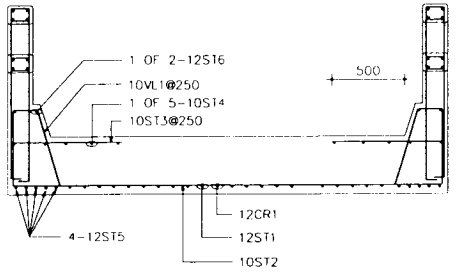
SIDE ELEVATION



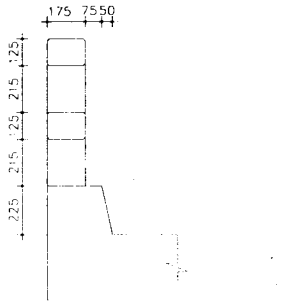
REINF. DETAILS OF SLAB



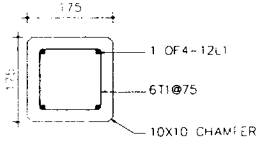
SEC. A-A



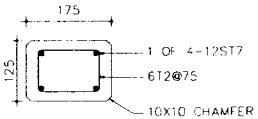
REINF. DETAILS AT SEC. A-A



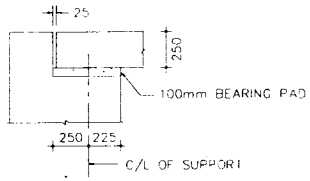
GENERAL ARRANGEMENT
OF CURB & RAILING



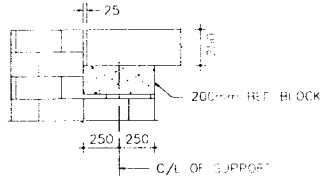
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

NOTES :

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	12	51	10	2370				2370
	12	61	9	330	240	1455		2595
	10	51	22	2060				2060
	10	51	22	2060				2060
	12	51	10	2370				2370
	12	51	5	2370				2370
CURB	12	61	4	330	240	1455		2595
POST	12	61	16	330	240	1455		2595
RAIL	12	51	8	2370				2370

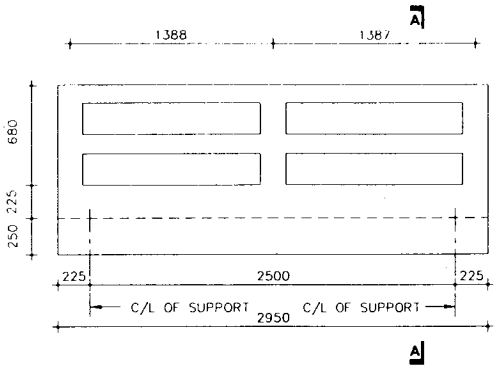
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 2.0m SLAB CULVERT
OF CARRIAGE WAY WIDTH 2.44m

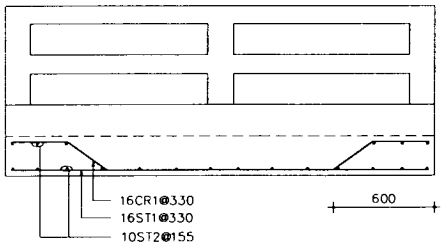
Web Copy

SHEET 1 OF 1

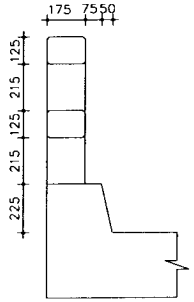
LIVE LOAD : AASHTO H10



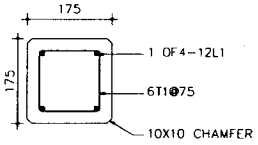
SIDE ELEVATION



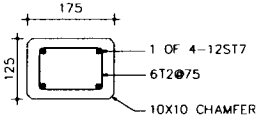
REINF. DETAILS OF SLAB



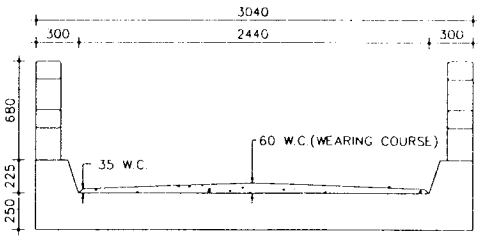
GENERAL ARRANGEMENT OF CURB & RAILING



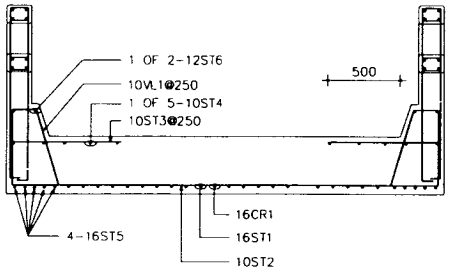
REINF. DETAIL OF POST



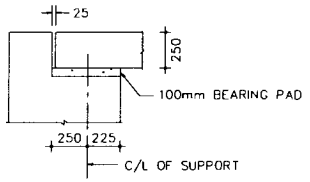
REINF. DETAIL OF RALING



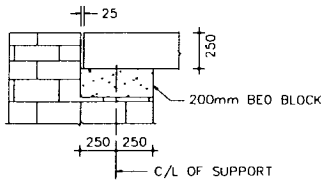
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	7	2870				2870
	16	CR1	7	430	240	1750		3090
	10	ST2	28	2990				2990
	10	ST3	24	775				775
	10	ST4	10	2870				2870
	16	ST5	8	2870				2870
CURB	12	ST6	4	2870				2870
	10	VL1	24	200	407	305	394	1426
POST	12	L1	24	1079	72			1151
	6	T1	36	135	135			576
RAIL	12	ST7	16	2910				2910
	6	T2	136	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa–ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength – 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab – 40mm, b) Rail – 20mm,
   c) Post – 20mm, d) Curb – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 2.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 2.44m

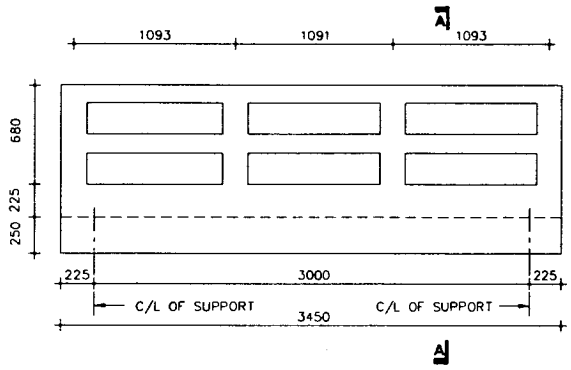
DATE : 24/09/1996 | ISSUED BY :

CAD FILE REF : CULV\S0102501

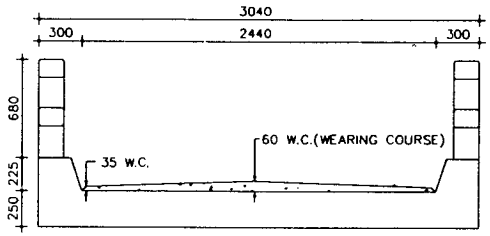
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SC-12

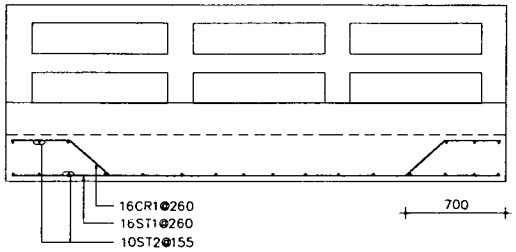
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



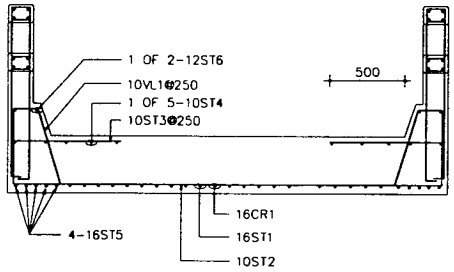
SIDE ELEVATION



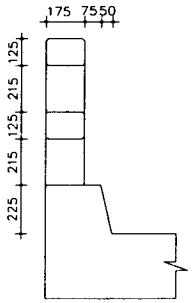
SEC. A-A



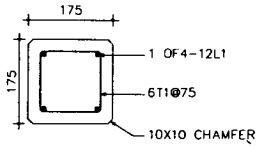
REINF. DETAILS OF SLAB



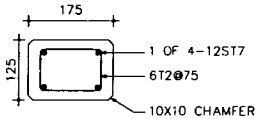
REINF. DETAILS AT SEC. A-A



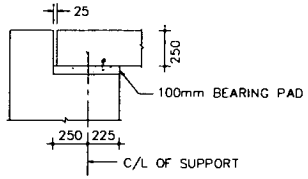
GENERAL ARRANGEMENT
OF CURB & RAILING



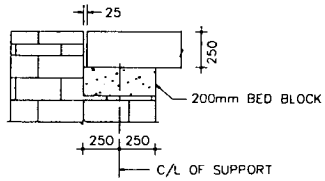
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	9	3370				3370
	16	CR1	9	530	240	2050		3590
	10	ST2	31	2990				2990
	10	ST3	28	775				775
	10	ST4	10	3370				3370
	16	ST5	8	3370				3370
CURB	12	ST6	4	3370				3370
	10	VL1	28	200	407	305	394	1426
POST	12	L1	32	1079	72			1151
	6	T1	48	135	135			576
RAIL	12	ST7	16	3410				3410
	6	T2	156	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

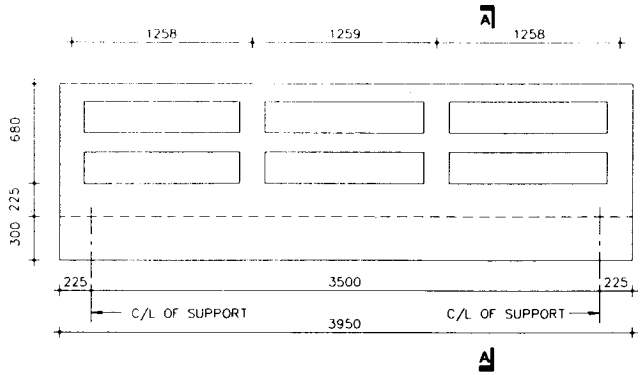
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 3.0m SLAB CULVERT
OF CARRIAGE WAY WIDTH 2.44m

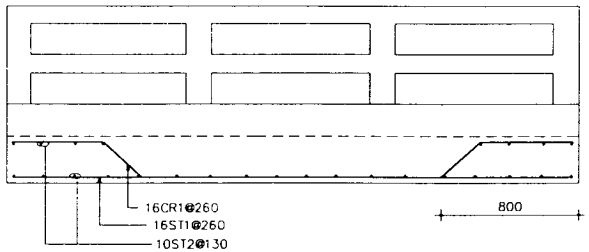
DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0103001

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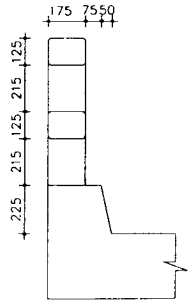
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



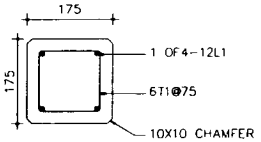
SIDE ELEVATION



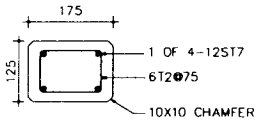
REINF. DETAILS OF SLAB



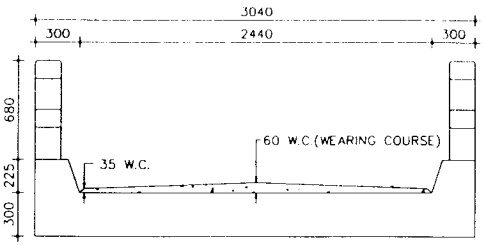
GENERAL ARRANGEMENT OF CURB & RAILING



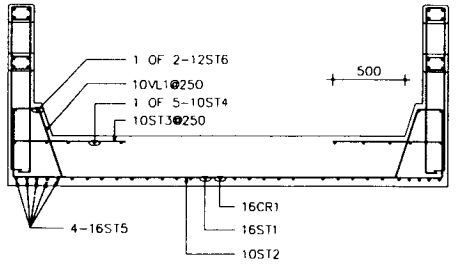
REINF. DETAIL OF POST



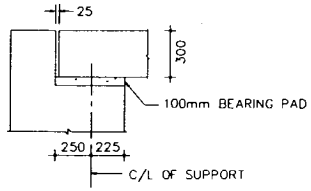
REINF. DETAIL OF RALING



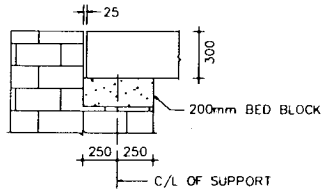
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	9	3870				3870
	16	CR1	9	580	311	2350		4132
	10	ST2	41	2990				2990
	10	ST3	32	775				775
	10	ST4	10	3870				3870
	16	ST5	8	3870				3870
CURB	12	ST6	4	3870				3870
	10	VL1	32	200	458	316	444	1538
POST	12	L1	32	1129	72			1201
	6	T1	48	135	135			576
RAIL	12	ST7	16	3910				3910
	6	T2	180	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S00D0001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 3.5m SLAB CULVERT
OF CARRIAGE WAY WIDTH 2.44m

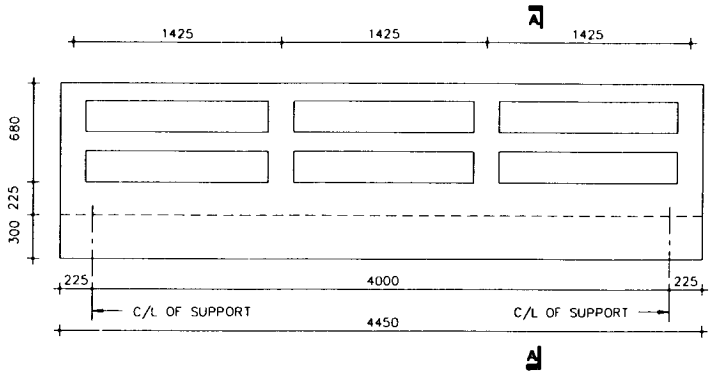
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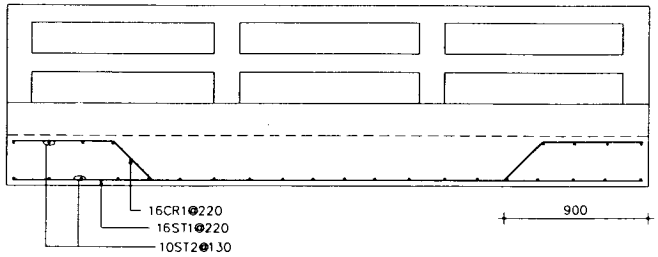
Web Copy

SHEET 1 OF 1

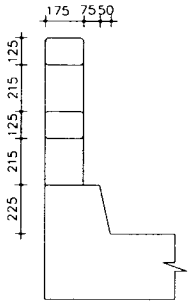
LIVE LOAD : AASHTO H10



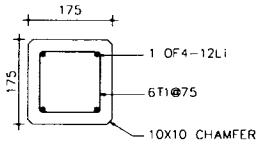
SIDE ELEVATION



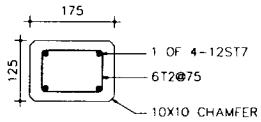
REINF. DETAILS OF SLAB



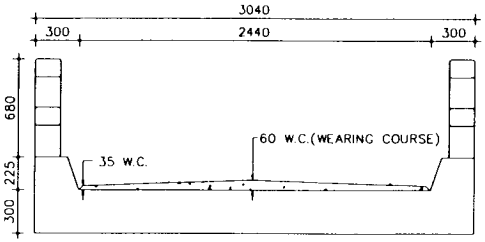
GENERAL ARRANGEMENT OF CURB & RAILING



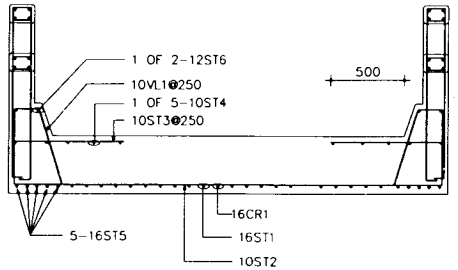
REINF. DETAIL OF POST



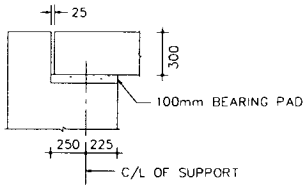
REINF. DETAIL OF RALING



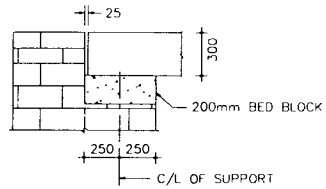
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	11	4370				4370
	16	CR1	10	680	311	2650		4632
	10	ST2	47	2990				2990
	10	ST3	36	775				775
	10	ST4	10	4370				4370
	16	ST5	10	4370				4370
CURB	12	ST6	4	4370				4370
	10	VL1	36	200	458	316	444	1538
POST	12	L1	32	1129	72			1201
	6	T1	48	135	135			576
RAIL	12	ST7	16	4410				4410
	6	T2	204	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa--ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 275MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code, Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

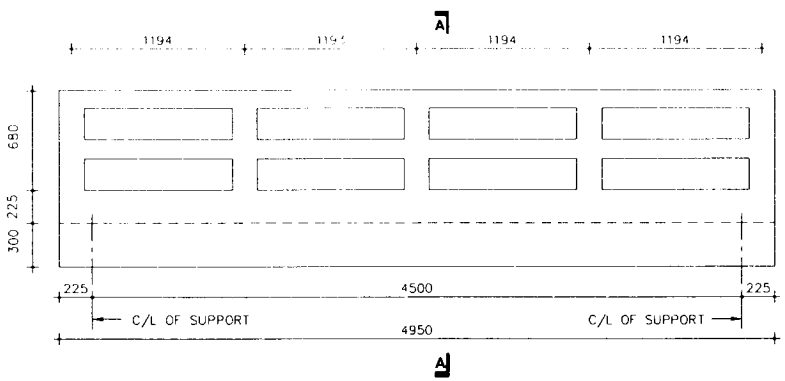
DETAILS OF 4.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 2.44m

DATE : 24/09/1996 | ISSUED BY

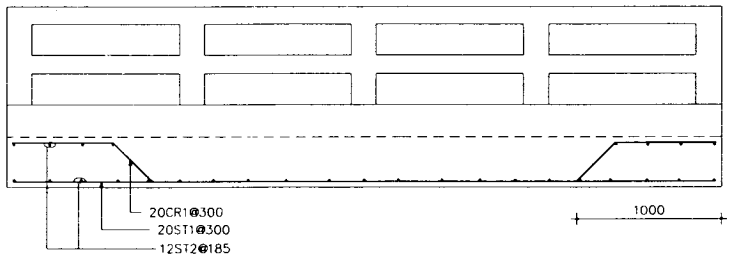
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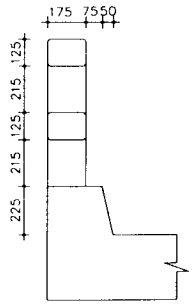
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



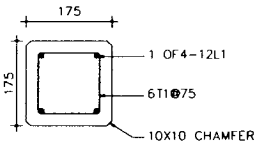
SIDE ELEVATION



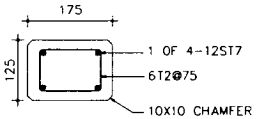
REINF. DETAILS OF SLAB



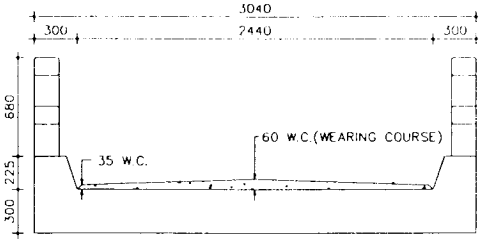
GENERAL ARRANGEMENT OF CURB & RAILING



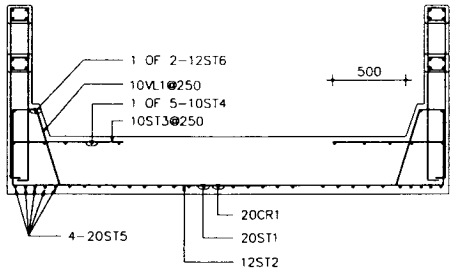
REINF. DETAIL OF POST



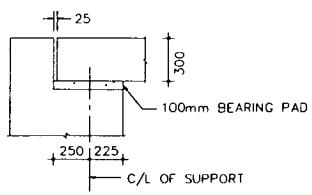
REINF. DETAIL OF RALING



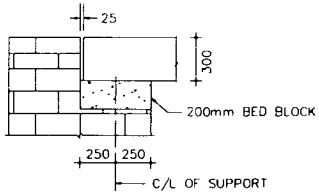
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	20	ST1	8	4870				4870
	20	CR1	7	780	311	2950		5132
	12	ST2	37	2990				2990
	10	ST3	40	775				775
	10	ST4	10	4870				4870
	20	ST5	8	4870				4870
CURB	12	ST6	4	4870				4870
	10	VL1	40	200	455	316	440	1531
POST	12	L1	40	1125	72			1197
	6	T1	60	135	135			576
RAIL	12	ST7	16	4910				4910
	6	12	224	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001

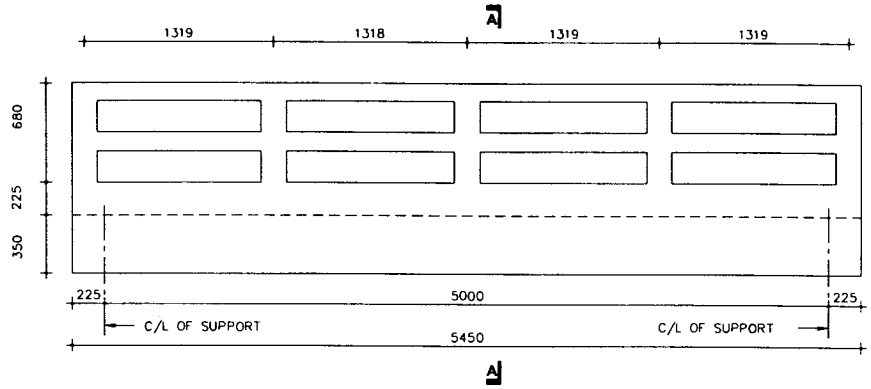
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 4.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 2.44m

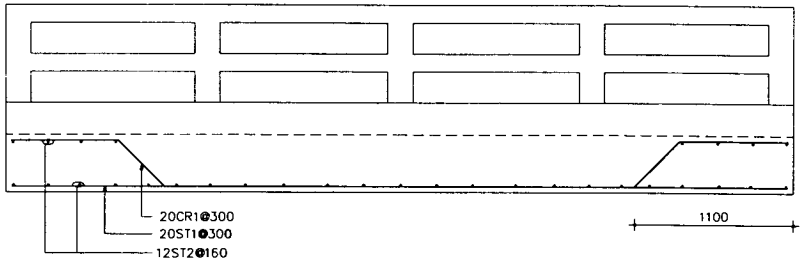
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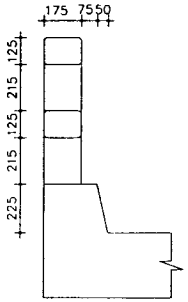
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



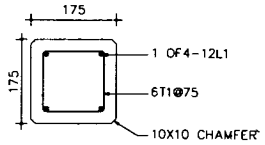
SIDE ELEVATION



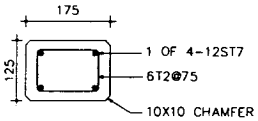
REINF. DETAILS OF SLAB



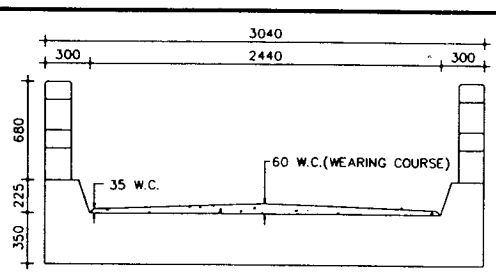
GENERAL ARRANGEMENT
OF CURB & RAILING



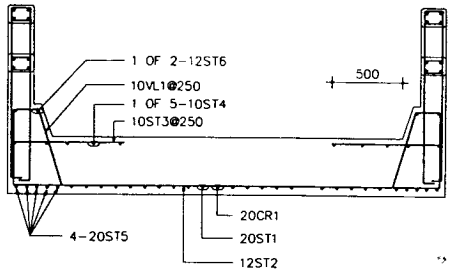
REINF. DETAIL OF POST



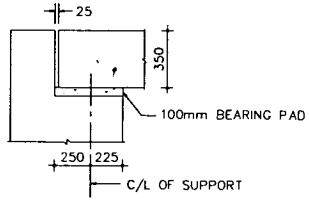
REINF. DETAIL OF RALING



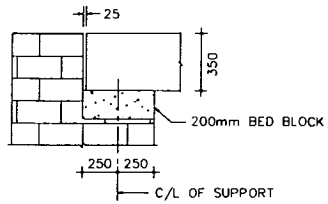
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	20	ST1	8	5370				5370
	20	CR1	7	830	382	3250		5674
	12	ST2	47	2990				2990
	10	ST3	44	775				775
	10	ST4	10	5370				5370
	20	ST5	8	5370				5370
CURB	12	ST6	4	5370				5370
	10	VL1	44	200	506	327	490	1643
POST	12	L1	40	1175	72			1247
	6	T1	60	135	135			576
RAIL	12	ST7	16	5410				5410
	6	T2	256	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

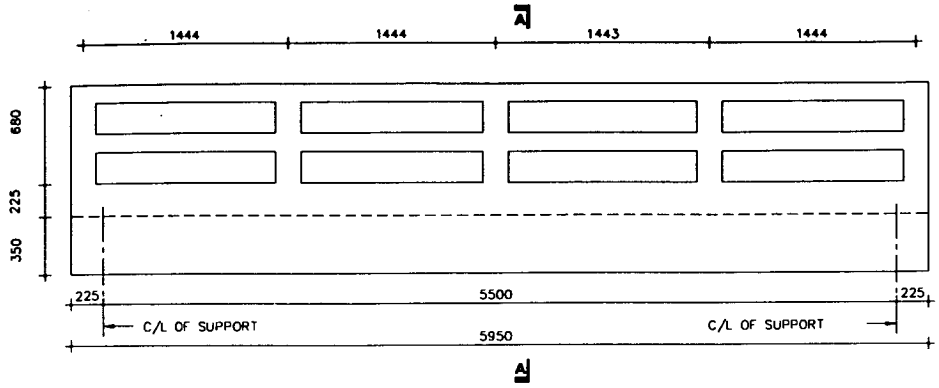
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 5.0m SLAB CULVERT
OF CARRIAGE WAY WIDTH 2.44m.

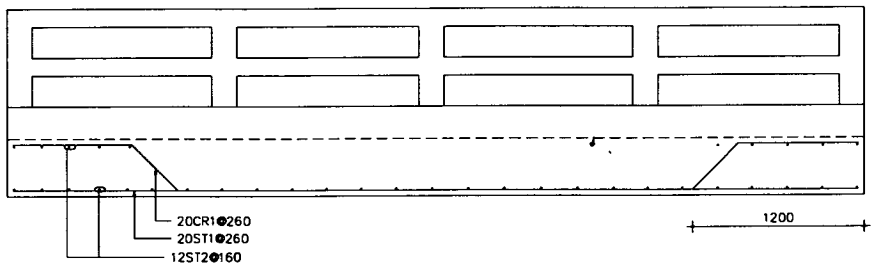
DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0105001

 Web Copy

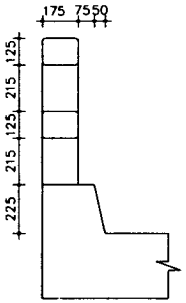
SHEET 1 OF 1
LIVE LOAD : AASHTO H10



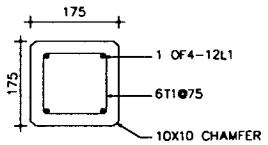
SIDE ELEVATION



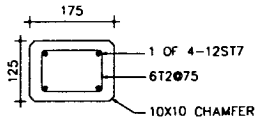
REINF. DETAILS OF SLAB



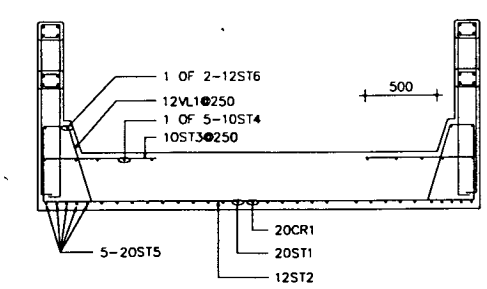
GENERAL ARRANGEMENT OF CURB & RAILING



REINF. DETAIL OF POST

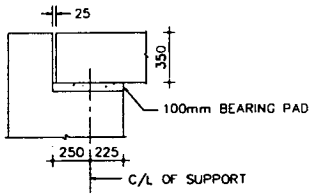


REINF. DETAIL OF RALING

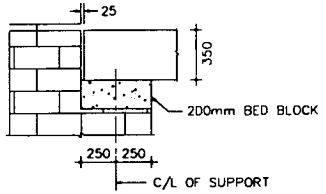


SEC. A-A

REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	20	ST1	9	5870				5870
	20	CR1	8	930	382	3550		6174
	12	ST2	52	2990				2990
	10	ST3	48	775				775
	10	ST4	10	5870				5870
	20	ST5	10	5870				5870
CURB	12	ST6	4	5870				5870
	10	VL1	48	200	506	327	490	1643
POST	12	L1	40	1175	72			1247
	6	T1	60	135	135			576
RAIL	12	ST7	16	5910				5910
	6	T2	272	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

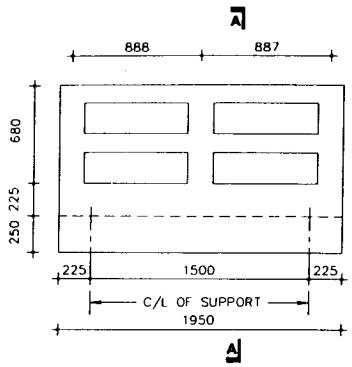
DETAILS OF 5.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 2.44m

DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0105501

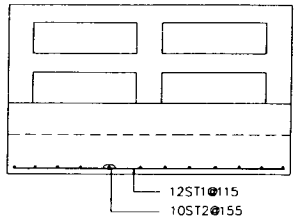
Web Copy

SHEET 1 OF 1

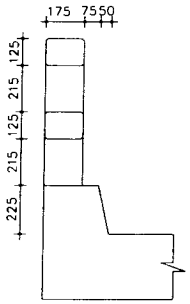
LIVE LOAD : AASHTO H15



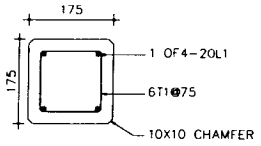
SIDE ELEVATION



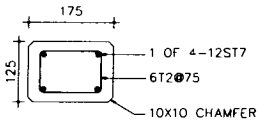
REINF. DETAILS OF SLAB



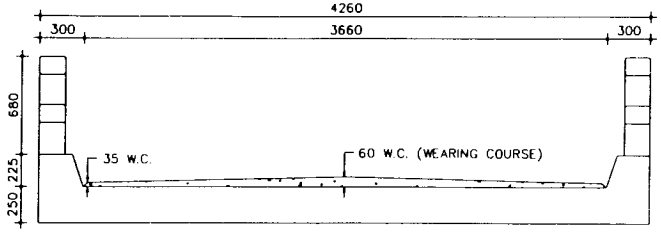
GENERAL ARRANGEMENT OF CURB & RAILING



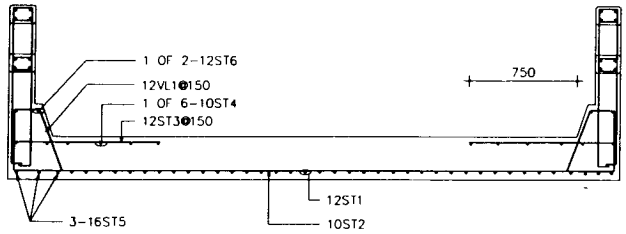
REINF. DETAIL OF POST



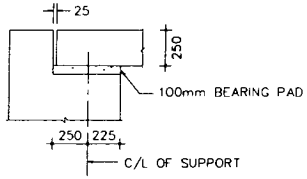
REINF. DETAIL OF RALING



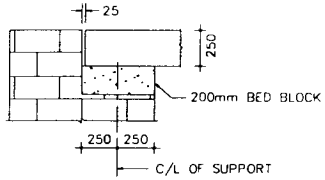
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	12	ST1	31	1870				1870
	10	ST2	13	4210				4210
	12	ST3	26	1025				1025
	10	ST4	12	1870				1870
	16	ST5	6	1870				1870
CURB	12	ST6	4	1870				1870
	12	VL1	26	200	407	305	394	1450
POST	20	L1	24	1079	120			1199
	6	T1	36	135	135			576
RAIL	12	ST7	16	1910				1910
	6	T2	80	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code, Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 1.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

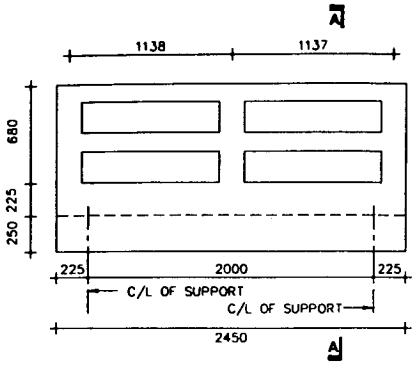
DATE 24/09/1996 | ISSUED BY :

CAD FILE REF : CULV\S0201501

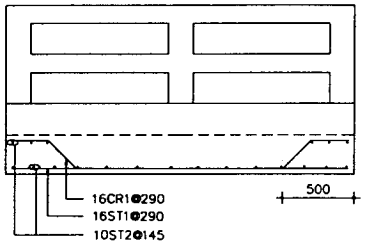
Web Copy

SHEET 1 OF 1

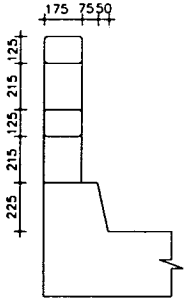
LIVE LOAD : AASHTO H15



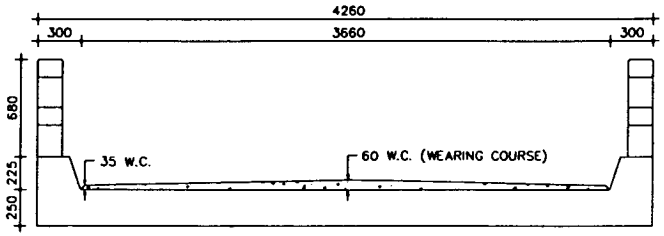
SIDE ELEVATION



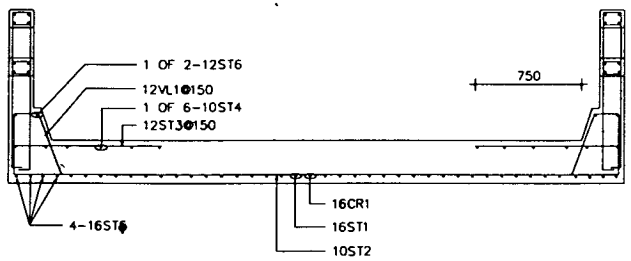
REINF. DETAILS OF SLAB



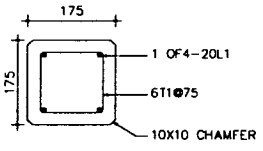
GENERAL ARRANGEMENT OF CURB & RAILING



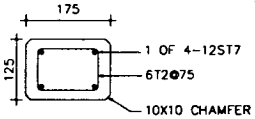
SEC. A-A



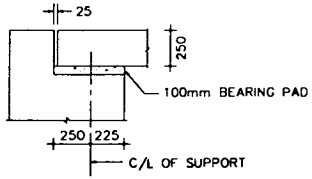
REINF. DETAILS AT SEC. A-A



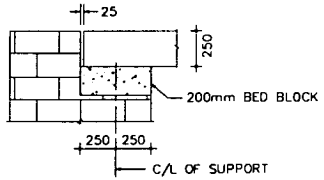
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	12	2370				2370
	16	CR1	12	330	240	1450		2590
	10	ST2	23	4210				4210
	12	ST3	34	1025				1025
	10	ST4	12	2370				2370
	16	ST5	8	2370				2370
CURB	12	ST6	4	2370				2370
	12	VL1	34	200	407	305	394	1450
POST	20	L1	24	1079	120			1199
	6	T1	36	135	135			576
RAIL	12	ST7	16	2410				2410
	6	T2	104	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 2.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

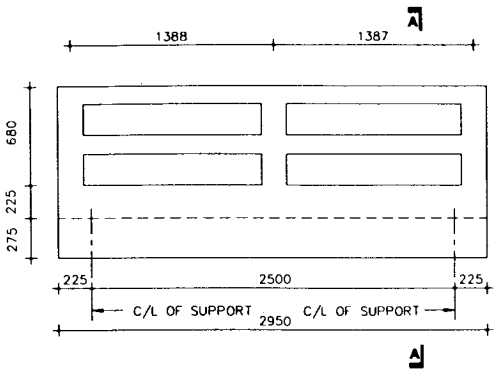
DATE : 24/09/1996 | ISSUED BY :

CAD FILE REF : CULV\S0202001

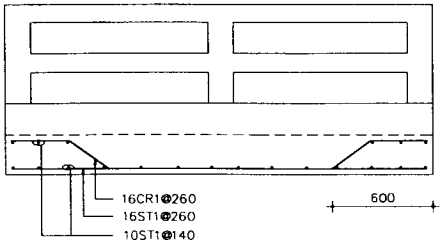
Web Copy

SHEET 1 OF 1

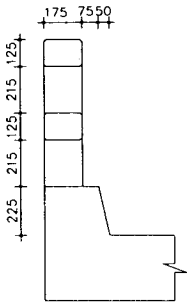
LIVE LOAD : AASHTO H15



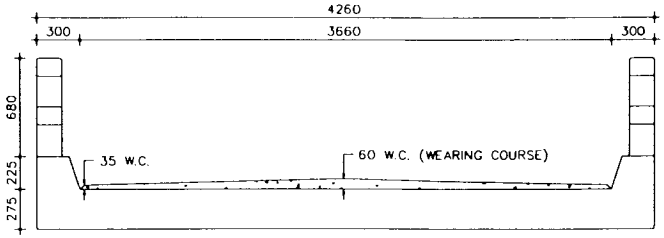
SIDE ELEVATION



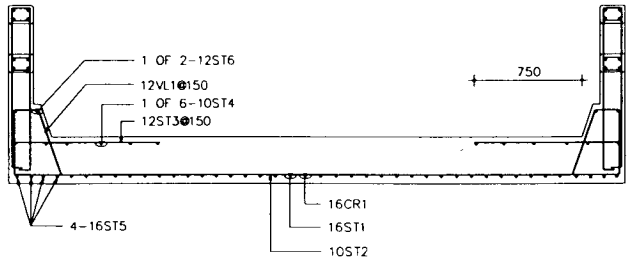
REINF. DETAILS OF SLAB



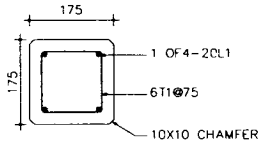
GENERAL ARRANGEMENT OF CURB & RAILING



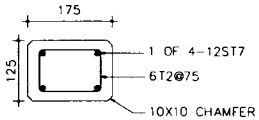
SEC. A-A



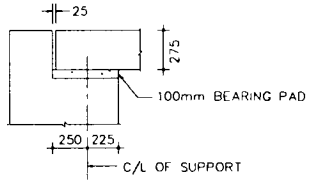
REINF. DETAILS AT SEC. A-A



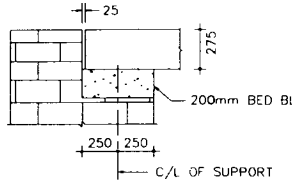
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	16	ST1	14	2870				2870
	16	CR1	13	405	276	1750		3112
	10	ST2	30	4210				4210
	12	ST3	40	1025				1025
	10	ST4	12	2870				2870
	16	ST5	8	2870				2870
CURB	12	ST6	4	2870				2870
	12	VL1	40	200	433	311	419	1507
POST	20	T1	24	1104	120			1224
	6	T1	36	135	135			576
RAIL	12	ST7	16	2910				2910
	6	T2	136	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code. Cad File: Culv\\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

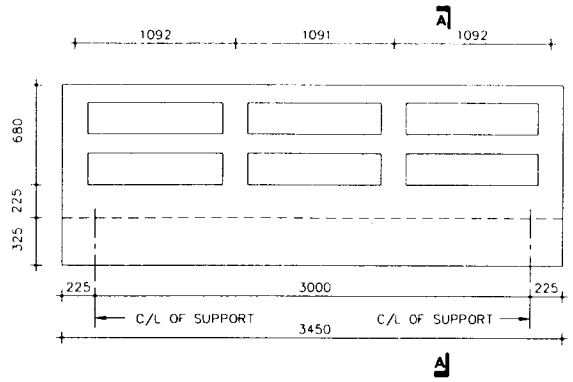
DETAILS OF 2.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996 | ISSUED BY :

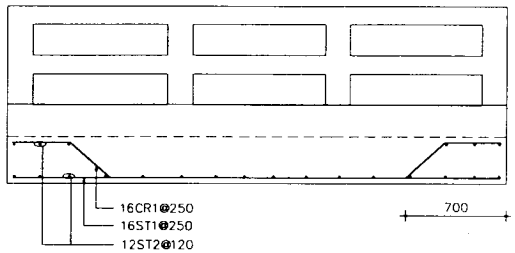
CAD FILE REF : CULV\S0202501

Web Copy

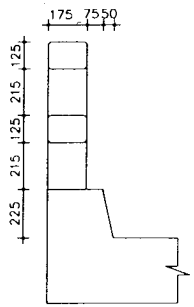
SHEET 1 OF 1
LIVE LOAD : AASHTO H15



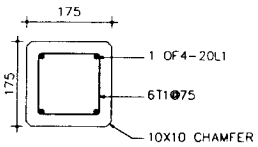
SIDE ELEVATION



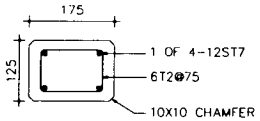
REINF. DETAILS OF SLAB



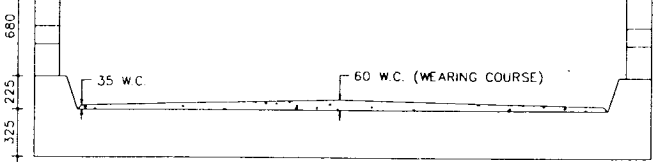
GENERAL ARRANGEMENT OF CURB & RAILING



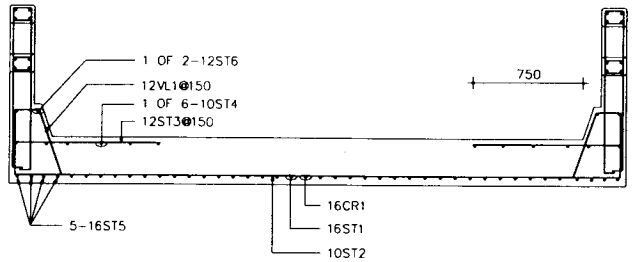
REINF. DETAIL OF POST



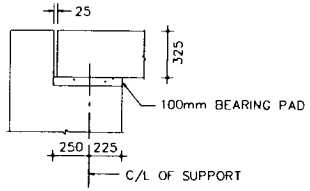
REINF. DETAIL OF RALING



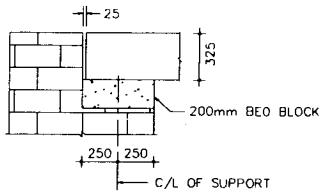
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	14	3370				3370
	16	CR1	14	455	346	2050		3652
	10	ST2	39	4210				4210
	12	ST3	46	1025				1025
	10	ST4	12	3370				3370
	16	ST5	10	3370				3370
CURB	12	ST6	4	3370				3370
	12	VL1	46	200	484	322	469	1619
POST	20	L1	32	1154	120			1274
	6	T1	48	135	135			576
RAIL	12	ST7	16	3410				3410
	6	T2	156	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code, Cod File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

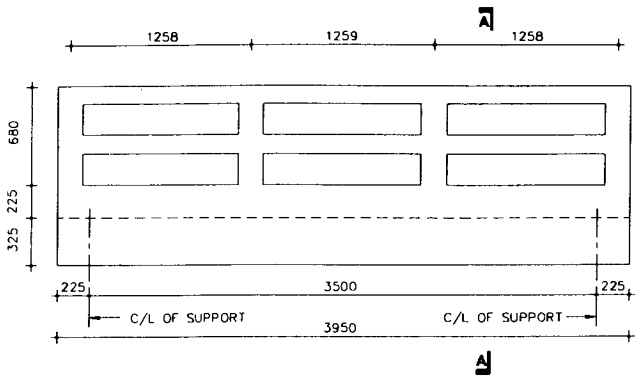
DETAILS OF 3.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0203001

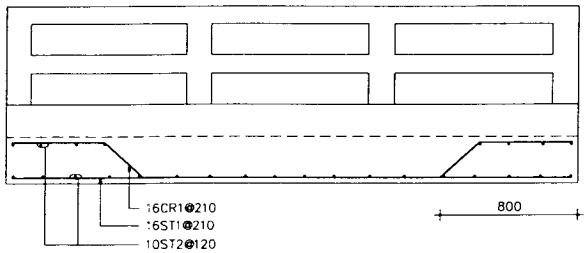
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SHEET 1 OF 1

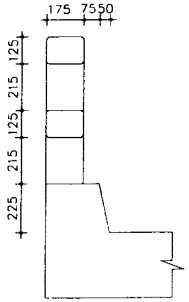
LIVE LOAD : AASHTO H15



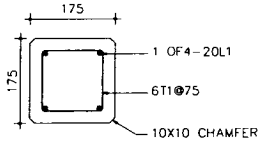
SIDE ELEVATION



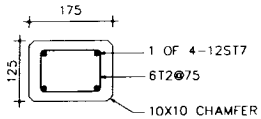
REINF. DETAILS OF SLAB



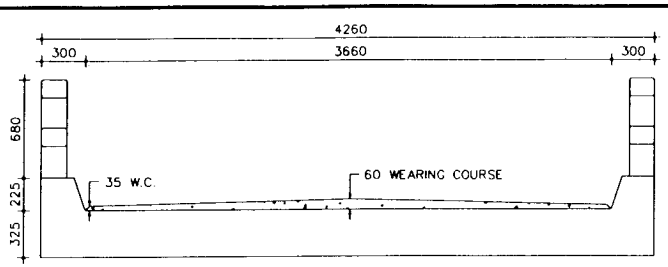
GENERAL ARRANGEMENT OF CURB & RAILING



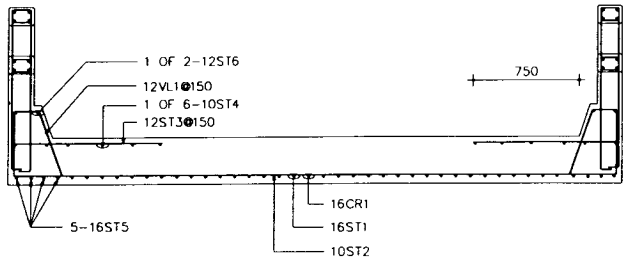
REINF. DETAIL OF POST



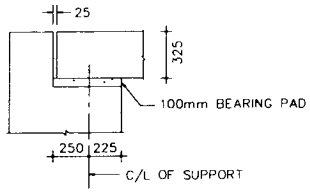
REINF. DETAIL OF RALING



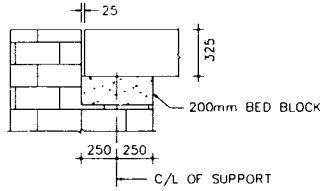
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	17	3870				3870
	16	CR1	16	555	345	2350		4152
	10	ST2	45	4210				4210
	12	ST3	54	1025				1025
	10	ST4	12	3870				3870
	16	ST5	10	3870				3870
CURB	12	ST6	4	3870				3870
	12	VL1	54	200	484	322	469	1619
POST	20	T1	32	1154	120			1274
	6	T1	48	135	135			576
RAIL	12	ST7	16	3910				3910
	6	T2	180	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File. Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 3.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996

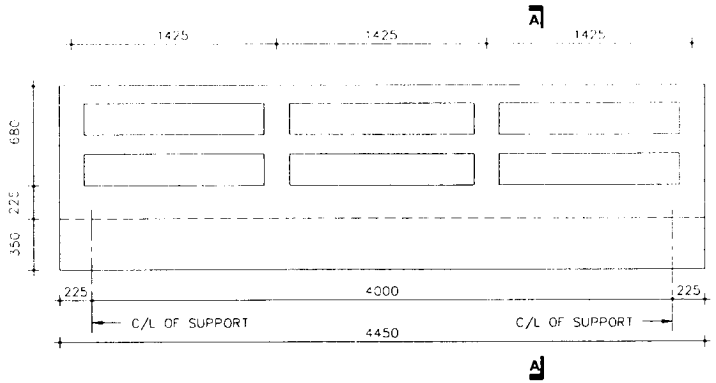
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CAD FILE REF : CULV\S0203501

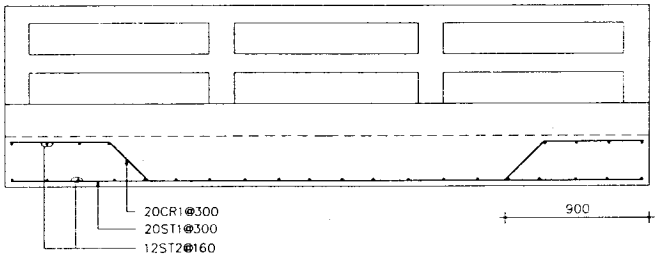
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SHEET 1 OF 1

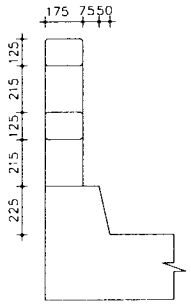
LIVE LOAD : AASHTO H15



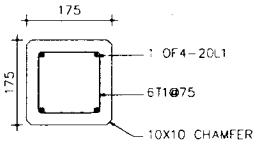
SIDE ELEVATION



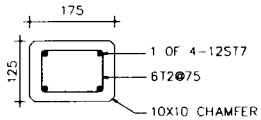
REINF. DETAILS OF SLAB



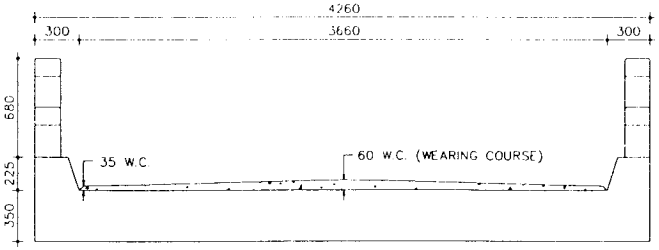
GENERAL ARRANGEMENT OF CURB & RAILING



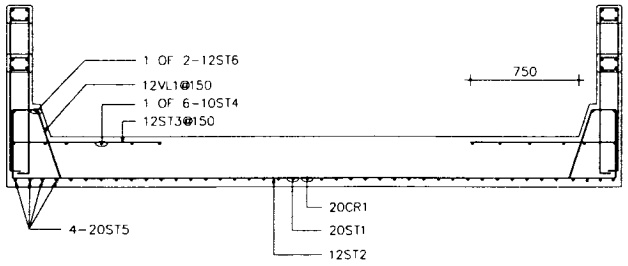
REINF. DETAIL OF POST



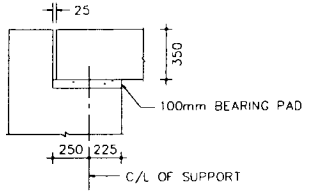
REINF. DETAIL OF RALING



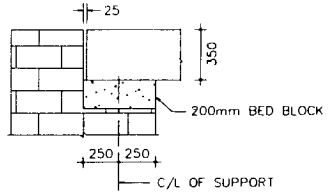
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	12	4370				4370
	20	CR1	11	630	382	2650		4674
	12	ST2	38	4210				4210
	12	ST3	60	1025				1025
	10	ST4	12	4370				4370
	20	ST5	8	4370				4370
CURB	12	ST6	4	4370				4370
	12	VL1	60	200	506	327	490	1667
POST	20	L1	32	1175	120			1295
	6	T1	48	135	135			576
RAIL	12	ST7	16	4410				4410
	6	T2	204	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days - 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code, Cad File Culv\S0000001

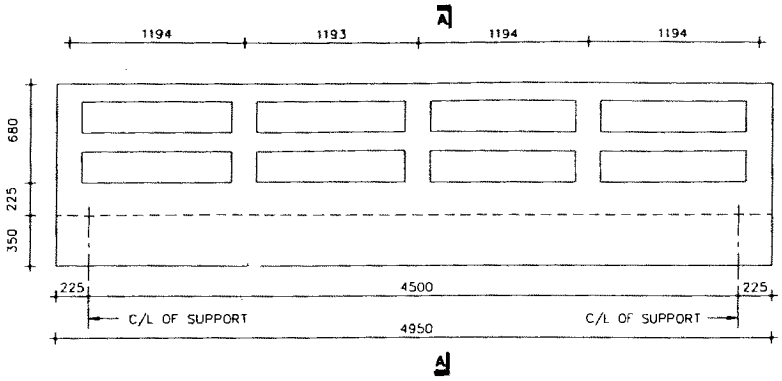
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 4.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

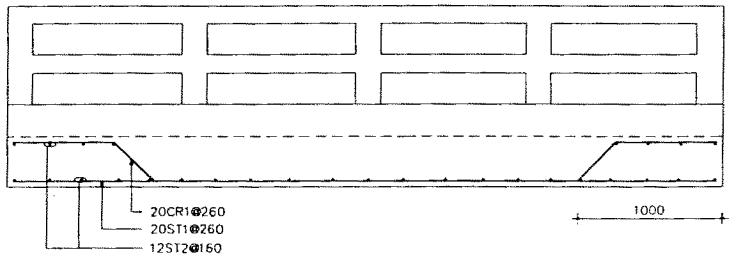
DATE : 24/09/1996 | ISSUED BY :

CAD FILE REF : CULV\S0204001

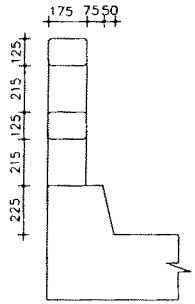
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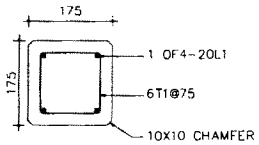
SIDE ELEVATION



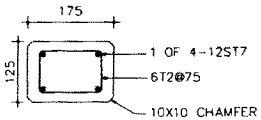
REINF. DETAILS OF SLAB



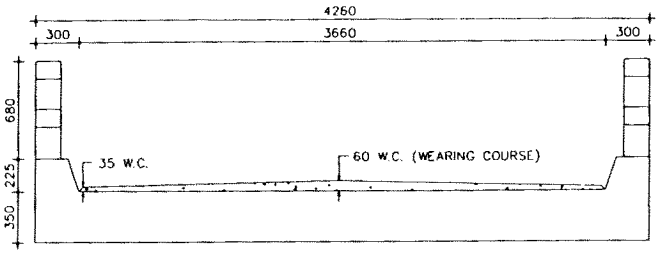
GENERAL ARRANGEMENT
OF CURB & RAILING



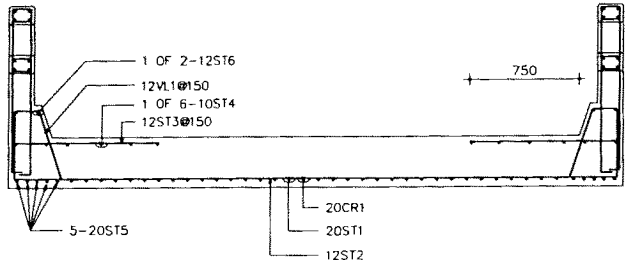
REINF. DETAIL OF POST



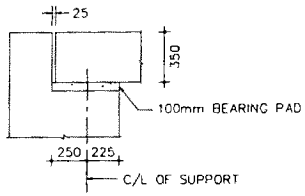
REINF. DETAIL OF RALING



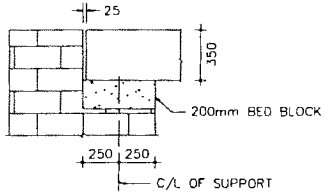
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	14	4870				4870
	20	CR1	13	730	382	2950		5174
	12	ST2	43	4210				4210
	12	ST3	66	1025				1025
	10	ST4	12	4870				4870
	20	ST5	8	4870				4870
CURB	12	ST6	4	4870				4870
	12	VL1	66	200	506	327	490	1667
POST	20	T1	40	1175	120			1295
	6	T1	60	135	135			576
RAIL	12	ST7	16	4910				4910
	6	T2	224	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa ASTM A615
5. Not all reinforcement are necessarily shown in any view
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S000000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

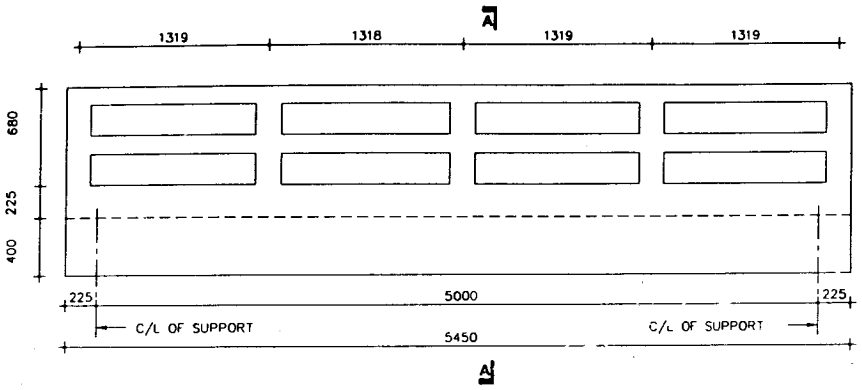
DETAILS OF 4.5m SLAB CULVERT
OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996
ISSUED BY
CAD FILE REF : CULV\S0204501

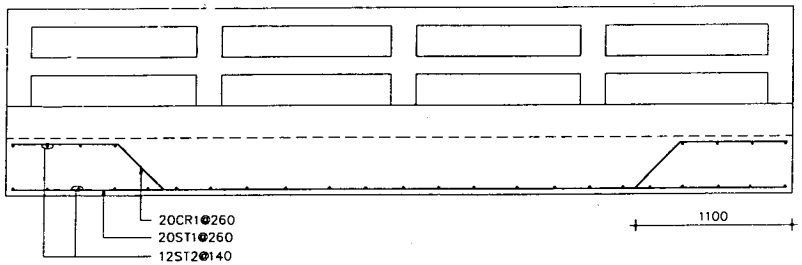
Web Copy

SHEET 1 OF 1

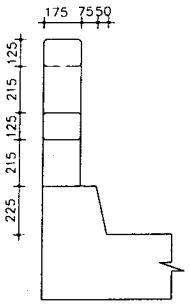
LIVE LOAD : AASHTO H15



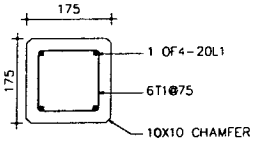
SIDE ELEVATION



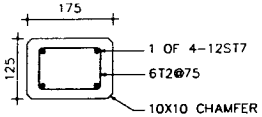
REINF. DETAILS OF SLAB



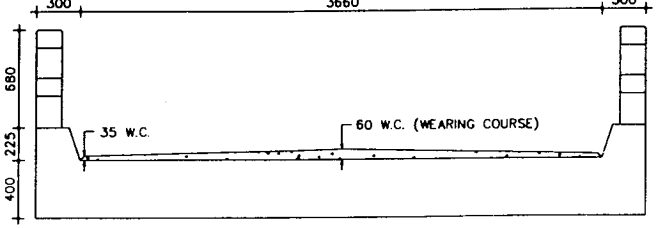
GENERAL ARRANGEMENT OF CURB & RAILING



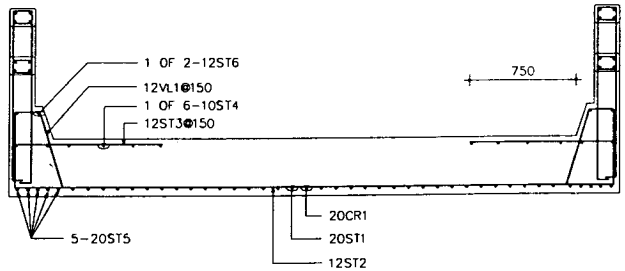
REINF. DETAIL OF POST



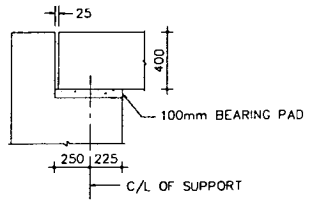
REINF. DETAIL OF RALING



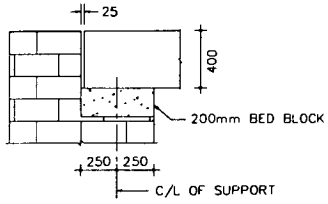
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	14	5370				5370
	20	CR1	13	780	453	3250		5716
	12	ST2	53	4210				4210
	12	ST3	74	1025				1025
	10	ST4	12	5370				5370
	20	ST5	10	5370				5370
CURB	12	ST6	4	5370				5370
	12	VL1	74	200	557	338	540	1779
POST	20	L1	40	1225	120			1345
	6	T1	60	135	135			576
RAIL	12	ST7	16	5410				5410
	6	T2	256	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa–ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength – 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab – 40mm, b) Rail – 20mm,
   c) Post – 20mm, d) Curb – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 5.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m.

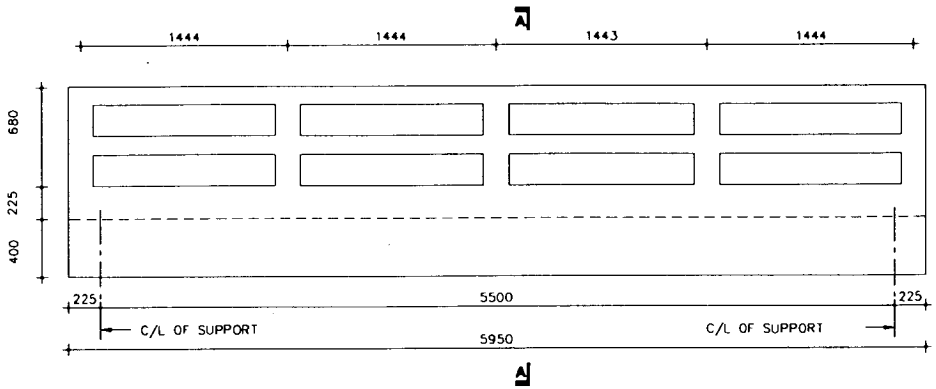
DATE : 24/09/1996

ISSUED BY :

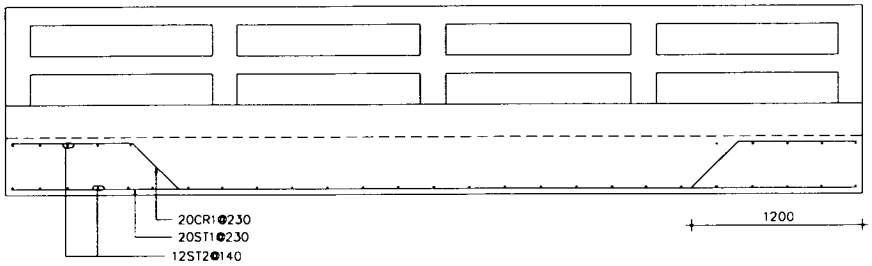
CAD FILE REF : CULV\S0205001

Web Copy

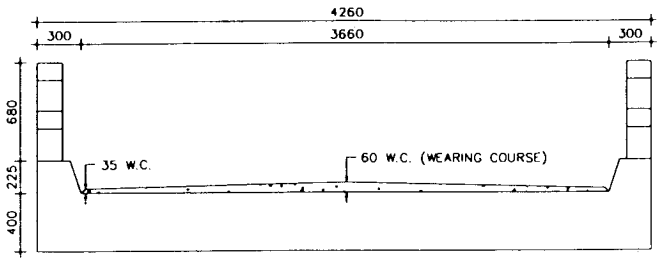
SHEET 1 OF 1
LIVE LOAD : AASHTO H15



SIDE ELEVATION



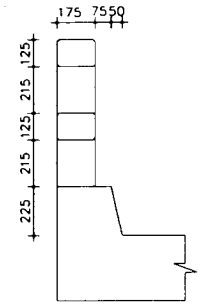
REINF. DETAILS OF SLAB



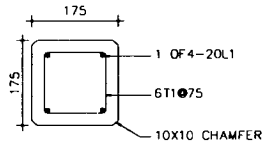
SEC. A-A



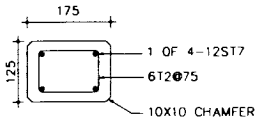
REINF. DETAILS AT SEC. A-A



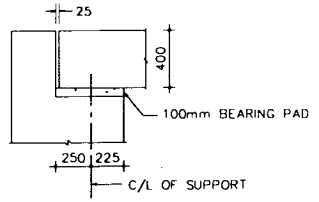
GENERAL ARRANGEMENT OF CURB & RAILING



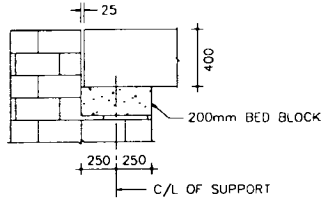
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	15	5870				5870
	20	CR1	15	880	453	3550		6216
	12	ST2	57	4210				4210
	12	ST3	80	1025				1025
	10	ST4	12	5870				5870
	20	ST5	10	5870				5870
CURB	12	ST6	4	5870				5870
	12	VL1	80	200	557	338	540	1779
POST	20	L1	40	1225	120			1345
	6	T1	60	135	135			576
RAIL	12	ST7	16	5910				5910
	6	T2	272	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

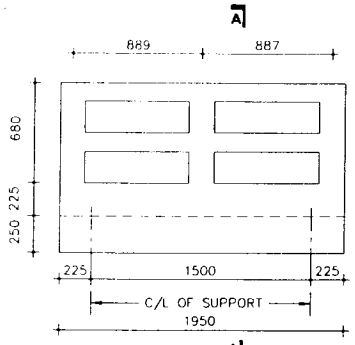
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 5.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

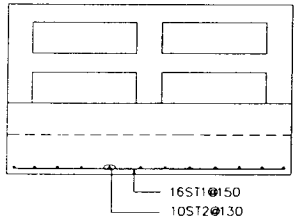
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ISSUED BY :
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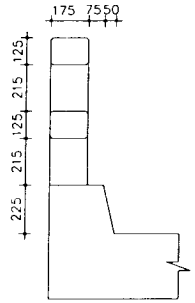
SHEET 1 OF 1
LIVE LOAD : AASHTO H20



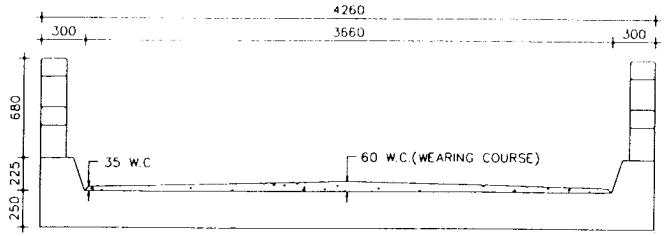
SIDE ELEVATION



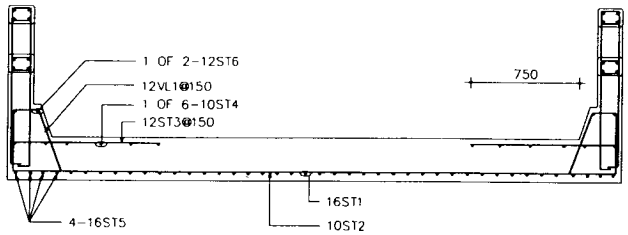
REINF. DETAILS OF SLAB



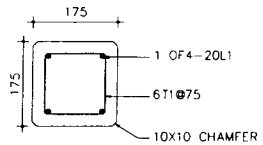
GENERAL ARRANGEMENT OF CURB & RAILING



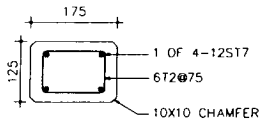
SEC. A-A



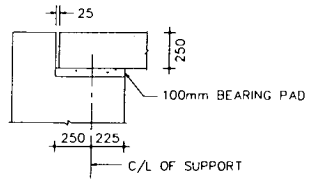
REINF. DETAILS AT SEC. A-A



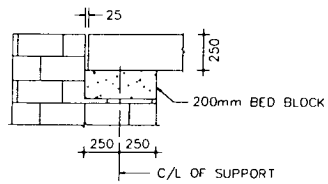
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	23	1870				1870
	10	ST2	15	4210				4210
	12	ST3	26	1025				1025
	10	ST4	12	1870				1870
	16	ST5	8	1870				1870
CURB	12	ST6	4	1870				1870
	12	VL1	26	200	407	305	394	1450
POST	20	L1	24	1079	120			1199
	6	T1	36	135	135			576
RAIL	12	ST7	16	1910				1910
	6	T2	80	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessorily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 1.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

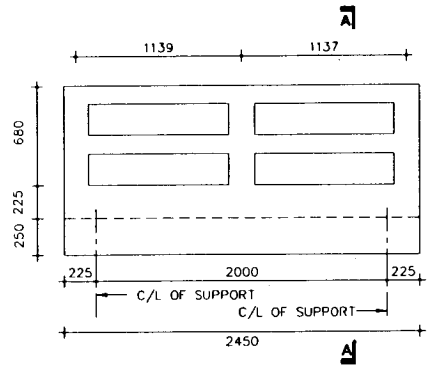
DATE : 24/09/1996
ISSUED BY
CAD FILE REF : CULV\S0301501

Web Copy

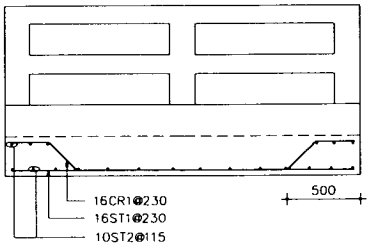
SC-28

SHEET 1 OF 1

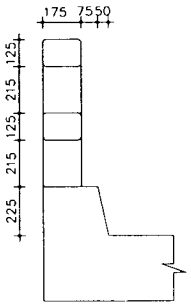
LIVE LOAD : AASHTO H20



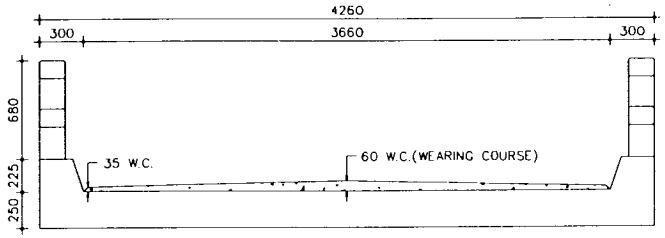
SIDE ELEVATION



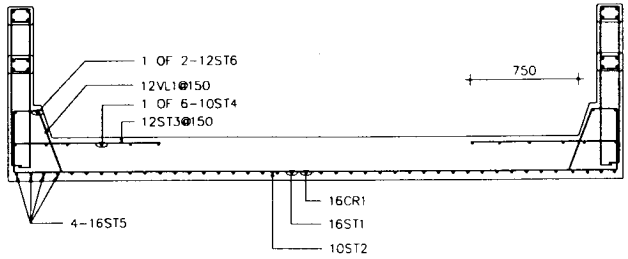
REINF. DETAILS OF SLAB



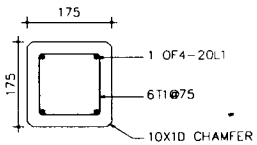
GENERAL ARRANGEMENT OF CURB & RAILING



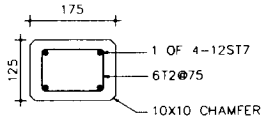
SEC. A-A



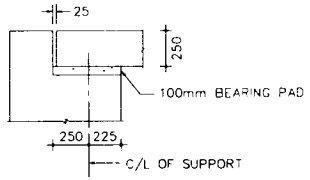
REINF. DETAILS AT SEC. A-A



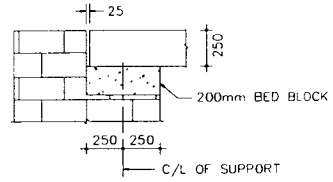
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	16	ST1	16	2370				2370
	16	CR1	15	330	240	1450		2590
	10	ST2	30	4210				4210
	12	ST3	34	1025				1025
	10	ST4	12	2370				2370
	16	ST5	8	2370				2370
CURB	12	ST6	4	2370				2370
	12	VL1	34	200	407	305	594	1450
POST	20	L1	24	1079	120			1199
	6	T1	36	135	135			576
RAIL	12	ST7	16	2410				2410
	6	T2	104	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 2.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996

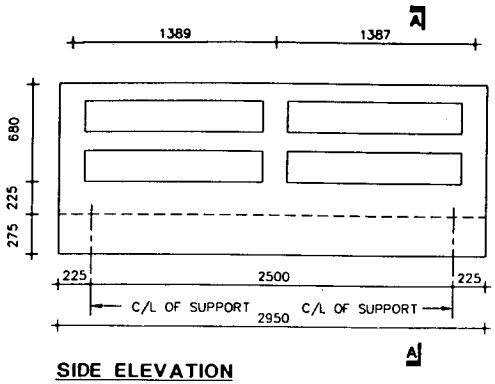
ISSUED BY

CAD FILE REF : CULV\S0302001

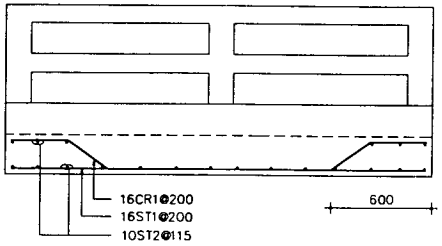
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SHEET 1 OF 1

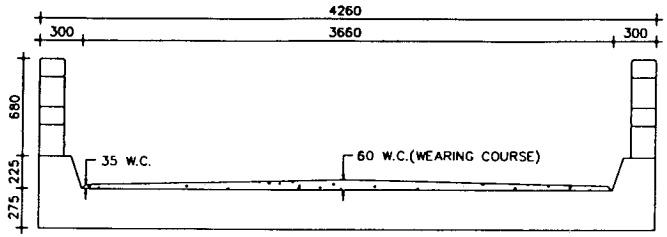
LIVE LOAD : AASHTO H20



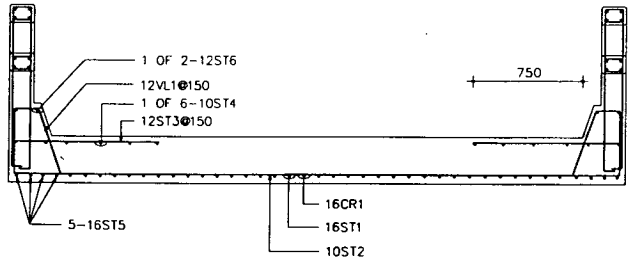
SIDE ELEVATION



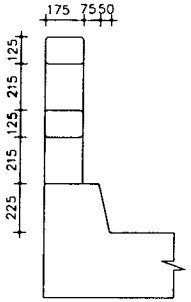
REINF. DETAILS OF SLAB



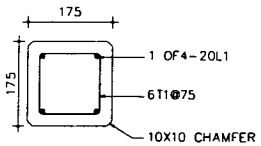
SEC. A-A



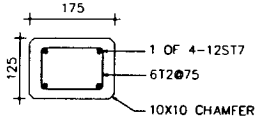
REINF. DETAILS AT SEC. A-A



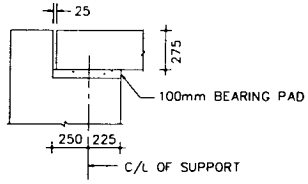
GENERAL ARRANGEMENT OF CURB & RAILING



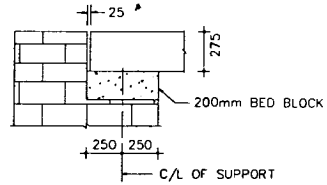
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	16	ST1	18	2870				2870
	16	CR1	17	405	276	1750		3112
	10	ST2	36	4210				4210
	12	ST3	40	1025				1025
	10	ST4	12	2870				2870
	16	ST5	10	2870				2870
CURB	12	ST6	4	2870				2870
	12	VL1	40	200	433	311	419	1507
POST	20	L1	24	1104	120			1224
	6	T1	36	135	135			576
RAIL	12	ST7	16	2910				2910
	6	T2	136	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 2.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996

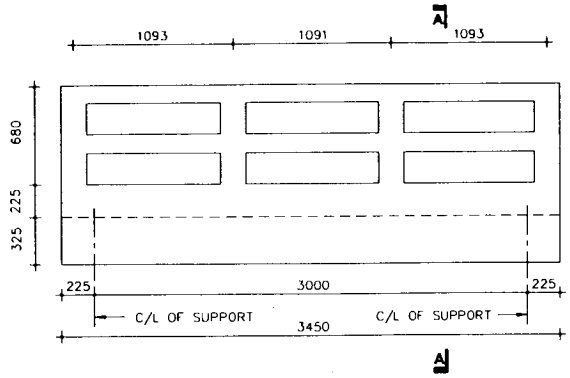
ISSUED BY :

CAD FILE REF : CULV\S0302501

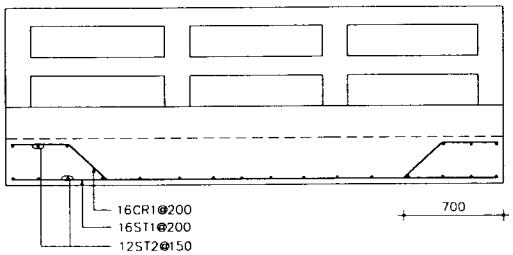
Web Copy

SHEET 1 OF 1

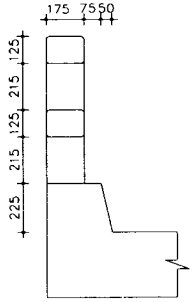
LIVE LOAD : AASHTO H20



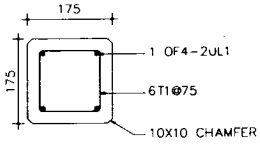
SIDE ELEVATION



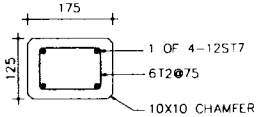
REINF. DETAILS OF SLAB



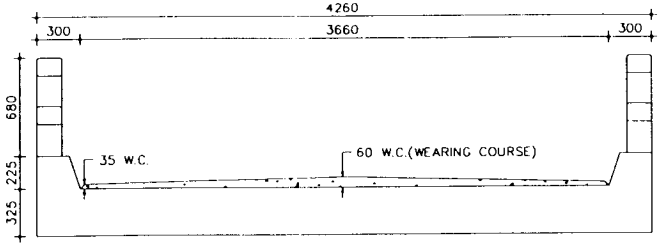
GENERAL ARRANGEMENT OF CURB & RAILING



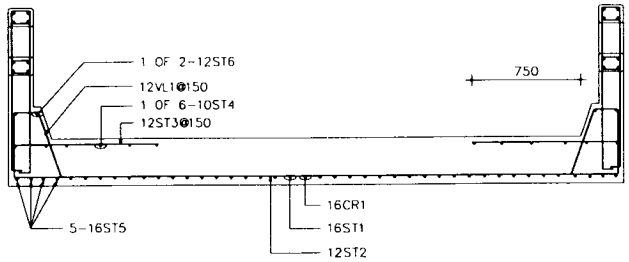
REINF. DETAIL OF POST



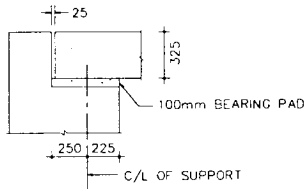
REINF. DETAIL OF RALING



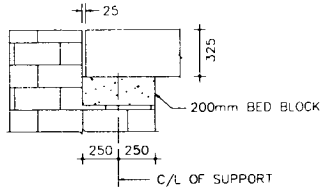
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	16	ST1	18	3370				3370
	16	CR1	17	455	346	2050		3652
	12	ST2	29	4210				4210
	12	ST3	46	1025				1025
	10	ST4	12	3370				3370
	16	ST5	10	3370				3370
CURB	12	ST6	4	3370				3370
	12	VL1	46	200	484	322	469	3619
POST	20	11	32	1154	120			1274
	6	11	48	135	135			576
RAIL	12	ST7	16	3410				3410
	6	12	156	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm
7. This drawing is to be read in conjunction with Shape Code, Cad File: Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 3.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

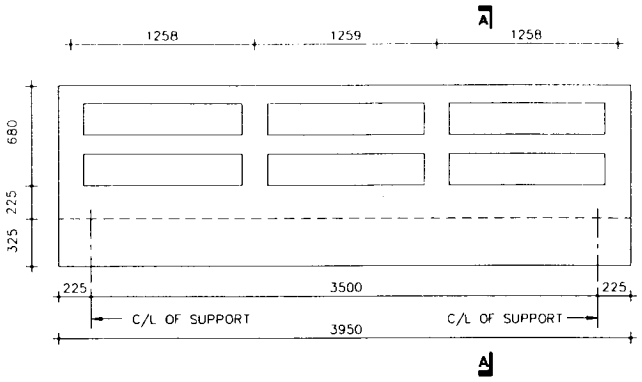
DATE : 24/09/1996 | ISSUED BY

CAD FILE REF : CULV\S0303001

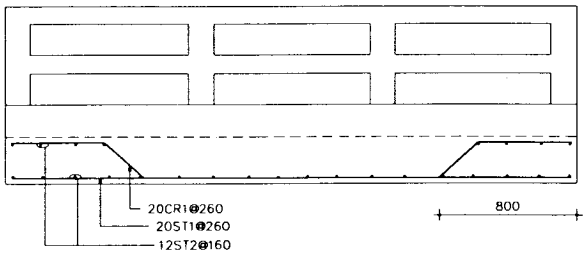
Web Copy

SHEET 1 OF 1

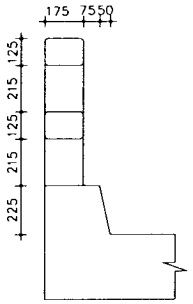
LIVE LOAD : AASHTO H20



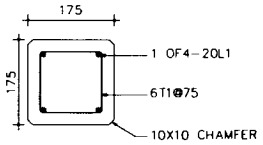
SIDE ELEVATION



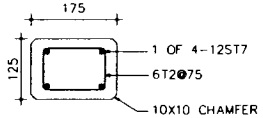
REINF. DETAILS OF SLAB



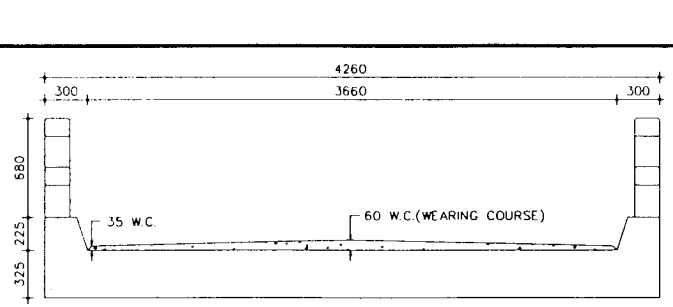
GENERAL ARRANGEMENT OF CURB & RAILING



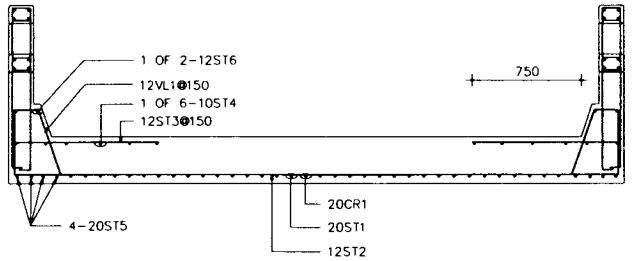
REINF. DETAIL OF POST



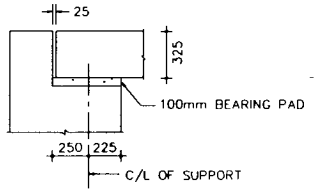
REINF. DETAIL OF RALING



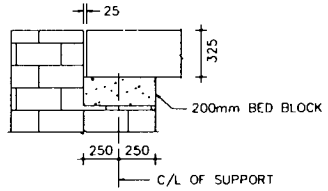
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	14	3870				3870
	20	CR1	13	555	346	2350		4152
	12	ST2	33	4210				4210
	12	ST3	54	1025				1025
	10	ST4	12	3870				3870
	20	ST5	8	3870				3870
CURB	12	ST6	4	3870				3870
	12	VL1	54	200	480	322	465	1611
POST	20	L1	32	1150	120			1270
	6	T1	48	135	135			576
RAIL	12	ST7	16	3910				3910
	6	T2	180	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm
7. This drawing is to be read in conjunction with Shape Code; Cad File. Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 3.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996

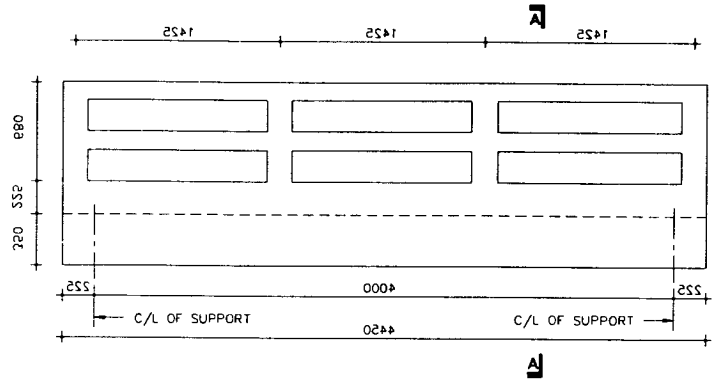
ISSUED BY :

CAD FILE REF : CULV\S0303501

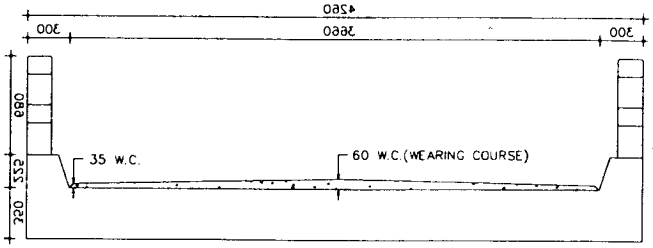
Web Copy

SC-32

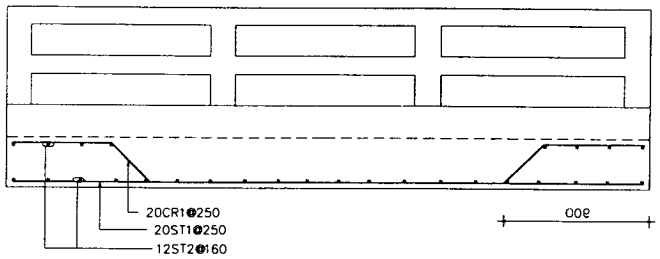
SHEET 1 OF 1
LIVE LOAD : AASHTO H20



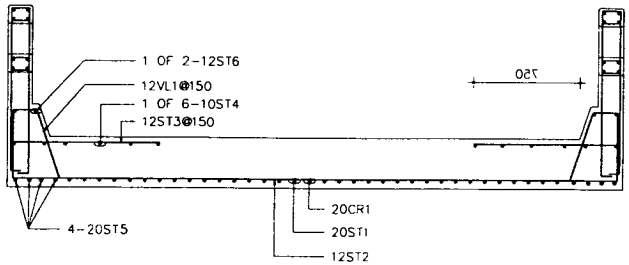
SIDE ELEVATION



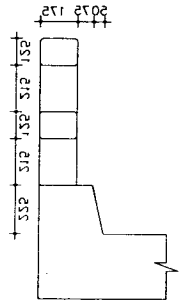
SEC. A-A



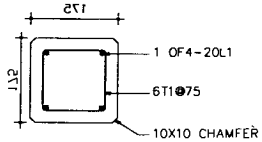
REINF. DETAILS OF SLAB



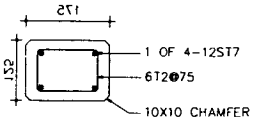
REINF. DETAILS AT SEC. A-A



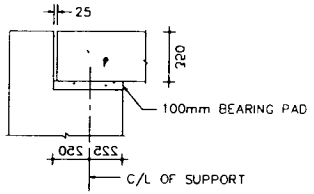
GENERAL ARRANGEMENT
OF CURB & RAILING



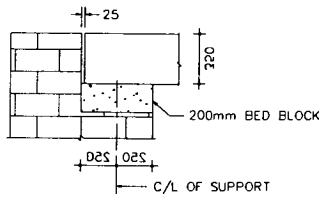
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	14	4370				4370
	20	CR1	14	630	382	2650		4674
	12	ST2	38	4210				4210
	12	ST3	60	1025				1025
	10	ST4	12	4370				4370
	20	ST5	8	4370				4370
CURB	12	ST6	4	4370				4370
	12	VL1	60	200	506	327	490	1667
POST	20	L1	32	1175	120			1295
	6	T1	48	135	135			576
RAIL	12	ST7	16	4410				4410
	6	T2	204	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength – 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab – 40mm, b) Rail – 20mm,
   c) Post – 20mm, d) Curb – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

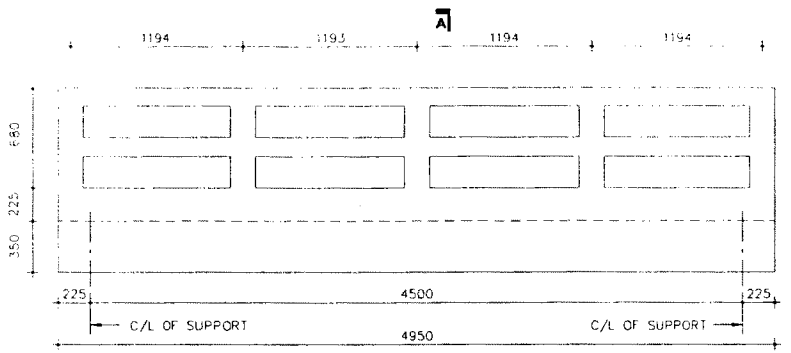
DETAILS OF 4.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996
ISSUED BY :
CAD FILE REF : CULV\S0304001

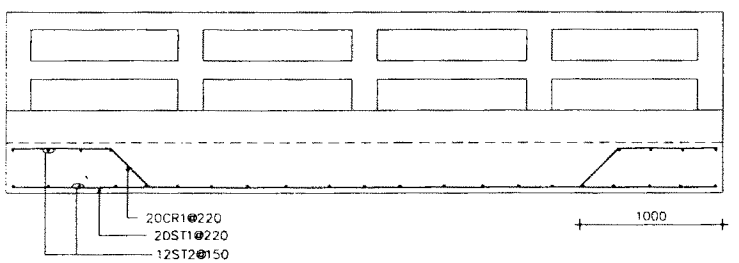
Web Copy

SHEET 1 OF 1

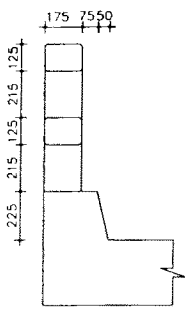
LIVE LOAD : AASHTO H20



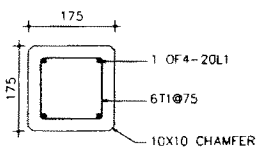
SIDE ELEVATION



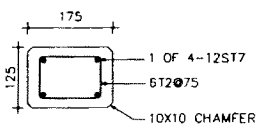
REINF. DETAILS OF SLAB



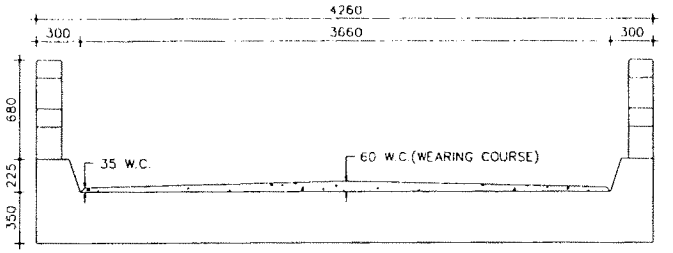
GENERAL ARRANGEMENT OF CURB & RAILING



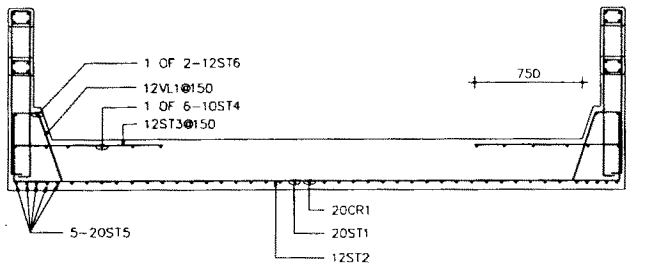
REINF. DETAIL OF POST



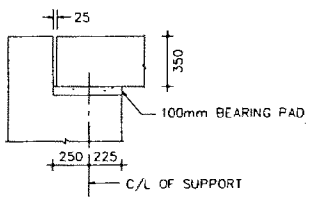
REINF. DETAIL OF RALING



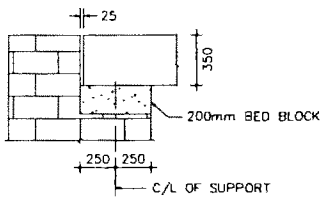
SEC. A-A



REINF. DETAILS AT SEC. A-A



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	16	4870				4870
	20	CR1	16	730	382	2950		5174
	12	ST2	45	4210				4210
	12	ST3	66	1025				1025
	10	ST4	12	4870				4870
	20	ST5	10	4870				4870
CURB	12	ST6	4	4870				4870
	12	VL1	66	200	506	327	490	1667
POST	20	L1	40	1175	120			1295
	6	T1	60	135	135			576
RAIL	12	ST7	16	4910				4910
	6	T2	224	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength – 276MPa ASTM A615.
5. Not all reinforcement are necessorily shown in any view.
6. Clear covers :
   a) Slab – 40mm, b) Rail – 20mm,
   c) Post – 20mm, d) Curb – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 4.5m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m

DATE : 24/09/1996 | ISSUED BY :

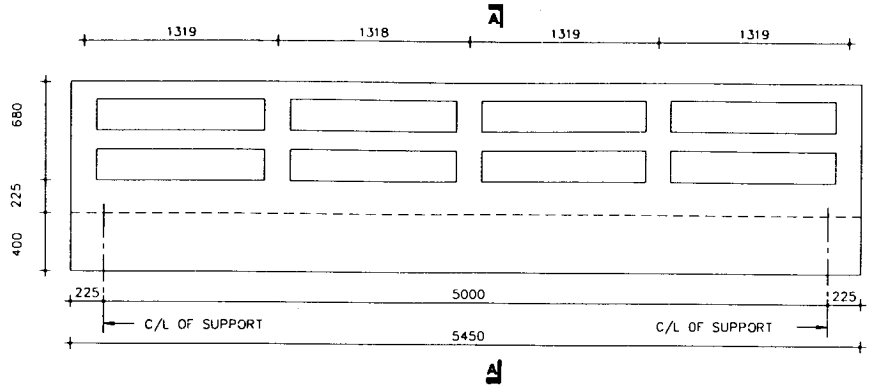
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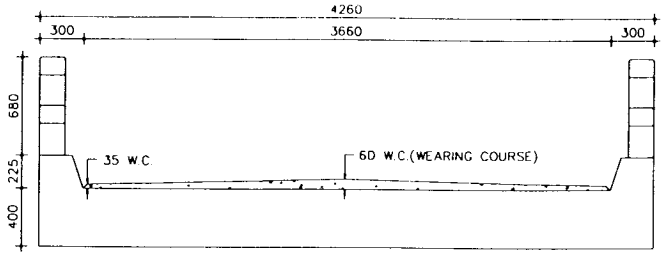
SC-34

SHEET 1 OF 1

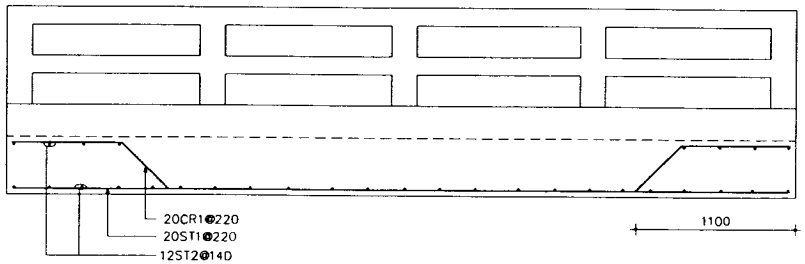
LIVE LOAD : AASHTO H20



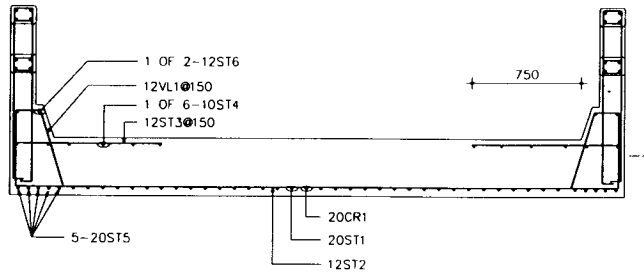
SIDE ELEVATION



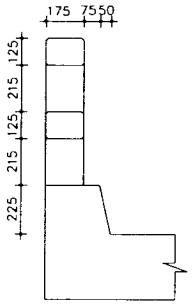
SEC. A-A



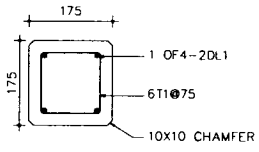
REINF. DETAILS OF SLAB



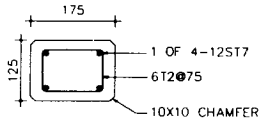
REINF. DETAILS AT SEC. A-A



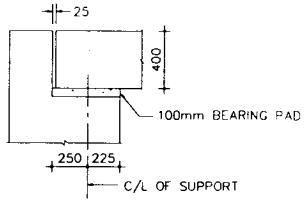
GENERAL ARRANGEMENT OF CURB & RAILING



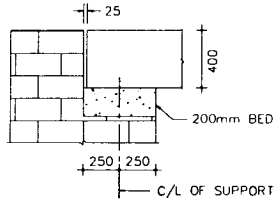
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS				BAR LENGTH
				a	b	c	d	
SLAB	20	ST1	16	5370				5370
	20	CR1	16	780	453	3250		5716
	12	ST2	53	4210				4210
	12	ST3	74	1025				1025
	10	ST4	12	5370				5370
	20	ST5	10	5370				5370
CURB	12	ST6	4	5370				5370
	12	VL1	74	200	557	338	540	1779
POST	20	T1	40	1225	120			1345
	6	T1	60	135	135			576
RAIL	12	ST7	16	5410				5410
	6	T2	256	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) Slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 5.0m SLAB CULVERT OF CARRIAGE WAY WIDTH 3.66m.

DATE : 24/09/1996 | ISSUED BY

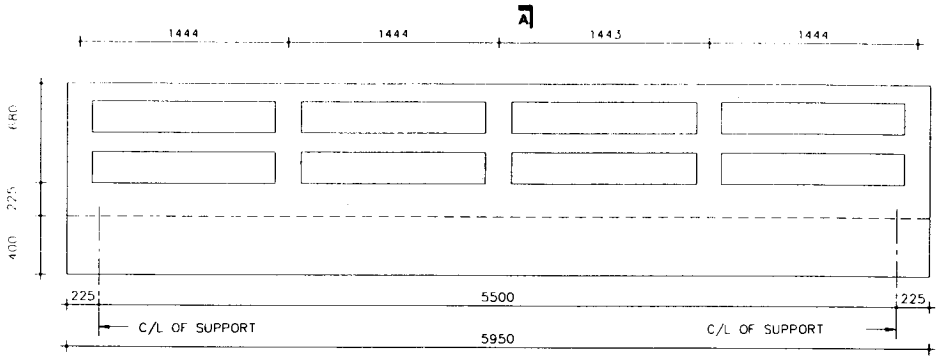
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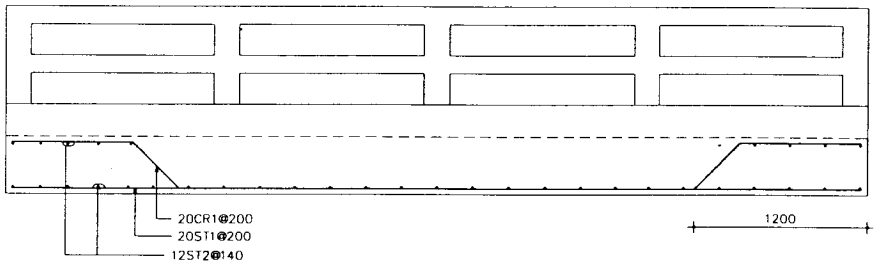
SC-35

SHEET 1 OF 1

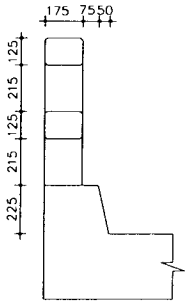
LIVE LOAD : AASHTO H20



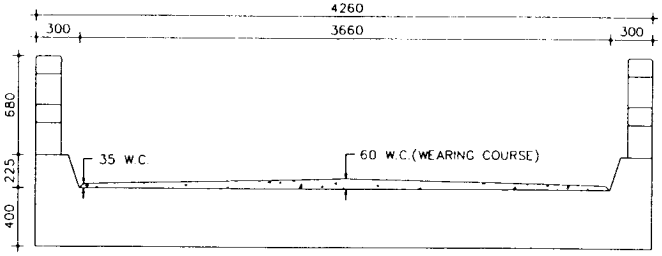
SIDE ELEVATION



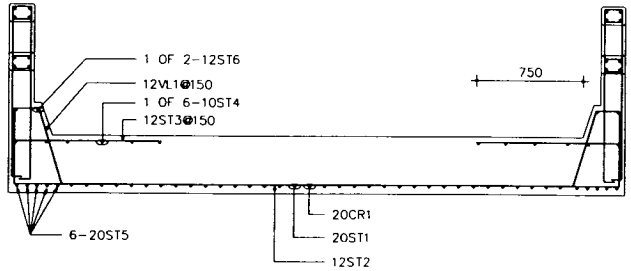
REINF. DETAILS OF SLAB



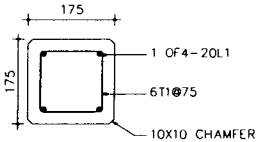
GENERAL ARRANGEMENT OF CURB & RAILING



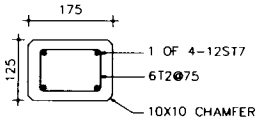
SEC. A-A



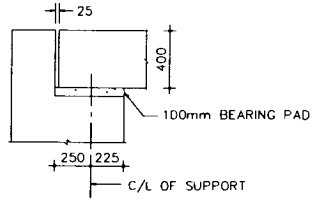
REINF. DETAILS AT SEC. A-A



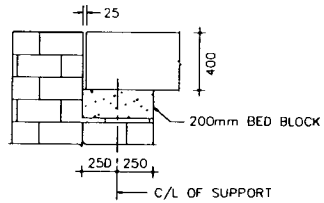
REINF. DETAIL OF POST



REINF. DETAIL OF RALING



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SITTING ARRANGEMENT OF SLAB ON ABUTMENT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
SLAB	20	ST1	18	5870				5870
	20	CR1	17	880	453	3550		6216
	12	ST2	57	4210				4210
	12	ST3	80	1025				1025
	10	ST4	12	5870				5870
	20	ST5	12	5870				5870
CURB	12	ST6	4	5870				5870
	12	VL1	80	200	557	338	540	1779
POST	20	L1	40	1225	120			1345
	6	T1	60	135	135			576
RAIL	12	ST7	16	5910				5910
	6	T2	272	85	135			476

NOTES :

1. All dimensions are in mm unless otherwise specified.
2. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
3. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength - 276MPa ASTM A615.
5. Not all reinforcement are necessarily shown in any view.
6. Clear covers :
   a) slab - 40mm, b) Rail - 20mm,
   c) Post - 20mm, d) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: Culv\SD000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

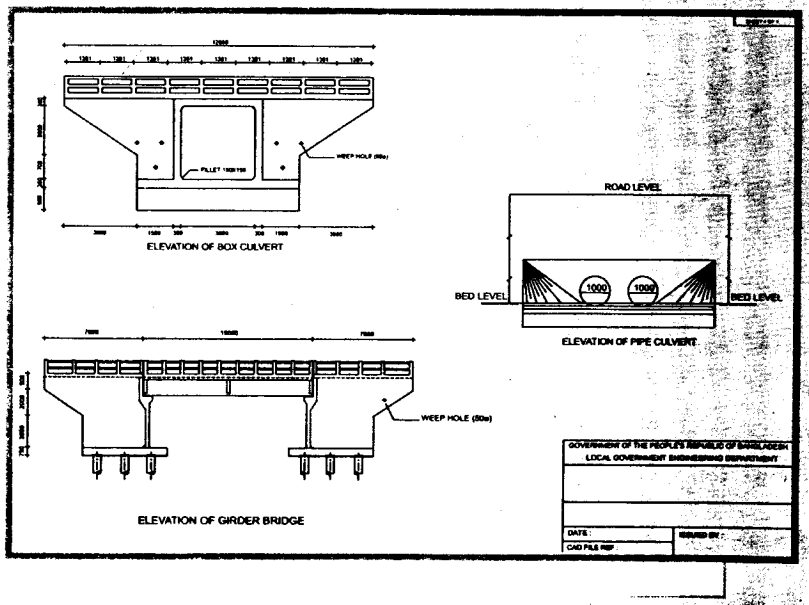
DETAILS OF 5.5m SLAB CULVERT. OF CARRIAGE WAY WIDTH 3.66m.

DATE : 24/09/1996

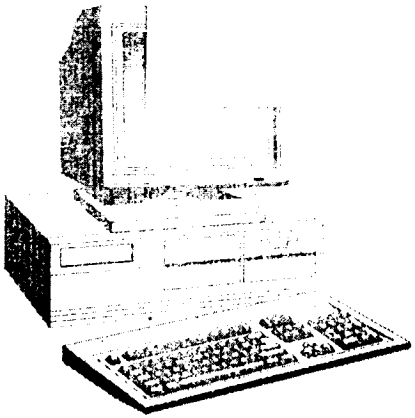
ISSUED BY :

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GIRDER BRIDGE



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SELECTION OF STANDARD DESIGN

GIRDER BRIDGES :

Introduction

Standard design of girder bridges with span lengths ranging from 6.0m to 20.0m with an increment of 0.5m and having three types of live loading AASHTO H10, H15 and H20 are presented in the Manual. The carriageway widths have been considered as 2.44m and 3.66m all the structures have been designed without providing footpaths. Additional standard designs for 3.66m carriageway width with footpaths (for H15 and H20 loading) have also been provided in the Manual. Each structure has been assigned a refernce code based on with and without footpath and types of loading and length of span.

Procedure of Selection

Selection of a girder bridges along with its span length will be determined by following the flow chart given in Chapter 13 of Part A of the Manual. Standard designs with detailed drawings of the required structure along with bar schedule are available in this section.

Selection of a suitable structure may also be done with the assistance of Structure WORKS, a computer software. See Part C of the Road Structure Manual for more information.

Quantity Estimate

The estimates of quantities involving different items of works are presented in the form of a Table in the following pages. Estimate for a particular design can be obtained from these tables.

The items of works whose quantities depend on the particular site conditions are included in the table, but their quantities are kept blank. Those are to be determined after actual field measurements.

In preparing the bill of quantities the full description of the related items should be taken from Chapter 16-Bill of Quantities.

List of all Girder Bridges are summarized below :

Structure List of Girder Bridges

Sl. No.	Reference Code	Structure Description	Page No.
1	GNRL\G000R201	General Arrangement Girder Bridge; Without Footpath; CW3.66; Full Depth Abutment	GB-1
2	GNRL\G100R201	General Arrangement Girder Bridge; With Footpath; CW3.66; Full Depth Abutment	GB-2
3	GNRL\G000R101	General Arrangement Girder Bridge; Without Footpath; CW2.44; Full Depth Abutment	GB-3
4	GNRL\G000S201	General Arrangement Girder Bridge; Without Footpath; CW3.66; Stub Abutment	GB-4
5	GNRL\G100S201	General Arrangement Girder Bridge; With Footpath; CW3.66; Stub Abutment	GB-5
6	GNRL\G000S101	General Arrangement Girder Bridge; Without Footpath; CW2.44; Stub Abutment	GB-6
7	GNRL\G000B201	General Arrangement Girder Bridge; Without Footpath; CW3.66; Brick Abutment	GB-7
8	GNRL\G100B201	General Arrangement Girder Bridge; With Footpath; CW3.66; Brick Abutment	GB-8
9	GNRL\G000B101	General Arrangement Girder Bridge; Without Footpath; CW2.44; Brick Abutment	GB-9
10	GNRL\G000O201	General Arrangement Girder Bridge; Without Footpath; CW3.66; Open Abutment	GB-10
11	GNRL\G100O201	General Arrangement Girder Bridge; With Footpath; CW3.66; Open Abutment	GB-11
12	GNRL\G000O101	General Arrangement Girder Bridge; Without Footpath; CW2.44; Open Abutment	GB-12
13	BRDG\D0100001	Deck Slab; Without Footpath; Load H10;	GB-13
14	BRDG\D0200001	Deck Slab; Without Footpath; Load H15;	GB-14
15	BRDG\D0300001	Deck Slab; Without Footpath; Load H20;	GB-15
16	BRDG\D1200001	Deck Slab; With Footpath; Load H15;	GB-16
17	BRDG\D1300001	Deck Slab; With Footpath; Load H20;	GB-17
18	BRDG\G0106001	Girder Bridge; Without Footpath; Load H10; S6.0m;	GB-18
19	BRDG\G0106501	Girder Bridge; Without Footpath; Load H10; S6.5m;	GB-19
20	BRDG\G0107001	Girder Bridge; Without Footpath; Load H10; S7.0m;	GB-20
21	BRDG\G0107501	Girder Bridge; Without Footpath; Load H10; S7.5m;	GB-21
22	BRDG\G0108001	Girder Bridge; Without Footpath; Load H10; S8.0m;	GB-22
23	BRDG\G0108501	Girder Bridge; Without Footpath; Load H10; S8.5m;	GB-23
24	BRDG\G0109001	Girder Bridge; Without Footpath; Load H10; S9.0m;	GB-24
25	BRDG\G0109501	Girder Bridge; Without Footpath; Load H10; S9.5m;	GB-25
26	BRDG\G0110001	Girder Bridge; Without Footpath; Load H10; S10.0m;	GB-26
27	BRDG\G0110501	Girder Bridge; Without Footpath; Load H10; S10.5m;	GB-27
28	BRDG\G0111001	Girder Bridge; Without Footpath; Load H10; S11.0m;	GB-28
29	BRDG\G0111501	Girder Bridge; Without Footpath; Load H10; S11.5m;	GB-29
30	BRDG\G0112001	Girder Bridge; Without Footpath; Load H10; S12.0m;	GB-30
31	BRDG\G0112501	Girder Bridge; Without Footpath; Load H10; S12.5m;	GB-31
32	BRDG\G0113001	Girder Bridge; Without Footpath; Load H10; S13.0m;	GB-32
33	BRDG\G0113501	Girder Bridge; Without Footpath; Load H10; S13.5m;	GB-33
34	BRDG\G0114001	Girder Bridge; Without Footpath; Load H10; S14.0m;	GB-34
35	BRDG\G0114501	Girder Bridge; Without Footpath; Load H10; S14.5m;	GB-35
36	BRDG\G0115001	Girder Bridge; Without Footpath; Load H10; S15.0m;	GB-36
37	BRDG\G0115501	Girder Bridge; Without Footpath; Load H10; S615.5m;	GB-37
38	BRDG\G0116001	Girder Bridge; Without Footpath; Load H10; S16.0m;	GB-38
39	BRDG\G0116501	Girder Bridge; Without Footpath; Load H10; S16.5m;	GB-39
40	BRDG\G0117001	Girder Bridge; Without Footpath; Load H10; S17.0m;	GB-40
41	BRDG\G0117501	Girder Bridge; Without Footpath; Load H10; S17.5m;	GB-41
42	BRDG\G0118001	Girder Bridge; Without Footpath; Load H10; S18.0m;	GB-42
43	BRDG\G0118501	Girder Bridge; Without Footpath; Load H10; S18.5m;	GB-43
44	BRDG\G0119001	Girder Bridge; Without Footpath; Load H10; S19.0m;	GB-44
45	BRDG\G0119501	Girder Bridge; Without Footpath; Load H10; S19.5m;	GB-45
46	BRDG\G0120001	Girder Bridge; Without Footpath; Load H10; S20.0m;	GB-46
47	BRDG\G0206001	Girder Bridge; Without Footpath; Load H15; S6.0m;	GB-47
48	BRDG\G0206501	Girder Bridge; Without Footpath; Load H15; S6.5m;	GB-48
49	BRDG\G0207001	Girder Bridge; Without Footpath; Load H15; S7.0m;	GB-49

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Sl. No.	Reference Code	Structure Description	Page No.
50	BRDG\G0207501	Girder Bridge; Without Footpath; Load H15; S7.5m;	GB-50
52	BRDG\G0208501	Girder Bridge; Without Footpath; Load H15; S8.5m;	GB-52
53	BRDG\G0209001	Girder Bridge; Without Footpath; Load H15; S9.0m;	GB-53
54	BRDG\G0209501	Girder Bridge; Without Footpath; Load H15; S9.5m;	GB-54
55	BRDG\G0210001	Girder Bridge; Without Footpath; Load H15; S10.0m;	GB-55
56	BRDG\G0210501	Girder Bridge; Without Footpath; Load H15; S10.5m;	GB-56
57	BRDG\G0211001	Girder Bridge; Without Footpath; Load H15; S11.0m;	GB-57
58	BRDG\G0211501	Girder Bridge; Without Footpath; Load H15; S11.5m;	GB-58
59	BRDG\G0212001	Girder Bridge; Without Footpath; Load H15; S12.0m;	GB-59
60	BRDG\G0212501	Girder Bridge; Without Footpath; Load H15; S12.50m;	GB-60
61	BRDG\G0213001	Girder Bridge; Without Footpath; Load H15; S13.0m;	GB-61
62	BRDG\G0213501	Girder Bridge; Without Footpath; Load H15; S13.5m;	GB-62
63	BRDG\G0214001	Girder Bridge; Without Footpath; Load H15; S14.0m;	GB-63
64	BRDG\G0214501	Girder Bridge; Without Footpath; Load H15; S14.5;	GB-64
65	BRDG\G0215001	Girder Bridge; Without Footpath; Load H15; S15.0m;	GB-65
66	BRDG\G0215501	Girder Bridge; Without Footpath; Load H15; S15.5m;	GB-66
67	BRDG\G0216001	Girder Bridge; Without Footpath; Load H15; S16.0m;	GB-67
68	BRDG\G0216501	Girder Bridge; Without Footpath; Load H15; S16.5m;	GB-68
69	BRDG\G0217001	Girder Bridge; Without Footpath; Load H15; S17.0m;	GB-69
70	BRDG\G0217501	Girder Bridge; Without Footpath; Load H15; S17.5m;	GB-70
71	BRDG\G0218001	Girder Bridge; Without Footpath; Load H15; S18.0m;	GB-71
72	BRDG\G0218501	Girder Bridge; Without Footpath; Load H15; S18.5m;	GB-72
73	BRDG\G0219001	Girder Bridge; Without Footpath; Load H15; S19.0m;	GB-73
74	BRDG\G0219501	Girder Bridge; Without Footpath; Load H15; S19.5m;	GB-74
75	BRDG\G0220001	Girder Bridge; Without Footpath; Load H15; S20.0m;	GB-75
76	BRDG\G0306001	Girder Bridge; Without Footpath; Load H20; S6.0m;	GB-76
77	BRDG\G0306501	Girder Bridge; Without Footpath; Load H20; S6.5m;	GB-77
78	BRDG\G0307001	Girder Bridge; Without Footpath; Load H20; S7.0m;	GB-78
79	BRDG\G0307501	Girder Bridge; Without Footpath; Load H20; S7.5m;	GB-79
80	BRDG\G0308001	Girder Bridge; Without Footpath; Load H20; S8.0m;	GB-80
81	BRDG\G0308501	Girder Bridge; Without Footpath; Load H20; S8.5m;	GB-81
82	BRDG\G0309001	Girder Bridge; Without Footpath; Load H20; S9.0m;	GB-82
83	BRDG\G0309501	Girder Bridge; Without Footpath; Load H20; S9.5m;	GB-83
84	BRDG\G0310001	Girder Bridge; Without Footpath; Load H20; S10.0m;	GB-84
85	BRDG\G0310501	Girder Bridge; Without Footpath; Load H20; S10.5m;	GB-85
86	BRDG\G0311001	Girder Bridge; Without Footpath; Load H20; S11.0m;	GB-86
87	BRDG\G0311501	Girder Bridge; Without Footpath; Load H20; S11.5m;	GB-87
88	BRDG\G0312001	Girder Bridge; Without Footpath; Load H20; S12.0m;	GB-88
89	BRDG\G0312501	Girder Bridge; Without Footpath; Load H20; S12.5m;	GB-89
90	BRDG\G0313001	Girder Bridge; Without Footpath; Load H20; S13.0m;	GB-90
91	BRDG\G0313501	Girder Bridge; Without Footpath; Load H20; S13.5m;	GB-91
92	BRDG\G0314001	Girder Bridge; Without Footpath; Load H20; S14.0m;	GB-92
93	BRDG\G0314501	Girder Bridge; Without Footpath; Load H20; S14.5m;	GB-93
94	BRDG\G0315001	Girder Bridge; Without Footpath; Load H20; S15.0m;	GB-94
95	BRDG\G0315501	Girder Bridge; Without Footpath; Load H20; S15.5m;	GB-95
96	BRDG\G0316001	Girder Bridge; Without Footpath; Load H20; S16.0m;	GB-96
97	BRDG\G0316501	Girder Bridge; Without Footpath; Load H20; S16.5m;	GB-97
98	BRDG\G0317001	Girder Bridge; Without Footpath; Load H20; S17.0m;	GB-98
99	BRDG\G0317501	Girder Bridge; Without Footpath; Load H20; S17.5m;	GB-99
100	BRDG\G0318001	Girder Bridge; Without Footpath; Load H20; S18.0m;	GB-100
101	BRDG\G0318501	Girder Bridge; Without Footpath; Load H20; S18.5m;	GB-101
102	BRDG\G0319001	Girder Bridge; Without Footpath; Load H20; S19.0m;	GB-102
103	BRDG\G0319501	Girder Bridge; Without Footpath; Load H20; S19.5m;	GB-103
104	BRDG\G0320001	Girder Bridge; Without Footpath; Load H20; S20.0m;	GB-104
105	BRDG\G1206001	Girder Bridge; With Footpath; Load H15; S6.0m;	GB-105
106	BRDG\G1206501	Girder Bridge; With Footpath; Load H15; S6.5m;	GB-106
107	BRDG\G1207001	Girder Bridge; With Footpath; Load H15; S7.0m;	GB-107
108	BRDG\G1207501	Girder Bridge; With Footpath; Load H15; S7.5m;	GB-108
109	BRDG\G1208001	Girder Bridge; With Footpath; Load H15; S8.0m;	GB-109
110	BRDG\G1208501	Girder Bridge; With Footpath; Load H15; S8.5m;	GB-110
111	BRDG\G1209001	Girder Bridge; With Footpath; Load H15; S9.0m;	GB-111
112	BRDG\G1209501	Girder Bridge; With Footpath; Load H15; S9.5m;	GB-112
113	BRDG\G1210001	Girder Bridge; With Footpath; Load H15; S10.0m;	GB-113
114	BRDG\G1210501	Girder Bridge; With Footpath; Load H15; S10.5m;	GB-114
115	BRDG\G1211001	Girder Bridge; With Footpath; Load H15; S11.0m;	GB-115
116	BRDG\G1211501	Girder Bridge; With Footpath; Load H15; S11.5m;	GB-116
117	BRDG\G1212001	Girder Bridge; With Footpath; Load H15; S12.0m;	GB-117
118	BRDG\G1212501	Girder Bridge; With Footpath; Load H15; S12.5m;	GB-118
119	BRDG\G1213001	Girder Bridge; With Footpath; Load H15; S13.0m;	GB-119
120	BRDG\G1213501	Girder Bridge; With Footpath; Load H15; S13.5m;	GB-120
121	BRDG\G1214001	Girder Bridge; With Footpath; Load H15; S14.0m;	GB-121
122	BRDG\G1214501	Girder Bridge; With Footpath; Load H15; S14.5m;	GB-122
123	BRDG\G1215001	Girder Bridge; With Footpath; Load H15; S15.0m;	GB-123
124	BRDG\G1215501	Girder Bridge; With Footpath; Load H15; S15.5m;	GB-124
125	BRDG\G1216001	Girder Bridge; With Footpath; Load H15; S16.0m;	GB-125
126	BRDG\G1216501	Girder Bridge; With Footpath; Load H15; S16.5m;	GB-126
127	BRDG\G1217001	Girder Bridge; With Footpath; Load H15; S17.0m;	GB-127
128	BRDG\G1217501	Girder Bridge; With Footpath; Load H15; S17.5m;	GB-128
129	BRDG\G1218001	Girder Bridge; With Footpath; Load H15; S18.0m;	GB-129
130	BRDG\G1218501	Girder Bridge; With Footpath; Load H15; S18.5m;	GB-130
131	BRDG\G1219001	Girder Bridge; With Footpath; Load H15; S19.0m;	GB-131
132	BRDG\G1219501	Girder Bridge; With Footpath; Load H15; S19.5m;	GB-132
133	BRDG\G1220001	Girder Bridge; With Footpath; Load H15; S20.0m;	GB-133
134	BRDG\G1306001	Girder Bridge; With Footpath; Load H20; S6.0m;	GB-134
135	BRDG\G1306501	Girder Bridge; With Footpath; Load H20; S6.5m;	GB-135
136	BRDG\G1307001	Girder Bridge; With Footpath; Load H20; S7.0m;	GB-136
137	BRDG\G1307501	Girder Bridge; With Footpath; Load H20; S7.5m;	GB-137
138	BRDG\G1308001	Girder Bridge; With Footpath; Load H20; S8.0m;	GB-138

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Sl. No.	Reference Code	Structure Description	Page No.
139	BRDG\G1308501	Girder Bridge; With Footpath; Load H20; S8.5m;	GB-139
140	BRDG\G1309001	Girder Bridge; With Footpath; Load H20; S9.0m;	GB-140
141	BRDG\G1309501	Girder Bridge; With Footpath; Load H20; S9.5m;	GB-141
142	BRDG\G1310001	Girder Bridge; With Footpath; Load H20; S10.0m;	GB-142
143	BRDG\G1310501	Girder Bridge; With Footpath; Load H20; S10.5m;	GB-143
144	BRDG\G1311001	Girder Bridge; With Footpath; Load H20; S11.0m;	GB-144
145	BRDG\G1311501	Girder Bridge; With Footpath; Load H20; S11.5m;	GB-145
146	BRDG\G1312001	Girder Bridge; With Footpath; Load H20; S12.0m;	GB-146
147	BRDG\G1312501	Girder Bridge; With Footpath; Load H20; S12.5m;	GB-147
148	BRDG\G1313001	Girder Bridge; With Footpath; Load H20; S13.0m;	GB-148
149	BRDG\G1313501	Girder Bridge; With Footpath; Load H20; S13.5m;	GB-149
150	BRDG\G1314001	Girder Bridge; With Footpath; Load H20; S14.0m;	GB-150
151	BRDG\G1314501	Girder Bridge; With Footpath; Load H20; S14.5m;	GB-151
152	BRDG\G1315001	Girder Bridge; With Footpath; Load H20; S15.0m;	GB-152
153	BRDG\G1315501	Girder Bridge; With Footpath; Load H20; S15.5m;	GB-153
154	BRDG\G1316001	Girder Bridge; With Footpath; Load H20; S16.0m;	GB-154
155	BRDG\G1316501	Girder Bridge; With Footpath; Load H20; S16.5m;	GB-155
156	BRDG\G1317001	Girder Bridge; With Footpath; Load H20; S17.0m;	GB-156
157	BRDG\G1317501	Girder Bridge; With Footpath; Load H20; S17.5m;	GB-157
158	BRDG\G1318001	Girder Bridge; With Footpath; Load H20; S18.0m;	GB-158
159	BRDG\G1318501	Girder Bridge; With Footpath; Load H20; S18.5m;	GB-159
160	BRDG\G1319001	Girder Bridge; With Footpath; Load H20; S19.0m;	GB-160
161	BRDG\G1319501	Girder Bridge; With Footpath; Load H20; S19.5m;	GB-161
162	BRDG\G1320001	Girder Bridge; With Footpath; Load H20; S20.0m;	GB-162

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GIRDER BRIDGE

Quantity Estimate The estimates of quantities of the various item of work required in the construction of girder-bridges are presented below in E.Q. (Estimate of Quantities) Table no-5. The estimates for a particular design can be obtained from this table by choosing the appropriate column corresponding to respective Design Loading. **E.Q. Table No. 5** contains only a brief description of the items intended for a ready reference. In preparing the bill of quantities, the full description of the items should be copied from Table16.1 of Road Structure Manual. Part A (Chapter 16, Table 16.1) for the corresponding item numbers.

Estimate Of Quantities For Girder Bridge (Super-Structure)

E.Q. Table No. 5

Clear span (m)				6					6.5					7					7.5					8				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																									
1.	15	a) Reinforcement	Kg	2055	1825	1835	1665	1010	2230	1975	2020	1795	1115	2435	2155	2165	1935	1205	2645	2335	2355	2125	1330	2780	2465	2475	2205	1425
2.	24	R.C.C. works (1 : 2 : 4)																										
		g) Curb/side walk	Cu-m	1.90	1.90	0.80	0.80	0.80	2.03	2.03	0.860	0.860	0.86	2.18	2.18	0.92	0.92	0.92	2.33	2.33	0.98	0.98	0.98	2.47	2.47	1.05	1.05	1.05
		i) Girder, X- girder upto 10m span	Cu-m	3.15	3.15	3.20	3.20	2.25	3.40	3.40	3.40	3.40	2.40	3.60	3.60	3.60	3.60	2.55	3.80	3.80	3.85	3.85	2.70	5.00	5.00	5.03	5.03	2.85
		k) Deck slab upto 10m span	Cu-m	6.12	6.33	4.88	5.08	2.94	6.60	6.82	5.260	5.48	3.17	7.07	7.31	5.64	5.87	3.40	7.54	7.80	6.02	6.27	3.63	8.02	8.29	6.40	6.66	3.85
		m) Rail & post	Cu-m	0.80	0.80	0.75	0.75	0.75	0.85	0.85	0.80	0.80	0.80	0.90	0.90	0.85	0.85	0.85	1.00	1.00	0.90	0.90	0.90	1.05	1.05	0.95	0.95	0.95
3.	26.	Wearing course (1:1.5:3.0)	Cu-m	1.13	1.13	1.13	1.13	0.80	1.22	1.22	1.22	1.22	0.85	1.30	1.30	1.30	1.30	0.90	1.40	1.40	1.40	1.40	0.95	1.50	1.50	1.50	1.50	1.00
4.	27.	b).Providing spout	L-m	2.30	2.30	2.25	2.25	2.00	2.30	2.30	2.25	2.25	2.00	2.30	2.30	2.25	2.25	2.00	3.10	3.10	3.00	3.00	2.50	3.10	3.10	3.00	3.00	2.50
5.	29.	Expansion joint	L-m	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

Clear Span (m)				8.5					9					9.5					10				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way Width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																				
1.	15	a) Reinforcement	Kg	2980	2630	2650	2390	1540	3200	2830	2850	2560	1590	3440	3010	3050	2710	1680	3660	3210	3240	2890	1770
2.	24	R.C.C. works (1 : 2 : 4)																					
		g) Curb/side walk	Cu-m	2.62	2.62	1.11	1.11	1.11	2.76	2.76	1.17	1.17	1.17	2.910	2.910	1.23	1.23	1.23	3.06	3.06	1.29	1.29	1.29
		j) Girder, X- girder upto 10m span	Cu-m	5.25	5.25	5.30	5.30	3.05	5.50	5.50	5.60	5.60	4.50	5.80	5.80	5.90	5.90	4.70	6.90	6.90	7.00	7.00	4.90
		k) Deck slab upto 10m span	Cu-m	8.49	8.78	6.77	7.05	4.08	8.97	9.27	7.15	7.45	4.31	9.44	9.76	7.53	7.84	4.54	9.92	10.25	7.91	8.24	4.77
		m) Rail & post	Cu-m	1.10	1.10	1.00	1.00	1.00	1.15	1.15	1.05	1.05	1.05	1.20	1.20	1.10	1.10	1.10	1.25	1.25	1.15	1.15	1.15
3.	26.	Wearing course (1:1.5:3.0)	Cu-m	1.60	1.60	1.60	1.60	1.05	1.70	1.70	1.70	1.70	1.10	1.75	1.75	1.75	1.75	1.20	1.85	1.85	1.85	1.85	1.25
4.	27.	b).Providing spout	L-m	3.10	3.10	3.00	3.00	2.50	3.10	3.10	3.00	3.00	2.50	3.10	3.10	3.00	3.00	2.50	3.10	3.10	3.00	3.00	2.50
5.	29	Expansion joint	L-m	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

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GIRDER BRIDGE

Estimate Of Quantities For Girder Bridge (Super-Structure)

E.Q. Table No. 5

Clear Span (m)				10.5					11					11.5					12					12.5				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way Width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																									
1.	15	Reinforcement	Kg	3890	3450	3480	8110	1930	4140	3670	3700	3280	2030	4360	3870	3920	3500	2190	4710	4170	4270	3690	2290	5085	4450	4520	4020	2510
2.	24	R.C.C. works (1:2:4)																										
		g) Curb/side walk	Cu-m	3.20	3.20	1.36	1.36	1.36	3.35	3.35	1.42	1.42	1.42	3.50	3.50	1.48	1.48	1.48	3.64	3.64	1.54	1.54	1.54	3.79	3.79	1.60	1.60	1.60
		j) Girder, X-girder beyond 10m span	Cu-m	7.25	7.25	7.30	7.30	5.20	7.60	7.60	7.60	7.60	5.50	7.90	7.90	7.95	7.95	5.60	8.11	8.11	8.20	8.20	6.98	8.68	8.68	8.73	8.73	7.41
		l) Deck slab beyond 10m span	Cu-m	10.39	10.74	8.29	8.630	4.99	10.87	11.23	8.67	9.02	5.22	11.34	11.72	9.05	9.42	5.45	11.81	12.21	9.42	9.81	5.68	12.29	12.70	9.80	10.21	5.91
		m) Rail & post	Cu-m	1.35	1.35	1.25	1.25	1.25	1.40	1.40	1.30	1.30	1.30	1.40	1.40	1.35	1.35	1.35	1.50	1.50	1.40	1.40	1.40	1.55	1.55	1.40	1.40	1.40
3.	26.	Wearing course (1:1.5:3.0)	Cu-m	1.90	1.90	1.90	1.90	1.35	2.00	2.00	2.00	2.00	1.40	2.10	2.10	2.10	2.10	1.45	2.20	2.20	2.20	2.20	1.50	2.30	2.30	2.30	2.30	1.55
4.	27.	b).Providing spout	L-m	4.00	4.00	3.60	3.60	3.25	4.00	4.00	3.60	3.60	3.25	4.00	4.00	3.60	3.60	3.25	4.00	4.00	3.60	3.60	3.25	4.00	4.00	3.60	3.60	3.25
5.	28.	(a) Elastomeric bearing																										
		iv) 300 x 200 x 37 mm	Set	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	4.00	4.00	4.00	-
		viii) 250 x 150 x 37 mm	Set	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
6.	29.	Expansion joint	L-m	7.32	7.32	7.32	7.20	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

Clear Span (m)				13					13.5					14					14.5					15				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way Width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																									
1.	15	a) Reinforcement	Kg	5215	4660	4690	4190	2595	5550	4925	4915	4390	2820	5840	5190	5255	4640	2970	6095	5450	5460	4850	3105	6420	5790	5785	5190	3270
2.	24	R.C.C. works (1:2:4)																										
		g) Curb/side walk	Cu-m	3.93	3.93	1.66	1.66	1.66	4.08	4.08	1.73	1.73	1.73	4.23	4.23	1.79	1.79	1.79	4.37	4.37	1.850	1.850	1.85	4.52	4.52	1.91	1.91	1.91
		j) Girder, X-girder beyond 10m span	Cu-m	10.07	10.07	10.11	10.11	7.68	10.41	10.41	10.46	10.46	7.95	10.76	10.76	10.81	10.81	8.22	11.11	11.11	11.17	11.17	8.49	11.46	11.46	11.52	11.52	8.76
		l) Deck slab beyond 10m span	Cu-m	12.76	13.190	10.180	10.600	6.13	13.24	13.68	10.56	11.00	6.36	13.71	14.17	10.94	11.39	6.59	14.19	14.66	11.32	11.78	6.82	14.66	15.15	11.69	12.18	7.05
		m) Rail & post	Cu-m	1.60	1.60	1.50	1.50	1.50	1.65	1.65	1.55	1.55	1.55	1.70	1.70	1.60	1.60	1.60	1.80	1.80	1.60	1.60	1.60	1.85	1.85	1.70	1.70	1.70
3.	26	Wearing course (1:1.5:3.0)	Cu-m	2.40	2.40	2.40	2.40	1.60	2.45	2.45	2.45	2.45	1.65	2.55	2.55	2.55	2.55	1.70	2.60	2.60	2.60	2.60	1.75	2.70	2.70	2.70	2.70	1.80
4.	27	b).Providing spout	L-m	4.00	4.00	3.60	3.60	3.25	4.60	4.60	4.50	4.50	3.75	4.60	4.60	4.50	4.50	3.75	4.60	4.60	4.50	4.50	3.75	4.60	4.60	4.50	4.50	3.75
5.	28	(a) Elastomeric bearing																										
		iii) 300 x 225 x 39 mm	Set	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	4.00	4.00	4.00	-
		iv) 300 x 200 x 37 mm	Set	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	-	-	-	-	-
		vii) 250 x 75 x 39 mm	Set	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
		viii) 250 x 150 x 37 mm	Set	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	-
6.	29	Expansion joint	L-m	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

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GIRDER BRIDGE

Estimate Of Quantities For Girder Bridge (Super-Structure)

E.Q. Table No. 5

Clear Span (m)				15.5					16					16.5					17					17.5				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way Width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl No.	Item No.	Brief Description	Unit																									
1.	15	a) Reinforcement	Kg	6465	5840	5815	5245	3310	6775	6130	6090	5445	3505	7215	6455	6405	5770	3670	7415	6670	6635	6040	3840	7800	6980	6950	6315	3985
2.	24	R.C.C. works (1:2:4)																										
		g) Curb/side walk	Cu-m	4.67	4.67	1.97	1.97	1.97	4.81	4.81	2.04	2.04	2.04	4.96	4.96	2.10	2.10	2.10	5.10	5.10	2.16	2.16	2.16	5.25	5.25	2.22	2.22	2.22
		j) Girder, X-girder beyond 10m	Cu-m	15.14	15.14	15.14	15.14	11.78	15.58	15.58	15.59	15.59	12.13	16.02	16.02	16.04	16.04	12.48	16.46	16.46	16.48	16.49	12.84	16.91	16.91	16.93	16.93	13.19
		l) Deck slab beyond 10m span	Cu-m	15.14	15.64	12.07	12.570	7.27	15.61	16.14	12.45	12.96	7.50	16.08	16.08	12.83	13.36	7.73	16.56	17.15	13.21	13.75	7.96	17.03	17.61	13.59	14.15	8.19
		m) Rail & post	Cu-m	1.90	1.90	1.75	1.75	1.75	1.95	1.95	1.80	1.80	1.80	2.00	2.00	1.85	1.85	1.85	2.10	2.10	1.90	1.90	1.90	2.10	2.10	1.95	1.95	1.95
3.	26.	Wearing course (1:1.5:3.0)	Cu-m	2.80	2.80	2.80	2.80	1.85	2.90	2.90	2.90	2.90	2.00	3.00	3.00	3.00	3.00	2.00	3.10	3.10	3.10	3.10	2.10	3.15	3.15	3.25	3.15	2.10
4.	27.	b).Providing spout	L-m	4.60	4.60	5.10	5.10	4.50	4.60	4.60	5.10	5.10	4.50	5.50	5.50	5.10	5.10	4.50	5.50	5.50	5.10	5.10	4.50	5.50	5.50	5.10	5.10	4.50
5.	28.	(a) Elastomeric bearing																										
		ii) 300 x 200 x 46 mm	Set	-	-	-	-	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-
		iii) 300 x 225 x 39 mm	Set	4.00	4.00	4.00	4.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi) 250 x 175 x 46 mm	Set	-	-	-	-	-	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00
		vii) 250 x 175 x 39 mm	Set	-	-	-	-	4.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	29.	Expansion joint	L-m	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

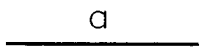
Clear Span (m)				18					18.5					19					19.5					20				
Foot-path (m)				Yes		No			Yes		No			Yes		No			Yes		No			Yes		No		
Carriage way Width (m)				3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44	3.66				2.44
Type of Loading				H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10	H20	H15	H20	H15	H10
Sl. No.	Item No.	Brief Description	Unit																									
1.	15	a) Reinforcement	Kg	8105	7275	7230	6590	4195	8470	7625	7570	6930	4350	8780	8015	7825	7155	4575	9185	8330	8290	7500	4800	9580	8695	8575	7840	4955
2.	24	R.C.C. works (1:2:4)																										
		g) Curb/side walk	Cu-m	5.40	5.40	2.28	2.28	2.28	5.54	5.54	2.35	2.35	2.35	5.87	5.87	2.41	2.41	2.41	5.84	5.84	2.47	2.47	2.47	5.98	5.98	2.53	2.53	2.53
		j) Girder, X-girder beyond 10m	Cu-m	17.35	17.35	17.38	17.34	13.54	20.16	20.16	20.16	20.14	15.89	20.66	20.66	20.66	20.66	16.29	21.16	21.16	21.16	21.16	16.69	21.70	21.70	21.70	21.70	17.81
		l) Deck slab beyond 10m span	Cu-m	17.51	18.10	13.96	14.540	8.41	17.98	18.59	14.34	14.93	8.64	18.46	19.08	14.72	15.33	8.87	18.93	19.56	15.10	15.72	9.10	19.40	20.06	15.48	16.12	9.33
		m) Rail & post	Cu-m	2.20	2.20	2.00	2.00	2.00	2.25	2.25	2.05	2.05	2.05	2.30	2.30	2.10	2.10	2.10	2.40	2.40	2.15	2.15	2.15	2.40	2.40	2.20	2.20	2.20
3.	26.	Wearing course (1:1.5:3.0)	Cu-m	3.25	3.25	3.25	3.25	2.20	3.30	3.30	3.30	3.30	2.25	3.40	3.40	3.40	3.40	2.30	3.50	3.50	3.50	3.50	2.35	3.60	3.60	3.60	3.60	2.40
4.	27.	b).Providing spout	L-m	5.50	5.50	5.10	5.10	4.50	6.10	6.10	5.80	5.80	5.00	6.10	6.10	5.80	5.80	5.00	6.10	6.10	5.80	5.80	5.00	6.10	6.10	5.80	5.80	5.00
5.	28.	a) Elastomeric bearing																										
		i) 300 x 250 x 52 mm	Set	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-	4.00	4.00	4.00	4.00	-
		v) 250 x 225 x 52 mm	Set	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00	-	-	-	-	4.00
6.	29.	Expansion joint	L-m	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88	7.32	7.32	7.32	7.32	4.88

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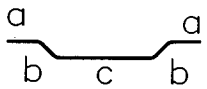
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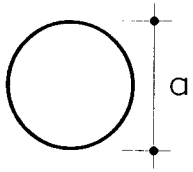
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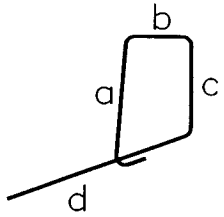
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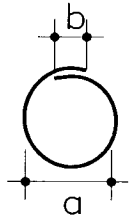
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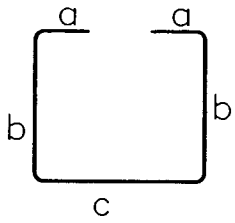
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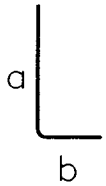
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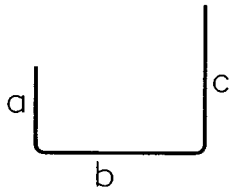
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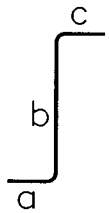
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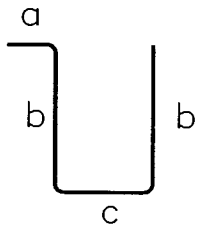
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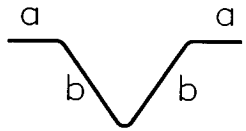
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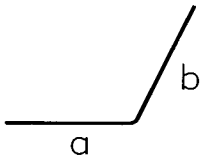
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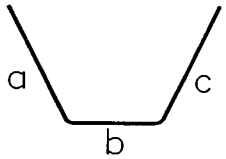
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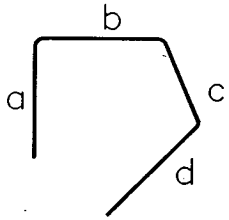
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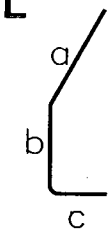
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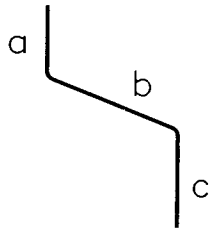
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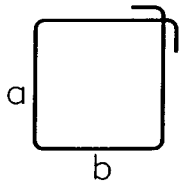
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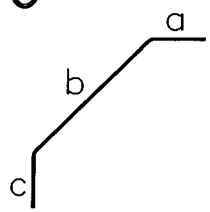
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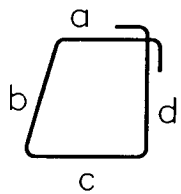
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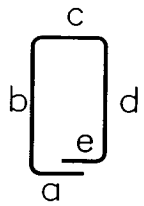
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VL



CU



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

STANDARD BAR SHAPE & SHAPE CODE

DATE :

ISSUED BY :

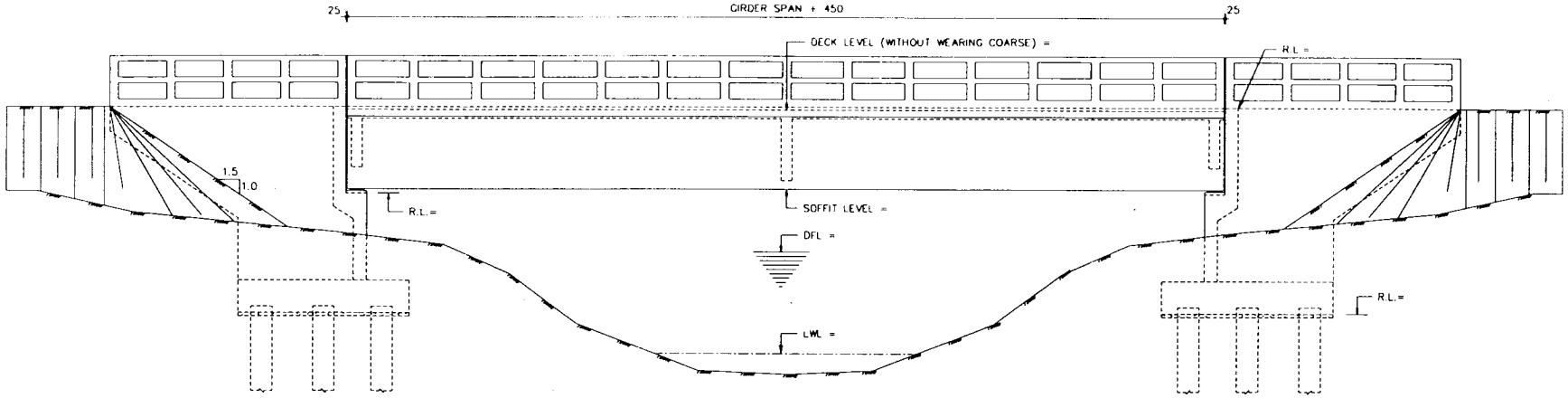
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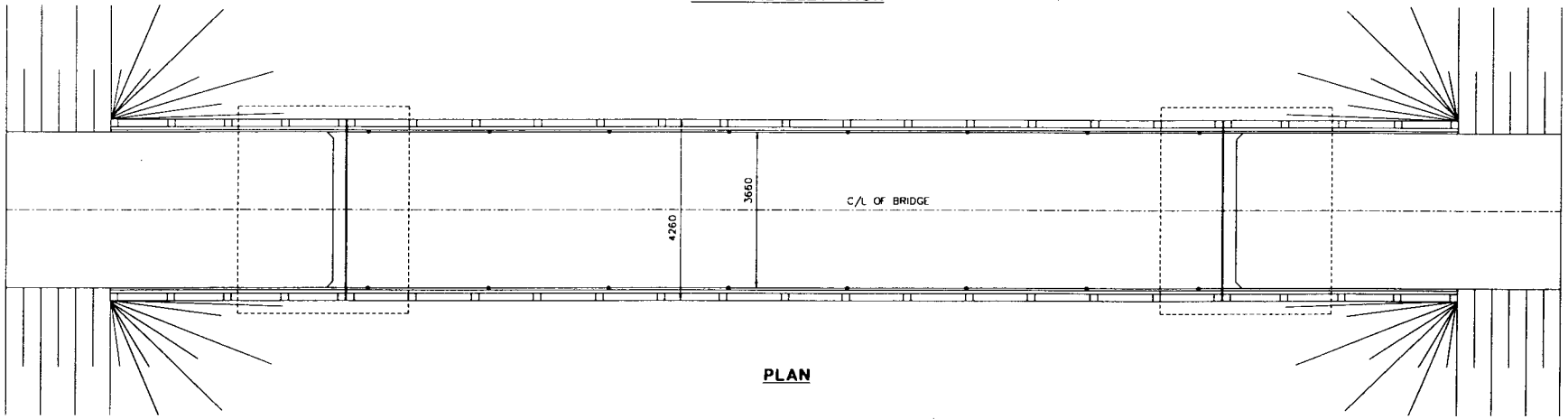
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SHEET 1 OF 1

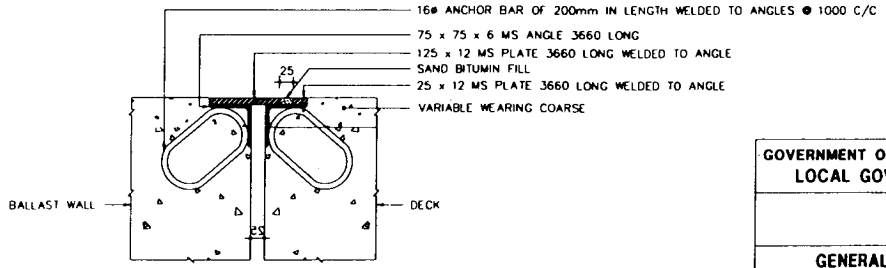
SIDEWALK - NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH FULL DEPTH ABUTMENT, DECK WIDTH : 4.26m.

DATE :

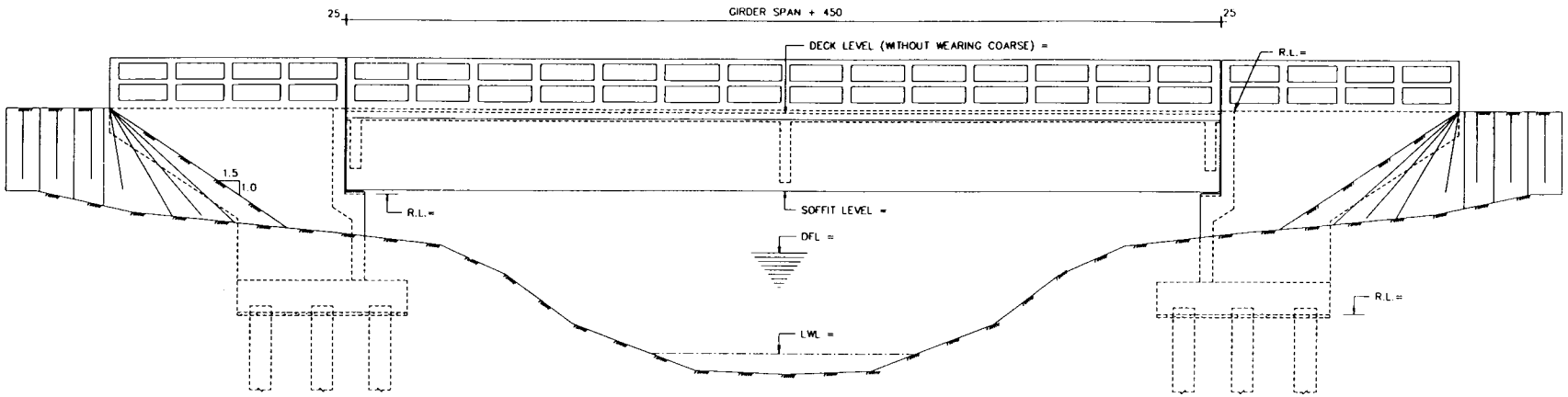
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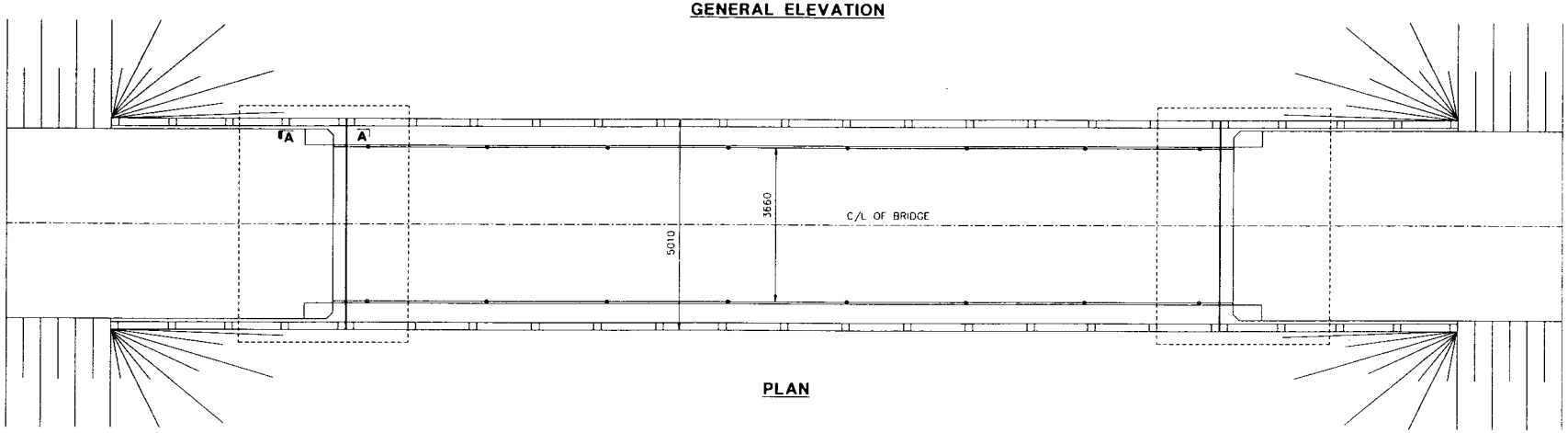
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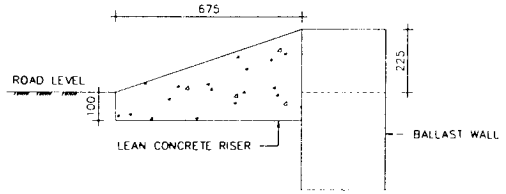
SHEET 1 OF 1
SIDEWALK – YES



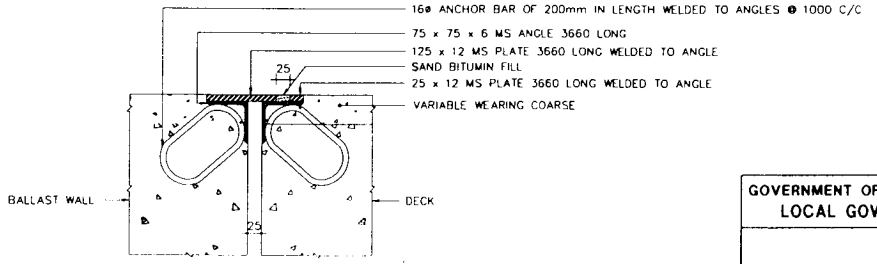
GENERAL ELEVATION



PLAN



SEC. A-A



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH FULL DEPTH ABUTMENT, DECK WIDTH : 5.01m.

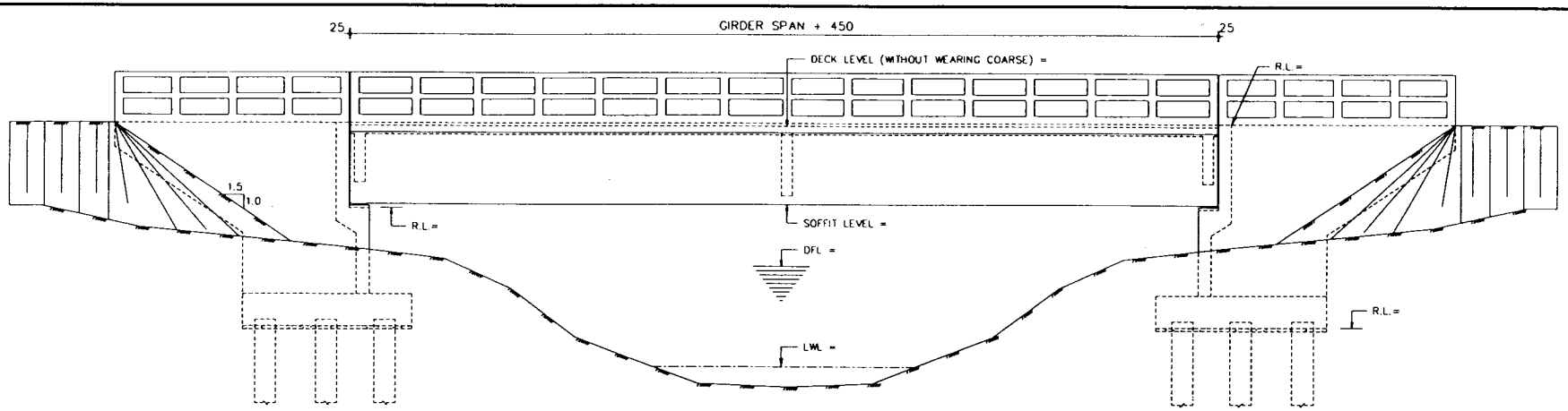
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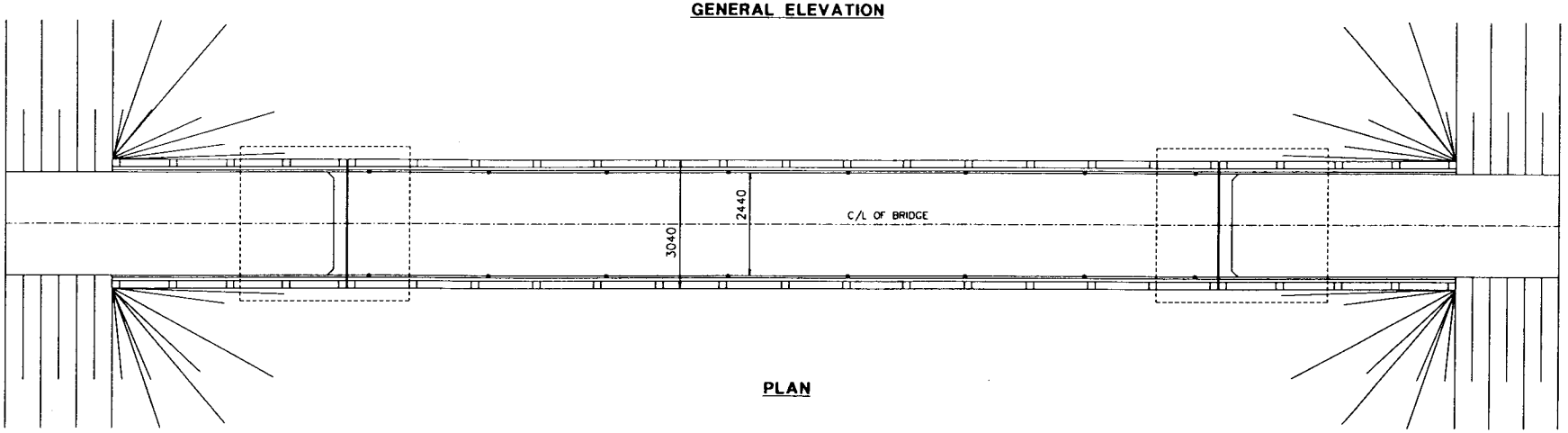
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SHEET 1 OF 1

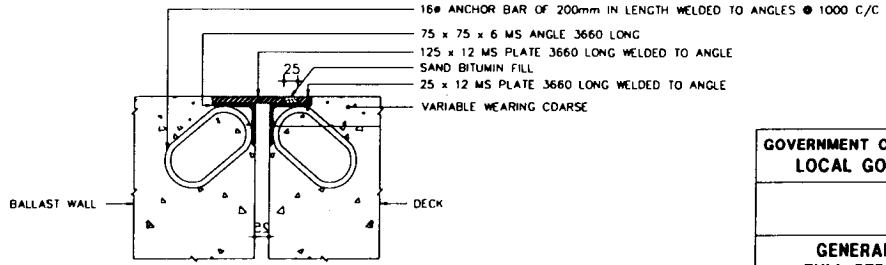
SIDEWALK - NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

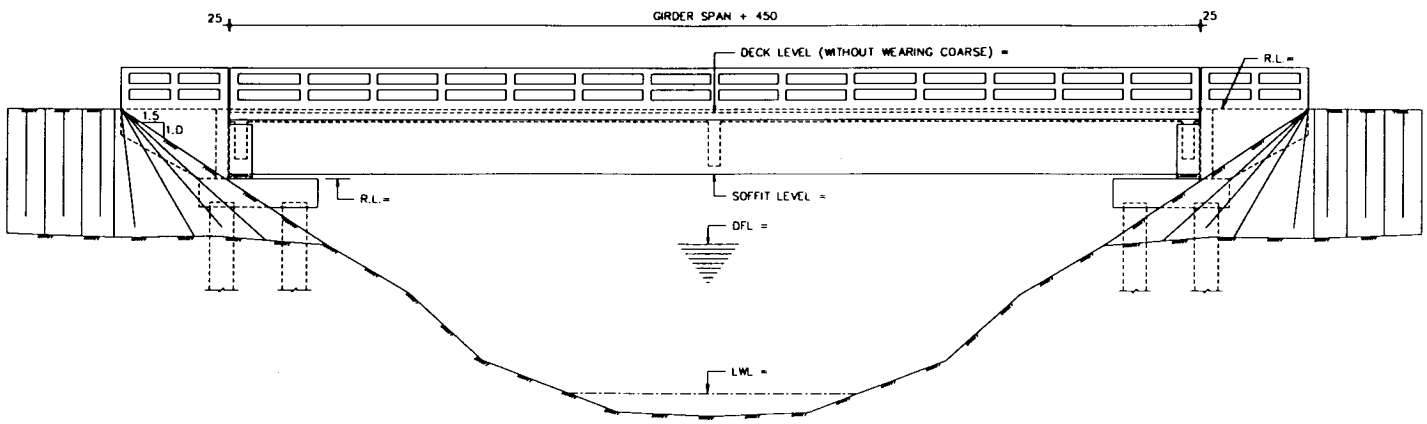
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DATE :	ISSUED BY :
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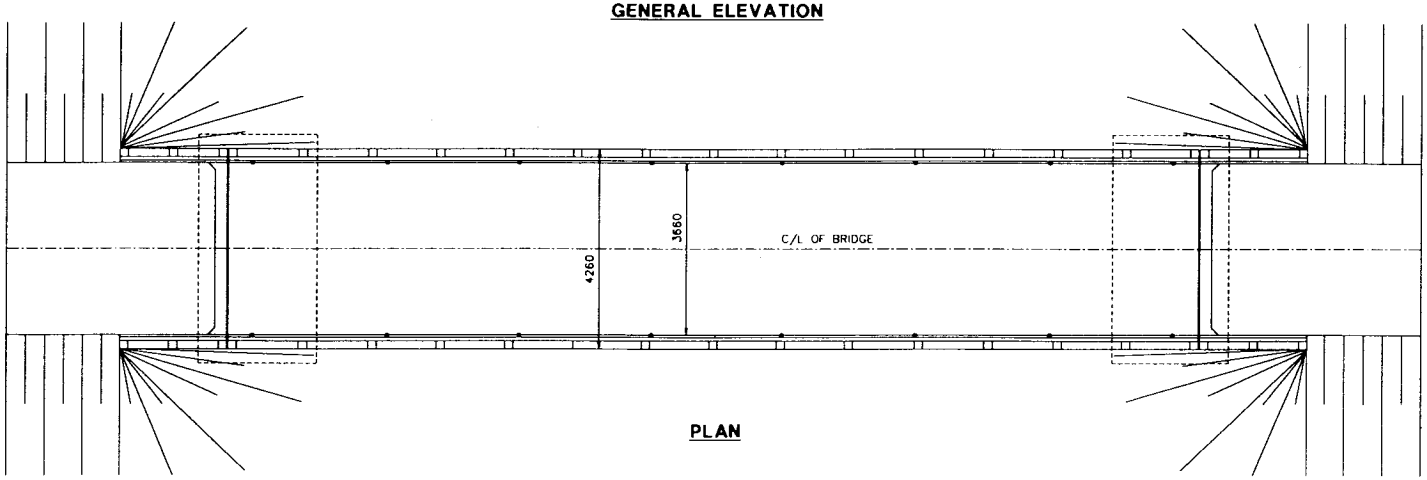
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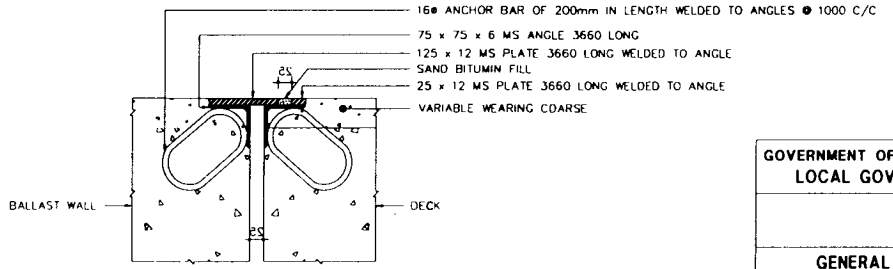
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

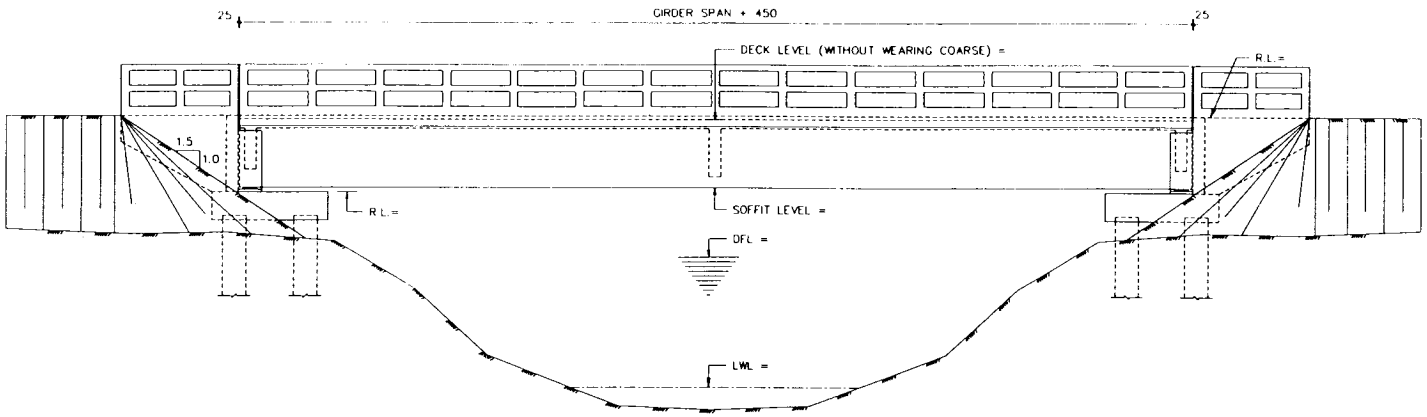
GENERAL ARRANGEMENT OF BRIDGE WITH STUB ABUTMENT, DECK WIDTH : 4.26m.

DATE :
ISSUED BY :
CAD FILE REF : BRDG\G0005201

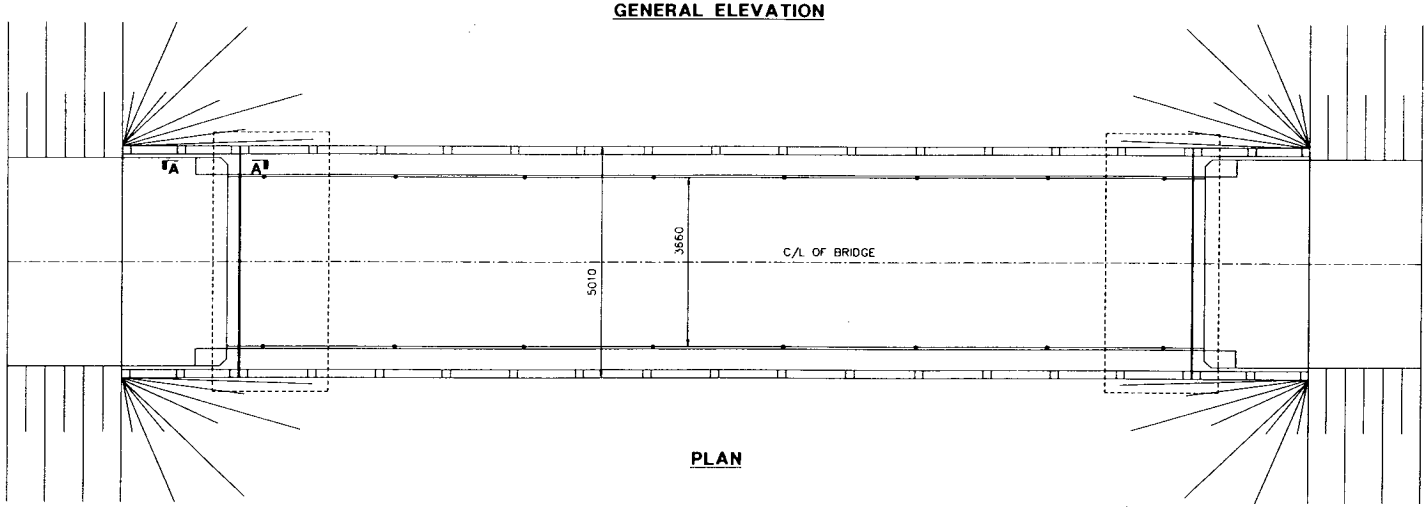
Web Copy

GB-5

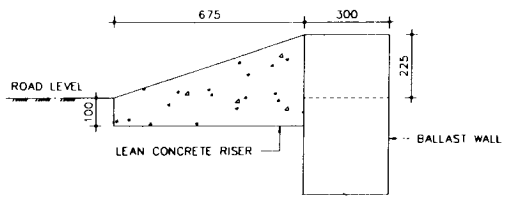
SHEET 1 OF 1
SIDEWALK – YES



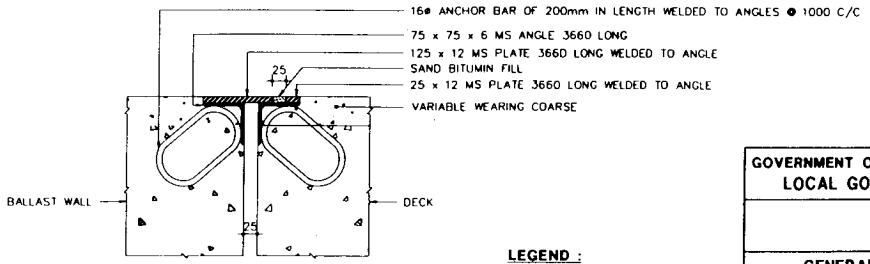
GENERAL ELEVATION



PLAN



SEC. A-A



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

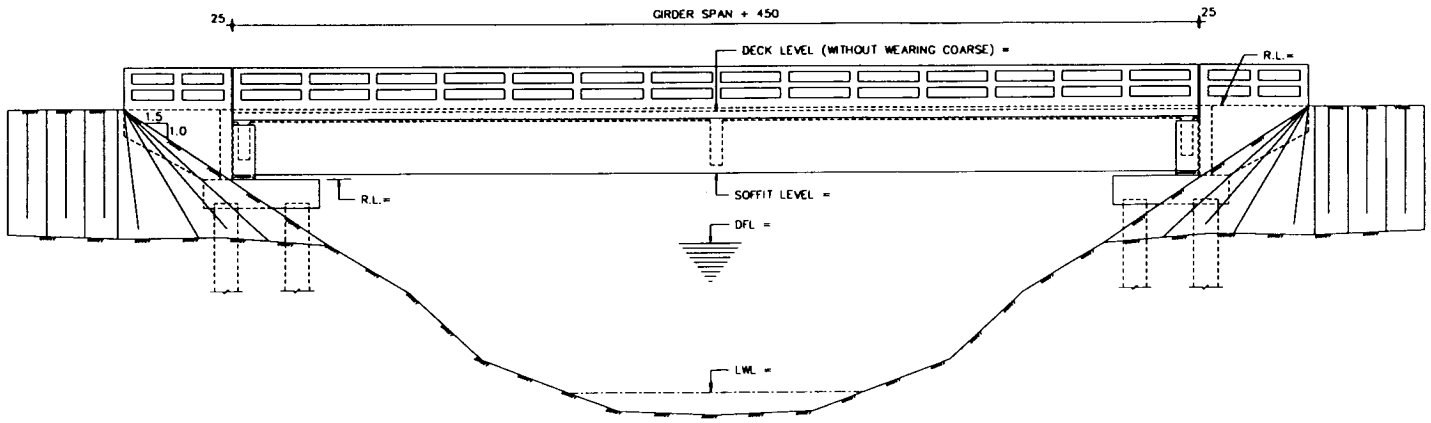
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH STUB ABUTMENT, DECK WIDTH : 5.01m.

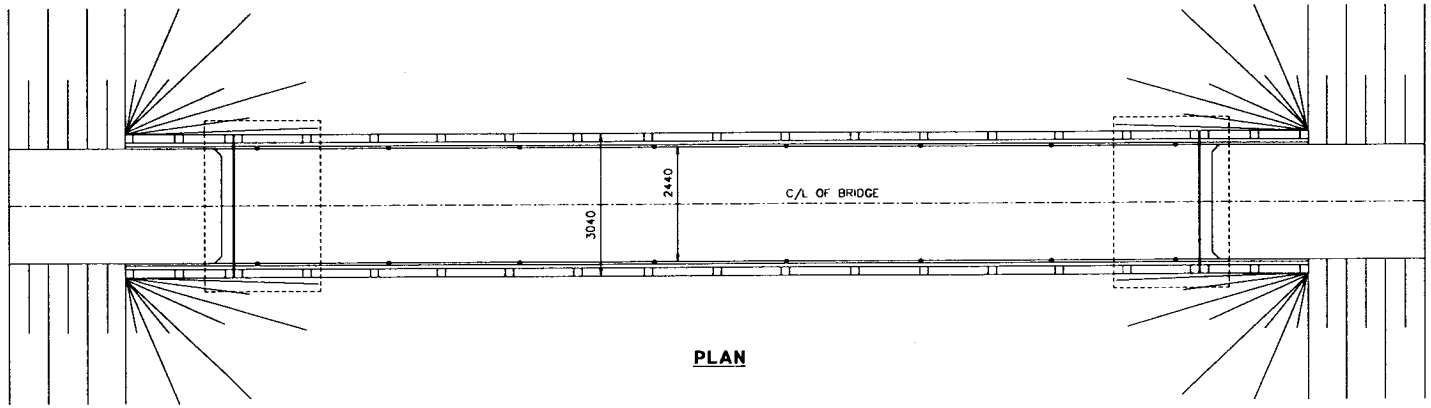
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ISSUED BY :
CAD FILE REF : BRDG\G100S201

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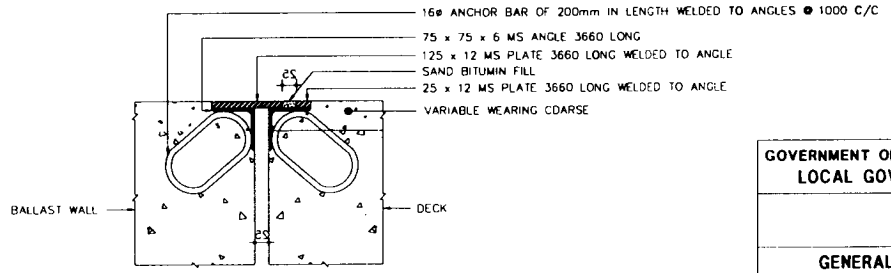
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

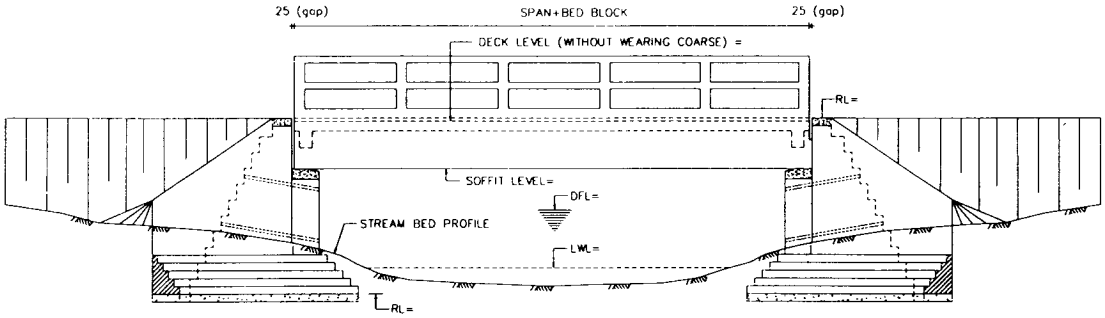
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH STUB ABUTMENT, DECK WIDTH : 3.04m.

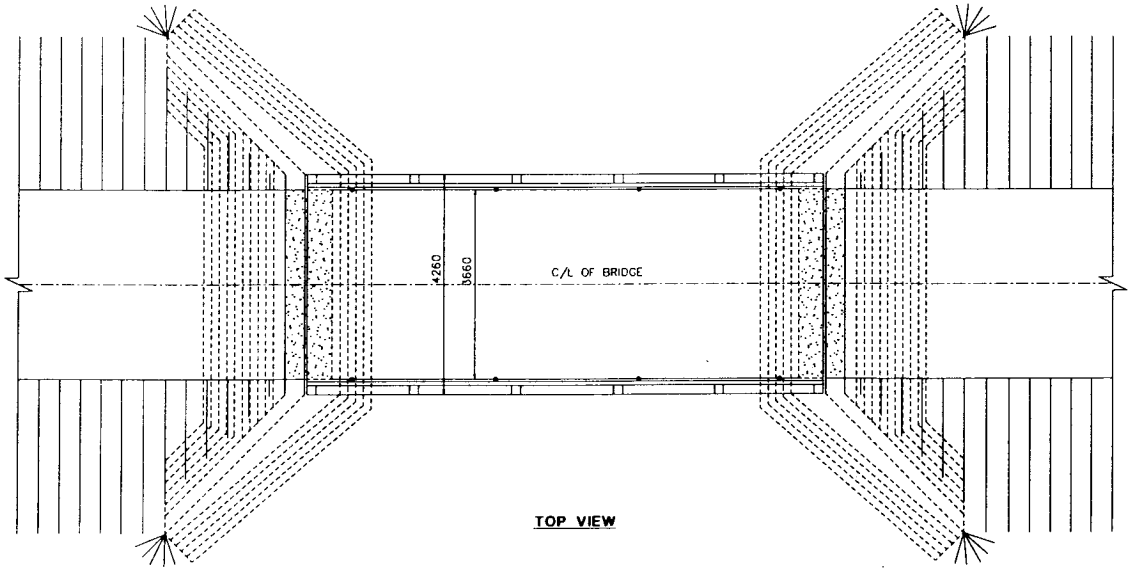
DATE :
ISSUED BY :
CAD FILE REF : BROG\GOODS101

Web Copy

SHEET 1 OF 1
SIDEWALK - NO



GENERAL ELEVATION



TOP VIEW

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. General Arrangment of Girder Bridge is hereby presented on the basis of Appropriate Combination of Structure as follows :
   A) Clear Girder Span : 9.0 m (Loading H15 without Footpath)
   B) Depth of Girder : 900 mm
   C) Thickness of Deck Slab : 185 mm
   D) Brick Abutment Height : 3.5 m

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

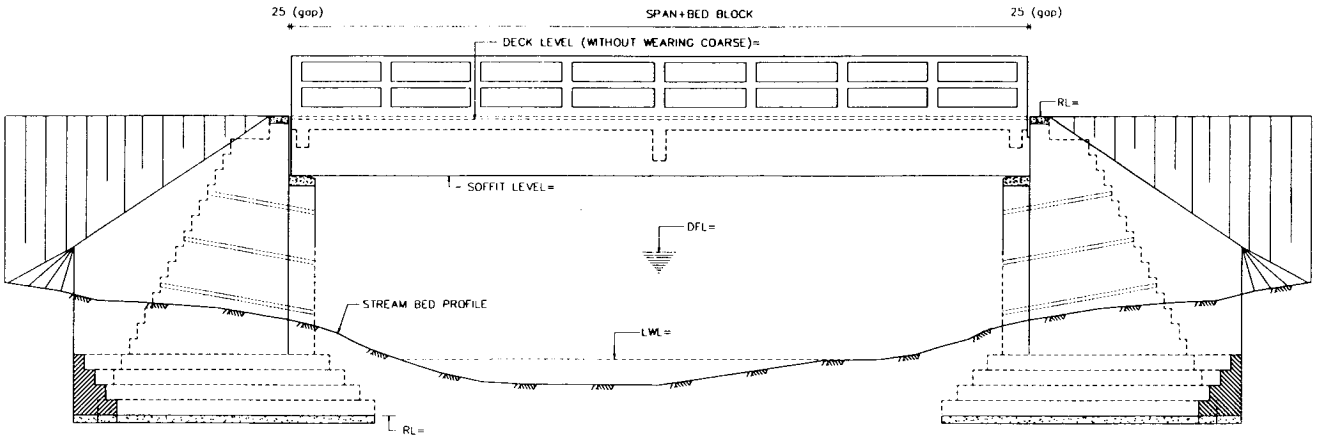
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH BRICK ABUTMENT., DECK WIDTH : 4.26m.

DATE :	ISSUED BY :
CAD FILE REF : BRDG\G000B201	

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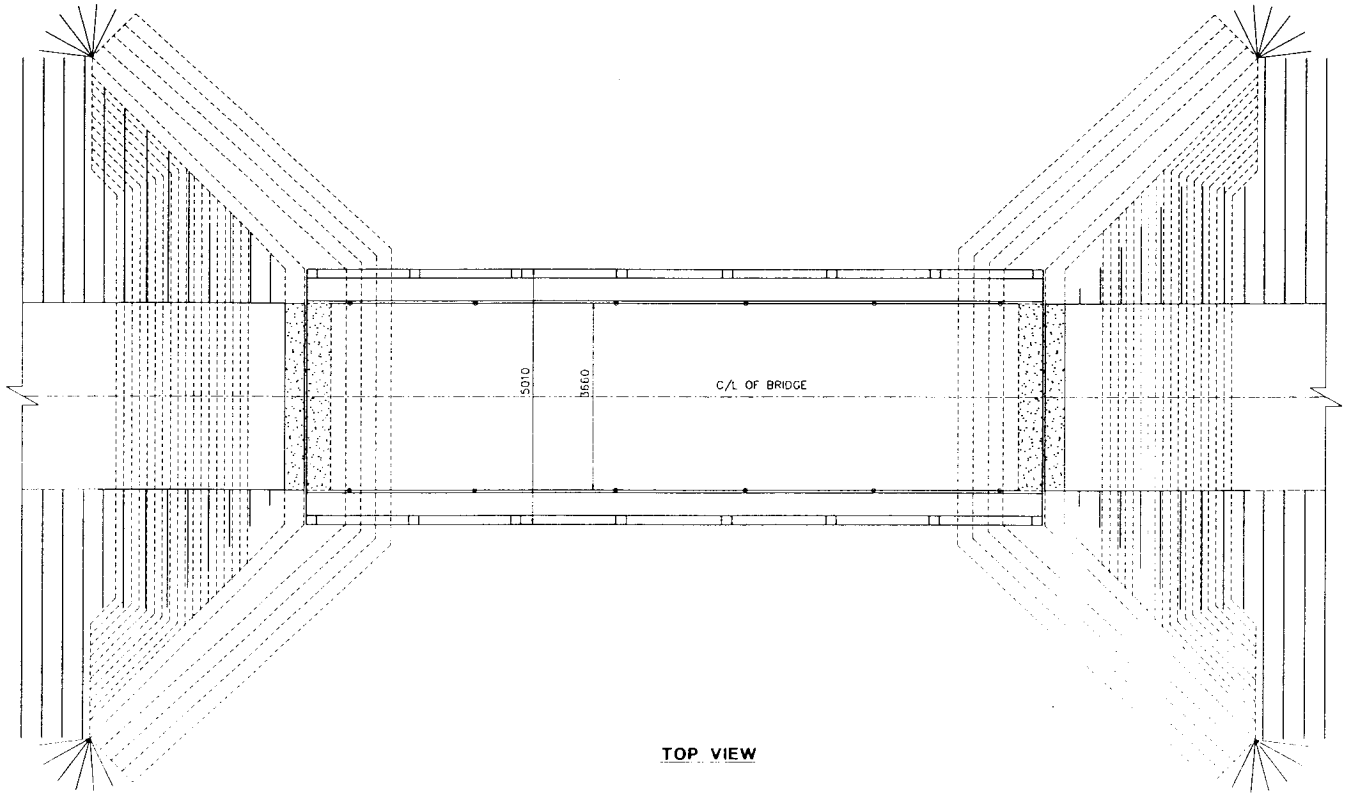
SHEET 1 OF 1
SIDEWALK - YES



GENERAL ELEVATION

NOTES :

1. All dimensions are in "millimeter" unless otherwise specified.
2. General Arrangment of Girder Bridge is hereby presented on the basis of Appropriate Combination of Structure as follows :
   A) Clear Girder Span : 13.5 m (Loading H20 with Footpath)
   B) Depth of Girder : 1100 mm
   C) Thickness of Deck Slab : 200 mm
   D) Brick Abutment Height : 6.0 m



TOP VIEW

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH BRICK ABUTMENT., DECK WIDTH : 5.01m.

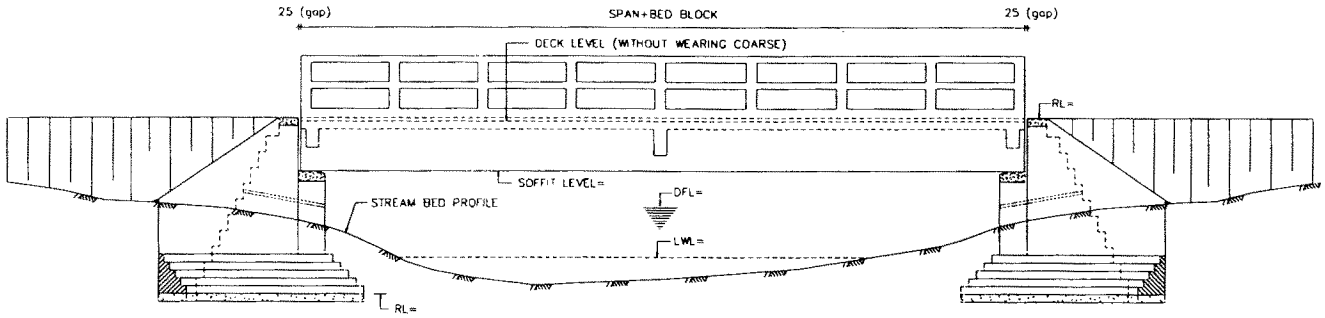
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CAD FILE REF : BRDG\G100B201	

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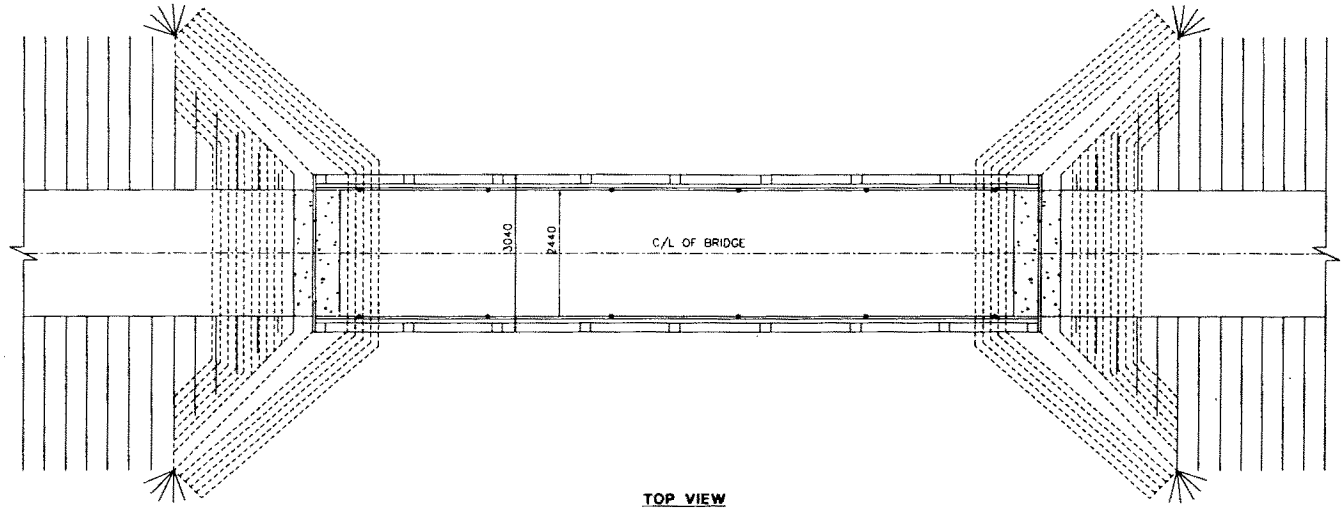
GB-9

SHEET 1 OF 1

SIDEWALK - NO



GENERAL ELEVATION



TOP VIEW

NOTES :

1. All dimensions are in millimeter unless otherwise specified
2. General Arrangment of Girder Bridge is hereby presented on the basis of Appropriate Combination of Structure as follows :
   A) Clear Girder Span : 13.0 m (Loading H10)
   B) Depth of Girder : 950 mm
   C) Thickness of Deck Slab : 150 mm
   D) Brick Abutment Height : 3.5 m

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

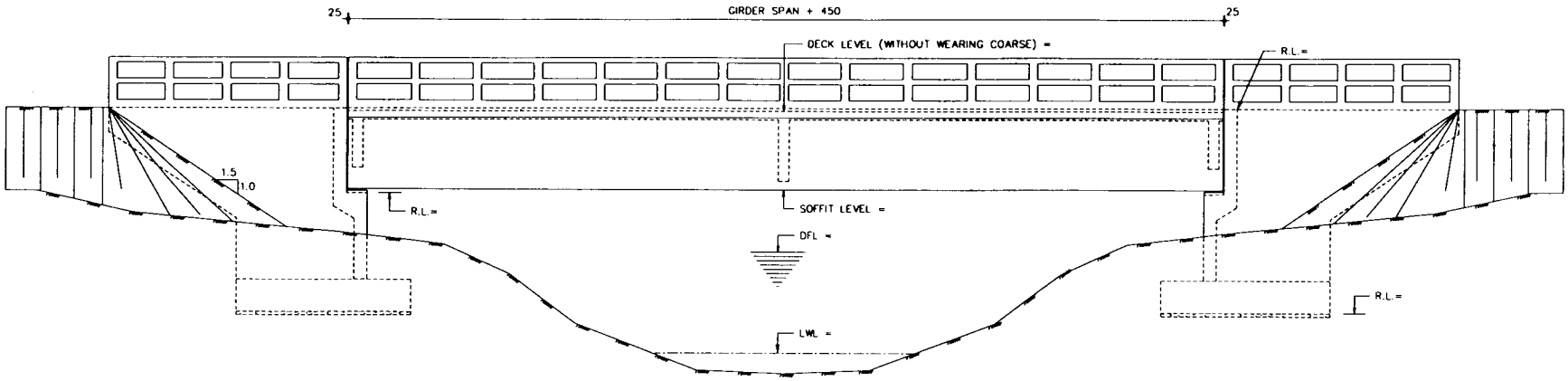
GENERAL ARRANGEMENT OF BRIDGE WITH BRICK ABUTMENT., DECK WIDTH : 3.04m.

DATE :	ISSUED BY :
CAD FILE REF : BRDG\G000B101	

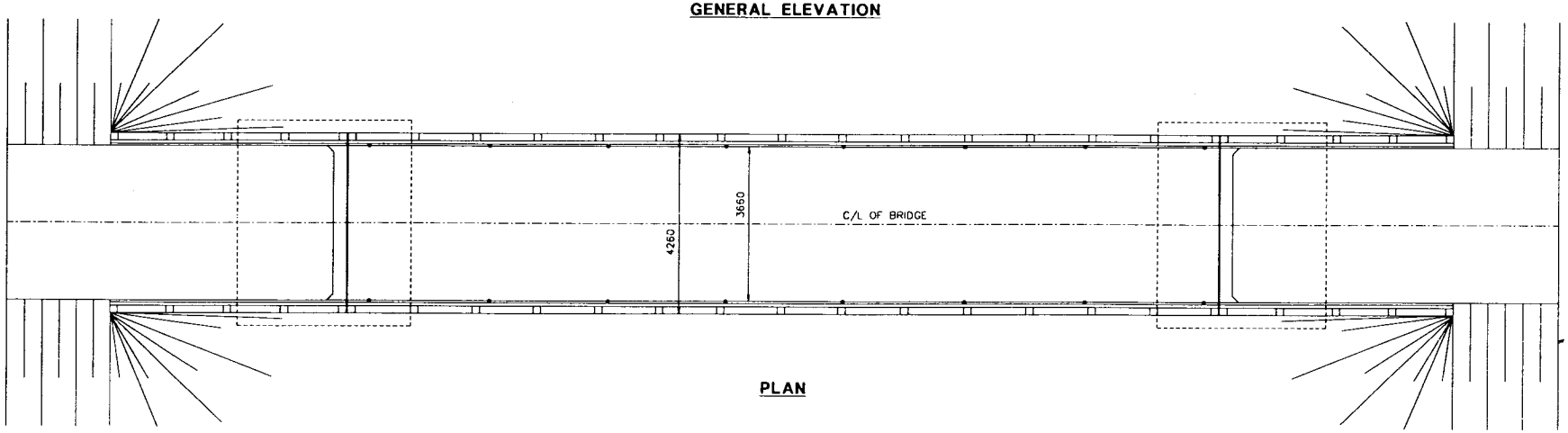
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GB-10

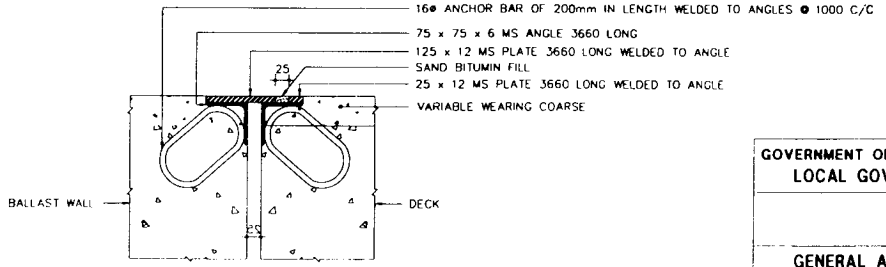
SHEET 1 OF 1
SIDEWALK – NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH OPEN RCC ABUTMENT, DECK WIDTH : 4.26m.

DATE

ISSUED BY :

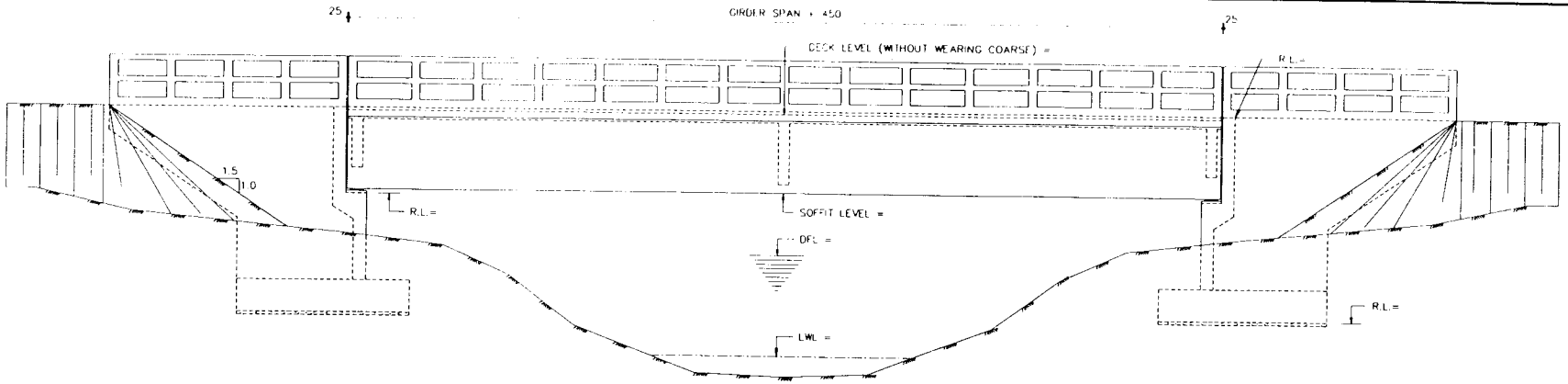
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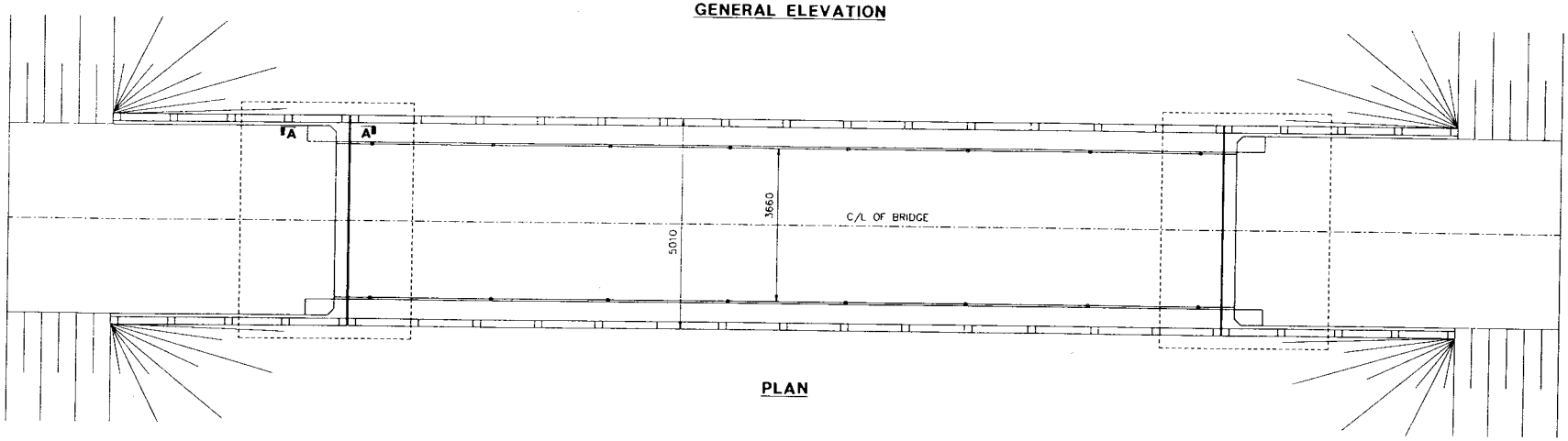
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SHEET 1 OF 1

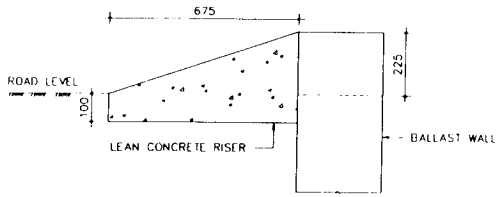
SIDEWALK – YES



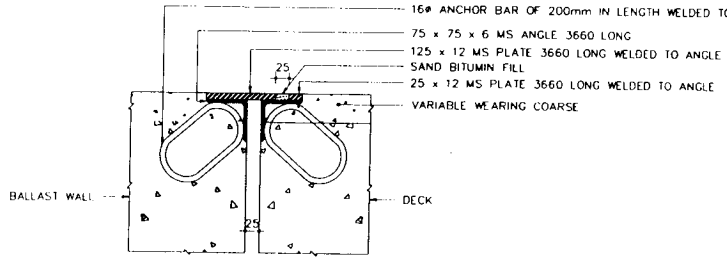
GENERAL ELEVATION



PLAN



SEC. A-A



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH OPEN RCC ABUTMENT, DECK WIDTH : 5.01m.

DATE :

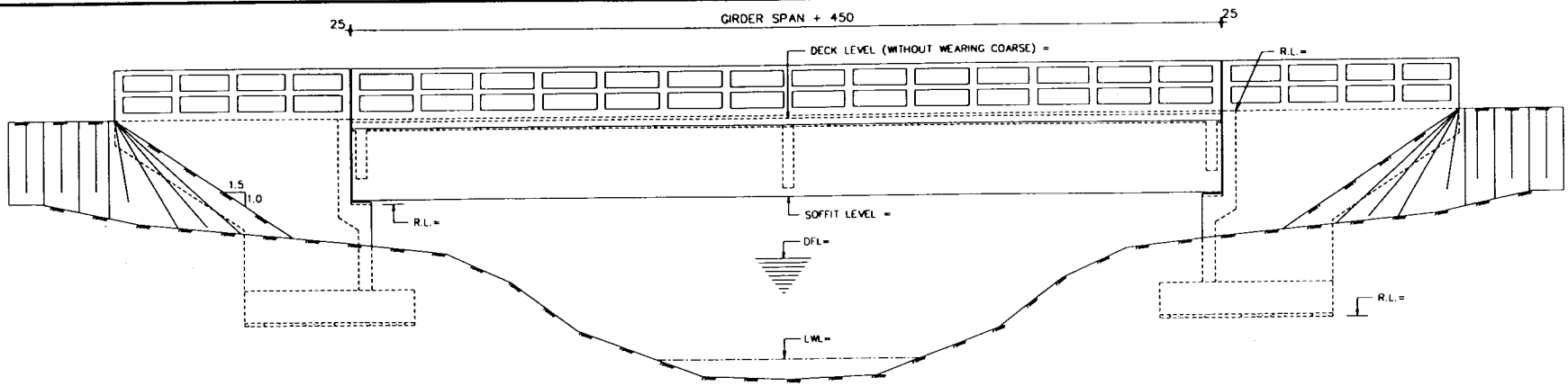
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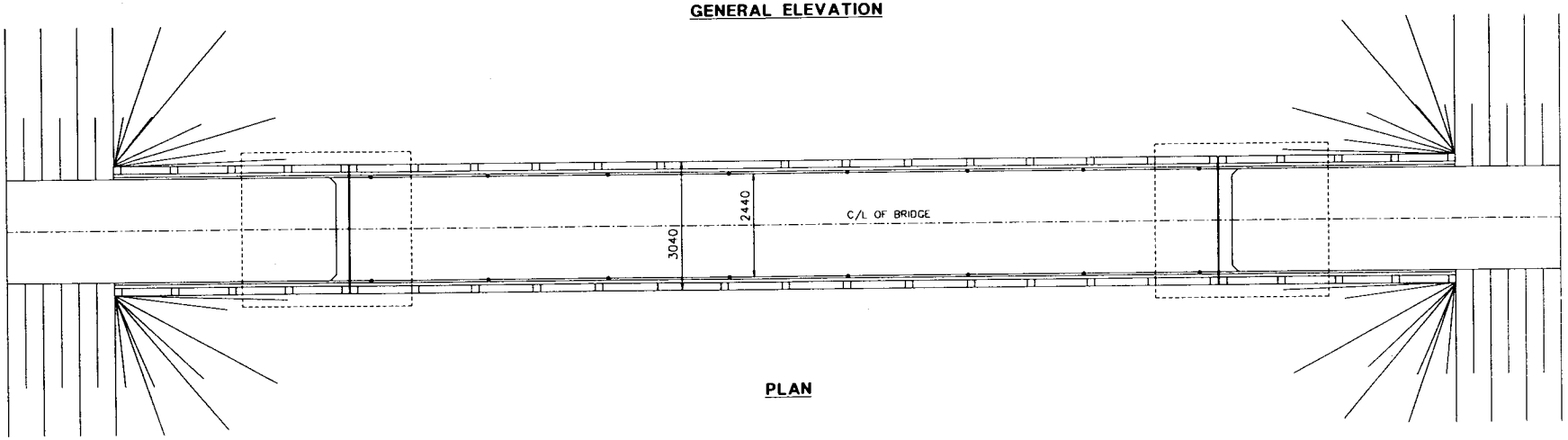
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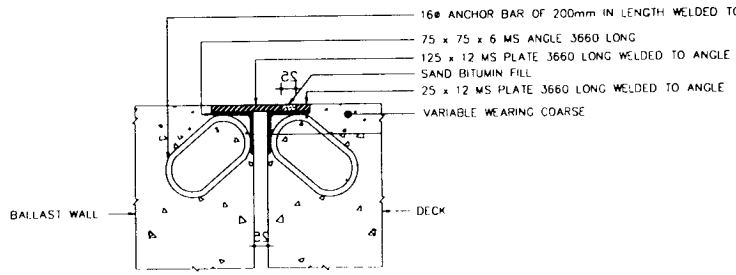
SHEET 1 OF 1
SIDEWALK - NO



GENERAL ELEVATION



PLAN



DETAILS OF EXPANSION JOINT

NOTE :

1. All dimensions are in mm unless otherwise specified.
2. To fix soffit level see guideline in Chapter 6.

LEGEND :

DFL = Design Flood Level
LWL = Lowest Water Level
RL = Reduced Level

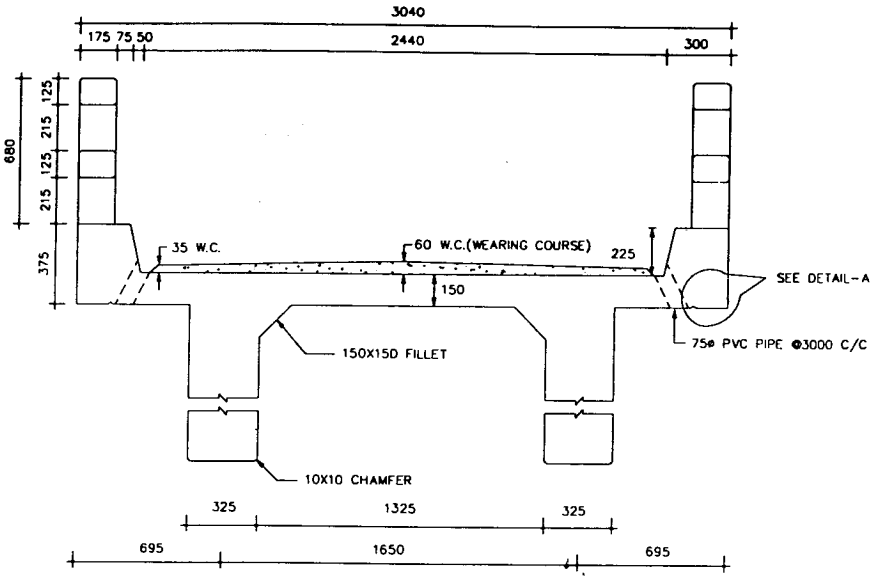
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF BRIDGE WITH OPEN RCC ABUTMENT, DECK WIDTH : 3.04m.

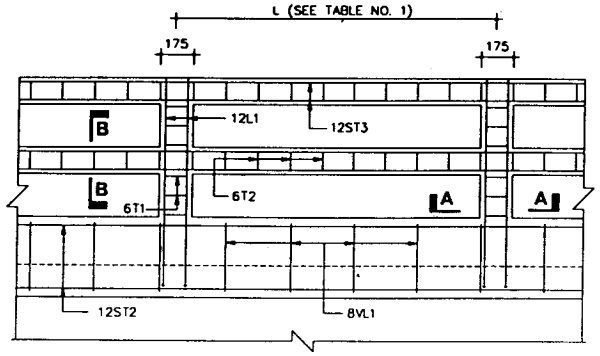
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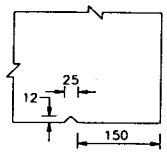
SHEET 1 OF 1
LIVE LOAD – AASHTO H10
SIDEWALK – NO



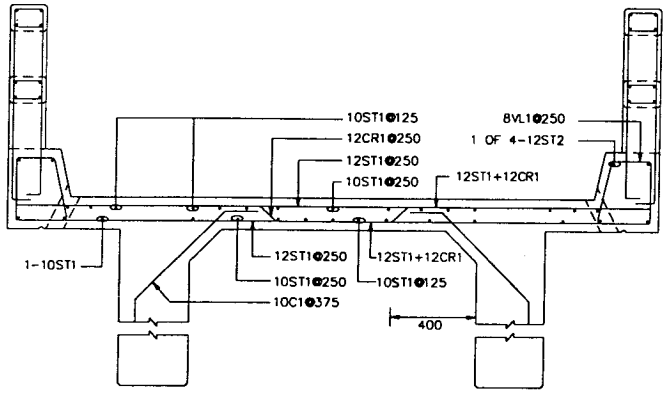
DETAILS OF DECK SLAB



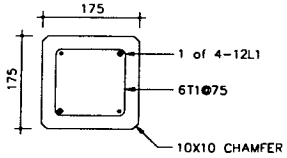
REINF. DETAILS OF RAIL, POST & CURB



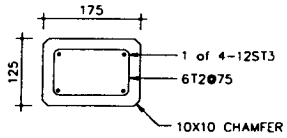
DETAIL-A



REINF. DETAILS OF DECK SLAB



SEC. A-A



SEC. B-B

TABLE - 1

SPAN	POST SPACING (L)	SPAN	POST SPACING (L)
20000	1448	12500	1419
19500	1413	12000	1364
19000	1483	11500	1472
18500	1444	11000	1409
18000	1406	10500	1347
17500	1481	10000	1468
17000	1440	9500	1396
16500	1398	9000	1325
16000	1480	8500	1463
15500	1434	8000	1379
15000	1389	7500	1296
14500	1478	7000	1455
14000	1428	6500	1355
13500	1378	6000	1255
13000	1475		

NOTES :

1. All dimensions are in millimetre unless otherwise specified.
2. Not all reinforcement are necessarily shown in any view.
3. Concrete, Cylinder strength at 28 days : 21MPa – ASTM C39.
4. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
5. Deformed Reinforcing Steel, Yield strength : 276MPa – ASTM A615.
6. Clear cover for : a) Rail – 20 mm, b) Post – 20 mm, c) Deck (Top) – 40 mm, d) Deck (Bottom) – 40 mm, e) Curb – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001.

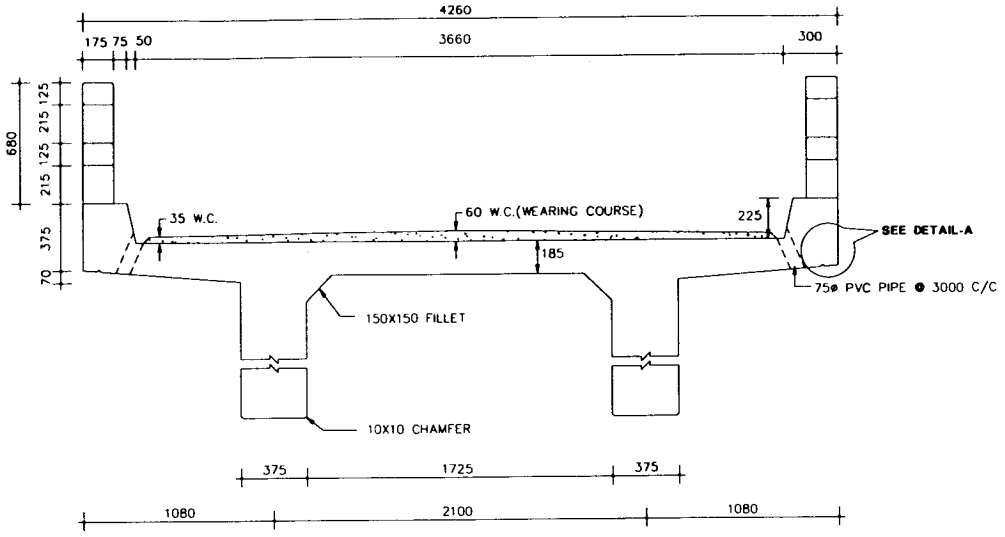
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DECK SLAB & RAILING DETAILS OF GIRDER BRIDGE

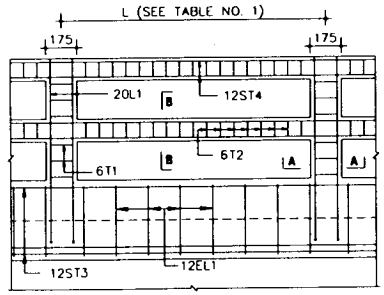
DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\D0100001	

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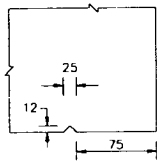
SHEET 1 OF 1
LIVE LOAD – AASHTO H15
SIDEWALK – NO.



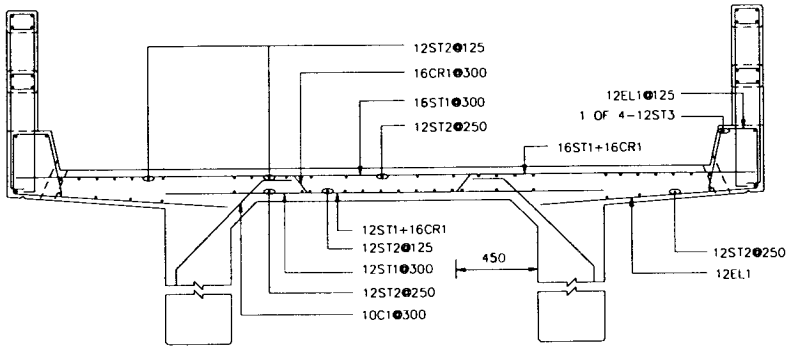
DETAILS OF DECK SLAB



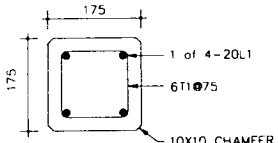
REINF. DETAILS OF RAIL, POST & CURB



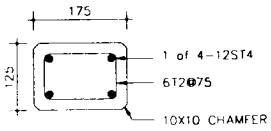
DETAIL - A



REINF. DETAILS OF DECK SLAB



SEC. A-A



SEC. B-B

TABLE - 1

SPAN	POST SPACING (L)	SPAN	POST SPACING (L)
20000	1448	12500	1419
19500	1413	12000	1364
19000	1483	11500	1472
18500	1444	11000	1409
18000	1406	10500	1347
17500	1481	10000	1468
17000	1440	9500	1396
16500	1398	9000	1325
16000	1480	8500	1463
15500	1434	8000	1379
15000	1389	7500	1296
14500	1478	7000	1455
14000	1428	6500	1355
13500	1378	6000	1255
13000	1475		

NOTES :

1. All dimensions are in millimetre unless otherwise specified.
2. Not all reinforcement are necessarily shown in any view .
3. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
4. Coarse aggregate for concrete shall be 19mm down down graded stone chips conforming ASTM C33.
5. Deformed Reinforcing Steel, Yield strength : 276MPa-ASTM A615.
6. Clear cover for : a) Rail – 20 mm, b) Post – 20 mm, c) Deck (Top) – 40 mm, d) Deck (Bottom) – 40 mm, e) Curb – 25mm
7. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

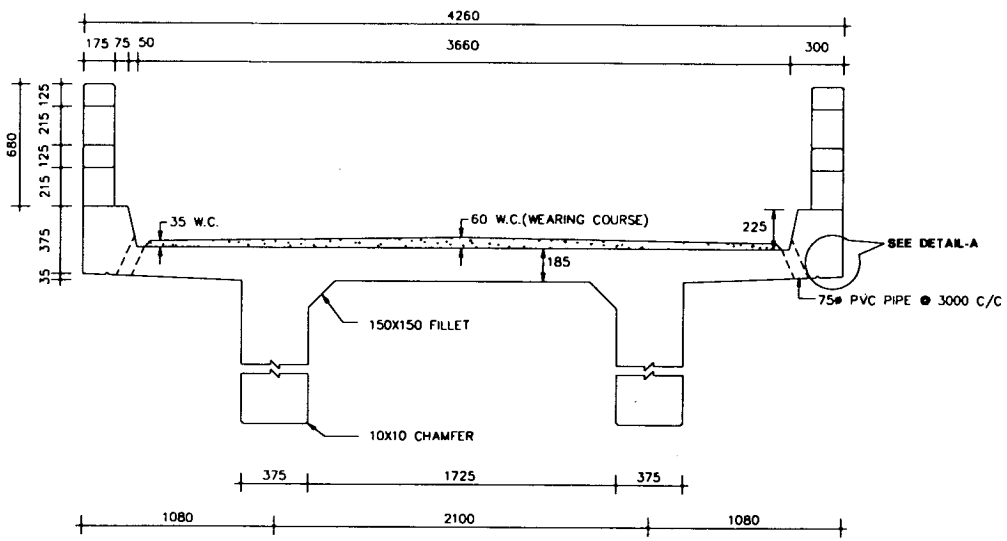
DECK SLAB & RAILING DETAILS OF GIRDER BRIDGE

DATE 06/04/1997 | ISSUED BY :

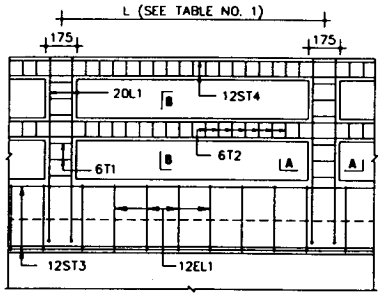
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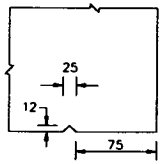
SHEET 1 OF 1
LIVE LOAD - AASHTO H20
SIDEWALK - NO.



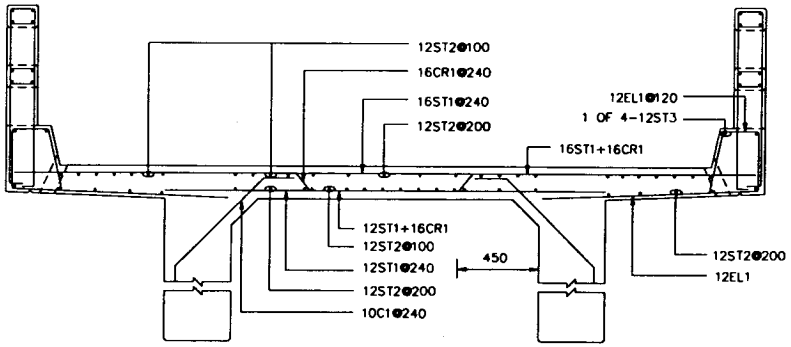
DETAILS OF DECK SLAB



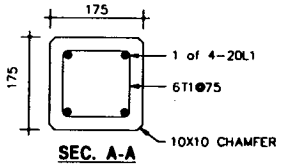
REINF. DETAILS OF RAIL, POST & CURB



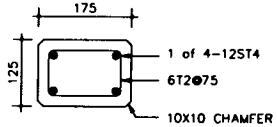
DETAIL - A



REINF. DETAILS OF DECK SLAB



SEC. A-A



SEC. B-B

TABLE - 1

SPAN	POST SPACING (L)	SPAN	POST SPACING (L)
20000	1448	12500	1419
19500	1413	12000	1364
19000	1483	11500	1472
18500	1444	11000	1409
18000	1406	10500	1347
17500	1481	10000	1468
17000	1440	9500	1396
16500	1398	9000	1325
16000	1480	8500	1463
15500	1434	8000	1379
15000	1389	7500	1296
14500	1478	7000	1455
14000	1428	6500	1355
13500	1378	6000	1255
13000	1475		

NOTES :

1. All dimensions are in millimetre unless otherwise specified.
2. Not all reinforcement are necessarily shown in any view .
3. Concrete, Cylinder strength at 28 days : 21MPa-ASTM C39.
4. Coarse aggregate for concrete shall be 19mm down down graded stone chips conforming ASTM C33.
5. Deformed Reinforcing Steel, Yield strength : 276MPa-ASTM A615.
6. Clear cover for : a) Rail - 20 mm, b) Post - 20 mm, c) Deck (Top) - 40 mm,
   d) Deck (Bottom) - 40 mm, e) Curb - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cod File: BRDG\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

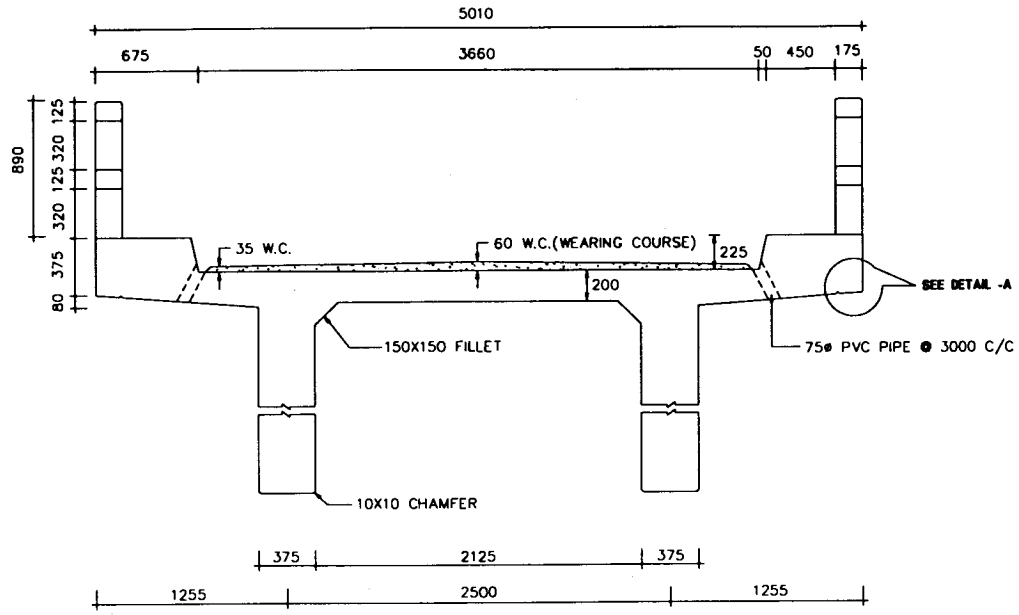
DECK SLAB & RAILING DETAILS OF GIRDER BRIDGE

DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\D0300001	

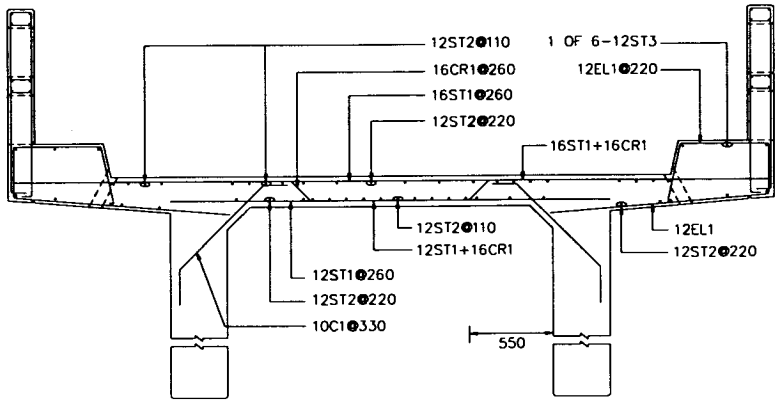
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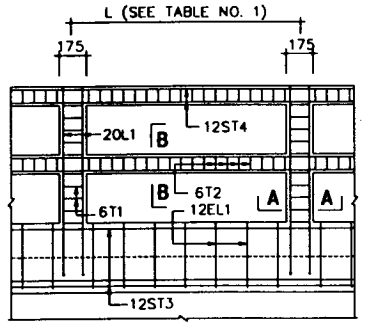
SHEET 1 OF 1
LIVE LOAD – AASHTO H15
SIDEWALK – YES



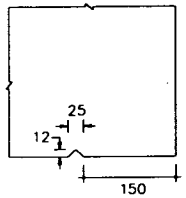
DETAILS OF DECK SLAB



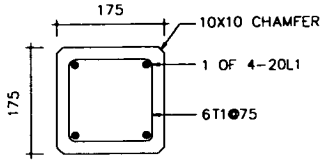
REINF. DETAILS OF DECK SLAB



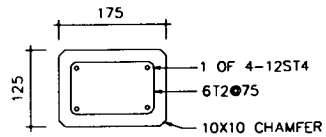
REINF. DETAILS OF RAIL, POST & SIDEWALK



DETAIL - A



SECTION A-A



SECTION B-B

TABLE - 1

SPAN	POST SPACING (L)	SPAN	POST SPACING (L)
20000	1448	12500	1419
19500	1413	12000	1364
19000	1483	11500	1472
18500	1444	11000	1409
18000	1406	10500	1347
17500	1481	10000	1468
17000	1440	9500	1396
16500	1398	9000	1325
16000	1480	8500	1463
15500	1434	8000	1379
15000	1389	7500	1296
14500	1478	7000	1455
14000	1428	6500	1355
13500	1378	6000	1255
13000	1475		

NOTES :

1. All dimensions are in millimetre unless otherwise specified .
2. Not all reinforcement are necessarily shown in ony view.
3. Concrete, Cylinder strength at 28 days : 21MPa – ASTM C39.
4. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
5. Deformed Reinforcing Steel, Yield strength : 276MPa – ASTM A615.
6. Cleor cover for : a) Rail – 20 mm, b) Post – 20 mm, c) Deck (Top) – 40 mm, d) Deck (Bottom) – 40 mm, e) Sidewalk – 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

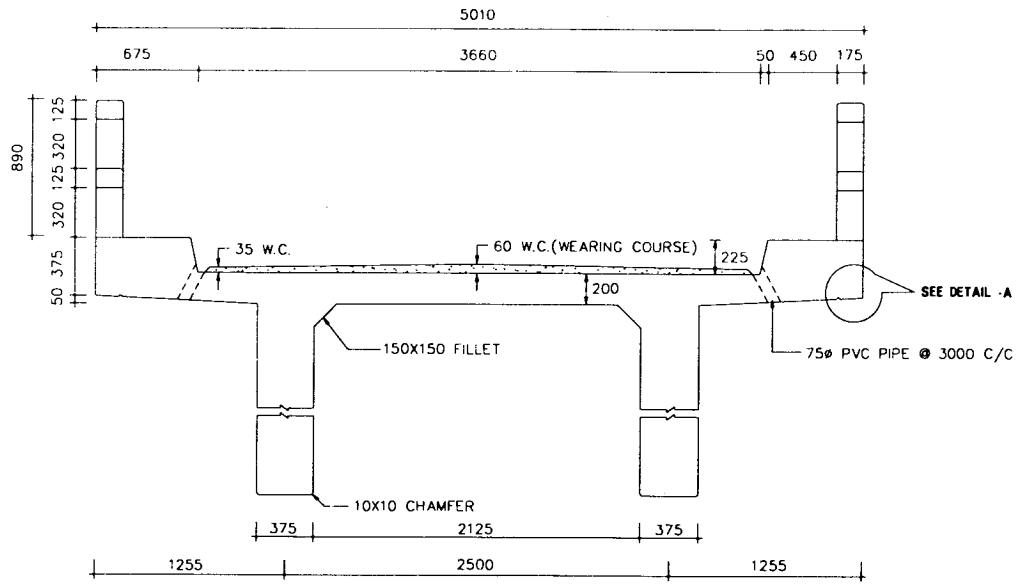
DECK SLAB & RAILING DETAILS
OF GIRDER BRIDGE

DATE : 06/04/1997 | ISSUED BY :

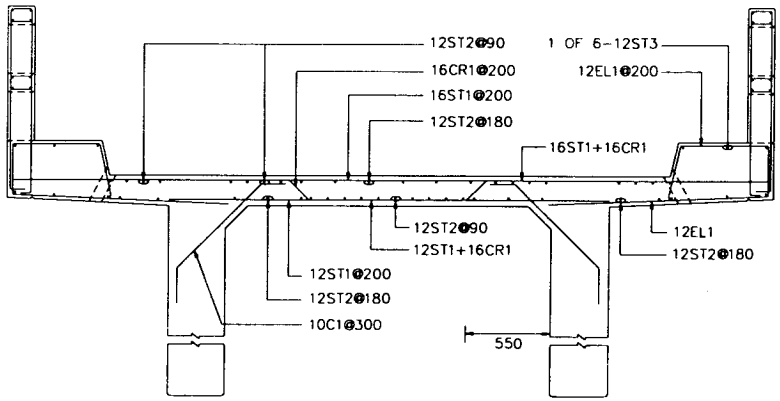
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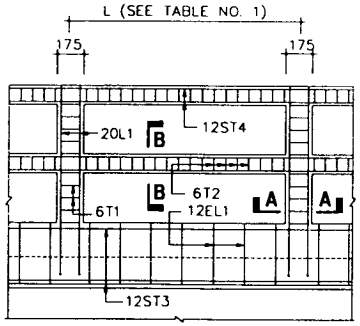
SHEET 1 OF 1
LIVE LOAD - AASHTO H20
SIDEWALK - YES



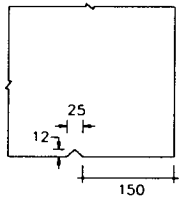
DETAILS OF DECK SLAB



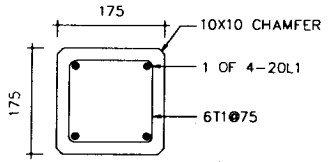
REINF. DETAILS OF DECK SLAB



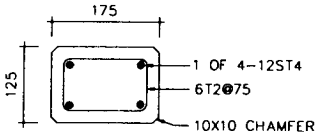
REINF. DETAILS OF RAIL, POST & SIDEWALK



DETAIL - A



SECTION A-A



SECTION B-B

TABLE - 1

SPAN	POST SPACING (L)	SPAN	POST SPACING (L)
20000	1448	12500	1419
19500	1413	12000	1364
19000	1483	11500	1472
18500	1444	11000	1409
18000	1406	10500	1347
17500	1481	10000	1468
17000	1440	9500	1396
16500	1398	9000	1325
16000	1480	8500	1463
15500	1434	8000	1379
15000	1389	7500	1296
14500	1478	7000	1455
14000	1428	6500	1355
13500	1378	6000	1255
13000	1475		

NOTES :

1. All dimensions are in millimetre unless otherwise specified .
2. Not all reinforcement are necessarily shown in any view.
3. Concrete, Cylinder strength at 28 days : 21MPa - ASTM C39.
4. Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
5. Deformed Reinforcing Steel, Yield strength : 276MPa - ASTM A615.
6. Clear cover for : a) Rail - 20 mm, b) Post - 20 mm, c) Deck (Top) - 40 mm, d) Deck (Bottom) - 40 mm, e) Sidewalk - 25mm.
7. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

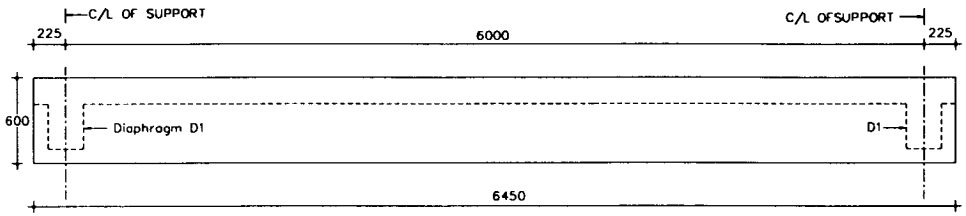
DECK SLAB & RAILING DETAILS OF GIRDER BRIDGE

DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\D1300001	

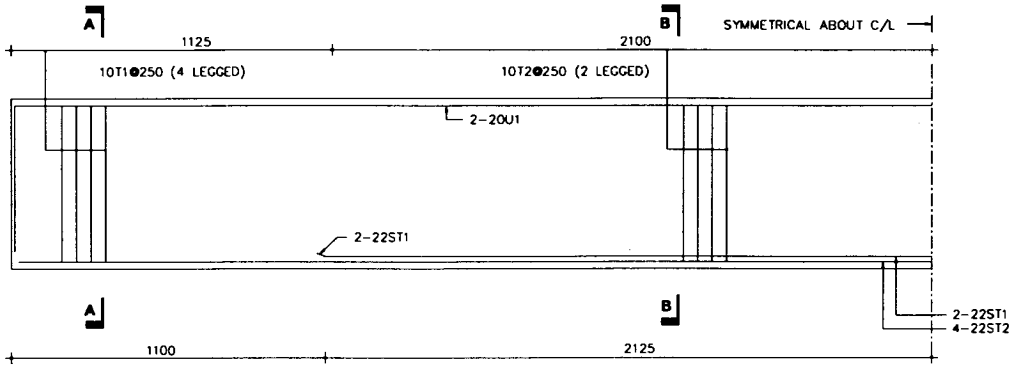
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GB-18

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



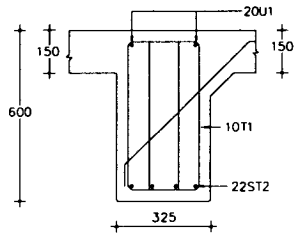
DETAILS OF GIRDER



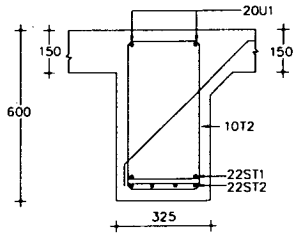
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

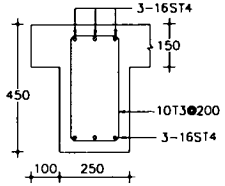
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	6410				6410
	6	T2	340	85	135			512
POST	12	L1	48	975	72			1047
	6	T1	72	135	135			612
SIDEWALK	8	VL1	54	201	317	270	310	1194
	12	ST2	8	6370				6370
DECK	12	ST1	52	2960				2960
	12	CR1	26	1147	98	525		3015
	10	ST1	25	6370				6370
	10	C1	36	120	676			916
GIRDER	22	ST1	4	4250				4250
	22	ST2	8	6350				6350
	20	U1	4	478	6350	478		7306
	10	T1	48	508	177			1490
	10	T2	28	508	245			1626
DIAPHRAGM	16	ST4	12	2025				2025
	10	T3	14	370	150			1160



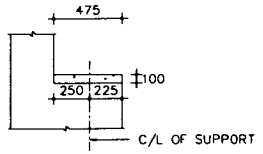
SECTION A-A



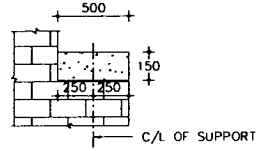
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

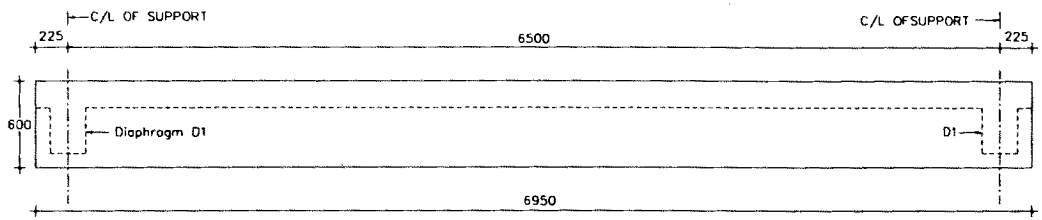
DETAILS OF 6.0m GIRDER

DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0106001	

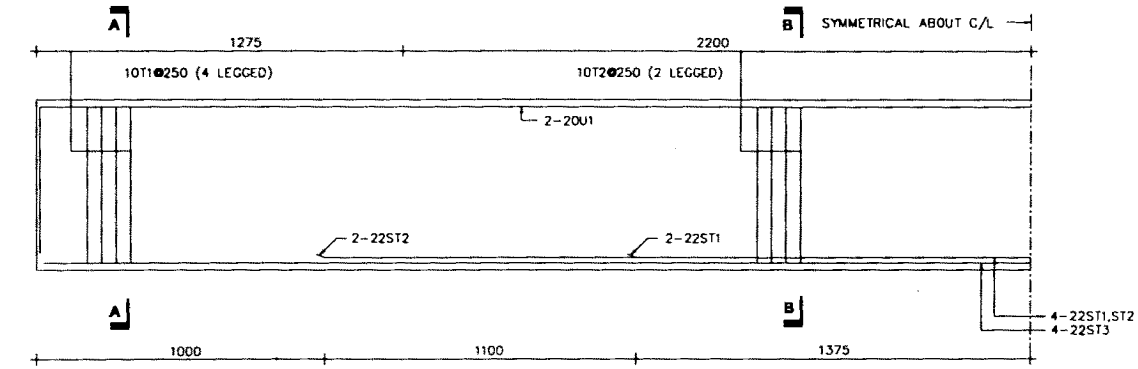
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GB-19

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



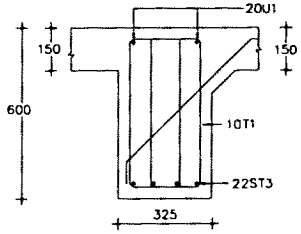
DETAILS OF GIRDER



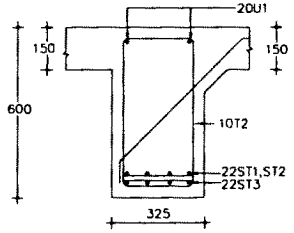
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

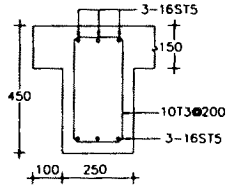
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	6910				6910
	6	T2	380	85	135			512
POST	12	L1	48	975	72			1047
	6	T1	72	135	135			612
SIDEWALK	8	VL1	58	201	317	270	310	1194
	12	ST2	8	6870				6870
DECK	12	ST1	56	2960				2960
	12	CR1	28	1147	98	525		3015
	10	ST1	25	6870				6870
	10	C1	38	120	676			916
GIRDER	22	ST1	4	2750				2750
	22	ST2	4	4950				4950
	22	ST3	8	6850				6850
	20	U1	4	478	6850	478		7806
	10	T1	48	508	177			1490
	10	T2	32	508	245			1626
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	370	150			1160



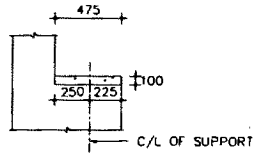
SECTION A-A



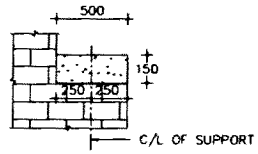
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

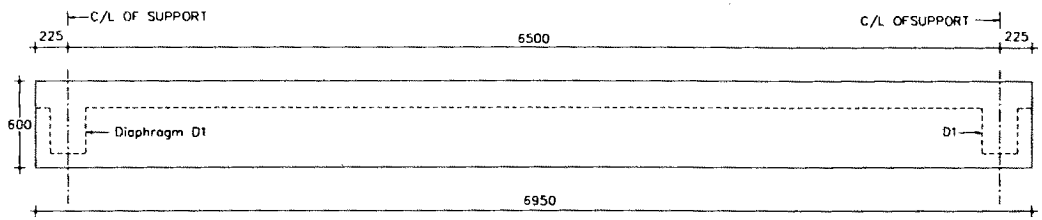
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 6.5m GIRDER

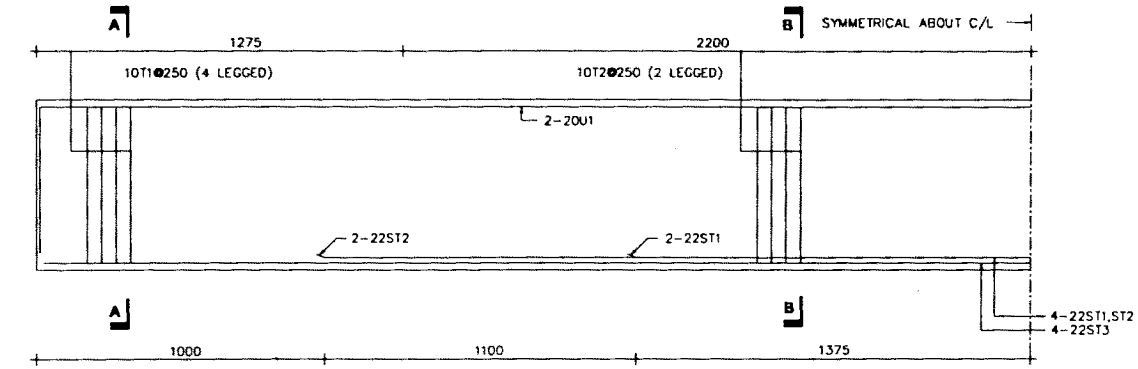
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\GD106501	

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



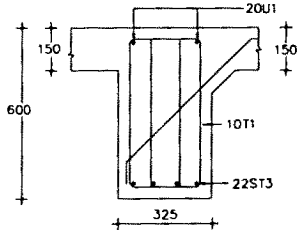
DETAILS OF GIRDER



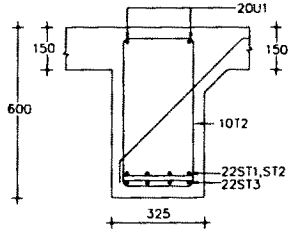
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

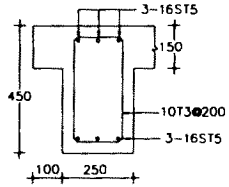
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	6910				6910
	6	T2	380	85	135			512
POST	12	L1	48	975	72			1047
	6	T1	72	135	135			612
SIDEWALK	8	VL1	58	201	317	270	310	1194
	12	ST2	8	6870				6870
DECK	12	ST1	56	2960				2960
	12	CR1	28	1147	98	525		3015
	10	ST1	25	6870				6870
	10	C1	38	120	676			916
GIRDER	22	ST1	4	2750				2750
	22	ST2	4	4950				4950
	22	ST3	8	6850				6850
	20	U1	4	478	6850	478		7806
	10	T1	48	508	177			1490
	10	T2	32	508	245			1626
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	370	150			1160



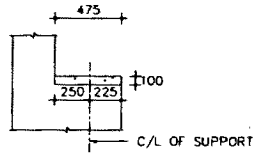
SECTION A-A



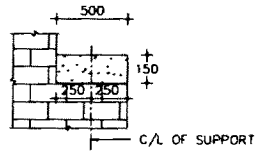
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

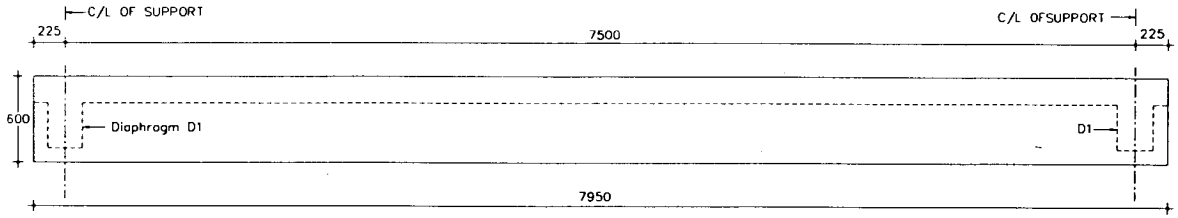
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 6.5m GIRDER

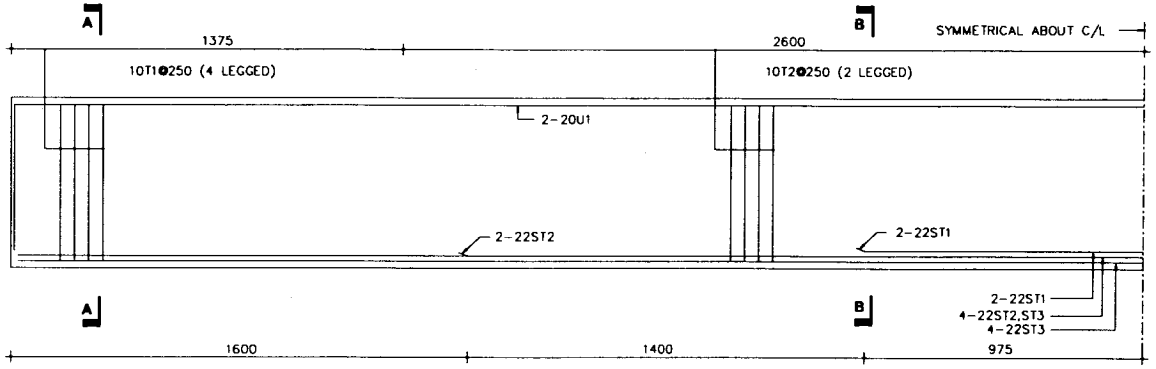
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



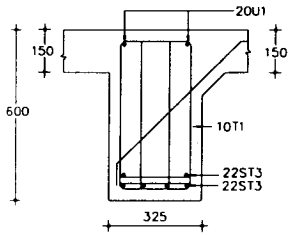
DETAILS OF GIRDER



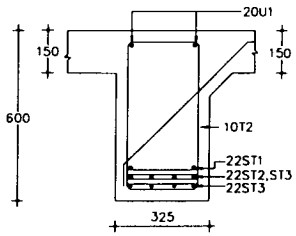
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

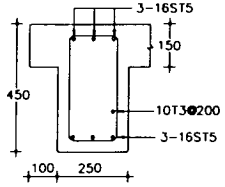
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	7910				7910
	6	T2	432	85	135			512
POST	12	L1	56	975	72			1047
	6	T1	84	135	135			612
SIDEWALK	8	VL1	66	201	317	270	310	1194
	12	ST2	8	7870				7870
DECK	12	ST1	64	2960				2960
	12	CR1	32	1147	98	525		3015
	10	ST1	25	7870				7870
	10	C1	44	120	676			916
GIRDER	22	ST1	4	1950				1950
	22	ST2	4	4750				4750
	22	ST3	12	7850				7850
	20	U1	4	430	7850	430		8710
	10	T1	56	508	177			1490
	10	T2	36	508	245			1626
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	370	150			1160



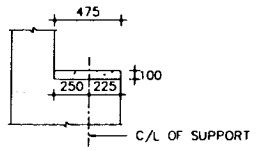
SECTION A-A



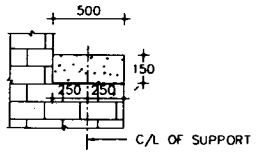
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

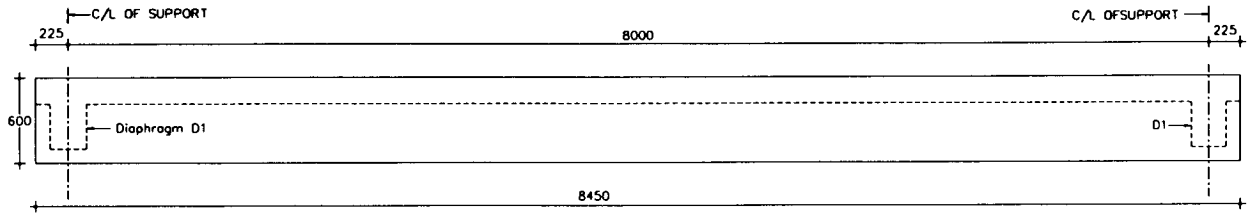
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.5m GIRDER

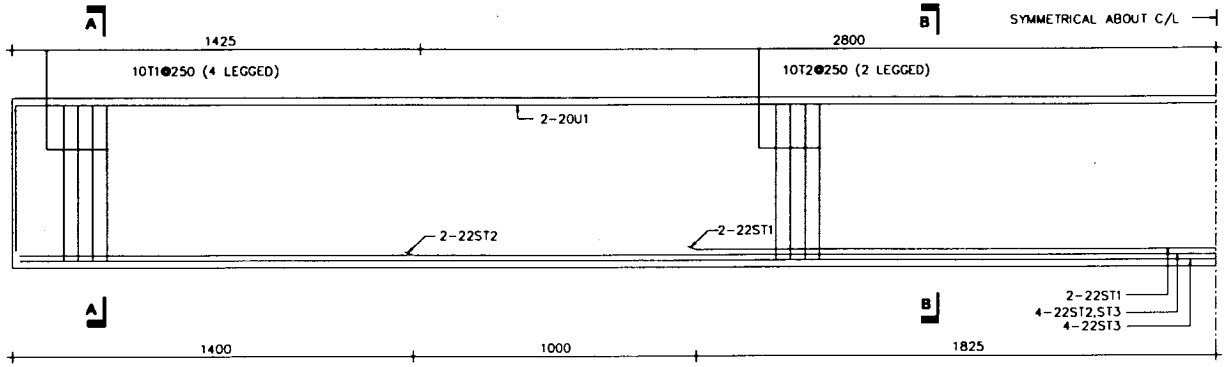
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SHEET 1 OF 1
LOADING – AASHTO H10
SIDEWALK – NO



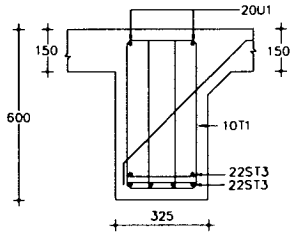
DETAILS OF GIRDER



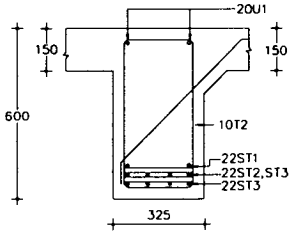
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

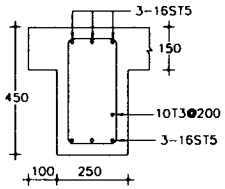
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	8410				8410
	6	T2	456	85	135			512
POST	12	L1	56	975	72			1047
	6	T1	84	135	135			612
SIDEWALK	8	VL1	70	201	317	270	310	1194
	12	ST2	8	8370				8370
DECK	12	ST1	68	2960				2960
	12	CR1	34	1147	98	525		3015
	10	ST1	25	8370				8370
	10	C1	46	120	676			916
GIRDER	22	ST1	4	3650				3650
	22	ST2	4	5650				5650
	22	ST3	12	8350				8350
	20	U1	4	430	8350	430		9210
	10	T1	56	508	177			1490
	10	T2	40	508	245			1626
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	370	150			1160



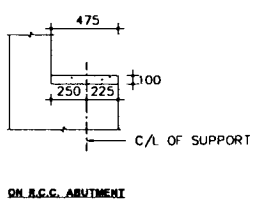
SECTION A-A



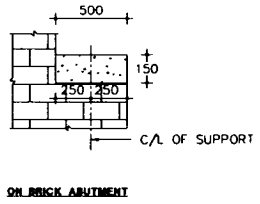
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

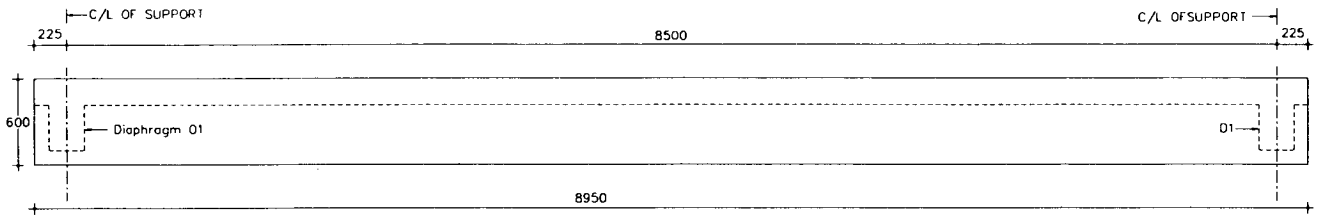
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.0m GIRDER

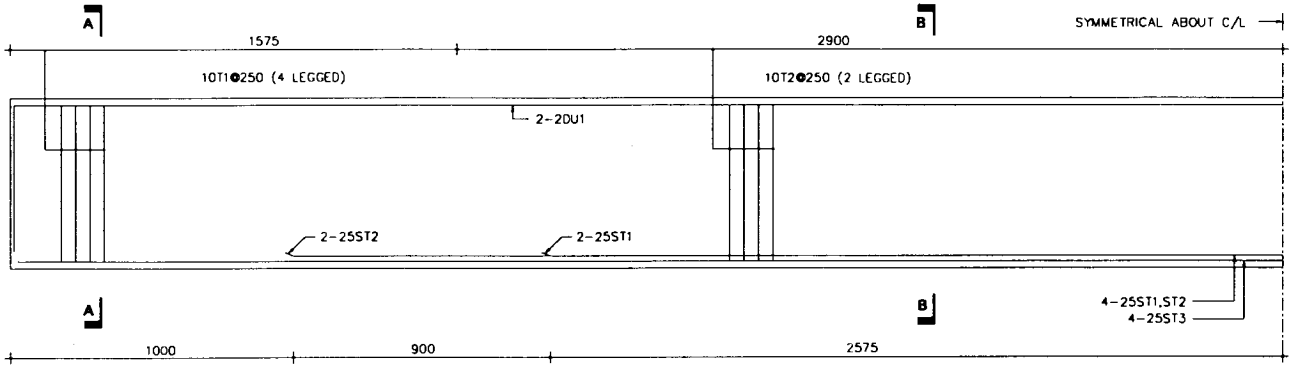
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



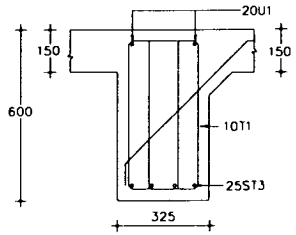
DETAILS OF GIRDER



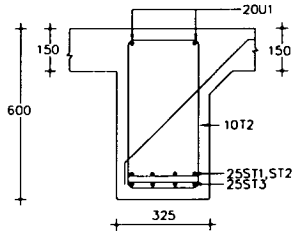
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

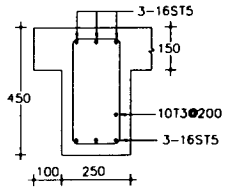
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	8910				8910
	6	T2	480	85	135			512
POST	12	L1	56	975	72			1047
	6	T1	84	135	135			612
SIDEWALK	8	VL1	74	201	317	270	310	1194
	12	ST2	8	8870				8870
DECK	12	ST1	72	2960				2960
	12	CR1	36	1147	98	525		3015
	10	ST1	25	8870				8870
	10	C1	50	120	676			916
GIRDER	25	ST1	4	5150				5150
	25	ST2	4	6950				6950
	25	ST3	8	8850				8850
	20	U1	4	475	8850	475		9800
	10	T1	64	508	178			1492
	10	T2	40	508	245			1626
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	370	150			1160



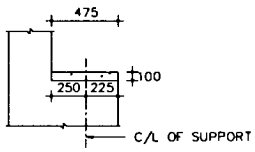
SECTION A-A



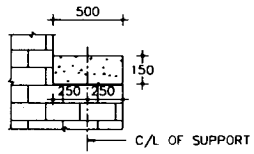
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

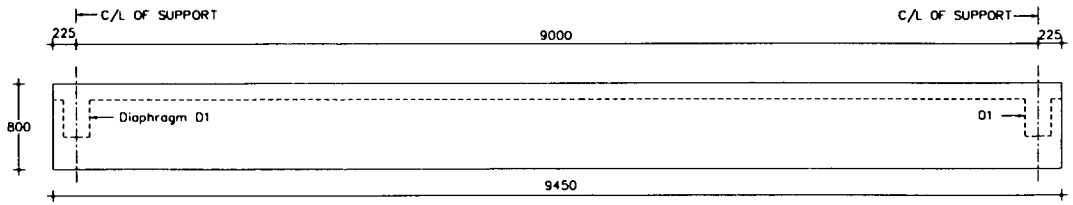
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.5m GIRDER

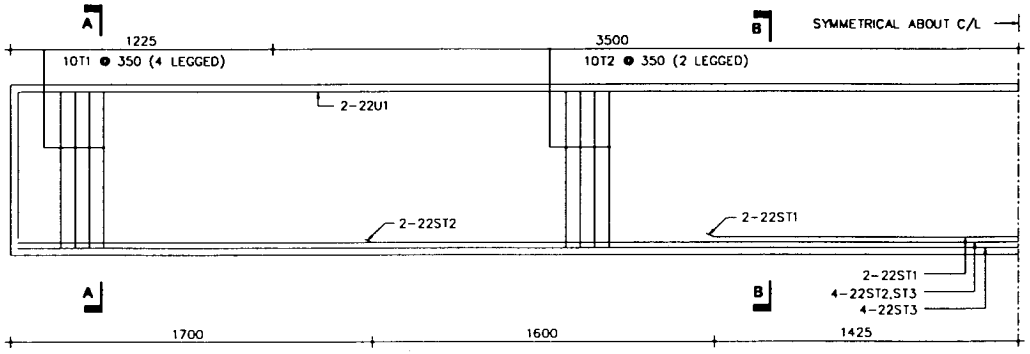
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SHEET 1 OF 1
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SIDEWALK - NO



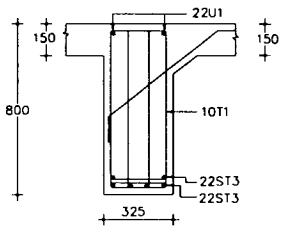
DETAILS OF GIRDER



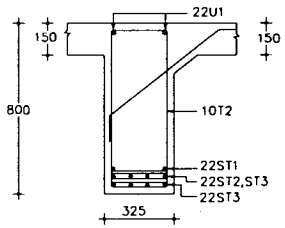
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

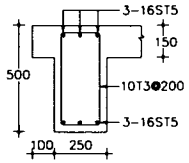
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	9410				9410
	6	T2	504	85	135			512
POST	12	L1	64	975	72			1047
	6	T1	96	135	135			612
SIDEWALK	8	VL1	78	201	317	270	310	1194
	12	ST2	8	9370				9370
DECK	12	ST1	76	2960				2960
	12	CR1	38	1147	98	525		3015
	10	ST1	25	9370				9370
	10	C1	52	120	676			916
GIRDER	22	ST1	4	2850				2850
	22	ST2	4	6050				6050
	22	ST3	12	9350				9350
	22	U1	4	630	9350	630		10610
	10	T1	40	708	177			1890
	10	T2	36	708	245			2026
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	420	150			1260



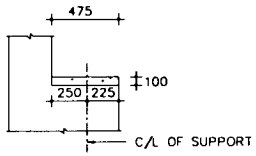
SECTION A-A



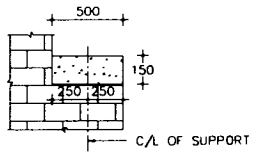
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAD

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

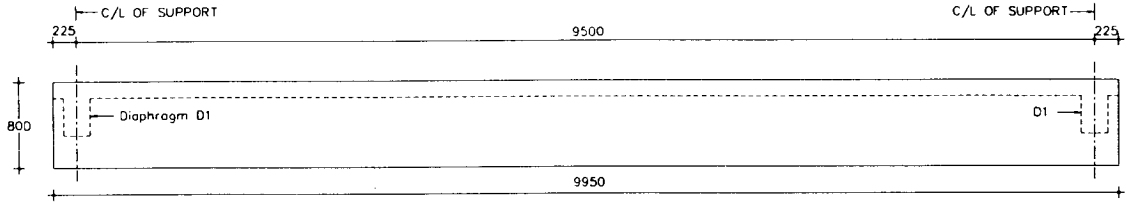
DETAILS OF 9.0m GIRDER

DATE : 06/04/1997 | ISSUED BY :

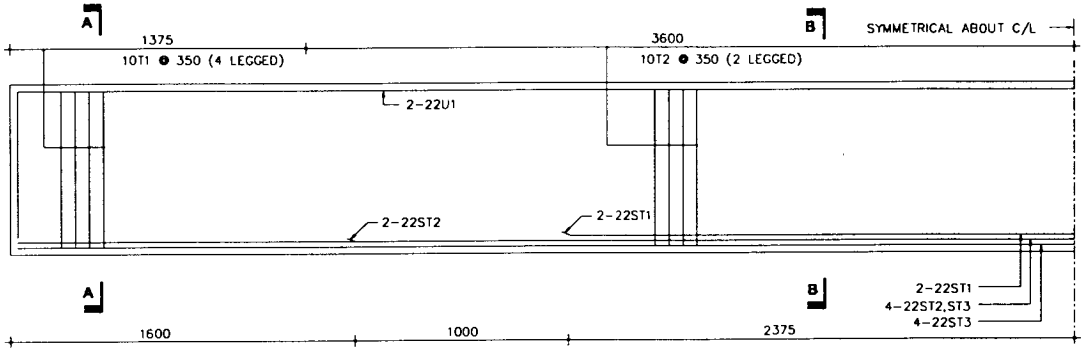
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



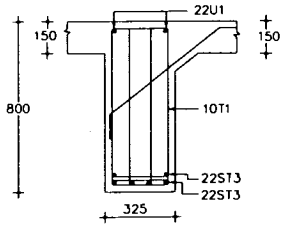
DETAILS OF GIRDER



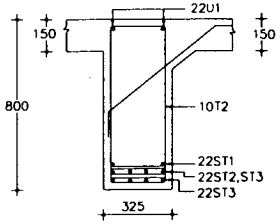
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

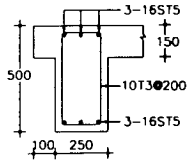
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	9910				9910
	6	T2	532	85	135			512
POST	12	L1	64	975	72			1047
	6	T1	96	135	135			612
SIDEWALK	8	VL1	82	201	317	270	310	1194
	12	ST2	8	9870				9870
DECK	12	ST1	80	2960				2960
	12	CR1	40	1147	98	525		3015
	10	ST1	25	9870				9870
	10	C1	54	120	676			916
GIRDER	22	ST1	4	4750				4750
	22	ST2	4	6750				6750
	22	ST3	12	9850				9850
	22	U1	4	630	9850	630		11110
	10	T1	40	708	177			1890
	10	T2	38	708	245			2026
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	420	150			1260



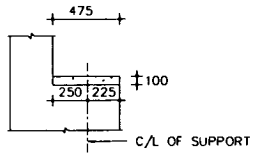
SECTION A-A



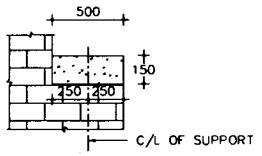
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

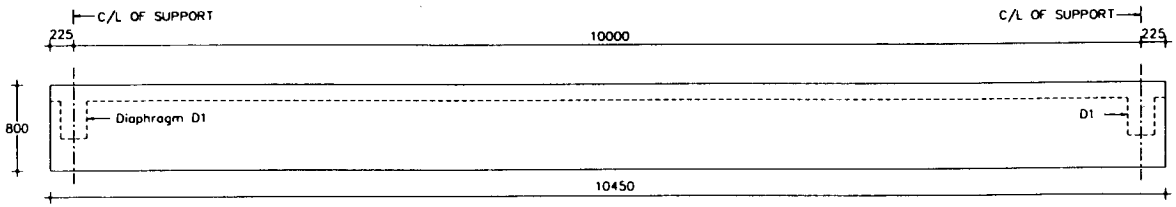
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 9.5m GIRDER

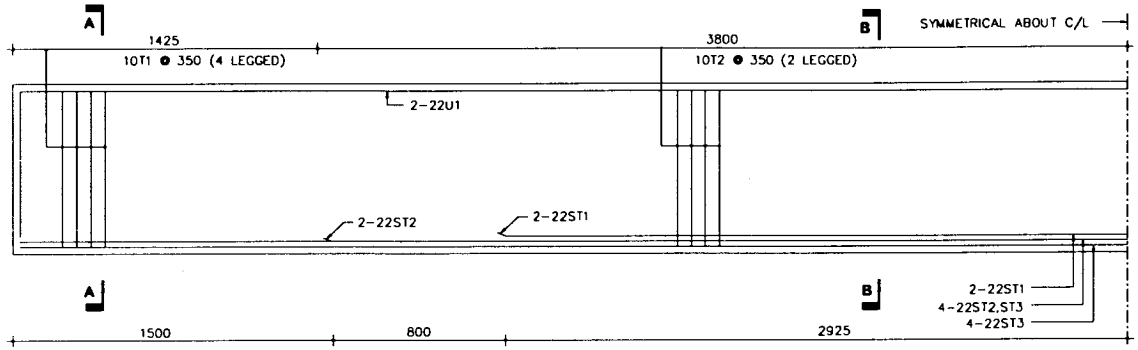
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CAD FILE REF : BRDG\G0109501

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - ND



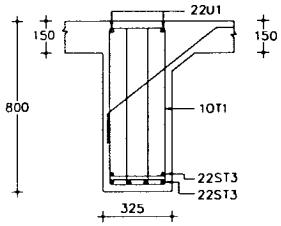
DETAILS OF GIRDER



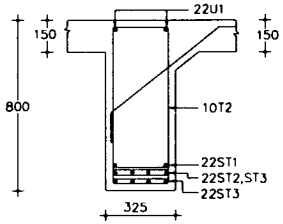
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

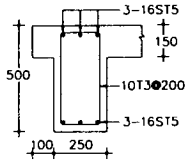
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	10410				10410
	6	T2	560	85	135			512
POST	12	L1	64	975	72			1047
	6	T1	96	135	135			612
SIDEWALK	8	VL1	86	201	317	270	310	1194
	12	ST2	8	10370				10370
DECK	12	ST1	84	2960				2960
	12	CR1	42	1147	98	525		3015
	10	ST1	25	10370				10370
	10	C1	58	120	676			916
GIRDER	22	ST1	4	5850				5850
	22	ST2	4	7450				7450
	22	ST3	12	10350				10350
	22	U1	4	630	10350	630		11610
	10	T1	40	708	177			1890
	10	T2	42	708	245			2026
DIAPHRAGM	16	ST5	12	2025				2025
	10	T3	14	420	150			1260



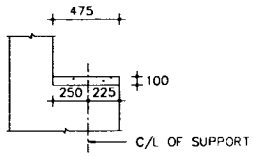
SECTION A-A



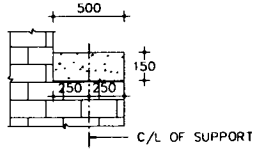
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001

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LOCAL GOVERNMENT ENGINEERING DEPARTMENT

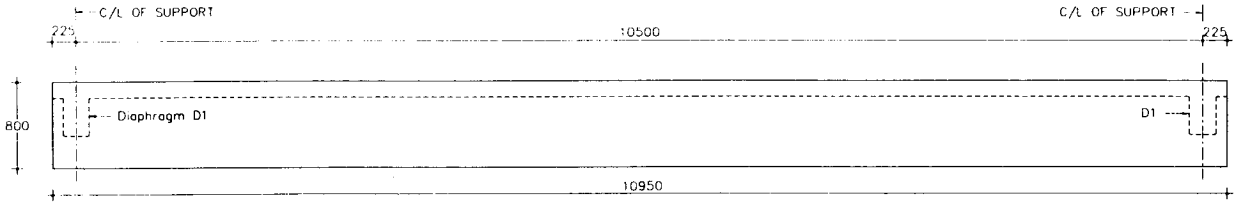
DETAILS OF 10.0m GIRDER

DATE 06/04/1997 | ISSUED BY

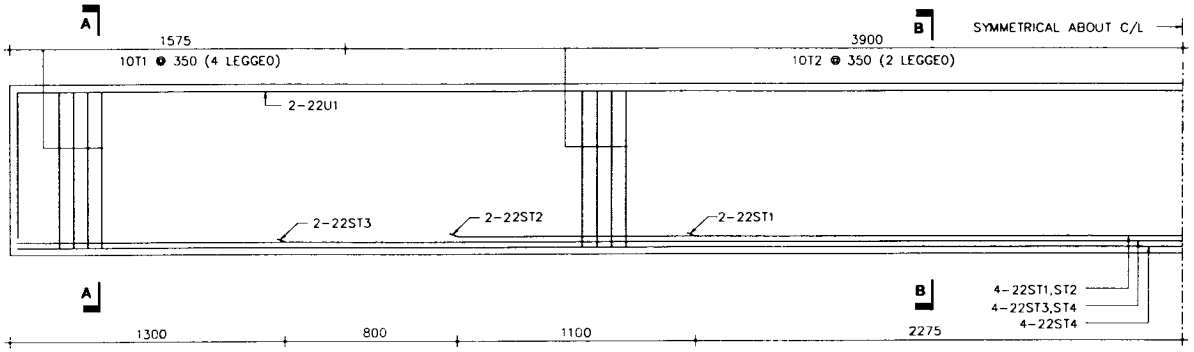
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



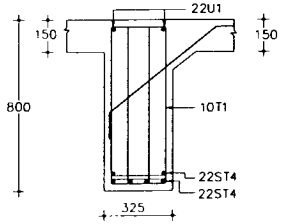
DETAILS OF GIRDER



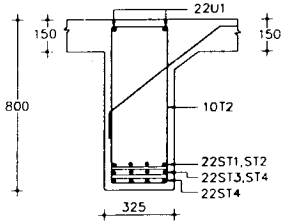
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

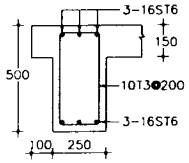
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	10910				10910
	6	T2	576	85	135			512
POST	12	L1	72	975	72			1047
	6	T1	108	135	135			612
SIDEWALK	8	VL1	90	201	317	270	310	1194
	12	ST2	8	10870				10870
DECK	12	ST1	88	2960				2960
	12	CR1	44	1147	98	525		3015
	10	ST1	25	10870				10870
	10	C1	60	120	676			916
GIRDER	22	ST1	4	4550				4550
	22	ST2	4	6750				6750
	22	ST3	4	8350				8350
	22	ST4	12	10850				10850
	22	U1	2	630	10850	630		12110
	10	T1	48	708	177			1890
	10	T2	40	708	245			2026
DIAPHRAGM	16	ST6	12	2025				2025
	10	T3	14	420	150			1260



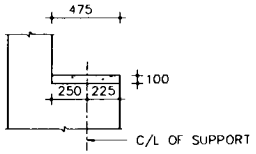
SECTION A-A



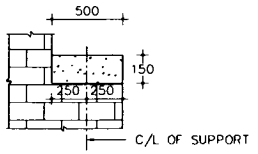
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 10.5m GIRDER

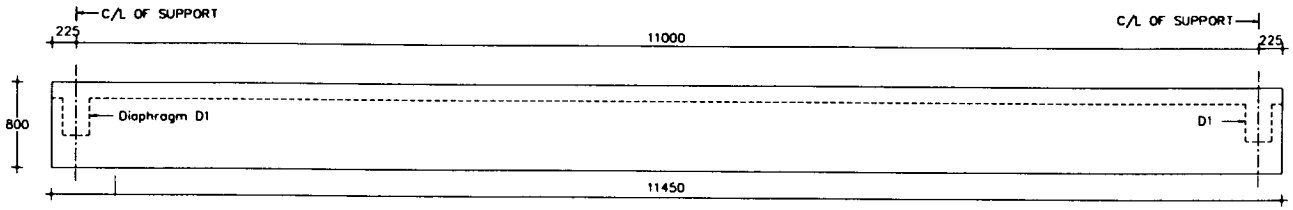
DATE : 06/04/1997 | ISSUED BY :

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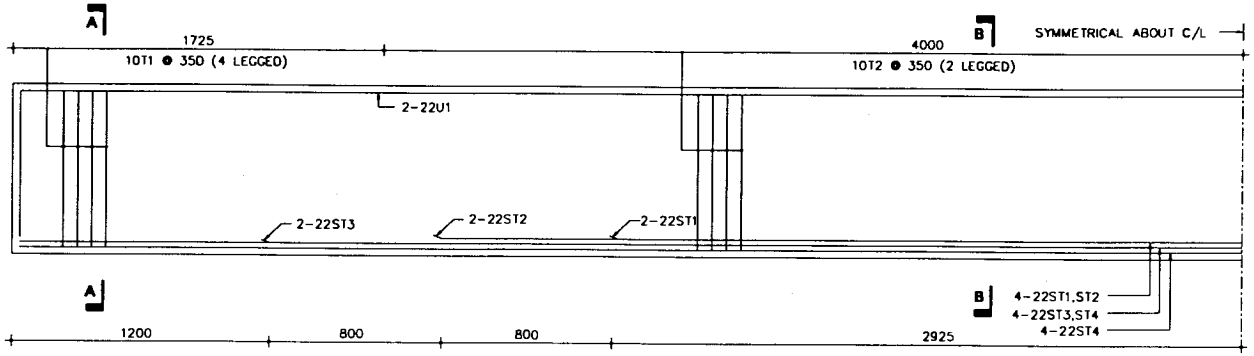
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SHEET 1 OF 1
LOADING – AASHTO H10
SIDEWALK – NO



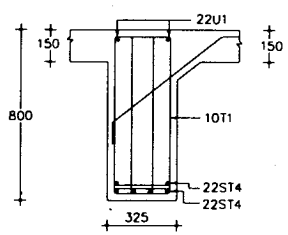
DETAILS OF GIRDER



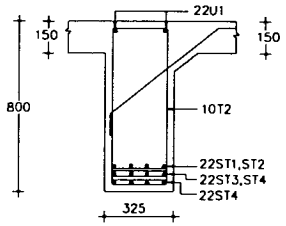
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

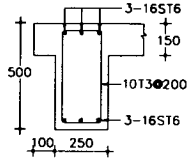
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	11410				11410
	6	T2	608	85	135			512
POST	12	L1	72	975	72			1047
	6	T1	108	135	135			612
SIDEWALK	8	VL1	94	201	317	270	310	1194
	12	ST2	8	11370				11370
DECK	12	ST1	92	2960				2960
	12	CR1	46	1147	98	525		3015
	10	ST1	25	11370				11370
	10	C1	62	120	676			916
GIRDER	22	ST1	4	5850				5850
	22	ST2	4	7450				7450
	22	ST3	4	9050				9050
	22	ST4	12	11350				11350
	22	U1	2	630	11350	630		12610
	10	T1	48	708	177			1890
	10	T2	42	708	245			2026
DIAPHRAGM	16	ST6	12	2025				2025
	10	T3	14	420	150			1260



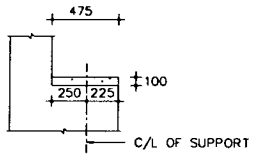
SECTION A-A



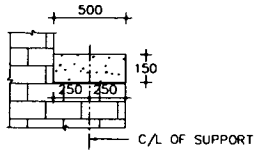
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

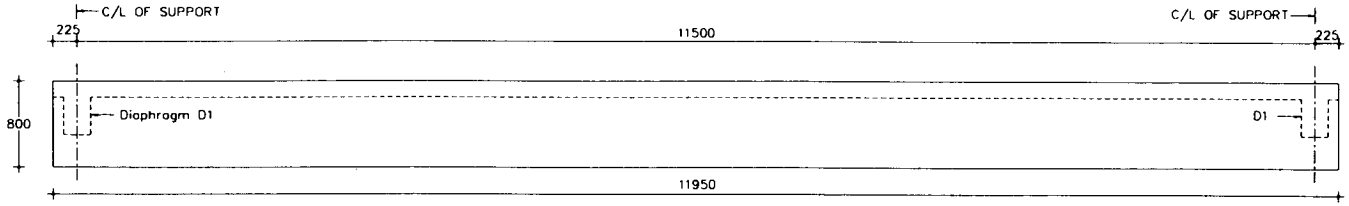
DETAILS OF 11.0m GIRDER

DATE : 06/04/1997 | ISSUED BY :

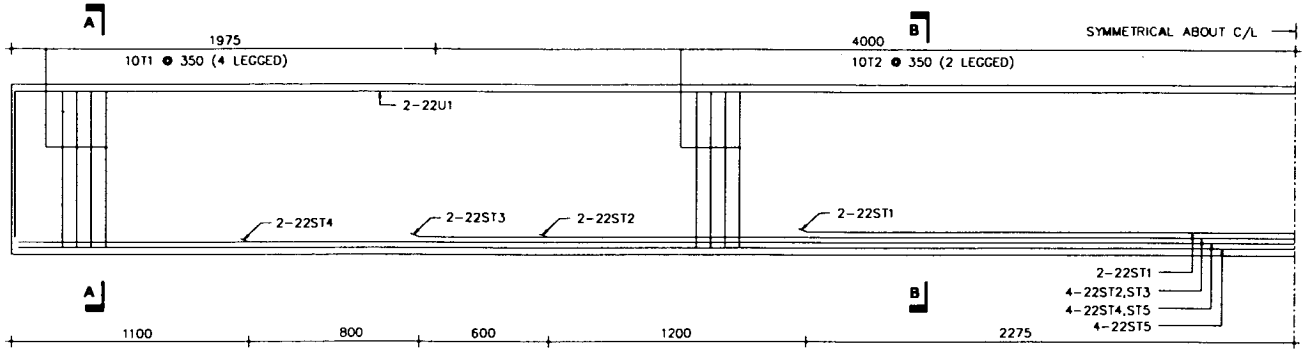
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK -- NO



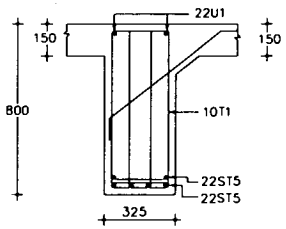
DETAILS OF GIRDER



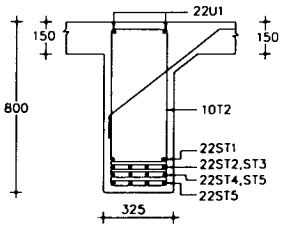
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

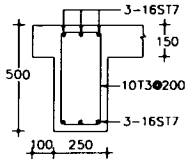
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	11910				11910
	6	T2	640	85	135			512
POST	12	L1	72	975	72			1047
	6	T1	108	135	135			612
SIDEWALK	8	VL1	98	201	317	270	310	1194
	12	ST2	8	11870				11870
DECK	12	ST1	96	2960				2960
	12	CR1	48	1147	98	525		3015
	10	ST1	25	11870				11870
	10	C1	66	120	676			916
GIRDER	22	ST1	4	4550				4550
	22	ST2	4	6950				6950
	22	ST3	4	8150				8150
	22	ST4	4	9750				9750
	22	ST5	12	11850				11850
	22	U1	4	630	11850	630		13110
	10	T1	56	708	177			1890
	10	T2	42	708	245			2026
DIAPHRAGM	16	ST7	12	2025				2025
	10	T3	14	420	150			1260



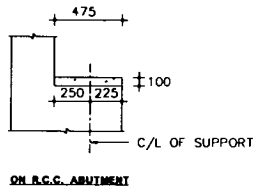
SECTION A-A



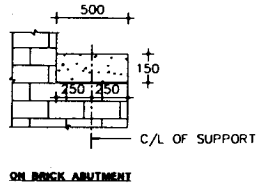
SECTION B-B



DETAILS OF D-1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

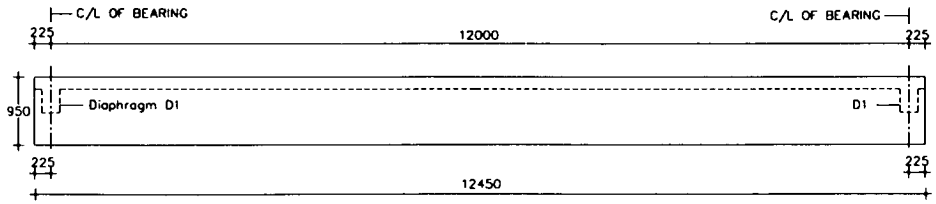
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 11.5m GIRDER

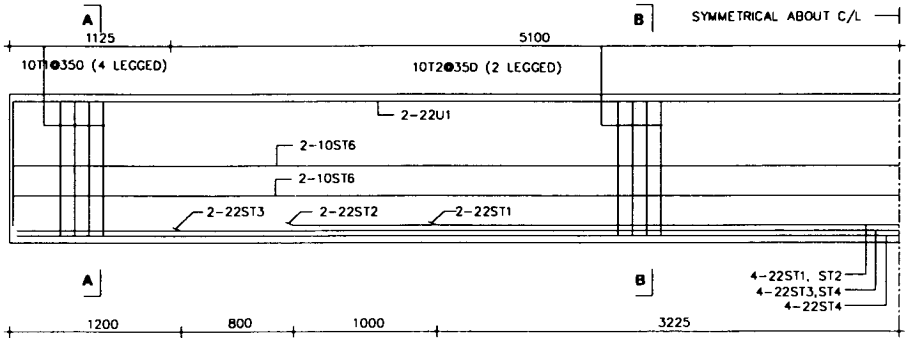
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CAD FILE REF : BRDG\G0111501

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



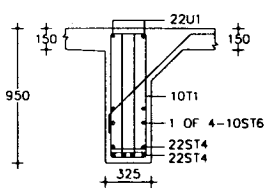
DETAILS OF GIRDER



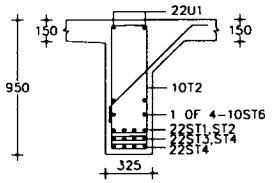
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

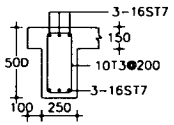
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	12410				12410
	6	T2	684	85	135			512
POST	12	L1	80	975	72			1047
	6	T1	120	135	135			612
SIDEWALK	8	VL1	102	201	317	270	310	1194
	12	ST2	8	12370				12370
DECK	12	ST1	100	2960				2960
	12	CR1	50	1147	98	525		3015
	10	ST1	25	12370				12370
	10	C1	68	120	676			916
GIRDER	22	ST1	4	6450				6450
	22	ST2	4	8450				8450
	22	ST3	4	10050				10050
	22	ST4	12	12350				12350
	22	U1	4	780	12350	780		13910
	10	ST6	8	12350				12350
	10	T1	40	858	177			2190
	10	T2	52	858	245			2326
DIAPHRAGM	16	ST7	12	2025				2025
	10	T3	14	420	150			1260



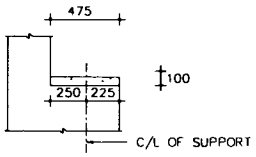
SECTION A-A



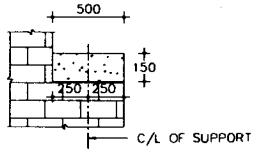
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

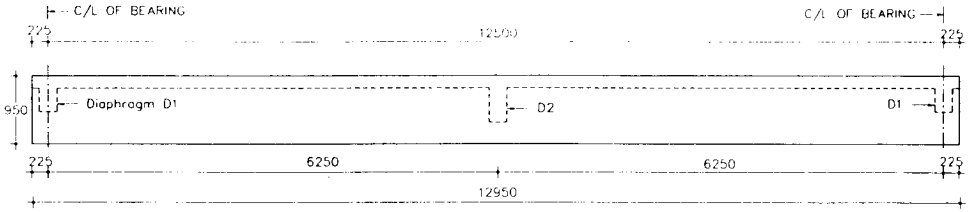
DETAILS OF 12.0m GIRDER

DATE : 06/04/1997 | ISSUED BY :

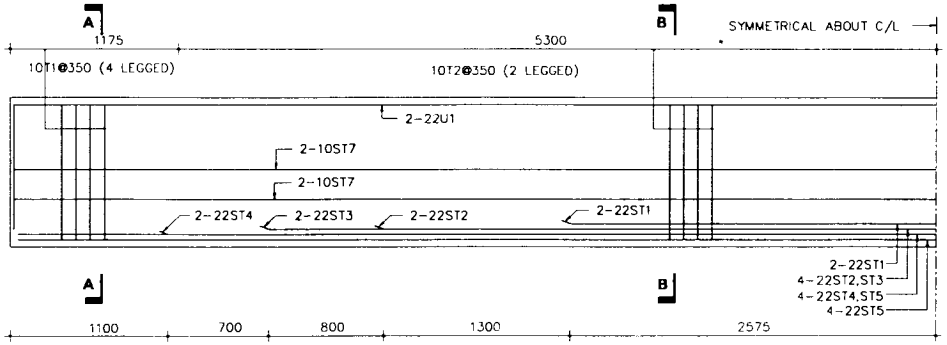
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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



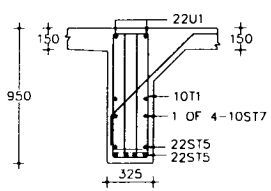
DETAILS OF GIRDER



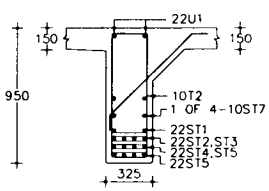
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

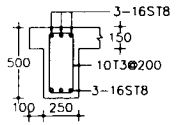
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	12910				12910
	6	T2	684	85	135			512
POST	12	L1	80	975	72			1047
	6	T1	120	135	135			612
SIDEWALK	8	VL1	106	201	317	270	310	1194
	12	ST2	8	12870				12870
DECK	12	ST1	104	2960				2960
	12	CR1	52	1147	98	525		3015
	10	ST1	25	12870				12870
	10	C1	70	120	676			916
GIRDER	22	ST1	4	5150				5150
	22	ST2	4	7750				7750
	22	ST3	4	9550				9550
	22	ST4	4	10950				10950
	22	ST5	12	12850				12850
	22	U1	4	780	12850	780		14410
	10	ST7	8	12850				12850
	10	T1	40	858	177			2190
	10	T2	56	858	245			2326
DIAPHRAGM	16	ST8	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



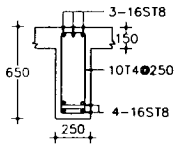
SECTION A-A



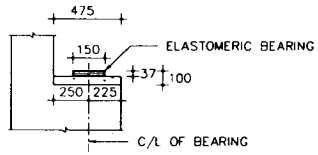
SECTION B-B



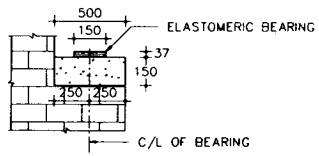
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

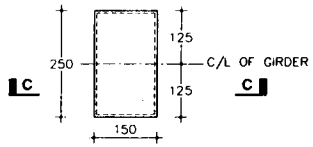


ON BRICK ABUTMENT

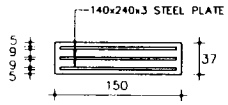
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This file is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

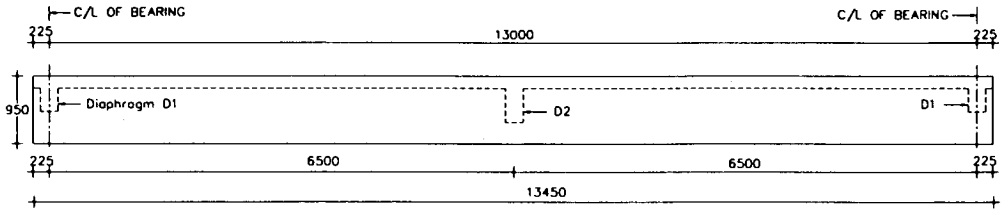
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.5m GIRDER & BEARING

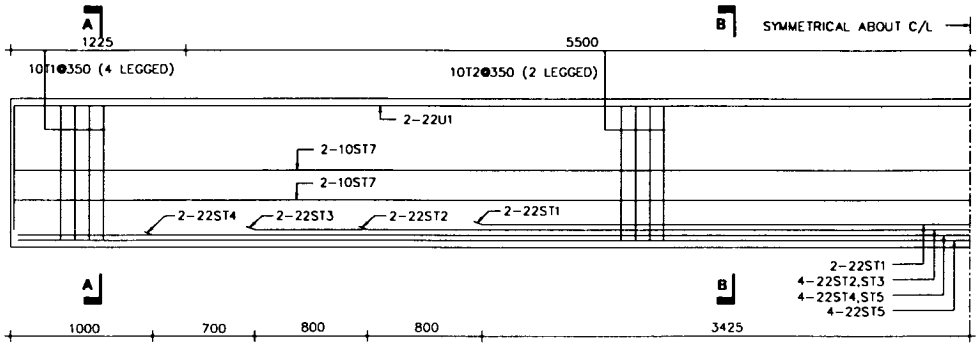
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G01125D1	

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



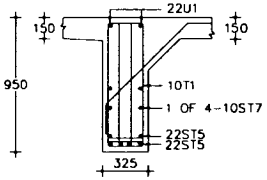
DETAILS OF GIRDER



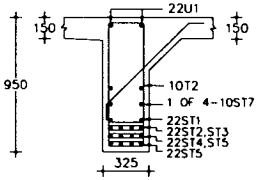
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

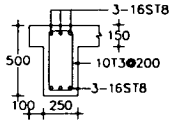
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	13410				13410
	6	T2	720	85	135			512
POST	12	L1	80	975	72			1047
	6	T1	120	135	135			612
SIDEWALK	8	WL1	110	201	317	270	310	1194
	12	ST2	8	13370				13370
DECK	12	ST1	108	2960				2960
	12	CR1	54	1147	98	525		3015
	10	ST1	25	13370				13370
	10	C1	74	120	676			916
GIRDER	22	ST1	4	6850				6850
	22	ST2	4	8450				8450
	22	ST3	4	10050				10050
	22	ST4	4	11450				11450
	22	ST5	12	13350				13350
	22	U1	4	780	13350	780		14910
	10	ST7	8	13350				13350
	10	T1	40	858	177			2190
	10	T2	58	858	245			2326
DIAPHRAGM	16	ST8	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



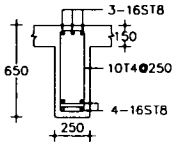
SECTION A-A



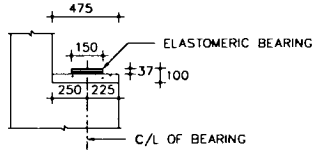
SECTION B-B



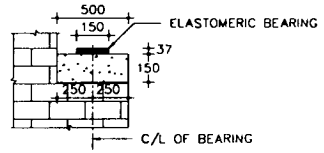
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

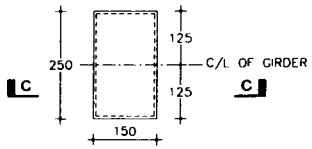


ON BRICK ABUTMENT

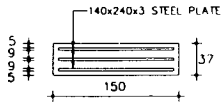
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This file is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

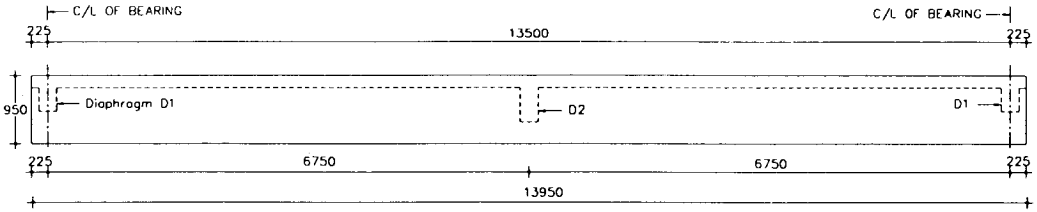
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 13.0m GIRDER & BEARING

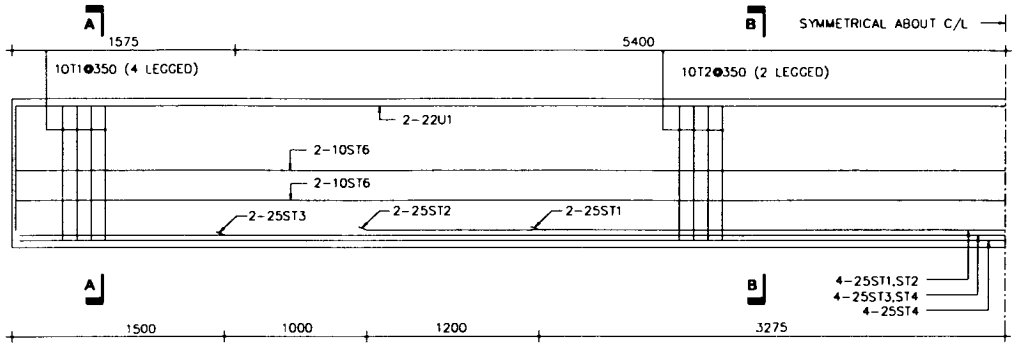
DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0113001

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



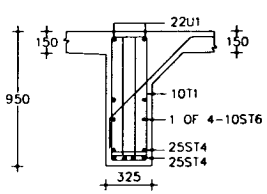
DETAILS OF GIRDER



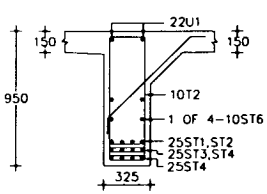
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

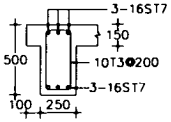
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	13910				13910
	6	T2	760	85	135			512
POST	12	L1	88	975	72			1047
	6	T1	132	135	135			612
SIDEWALK	8	VL1	114	201	317	270	310	1194
	12	ST2	8	13870				13870
DECK	12	ST1	112	2960				2960
	12	CR1	56	1147	98	525		3015
	10	ST1	25	13870				13870
	10	C1	76	120	676			916
GIRDER	25	ST1	4	6550				6550
	25	ST2	4	8950				8950
	25	ST3	4	10950				10950
	25	ST4	12	13850				13850
	22	U1	4	774	13850	774		15398
	10	ST6	8	13850				13850
	10	T1	48	858	178			2192
	10	T2	58	858	245			2326
DIAPHRAGM	16	ST7	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



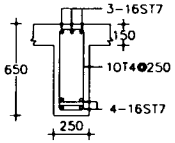
SECTION A-A



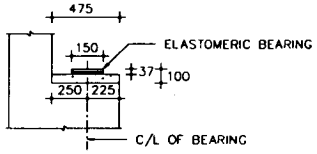
SECTION B-B



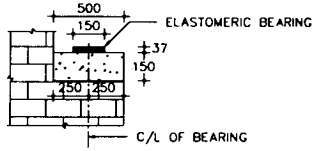
DETAILS OF D1



DETAILS OF D2

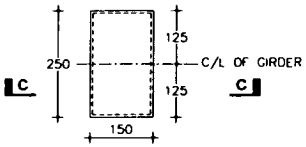


ON R.C.C. ABUTMENT

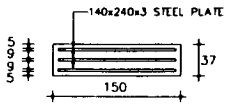


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This file is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

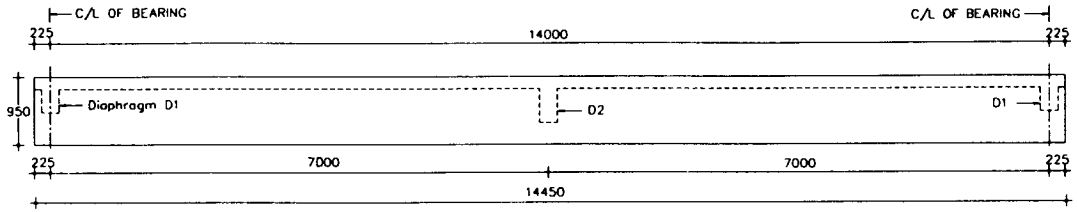
DETAILS OF 13.5m GIRDER & BEARING

DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0113501	

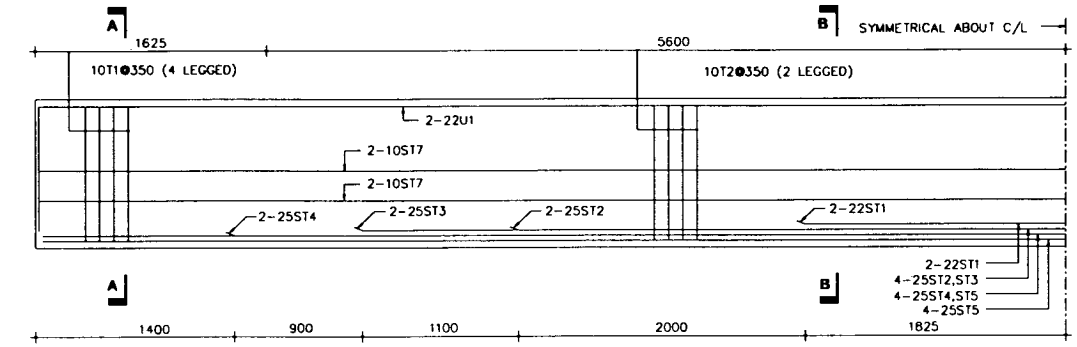
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GB-34

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



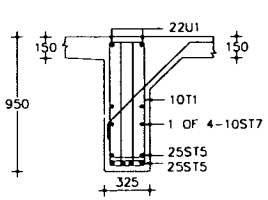
DETAILS OF GIRDER



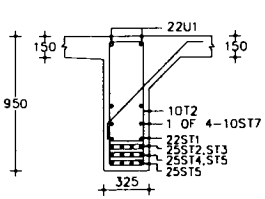
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

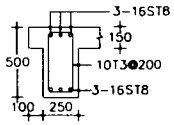
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	14410				14410
	6	T2	800	85	135			512
POST	12	L1	88	975	72			1047
	6	T1	132	135	135			612
SIDEWALK	8	VL1	118	201	317	270	310	1194
	12	ST2	8	14370				14370
DECK	12	ST1	116	2960				2960
	12	CR1	58	1147	98	525		3015
	10	ST1	25	14370				14370
	10	C1	78	120	676			916
GIRDER	22	ST1	4	3650				3650
	25	ST2	4	7650				7650
	25	ST3	4	9850				9850
	25	ST4	4	11650				11650
	25	ST5	12	14350				14350
	22	U1	4	774	14350	774		15898
	10	ST7	8	14350				14350
	10	T1	48	858	178			2192
	10	T2	60	858	245			2326
DIAPHRAGM	16	ST8	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



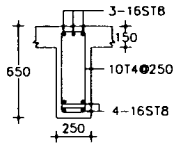
SECTION A-A



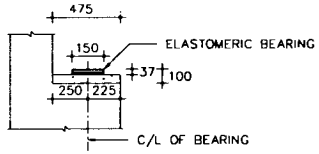
SECTION B-B



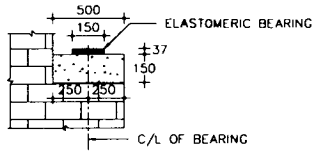
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

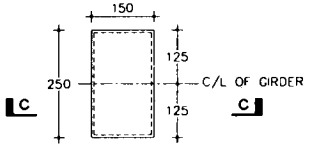


ON BRICK ABUTMENT

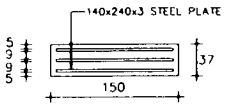
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This file is to be read in conjunction with Shape Code; Cad File: BRDG\SOD00001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

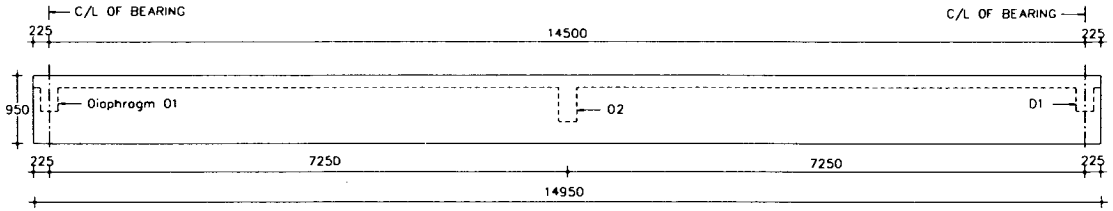
DETAILS OF 14.0m GIRDER & BEARING

DATE : 06/04/1997 | ISSUED BY :

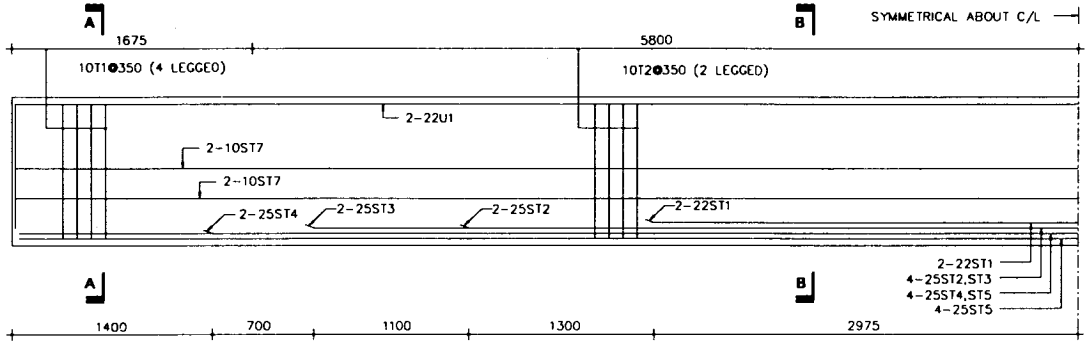
CAD FILE REF : BRDG\GD114001

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



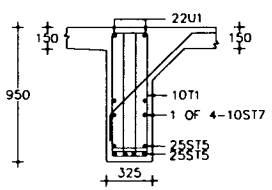
DETAILS OF GIRDER



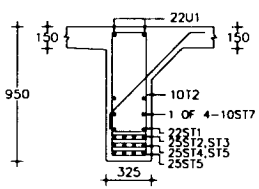
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

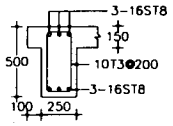
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	14910				14910
	6	T2	800	85	135			512
POST	12	L1	88	975	72			1047
	6	T1	132	135	135			612
SIDEWALK	8	VL1	122	201	317	270	310	1194
	12	ST2	8	14870				14870
DECK	12	ST1	120	2960				2960
	12	CR1	60	1147	98	525		3015
	10	ST1	25	14870				14870
	10	C1	82	120	676			916
GIRDER	22	ST1	4	5950				5950
	25	ST2	4	8550				8550
	25	ST3	4	10750				10750
	25	ST4	4	12150				12150
	25	ST5	12	14850				14850
	22	U1	4	774	14850	774		16398
	10	ST7	8	14850				14850
	10	T1	48	858	178			2192
	10	T2	62	858	245			2326
DIAPHRAGM	16	ST8	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



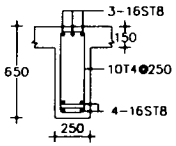
SECTION A-A



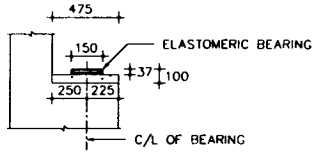
SECTION B-B



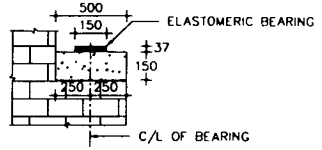
DETAILS OF D1



DETAILS OF D2

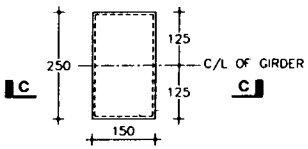


ON R.C.C. ABUTMENT

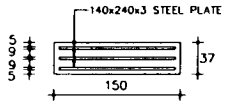


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

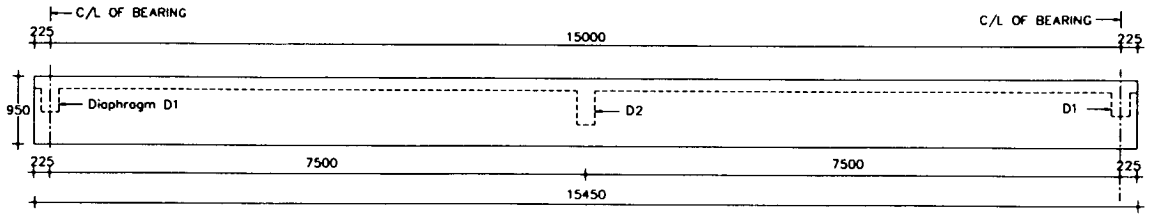
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 14.5m GIRDER & BEARING

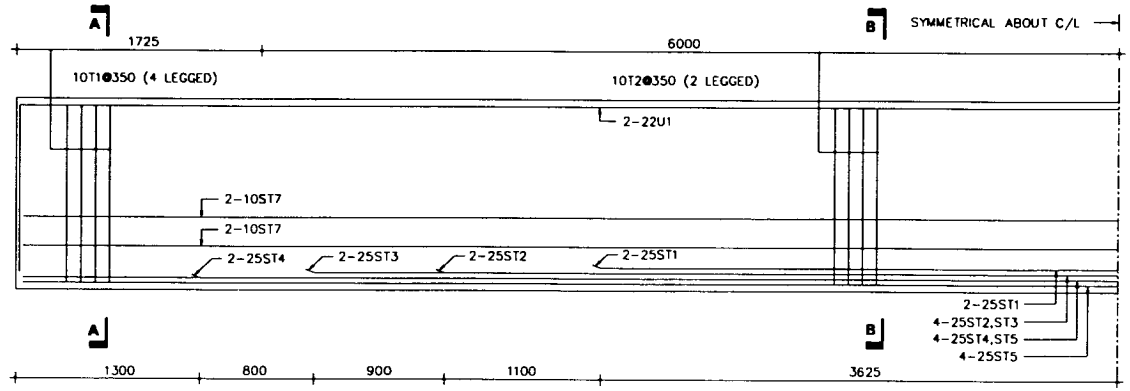
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0114501	

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



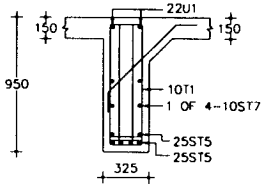
DETAILS OF GIRDER



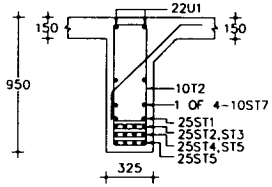
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

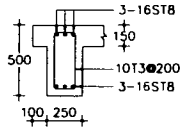
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	15410				15410
	6	T2	836	85	135			512
POST	12	L1	96	975	72			1047
	6	T1	144	135	135			612
SIDEWALK	8	WL1	126	201	317	270	310	1194
	12	ST2	8	15370				15370
DECK	12	ST1	124	2960				2960
	12	CR1	62	1147	98	525		3015
	10	ST1	25	15370				15370
	10	C1	84	120	676			916
GIRDER	25	ST1	4	7250				7250
	25	ST2	4	9450				9450
	25	ST3	4	11250				11250
	25	ST4	4	12850				12850
	25	ST5	12	15350				15350
	22	U1	4	774	15350	774		16898
	10	ST7	8	15350				15350
	10	T1	48	858	178			2192
	10	T2	66	858	245			2326
DIAPHRAGM	16	ST8	18	2025				2025
	10	T3	14	420	150			1260
	10	T4	6	570	150			1560



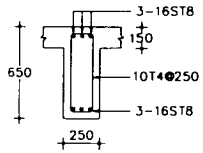
SECTION A-A



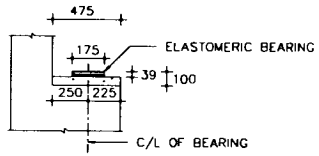
SECTION B-B



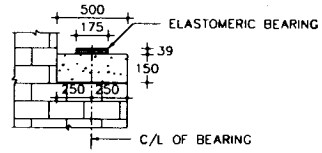
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

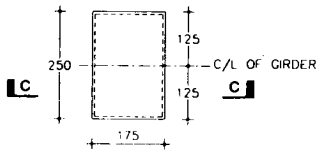


ON BRICK ABUTMENT

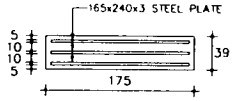
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

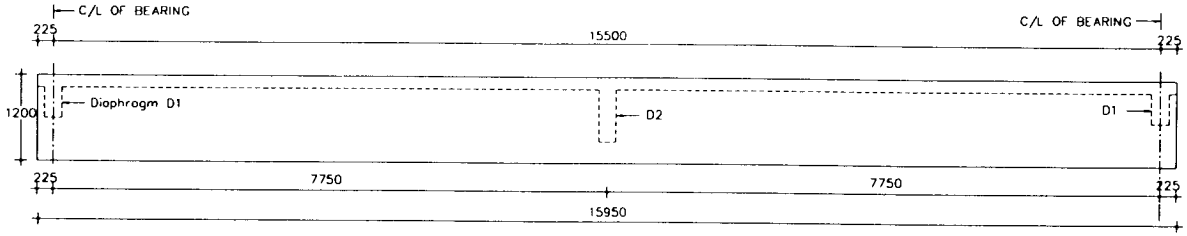
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.0m GIRDER & BEARING

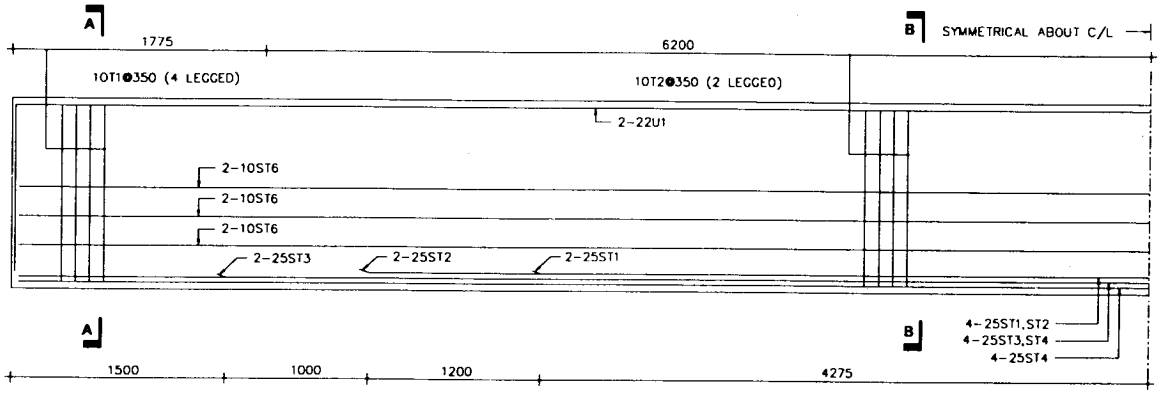
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0115001	

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SHEET 1 OF 1	
LOADING – AASHTO H10	
SIDEWALK – NO	



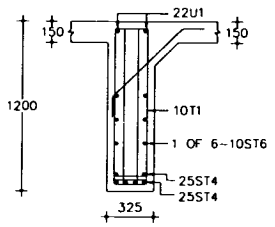
DETAILS OF GIRDER



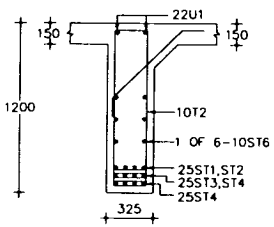
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

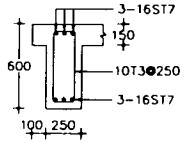
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	15910				15910
	6	T2	880	85	135			512
POST	12	L1	96	975	72			1047
	6	T1	144	135	135			612
SIDEWALK	8	VL1	130	201	317	270	310	1194
	12	ST2	8	15870				15870
DECK	12	ST1	128	2960				2960
	12	CR1	64	1147	98	525		3015
	10	ST1	25	15870				15870
	10	C1	86	120	676			916
GIRDER	25	ST1	4	8550				8550
	25	ST2	4	10950				10950
	25	ST3	4	12950				12950
	25	ST4	12	15850				15850
	22	U1	4	1024	15850	1024		17894
	10	ST6	12	15850				15850
	10	T1	48	1108	178			2692
	10	T2	68	1108	245			2826
DIAPHRAGM	16	ST7	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060



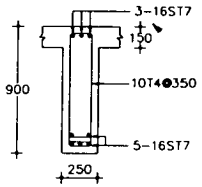
SECTION A-A



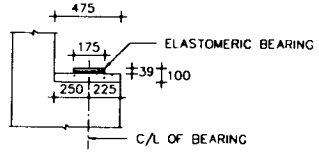
SECTION B-B



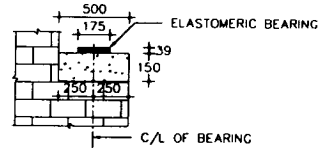
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

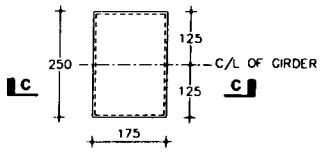


ON BRICK ABUTMENT

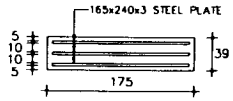
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

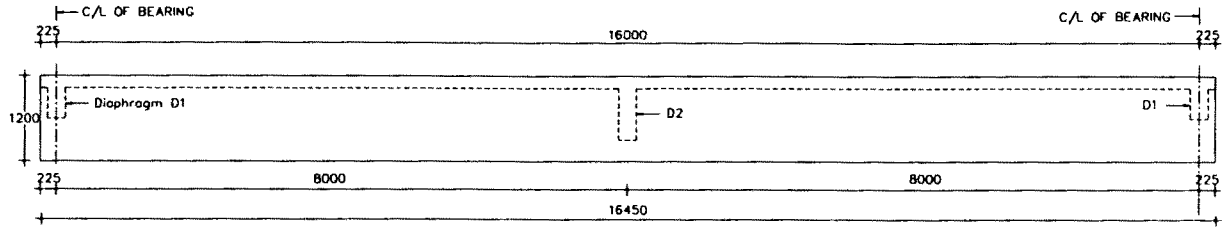
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.5m GIRDER & BEARING

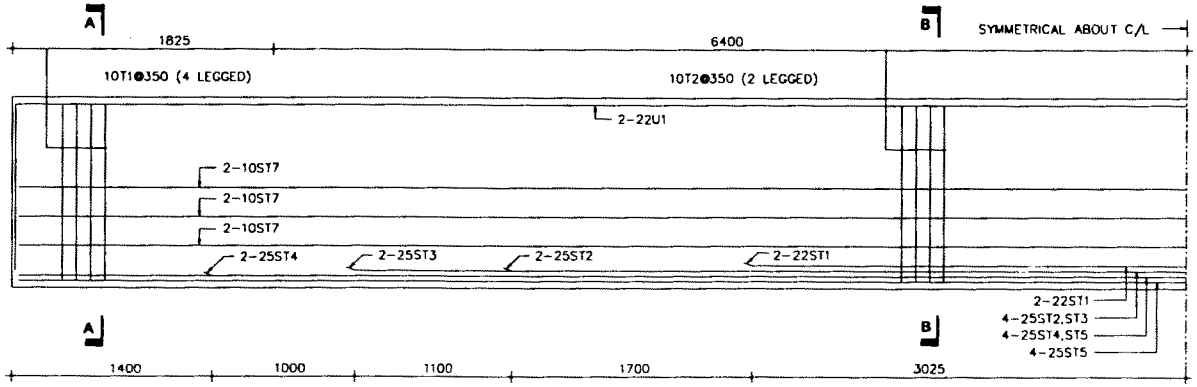
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0115501	

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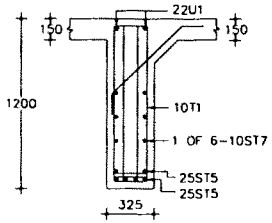
SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



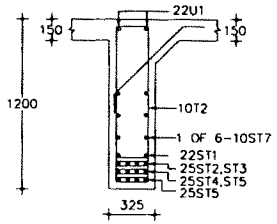
DETAILS OF GIRDER



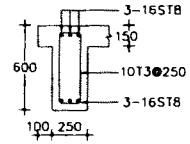
REINF. DETAILS OF GIRDER



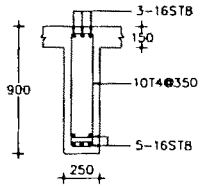
SECTION A-A



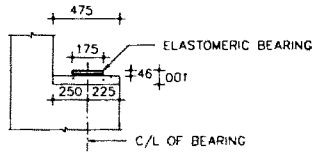
SECTION B-B



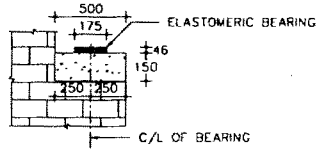
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

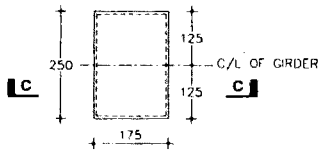
SIDE ELEVATION OF PLACEMENT OF BEARING

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	16410				16410
	6	T2	880	85	135			512
POST	12	L1	96	975	72			1047
	6	T1	144	135	135			612
SIDEWALK	8	VL1	134	201	317	270	310	1194
	12	ST2	8	16370				16370
DECK	12	ST1	132	2980				2960
	12	CR1	66	1147	98	525		3015
	10	ST1	25	16370				16370
	10	C1	90	120	676			916
GIRDER	22	ST1	4	6050				6050
	25	ST2	4	9450				9450
	25	ST3	4	11650				11650
	25	ST4	4	13650				13650
	25	ST5	12	16350				16350
	22	U1	4	1024	16350	1024		18398
	10	ST7	12	16350				16350
	10	T1	56	1108	178			2692
	10	T2	68	1108	245			2826
DIAPHRAGM	16	ST8	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

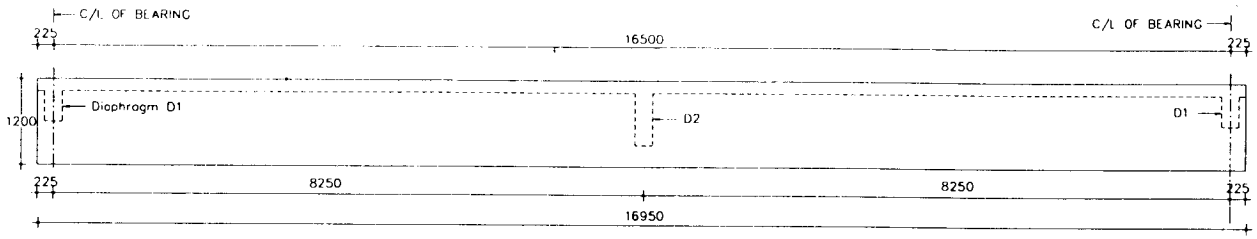
DETAILS OF 16.0m GIRDER & BEARING

DATE : 06/04/1997 | ISSUED BY :

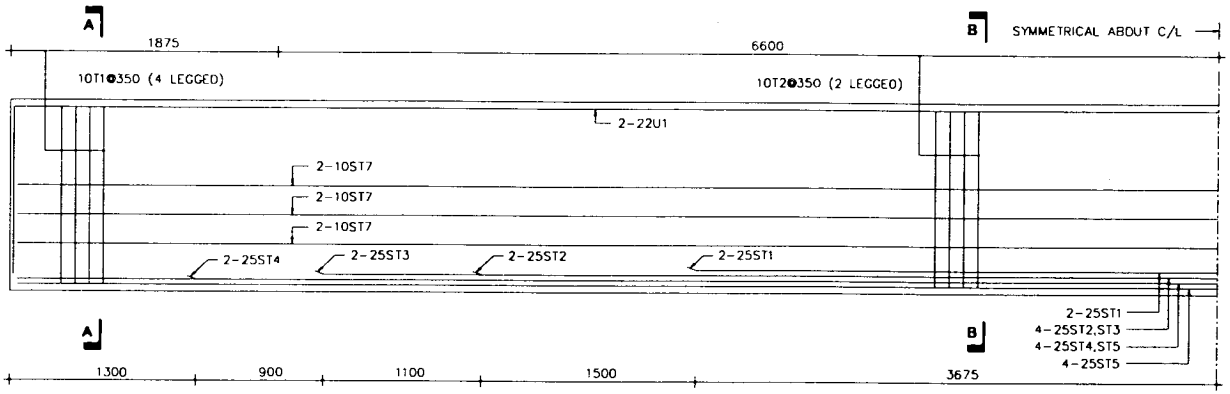
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SHEET 1 OF 1	
LOADING – AASHTO H10	
SIDEWALK – NO	



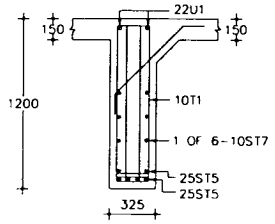
DETAILS OF GIRDER



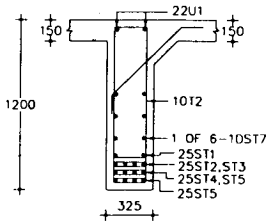
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

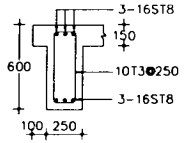
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	16910				16910
	6	T2	912	85	135			512
POST	12	L1	104	975	72			1047
	6	T1	156	135	135			612
SIDEWALK	8	VL1	138	201	317	270	310	1194
	12	ST2	8	16870				16870
DECK	12	ST1	136	2960				2960
	12	CR1	68	1147	98	525		3015
	10	ST1	25	16870				16870
	10	C1	92	120	676			916
GIRDER	25	ST1	4	7350				7350
	25	ST2	4	10350				10350
	25	ST3	4	12550				12550
	25	ST4	4	14350				14350
	25	ST5	12	16850				16850
	22	U1	4	1024	16850	1024		18898
	10	ST7	12	16850				16850
	10	T1	56	1108	178			2692
	10	T2	70	1108	245			2826
DIAPHRAGM	16	ST8	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060



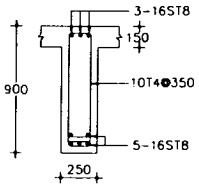
SECTION A-A



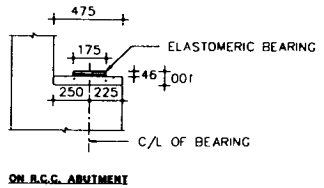
SECTION B-B



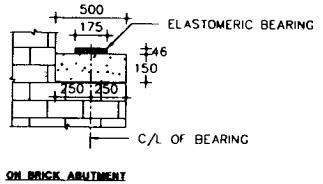
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

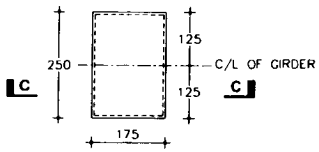


ON BRICK ABUTMENT

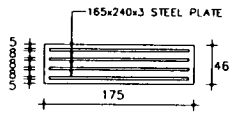
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

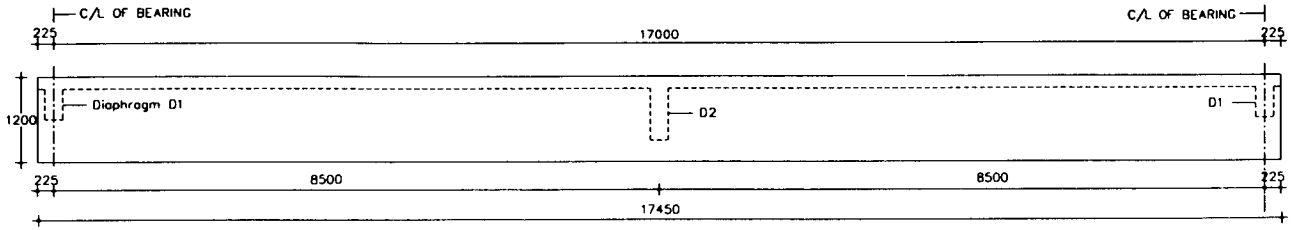
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.5m GIRDER & BEARING

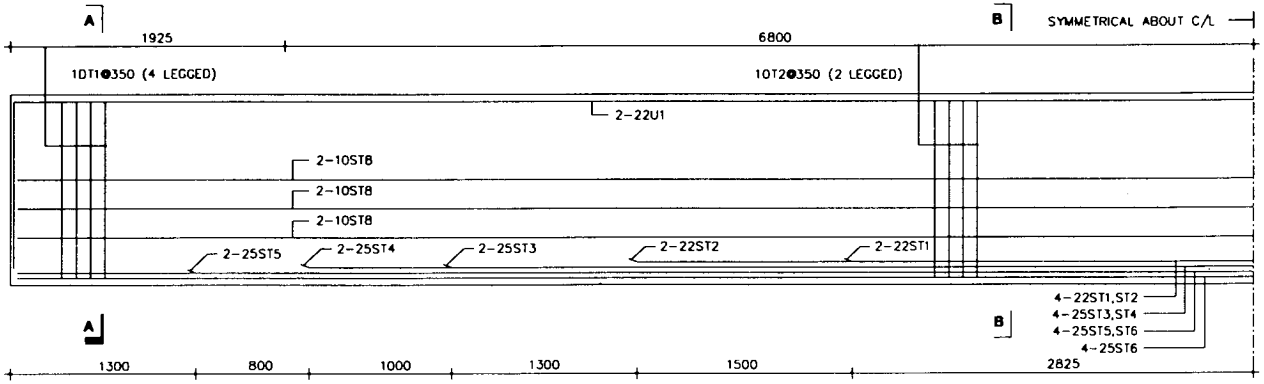
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0116501	

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SHEET 1 OF 1
LOADING – AASHTO H10
SIDEWALK – NO



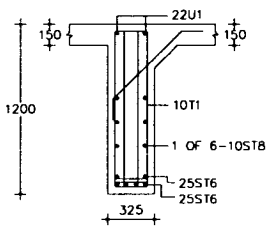
DETAILS OF GIRDER



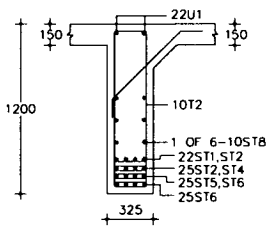
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

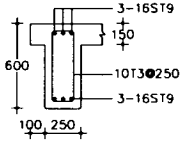
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	17410				17410
	6	T2	960	85	135			512
POST	12	L1	104	975	72			1047
	6	T1	156	135	135			612
SIDEWALK	8	VL1	142	201	317	270	310	1194
	12	ST2	8	17370				17370
DECK	12	ST1	140	2960				2960
	12	CR1	70	1147	98	525		3015
	10	ST1	25	17370				17370
	10	C1	94	120	676			916
GIRDER	22	ST1	4	5650				5650
	22	ST2	4	8650				8650
	25	ST3	4	11250				11250
	25	ST4	4	13250				13250
	25	ST5	4	14850				14850
	25	ST6	12	17350				17350
	22	U1	4	1024	17350	1024		19398
	10	ST8	12	17350				17350
	10	T1	56	1108	178			2692
	10	T2	74	1108	245			2826
DIAPHRAGM	16	ST9	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060



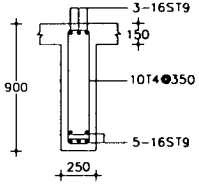
SECTION A-A



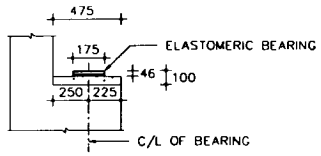
SECTION B-B



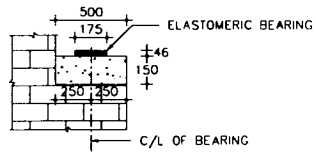
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

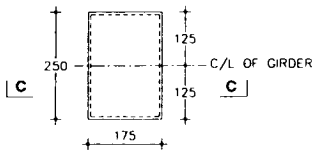


ON BRICK ABUTMENT

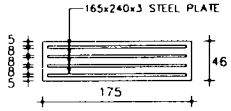
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

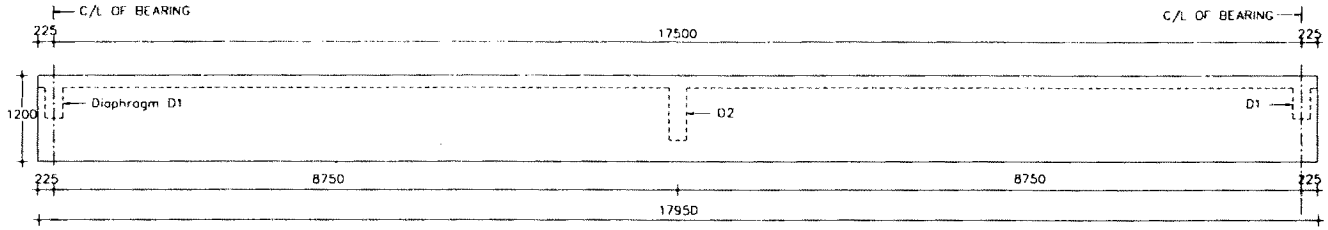
DETAILS OF 17.0m GIRDER & BEARING

DATE : 06/04/1997
CAD FILE REF : BRDG\G0117001
ISSUED BY :

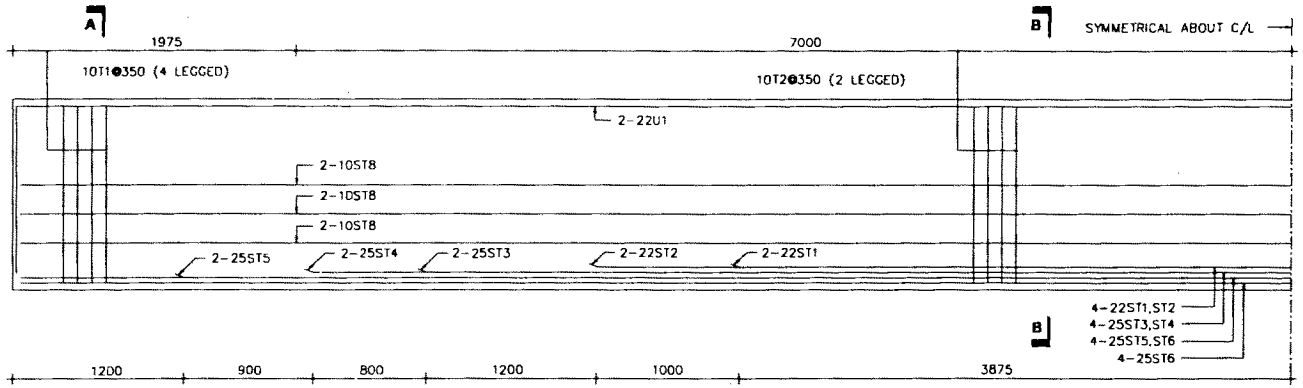
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GB-41

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



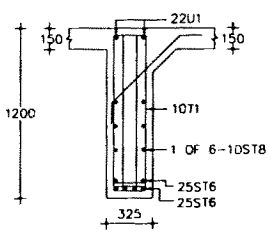
DETAILS OF GIRDER



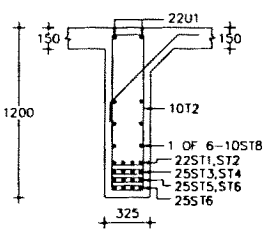
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

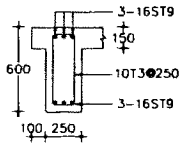
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	17910				17910
	6	T2	960	85	135			512
POST	12	L1	104	975	72			1047
	6	T1	156	135	135			612
SIDEWALK	8	VL1	146	201	317	270	310	1194
	12	ST2	8	17870				17870
DECK	12	ST1	144	2960				2960
	12	CR1	72	1147	98	525		3015
	10	ST1	25	17870				17870
	10	C1	98	120	676			916
GIRDER	22	ST1	4	7750				7750
	22	ST2	4	9750				9750
	25	ST3	4	12150				12150
	25	ST4	4	13750				13750
	25	ST5	4	15550				15550
	25	ST6	12	17850				17850
	22	U1	4	1024	17850	1024		19898
	10	ST8	12	17850				17850
	10	T1	56	1108	178			2692
	10	T2	76	1108	245			2826
DIAPHRAGM	16	ST9	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060



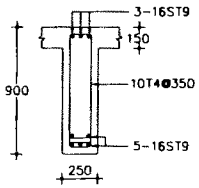
SECTION A-A



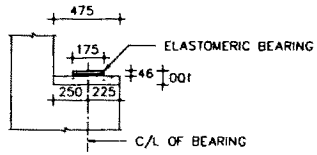
SECTION B-B



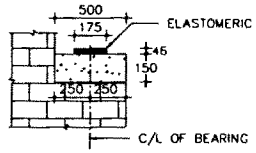
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

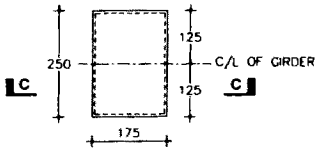


ON BRICK ABUTMENT

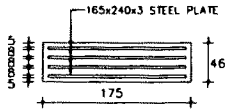
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

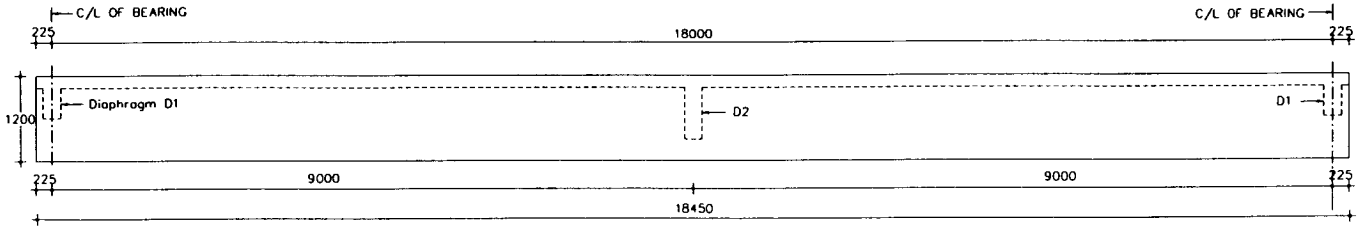
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 17.5m GIRDER & BEARING

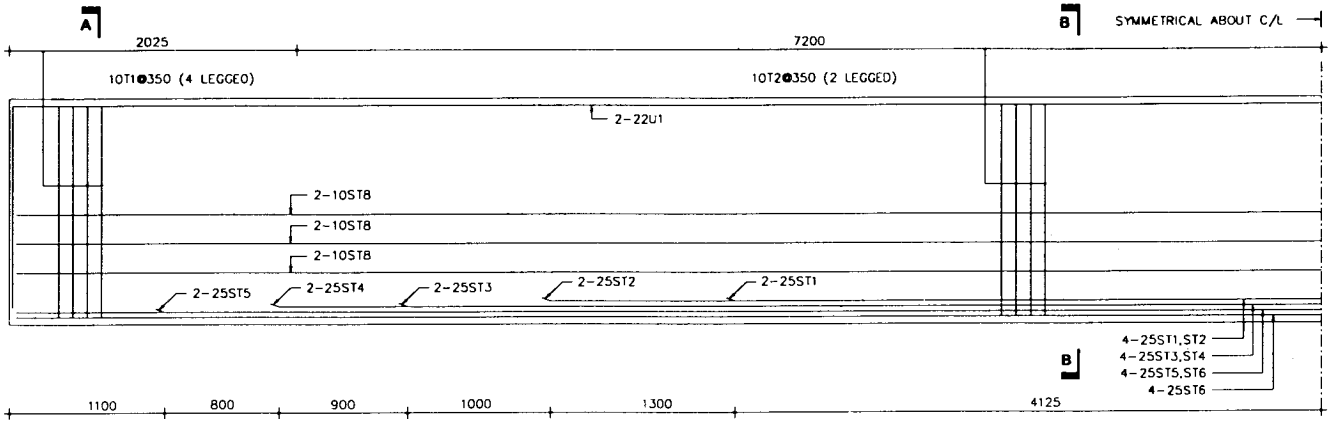
DATE : 06/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0117501	

Web Copy

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



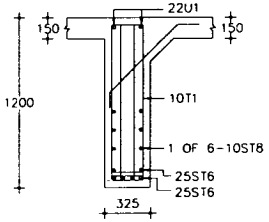
DETAILS OF GIRDER



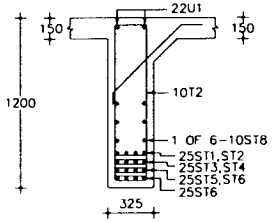
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	18410				18410
	6	T2	988	85	135			512
POST	12	L1	112	975	72			1047
	6	T1	168	135	135			612
SIDEWALK	8	VL1	150	201	317	270	310	1194
	12	ST2	8	18370				18370
DECK	12	ST1	148	2960				2960
	12	CR1	74	1147	98	525		3015
	10	ST1	25	18370				18370
	10	C1	100	120	676			916
GIRDER	25	ST1	4	8250				8250
	25	ST2	4	10850				10850
	25	ST3	4	12850				12850
	25	ST4	4	14650				14650
	25	ST5	4	16250				16250
	25	ST6	12	18350				18350
	22	U1	4	1024	18350	1024		20398
	10	ST8	12	18350				18350
	10	T1	56	1108	178			2692
	10	T2	78	1108	245			2826
DIAPHRAGM	16	ST9	20	2025				2025
	10	T3	12	520	150			1460
	10	T4	4	820	150			2060

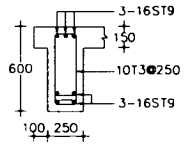
REINF. DETAILS OF GIRDER



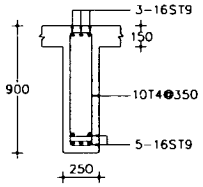
SECTION A-A



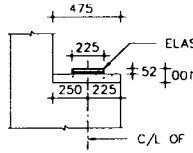
SECTION B-B



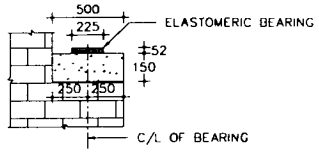
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

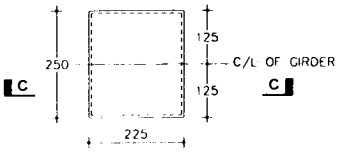


ON BRICK ABUTMENT

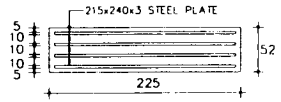
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

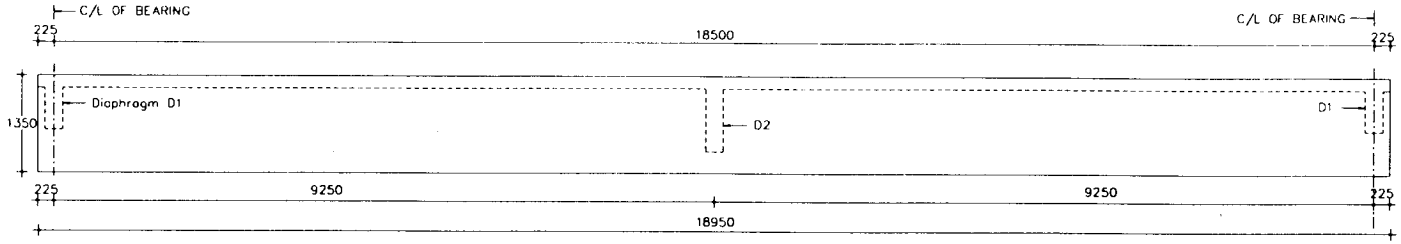
DETAILS OF 18.0m GIRDER & BEARING

DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0118001

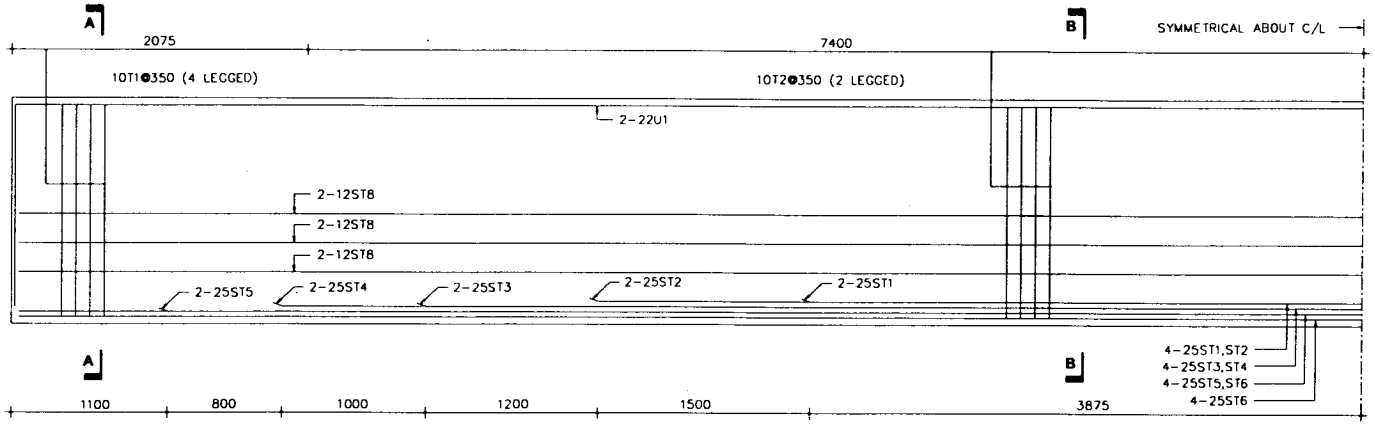
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GB-4.3

SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



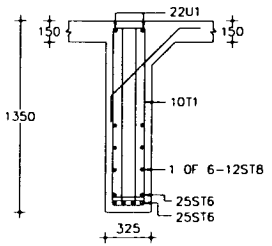
DETAILS OF GIRDER



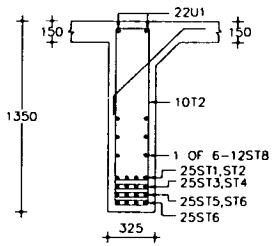
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	18910				18910
	6	T2	1040	85	135			512
POST	12	L1	112	975	72			1047
	6	T1	168	135	135			612
SIDEWALK	8	VL1	154	201	317	270	310	1194
	12	ST2	8	18870				18870
DECK	12	ST1	152	2960				2960
	12	CR1	76	1147	98	525		3015
	10	ST1	25	18870				18870
	10	C1	102	120	676			916
GIRDER	25	ST1	4	7750				7750
	25	ST2	4	10750				10750
	25	ST3	4	13150				13150
	25	ST4	4	15150				15150
	25	ST5	4	16750				16750
	25	ST6	12	18850				18850
	22	U1	4	1174	18850	1174		21198
	12	ST8	12	18850				18850
	10	T1	56	1258	178			2992
	10	T2	82	1258	245			3126
DIAPHRAGM	16	ST9	22	2025				2025
	12	ST10	2	2025				2025
	10	T3	10	670	150			1760
	10	T4	4	970	150			2360

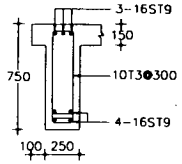
REINF. DETAILS OF GIRDER



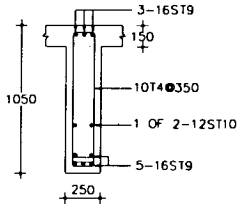
SECTION A-A



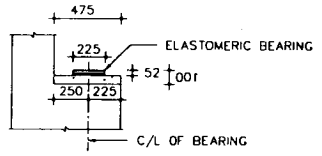
SECTION B-B



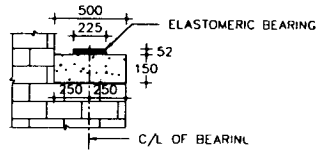
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

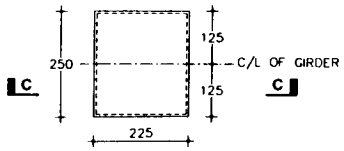


ON BRICK ABUTMENT

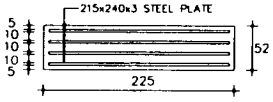
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 18.5m GIRDER & BEARING

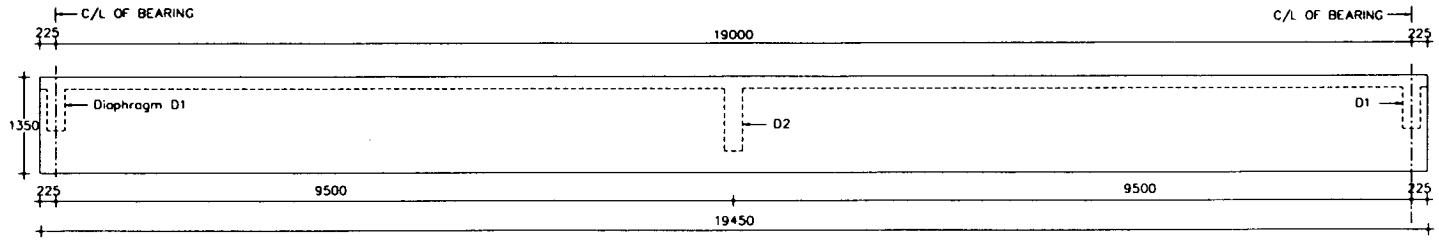
DATE : 06/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0118501

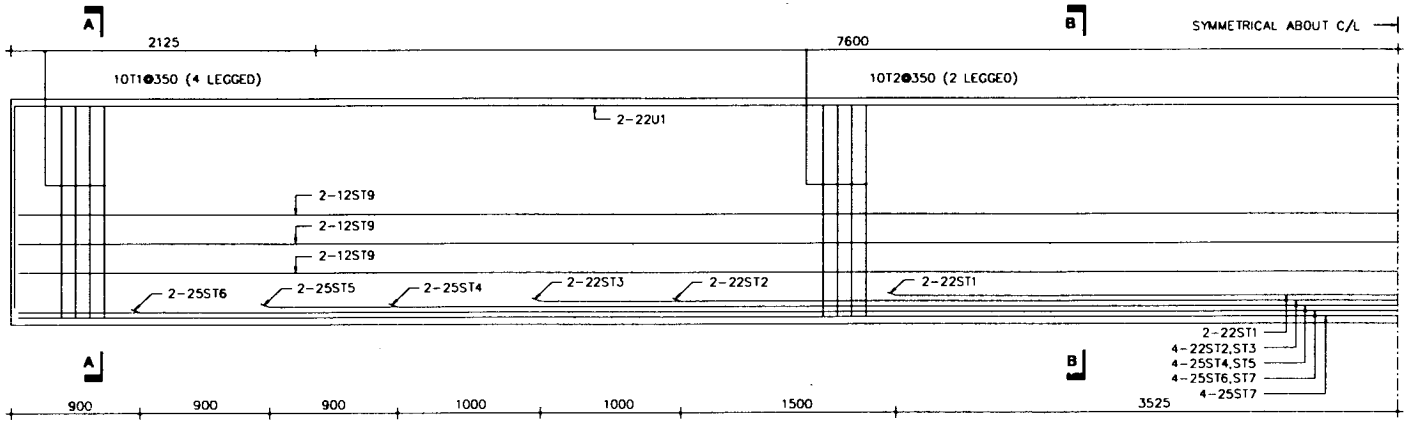
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GB-44

SHEET 1 OF 1	
LOADING - AASHTO H10	
SIDEWALK - NO	



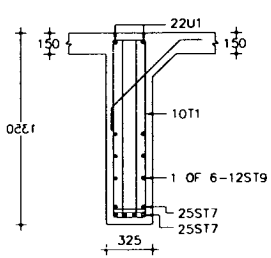
DETAILS OF GIRDER



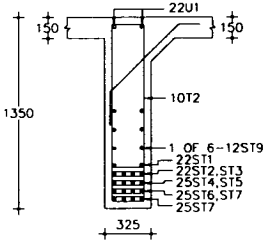
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	19410				19410
	6	T2	1040	85	135			512
POST	12	L1	112	975	72			1047
	6	T1	168	135	135			612
SIDEWALK	8	WL1	158	201	317	270	310	1194
	12	ST2	8	19370				19370
DECK	12	ST1	156	2960				2960
	12	CR1	78	1147	98	525		3015
	10	ST1	25	19370				19370
	10	C1	106	120	676			916
GIRDER	22	ST1	4	7050				7050
	22	ST2	4	10050				10050
	22	ST3	4	12050				12050
	25	ST4	4	14050				14050
	25	ST5	4	15850				15850
	25	ST6	4	17650				17650
	25	ST7	12	19350				19350
	22	U1	4	1174	19350	1174		21698
	12	ST9	12	19350				19350
	10	T1	56	1258	178			2992
	10	T2	84	1258	245			3126
DIAPHRAGM	16	ST10	22	2025				2025
	12	ST11	2	2025				2025
	10	T3	10	670	150			1760
	10	T4	4	970	150			2360

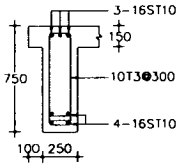
REINF. DETAILS OF GIRDER



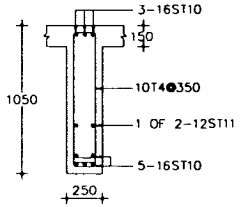
SECTION A-A



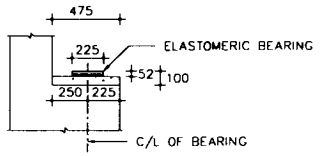
SECTION B-B



DETAILS OF D1



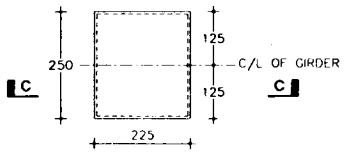
DETAILS OF D2



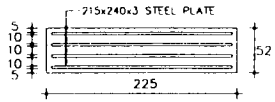
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S000D001



PLAN OF BEARING



SEC. C-C

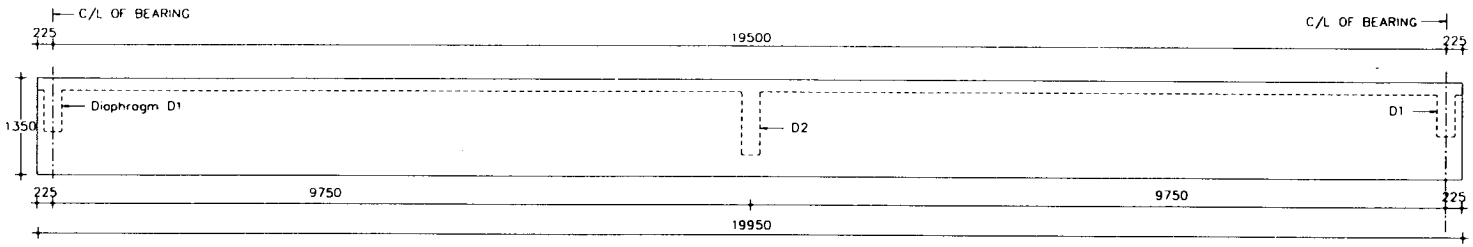
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.0m GIRDER & BEARING

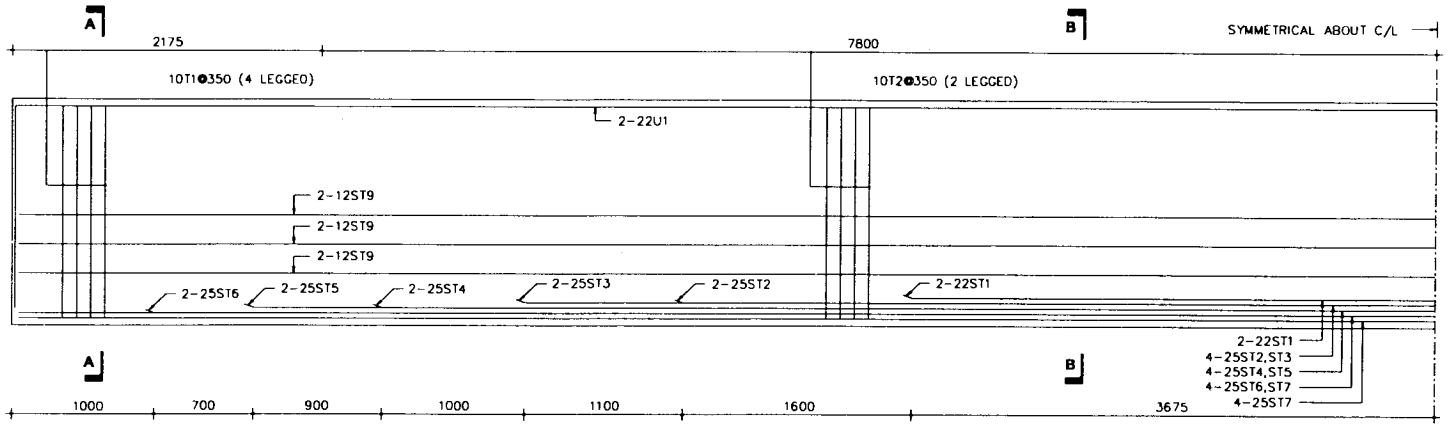
DATE : 05/04/1997	ISSUED BY
CAD FILE REF : BRDG\G0119001	

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



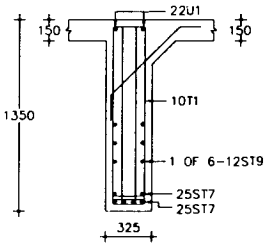
DETAILS OF GIRDER



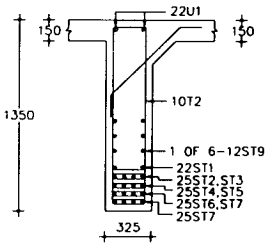
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	19910				19910
	6	T2	1064	85	135			512
POST	12	L1	120	975	72			1047
	6	T1	180	135	135			612
SIDEWALK	8	VL1	162	201	317	270	310	1194
	12	ST2	8	19870				19870
DECK	12	ST1	160	2960				2960
	12	CR1	80	1147	98	525		3015
	10	ST1	25	19870				19870
	10	C1	108	120	676			916
GIRDER	22	ST1	4	7350				7350
	25	ST2	4	10550				10550
	25	ST3	4	12750				12750
	25	ST4	4	14750				14750
	25	ST5	4	16550				16550
	25	ST6	4	17950				17950
	25	ST7	12	19850				19850
	22	U1	4	1174	19850	1174		22198
	12	ST9	12	19850				19850
	10	T1	64	1258	178			2992
	10	T2	84	1258	245			3126
DIAPHRAGM	16	ST10	22	2025				2025
	12	ST11	2	2025				2025
	10	T3	10	670	150			1760
	10	T4	4	970	150			2360

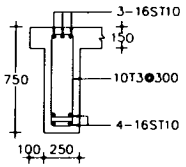
REINF. DETAILS OF GIRDER



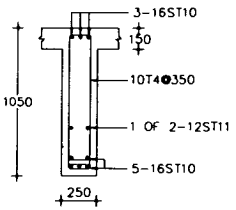
SECTION A-A



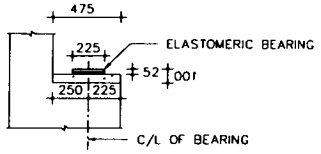
SECTION B-B



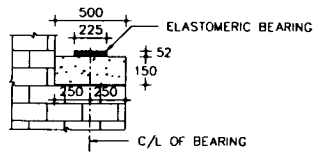
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

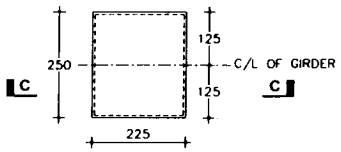


ON BRICK ABUTMENT

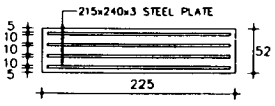
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

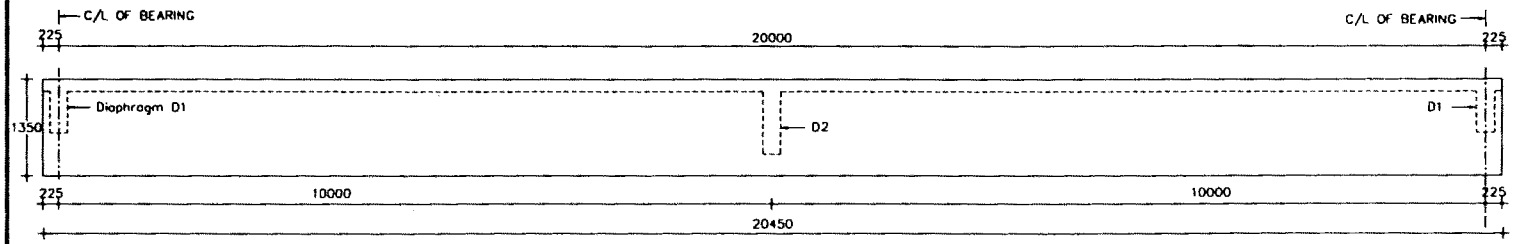
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.5m GIRDER & BEARING

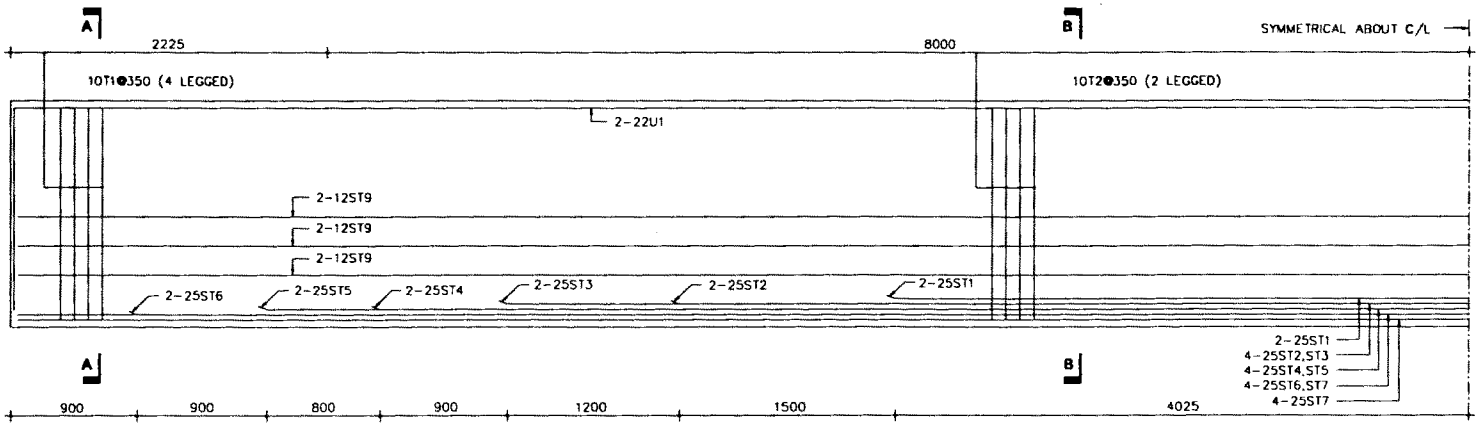
DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0119501

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SHEET 1 OF 1
LOADING - AASHTO H10
SIDEWALK - NO



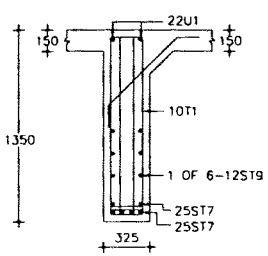
DETAILS OF GIRDER



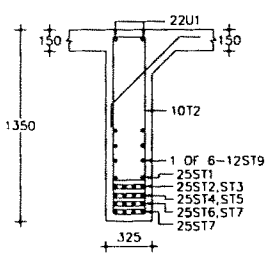
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST3	16	20410				20410
	6	T2	1120	85	135			512
POST	12	L1	120	975	72			1047
	6	T1	180	135	135			612
SIDEWALK	8	WL1	166	201	317	270	310	1194
	12	ST2	8	20370				20370
DECK	12	ST1	164	2960				2960
	12	CR1	82	1147	98	525		3015
	10	ST1	25	20370				20370
	10	C1	110	120	676			916
GIRDER	25	ST1	4	8050				8050
	25	ST2	4	11050				11050
	25	ST3	4	13450				13450
	25	ST4	4	15250				15250
	25	ST5	4	16850				16850
	25	ST6	4	18650				18650
	25	ST7	12	20350				20350
	22	U1	4	1174	20350	1174		22698
	12	ST9	12	20350				20350
	10	T1	64	1258	178			2992
	10	T2	86	1258	245			3126
DIAPHRAGM	16	ST10	22	2025				2025
	12	ST11	2	2025				2025
	10	T3	10	670	150			1760
	10	T4	4	970	150			2360

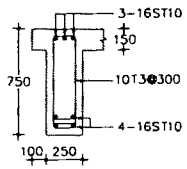
REINF. DETAILS OF GIRDER



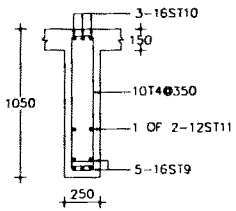
SECTION A-A



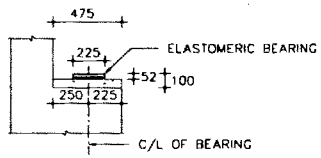
SECTION B-B



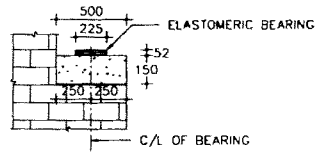
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

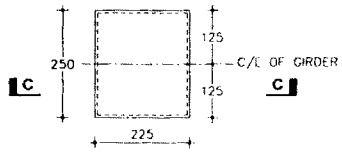


ON BRICK ABUTMENT

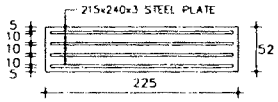
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

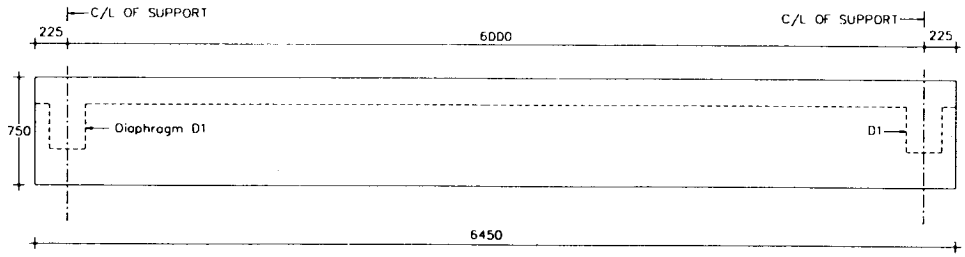
DETAILS OF 20.0m GIRDER & BEARING

DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0120001

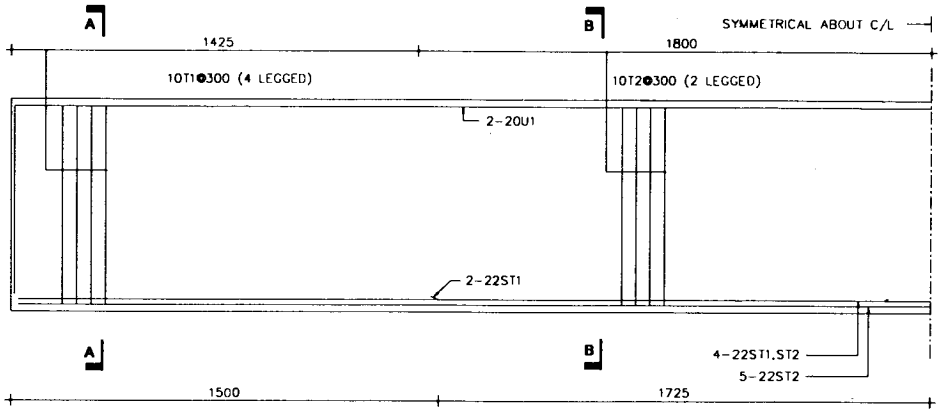
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



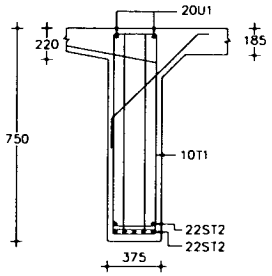
DETAILS OF GIRDER



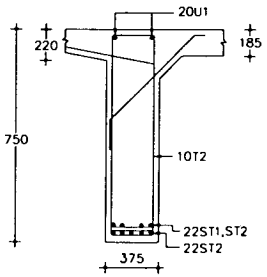
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

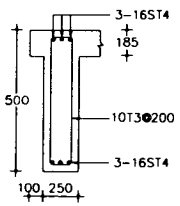
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6410				6410
	6	T2	340	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	104	341	201	311	1203	2128
	12	ST3	8	6370				6370
DECK	16	ST1	22	4180				4180
	12	ST1	22	2475				2475
	16	CR1	21	1572	148	825		4265
	12	ST2	39	6370				6370
	10	C1	44	120	796			1036
GIRDER	22	ST1	4	3450				3450
	22	ST2	14	6350				6350
	20	U1	2	580	6350	580		7510
	10	T1	48	654	231			1890
	10	T2	20	654	295			2018
DIAPHRAGM	16	ST4	12	2425				2425
	10	T3	18	420	150			1260



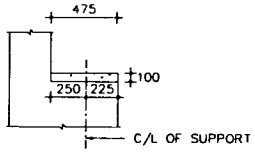
SECTION A-A



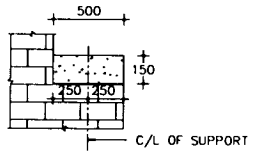
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

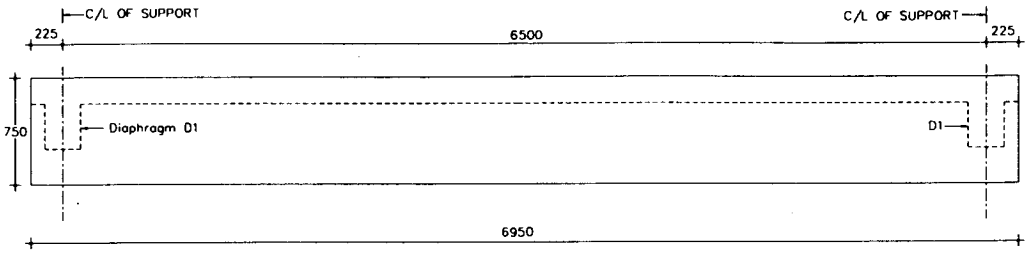
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 6.0m GIRDER

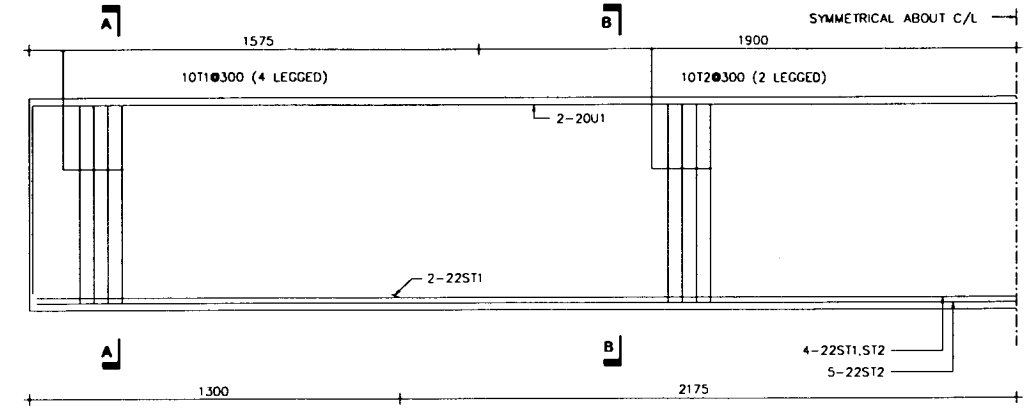
DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0206001

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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



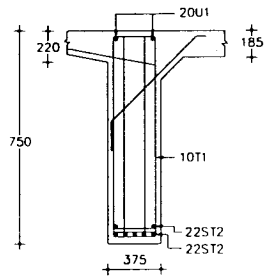
DETAILS OF GIRDER



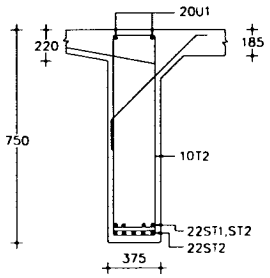
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

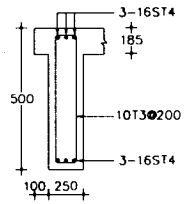
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6910				6910
	6	T2	380	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	112	341	201	311	1203	2128
	12	ST3	8	6870				6870
DECK	16	ST1	24	4180				4180
	12	ST1	24	2475				2475
	16	CR1	23	1572	148	825		4265
	12	ST2	39	6870				6870
	10	C1	48	120	796			1036
GIRDER	22	ST1	4	4350				4350
	22	ST2	14	6850				6850
	20	U1	4	580	6850	580		8010
	10	T1	56	654	231			1890
	10	T2	20	654	295			2018
DIAPHRAGM	16	ST4	12	2425				2425
	10	T3	18	420	150			1260



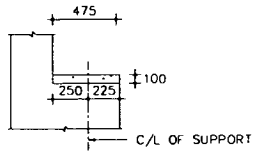
SECTION A-A



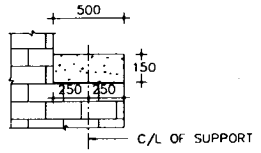
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

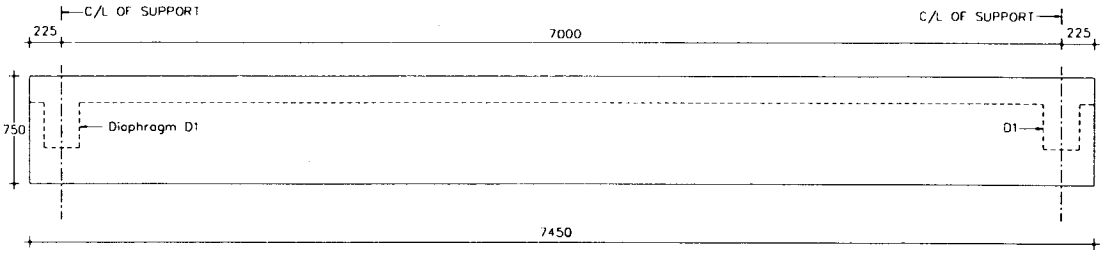
DETAILS OF 6.5m GIRDER

DATE : 06/04/1997 | ISSUED BY :

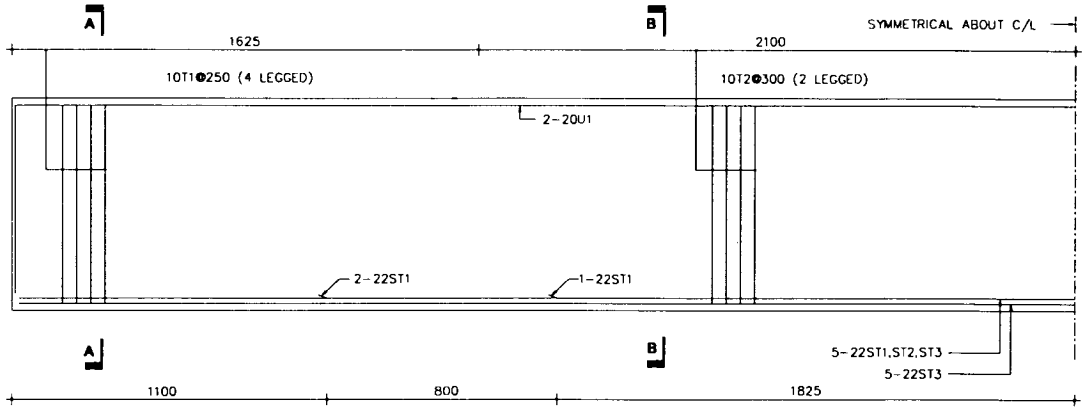
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



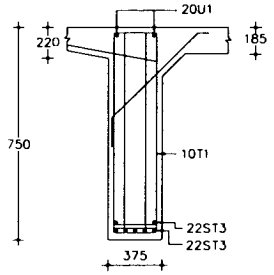
DETAILS OF GIRDER



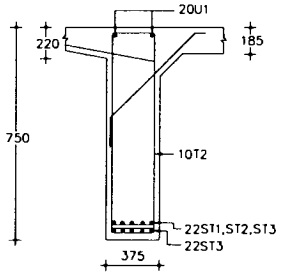
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

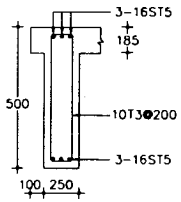
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7410				7410
	6	T2	400	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	120	341	201	311	1203	2128
	12	ST3	8	7370				7370
DECK	16	ST1	25	4180				4180
	12	ST1	25	2475				2475
	16	CR1	25	1572	148	825		4265
	12	ST2	39	7370				7370
	10	C1	52	120	796			1036
GIRDER	22	ST1	2	3650				3650
	22	ST2	4	5250				5250
	22	ST3	14	7350				7350
	20	U1	4	580	7350	580		8510
	10	T1	56	654	231			1890
	10	T2	24	654	295			2018
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



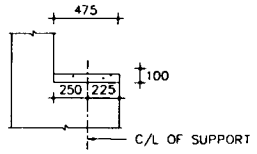
SECTION A-A



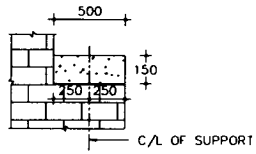
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001

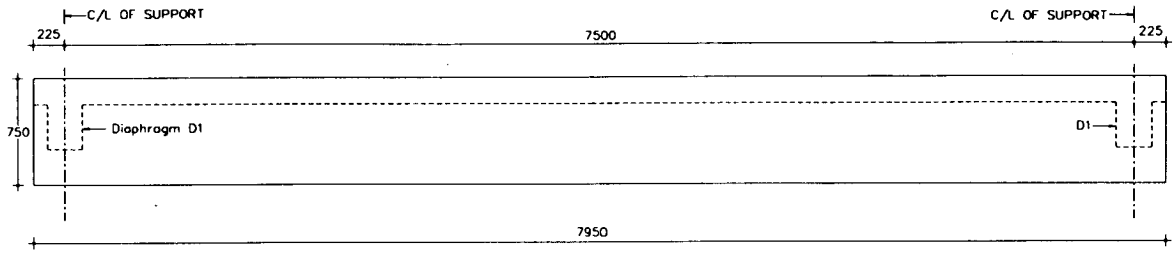
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.0m GIRDER

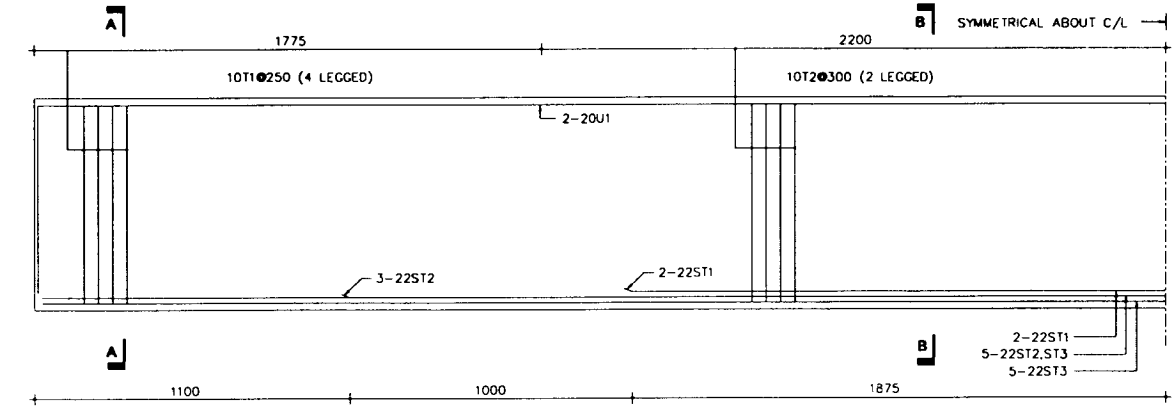
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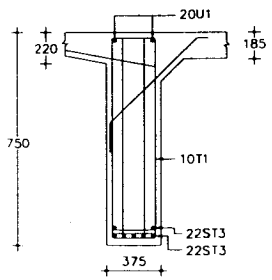
SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



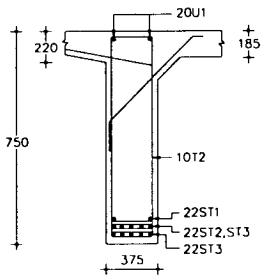
DETAILS OF GIRDER



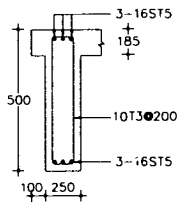
REINF. DETAILS OF GIRDER



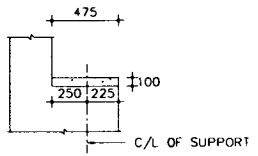
SECTION A-A



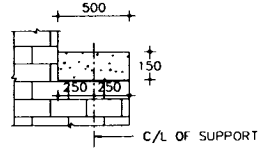
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7910				7910
	6	T2	432	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	128	341	201	311	1203	2128
	12	ST3	8	7870				7870
DECK	16	ST1	27	4180				4180
	12	ST1	27	2475				2475
	16	CR1	26	1572	148	825		4265
	12	ST2	39	7870				7870
	10	C1	54	120	796			1036
GIRDER	22	ST1	4	3750				3750
	22	ST2	6	5750				5750
	22	ST3	14	7850				7850
	20	U1	4	580	7850	580		9010
	10	T1	64	654	231			1890
	10	T2	28	654	295			2018
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260

NOTES :-

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001.

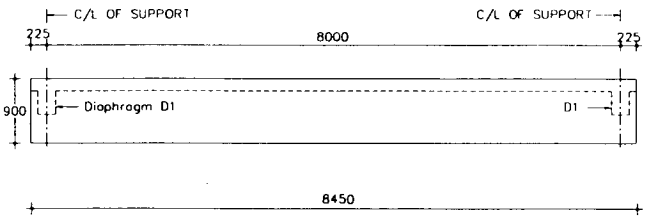
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.5m GIRDER

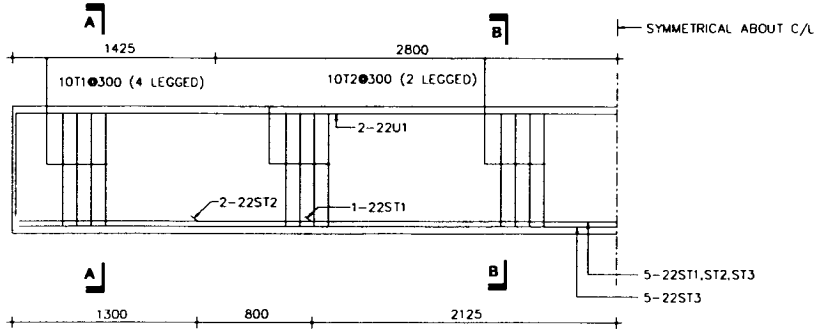
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



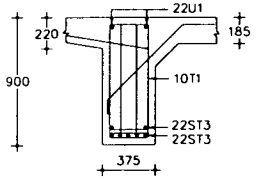
DETAILS OF GIRDER



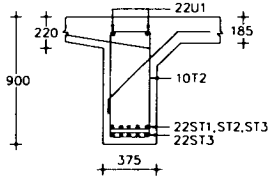
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

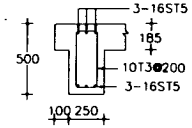
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8410				8410
	6	T2	456	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	136	341	201	311	1203	2128
	12	ST3	8	8370				8370
DECK	16	ST1	29	4180				4180
	12	ST1	29	2475				2475
	16	CR1	28	1572	148	825		4265
	12	ST2	39	8370				8370
	10	C1	58	120	796			1036
GIRDER	22	ST1	2	4250				4250
	22	ST2	4	5850				5850
	22	ST3	14	8350				8350
	22	U1	4	730	8350	730		9810
	10	T1	48	804	231			2190
	10	T2	34	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



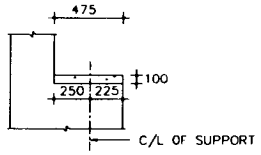
SECTION A-A



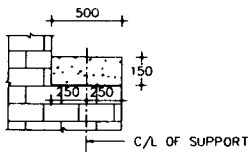
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

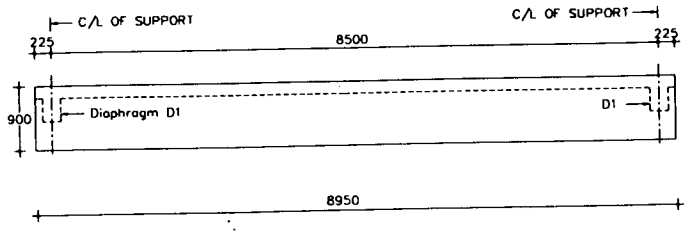
DETAILS OF 8.0m GIRDER

DATE : 06/04/1997 | ISSUED BY :

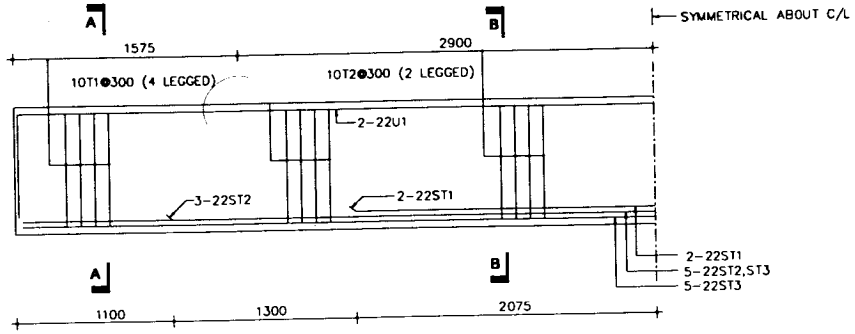
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



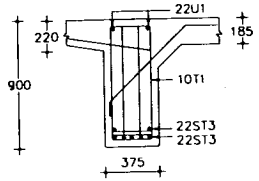
DETAILS OF GIRDER



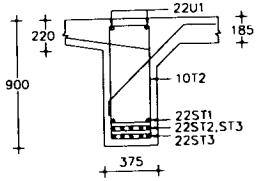
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

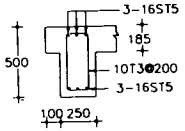
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8910				8910
	6	T2	480	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	144	341	201	311	1203	2128
	12	ST3	8	8870				8870
DECK	16	ST1	30	4180				4180
	12	ST1	30	2475				2475
	16	CR1	30	1572	148	825		4265
	12	ST2	39	8870				8870
	10	C1	62	120	796			1036
GIRDER	22	ST1	4	4150				4150
	22	ST2	6	6750				6750
	22	ST3	14	8850				8850
	22	U1	4	730	8850	730		10310
	10	T1	56	804	231			2190
	10	T2	34	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



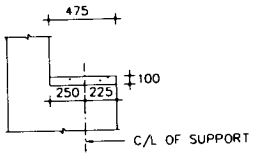
SECTION A-A



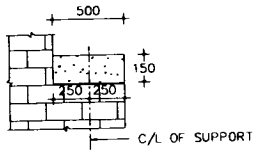
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code. Cad File: BRDG\S0000001

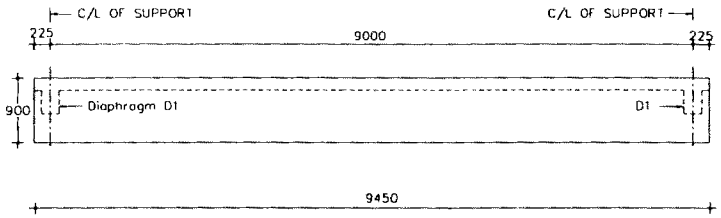
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.5m GIRDER

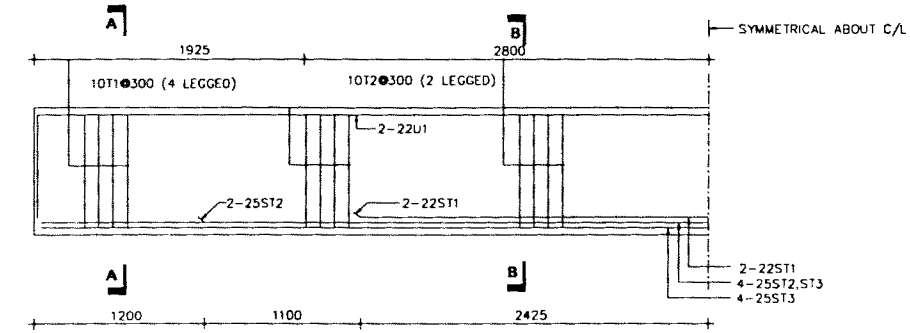
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SIDEWALK - NO



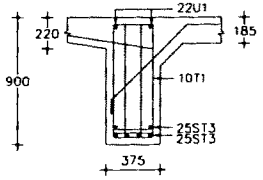
DETAILS OF GIRDER



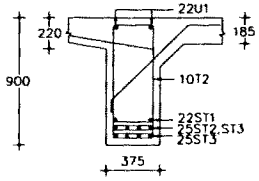
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

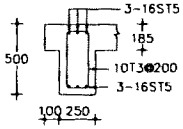
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9410				9410
	6	T2	504	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	152	341	201	311	1203	2128
	12	ST3	8	9370				9370
DECK	16	ST1	32	4180				4180
	12	ST1	32	2475				2475
	16	CR1	31	1572	148	825		4265
	12	ST2	39	9370				9370
	10	C1	64	120	796			1036
GIRDER	22	ST1	4	4850				4850
	25	ST2	4	7050				7050
	25	ST3	12	9350				9350
	22	U1	4	724	9350	724		10798
	10	T1	64	804	211			2150
	10	T2	32	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



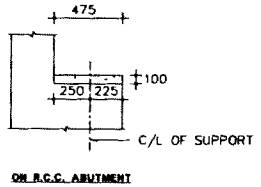
SECTION A-A



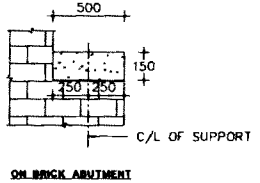
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File; BRDG\S0000001

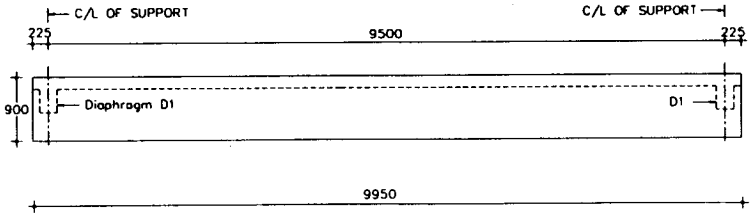
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 9.0m GIRDER

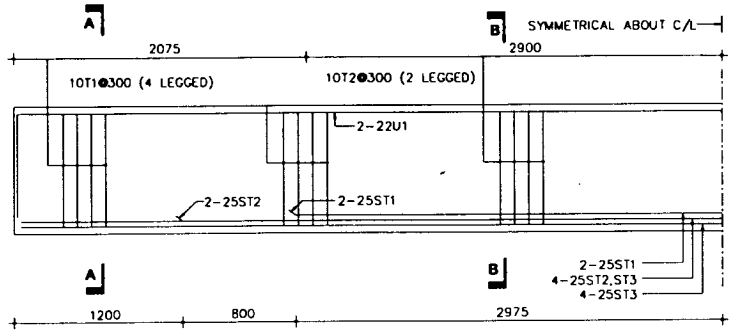
DATE : 06/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0209001

Web Copy

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



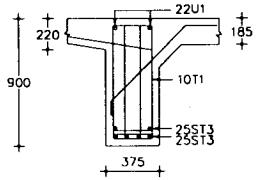
DETAILS OF GIRDER



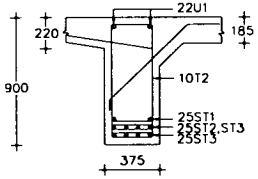
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

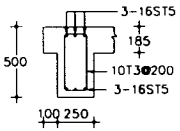
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9910				9910
	6	T2	532	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	160	341	201	311	1203	2128
	12	ST3	8	9870				9870
DECK	16	ST1	34	4180				4180
	12	ST1	34	2475				2475
	16	CR1	33	1572	148	825		4265
	12	ST2	39	9870				9870
	10	C1	68	120	796			1036
GIRDER	25	ST1	4	5950				5950
	25	ST2	4	7550				7550
	25	ST3	12	9850				9850
	22	U1	4	724	9850	724		11298
	10	T1	64	804	211			2150
	10	T2	36	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



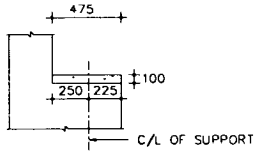
SECTION A-A



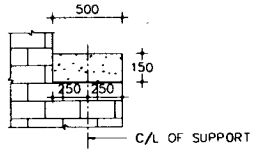
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

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LOCAL GOVERNMENT ENGINEERING DEPARTMENT

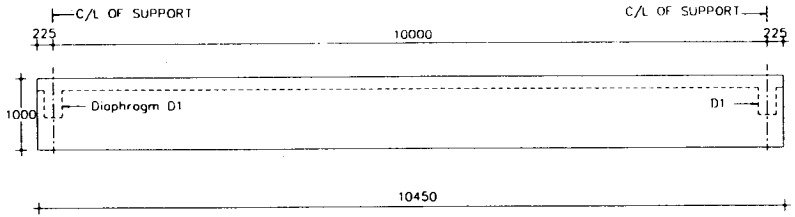
DETAILS OF 9.5m GIRDER

DATE 06/04/1997 | ISSUED BY :

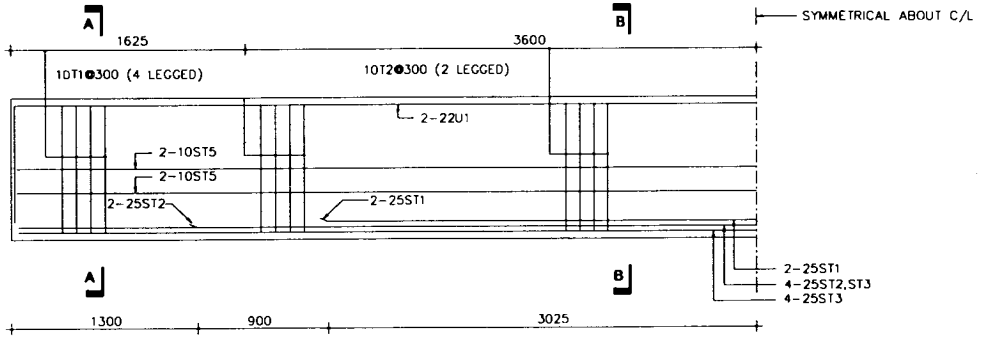
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



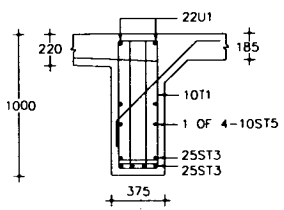
DETAILS OF GIRDER



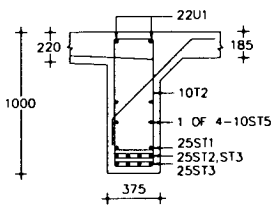
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

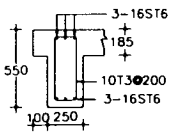
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10410				10410
	6	T2	560	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	168	341	201	311	1203	2128
	12	ST3	8	10370				10370
DECK	16	ST1	35	4180				4180
	12	ST1	35	2475				2475
	16	CR1	35	1572	148	825		4265
	12	ST2	39	10370				10370
	10	C1	72	120	796			1036
GIRDER	25	ST1	4	6050				6050
	25	ST2	4	7850				7850
	25	ST3	12	10350				10350
	22	ST4	4	10350				10350
	10	U1	8	824	10350	824		11998
	10	T1	56	904	211			2350
	10	T2	44	904	295			2518
DIAPHRAGM	16	ST6	12	2425				2425
	10	T3	18	470	150			1360



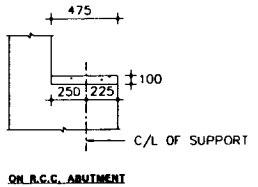
SECTION A-A



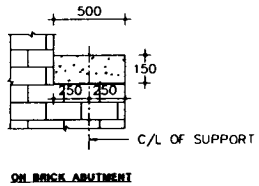
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

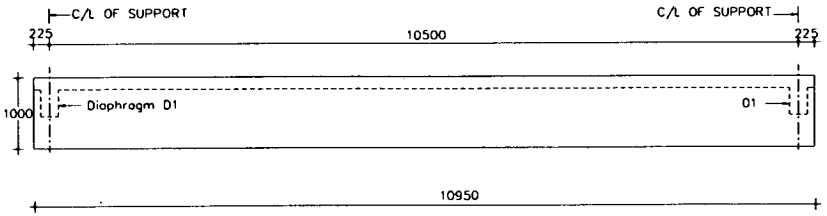
DETAILS OF 10.0m GIRDER

DATE : 06/04/1997 | ISSUED BY :

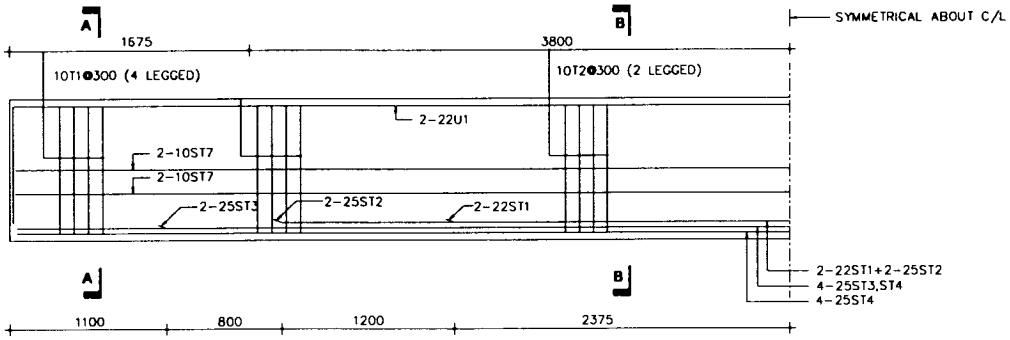
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



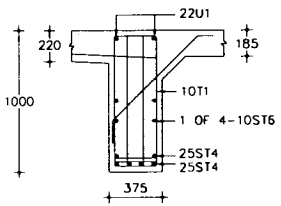
DETAILS OF GIRDER



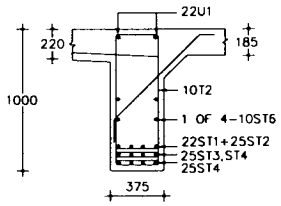
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

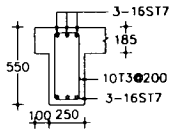
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10910				10910
	6	T2	576	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	176	341	201	311	1203	2128
	12	ST3	8	10870				10870
DECK	16	ST1	37	4180				4180
	12	ST1	37	2475				2475
	16	CR1	36	1572	148	825		4265
	12	ST2	39	10870				10870
	10	C1	74	120	796			1036
GIRDER	22	ST1	4	4750				4750
	25	ST2	4	7150				7150
	25	ST3	4	8750				8750
	25	ST4	12	10850				10850
	22	U1	4	824	10850	824		12498
	10	ST6	8	10850				10850
	10	T1	56	904	211			2350
	10	T2	46	904	295			2518
DIAPHRAGM	16	ST7	12	2425				2425
	10	T3	18	470	150			1360



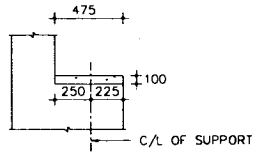
SECTION A-A



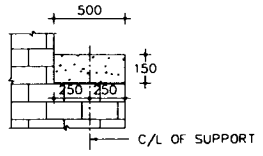
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

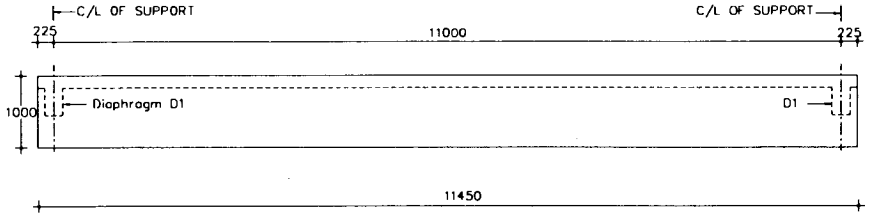
DETAILS OF 10.5m GIRDER

DATE 17/09/1996 | ISSUED BY :

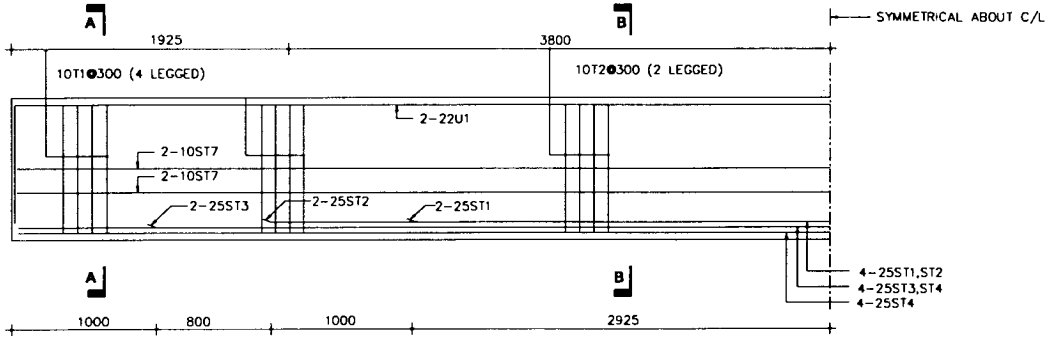
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



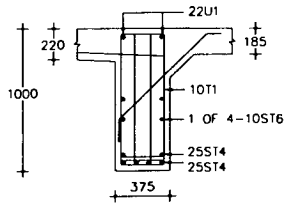
DETAILS OF GIRDER



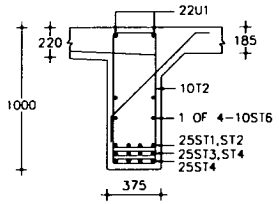
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

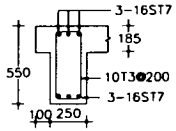
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11410				11410
	6	T2	608	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	184	341	201	311	1203	2128
	12	ST3	8	11370				11370
DECK	16	ST1	39	4180				4180
	12	ST1	39	2475				2475
	16	CR1	38	1572	148	825		4265
	12	ST2	39	11370				11370
	10	C1	78	120	796			1036
GIRDER	25	ST1	4	5850				5850
	25	ST2	4	7850				7850
	25	ST3	4	9450				9450
	25	ST4	12	11350				11350
	22	U1	4	824	11350	824		12998
	10	ST6	8	11350				11350
	10	T1	64	904	211			2350
	10	T2	46	904	295			2518
DIAPHRAGM	16	ST7	12	2425				2425
	10	T3	18	470	150			1360



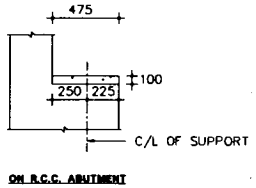
SECTION A-A



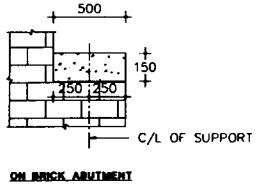
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

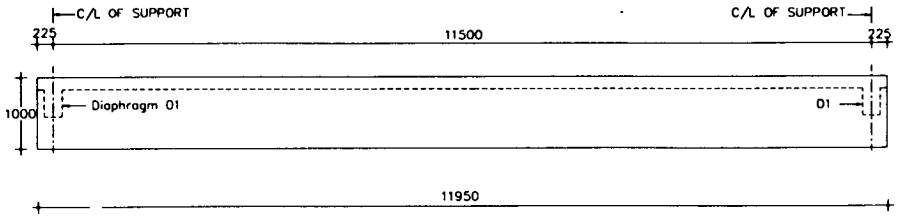
DETAILS OF 11.0m GIRDER

DATE : 17/09/1996 | ISSUED BY :

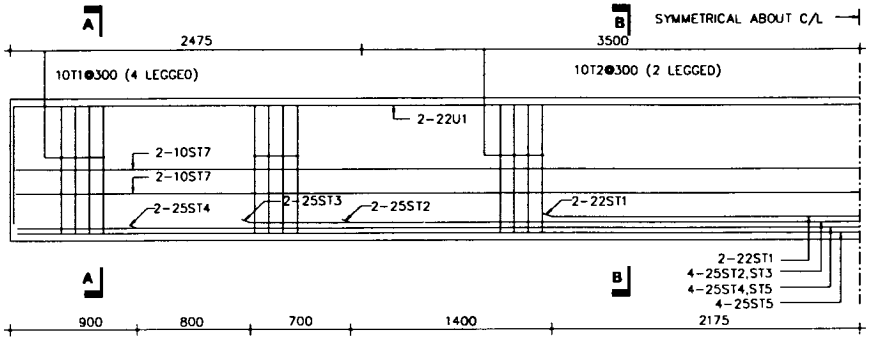
CAD FILE REF : TEMP\G0211001

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



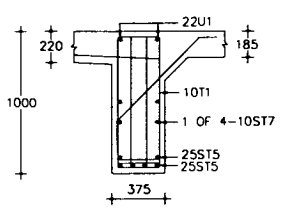
DETAILS OF GIRDER



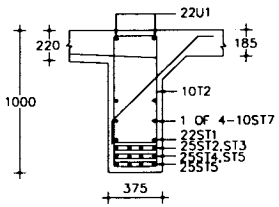
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

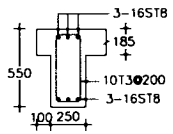
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11910				11910
	6	T2	640	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	192	341	201	311	1203	2128
	12	ST3	8	11870				11870
DECK	16	ST1	40	4180				4180
	12	ST1	40	2475				2475
	16	CR1	40	1572	148	825		4265
	12	ST2	39	11870				11870
	10	C1	82	120	796			1036
GIRDER	22	ST1	4	4350				4350
	25	ST2	4	7150				7150
	25	ST3	4	8550				8550
	25	ST4	4	10150				10150
	25	ST5	12	11850				11850
	22	U1	4	824	11850	824		13498
	10	ST7	8	11850				11850
	10	T1	80	904	211			2350
	10	T2	42	904	295			2518
DIAPHRAGM	16	ST8	12	2425				2425
	10	T3	18	470	150			1360



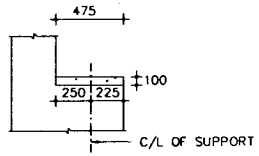
SECTION A-A



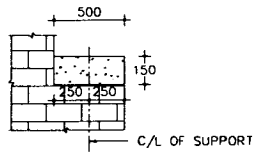
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

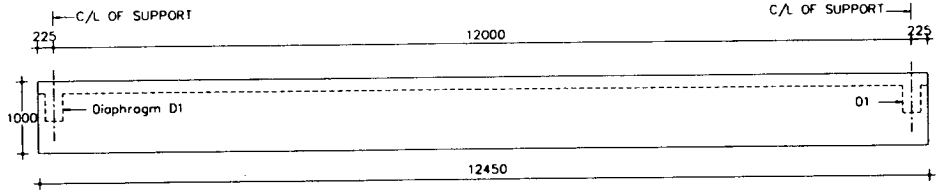
DETAILS OF 11.5m GIRDER

DATE : 09/04/1997 | ISSUED BY :

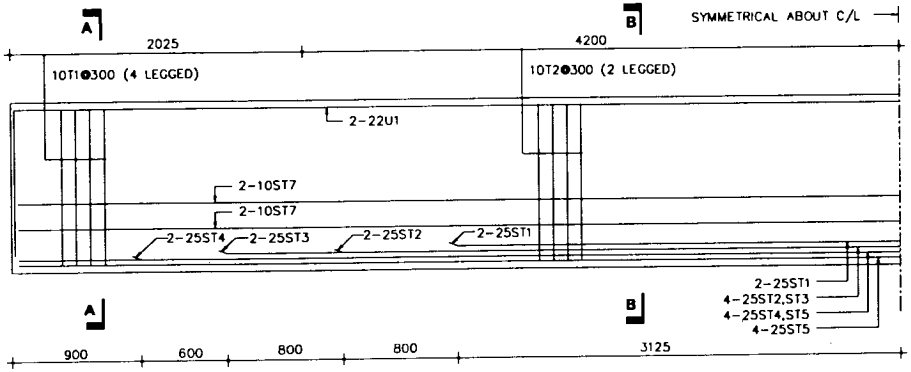
CAD FILE REF : BRDG\G0211501

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



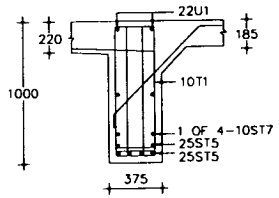
DETAILS OF GIRDER



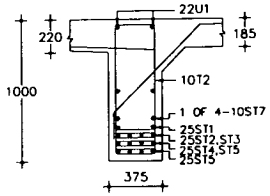
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

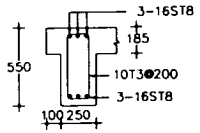
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12410				12410
	6	T2	684	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	200	341	201	311	1203	2128
	12	ST3	8	12370				12370
DECK	16	ST1	42	4180				4180
	12	ST1	42	2475				2475
	16	CR1	41	1572	148	825		4265
	12	ST2	39	12370				12370
	10	C1	84	120	796			1036
GIRDER	25	ST1	4	6250				6250
	25	ST2	4	7850				7850
	25	ST3	4	9450				9450
	25	ST4	4	10650				10650
	25	ST5	12	12350				12350
	22	U1	4	824	12350	824		13998
	10	ST7	8	12350				12350
	10	T1	64	904	211			2350
	10	T2	52	904	295			2518
DIAPHRAGM	16	ST8	12	2425				2425
	10	T3	18	470	150			1360



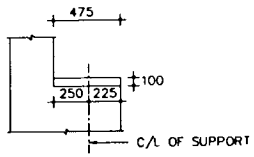
SECTION A-A



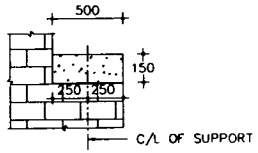
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

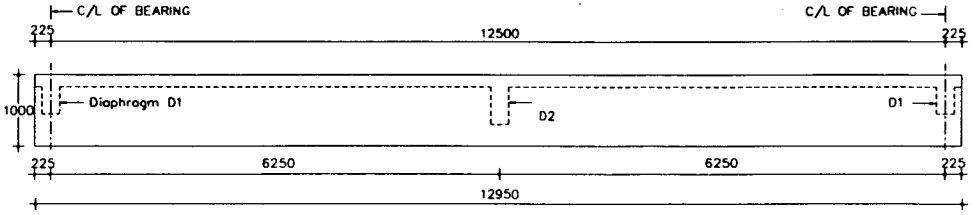
DETAILS OF 12.0m GIRDER

DATE : 17/09/1996 | ISSUED BY :

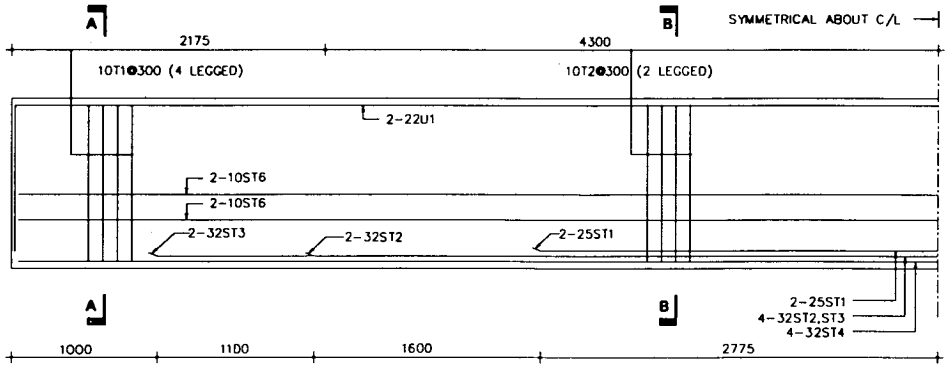
CAD FILE REF : TEMP\G0212001

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



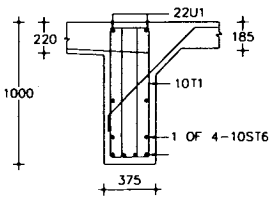
DETAILS OF GIRDER



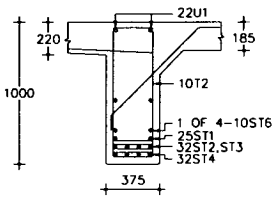
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

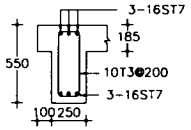
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12910				12910
	6	T2	684	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	208	341	201	311	1203	2128
	12	ST3	8	12870				12870
DECK	16	ST1	44	4180				4180
	12	ST1	44	2475				2475
	16	CR1	43	1572	148	825		4265
	12	ST2	39	12870				12870
	10	C1	88	120	796			1036
GIRDER	25	ST1	4	5550				5550
	32	ST2	4	8750				8750
	32	ST3	4	10950				10950
	32	ST4	8	12850				12850
	22	U1	4	868	12850	868		14586
	10	ST6	8	12850				12850
	10	T1	72	904	214			2356
	10	T2	52	904	295			2518
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	6	620	150			1660



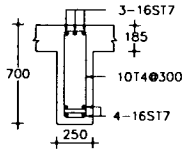
SECTION A-A



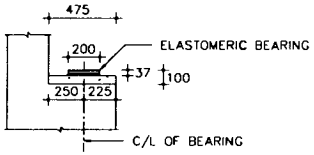
SECTION B-B



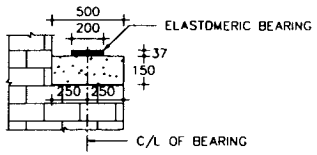
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

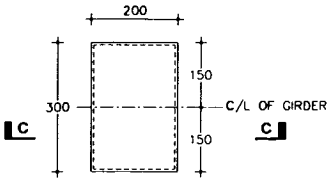


ON BRICK ABUTMENT

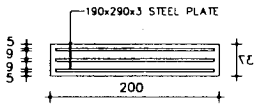
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

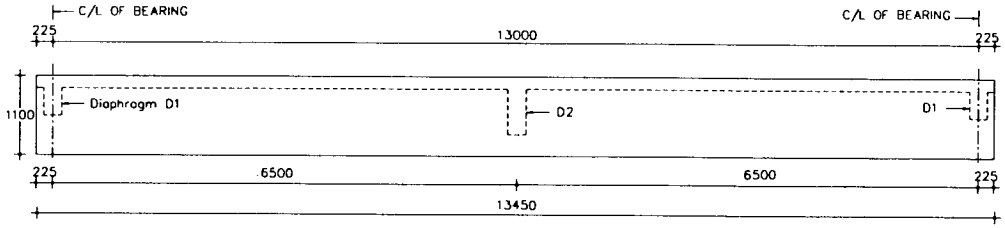
DETAILS OF 12.5m GIRDER & BEARING

DATE : 17/09/1996	ISSUED BY :
CAD FILE REF : TEMP\G02125D1	

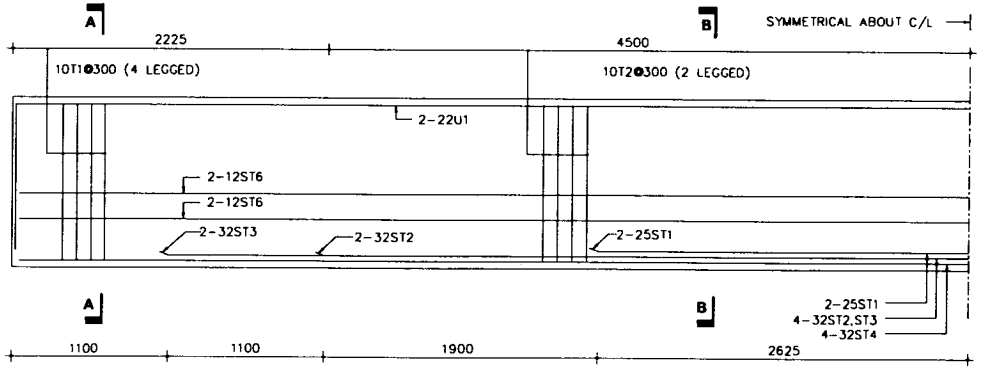
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GB-61

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



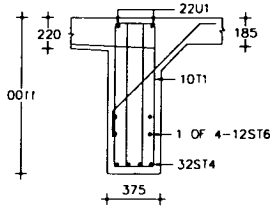
DETAILS OF GIRDER



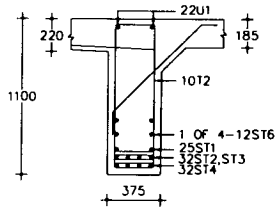
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

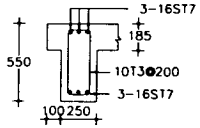
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13410				13410
	6	T2	720	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	216	341	201	311	1203	2128
	12	ST3	8	13370				13370
DECK	16	ST1	45	4180				4180
	12	ST1	45	2475				2475
	16	CR1	45	1572	148	825		4265
	12	ST2	39	13370				13370
	10	C1	92	120	796			1036
GIRDER	25	ST1	4	5250				5250
	32	ST2	4	9050				9050
	32	ST3	4	11250				11250
	32	ST4	8	13350				13350
	22	U1	4	968	13350	968		15286
	12	ST6	8	13350				13350
	10	T1	72	1004	214			2556
	10	T2	56	1004	295			2718
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



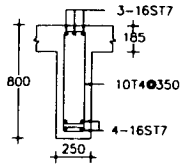
SECTION A-A



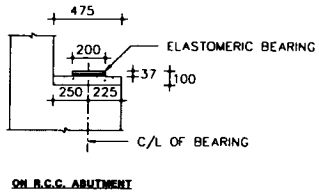
SECTION B-B



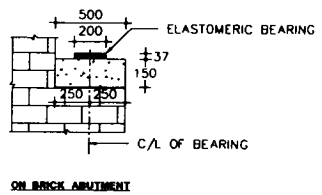
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

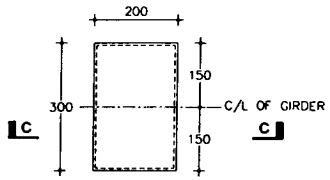


ON BRICK ABUTMENT

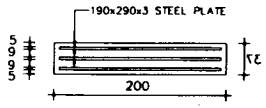
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

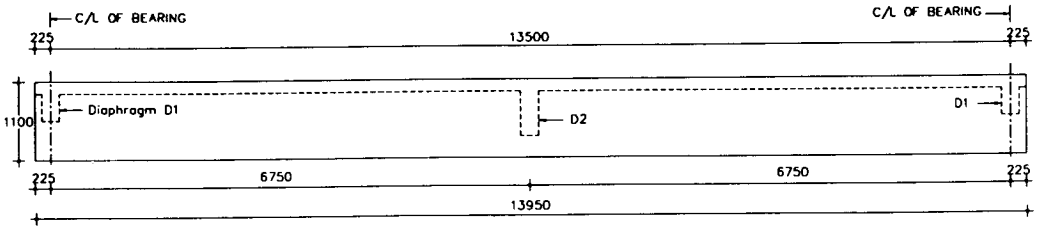
DETAILS OF 13.0m GIRDER & BEARING

DATE : 09/04/1997 | ISSUED BY :

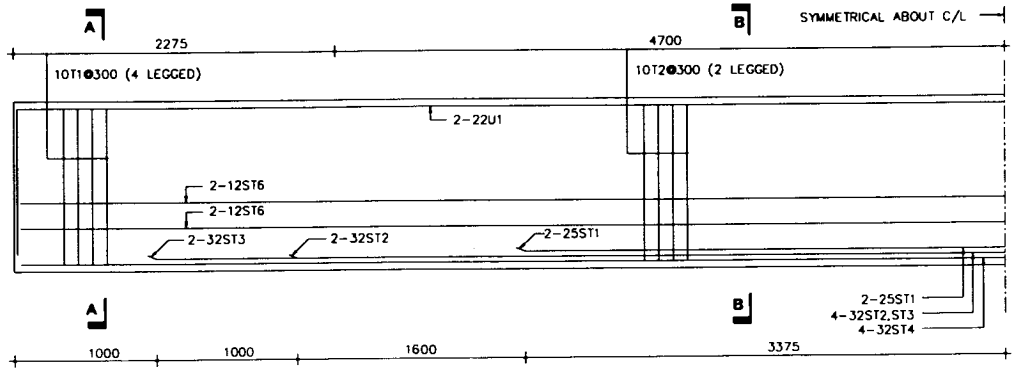
CAD FILE REF : BRDG\G0213001

Web Copy

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



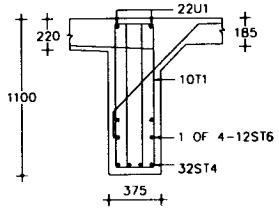
DETAILS OF GIRDER



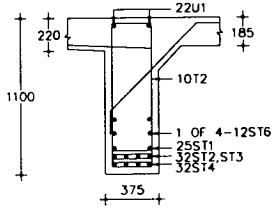
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

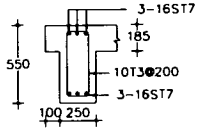
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13910				13910
	6	T2	760	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	224	341	201	311	1203	2128
	12	ST3	8	13870				13870
DECK	16	ST1	47	4180				4180
	12	ST1	47	2475				2475
	16	CR1	46	1572	148	825		4265
	12	ST2	39	13870				13870
	10	C1	94	120	796			1036
GIRDER	25	ST1	4	6750				6750
	32	ST2	4	9950				9950
	32	ST3	4	11950				11950
	32	ST4	8	13850				13850
	22	U1	4	968	13850	968		15786
	12	ST6	8	13850				13850
	10	T1	72	1004	214			2556
	10	T2	58	1004	295			2718
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



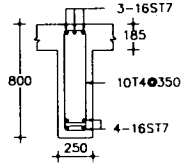
SECTION A-A



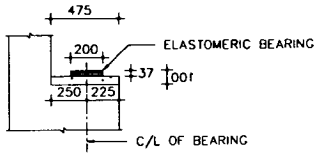
SECTION B-B



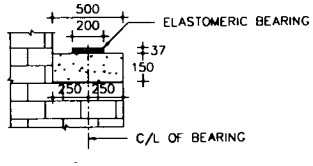
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

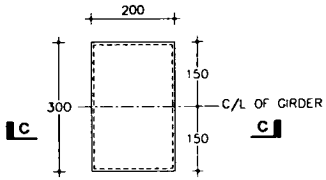


ON BRICK ABUTMENT

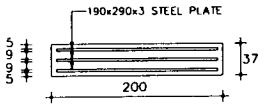
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drowing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 13.5m GIRDER & BEARING

DATE : 09/04/1997

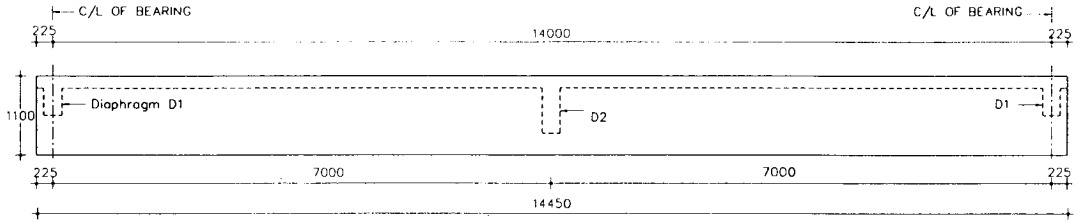
CAD FILE REF : BRDG\G0213501

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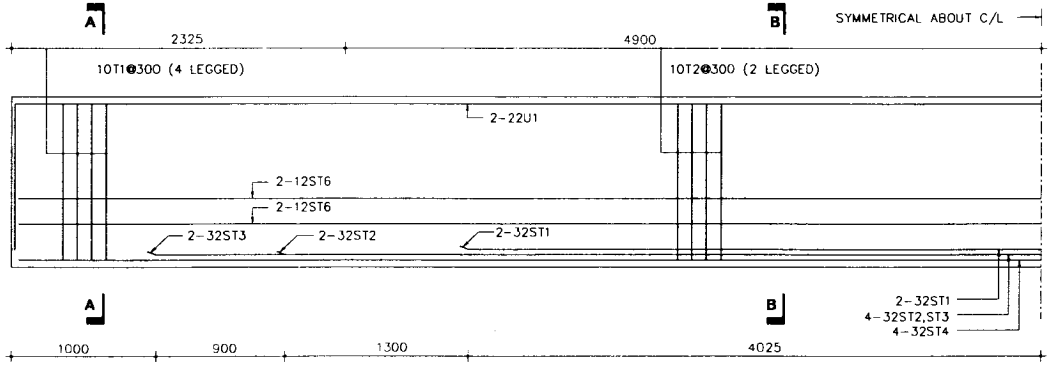
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GB-63

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



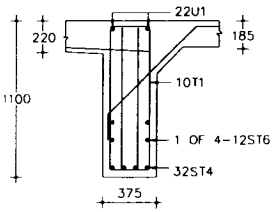
DETAILS OF GIRDER



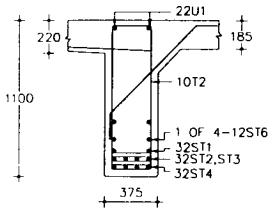
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

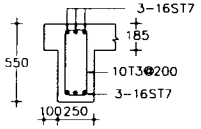
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14410				14410
	6	T2	800	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	232	341	201	311	1203	2128
	12	ST3	8	14370				14370
DECK	16	ST1	49	4180				4180
	12	ST1	49	2475				2475
	16	CR1	48	1572	148	825		4265
	12	ST2	39	14370				14370
	10	C1	98	120	796			1036
GIRDER	32	ST1	4	8050				8050
	32	ST2	4	10650				10650
	32	ST3	4	12450				12450
	32	ST4	8	14350				14350
	22	U1	4	968	14350	968		16286
	12	ST6	8	14350				14350
	10	T1	72	1004	214			2556
	10	T2	62	1004	295			2718
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



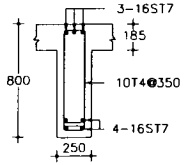
SECTION A-A



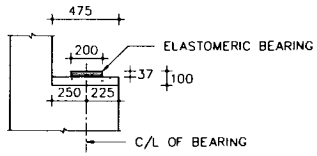
SECTION B-B



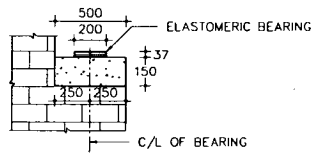
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

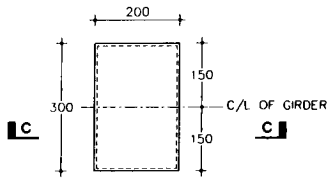


ON BRICK ABUTMENT

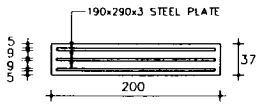
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

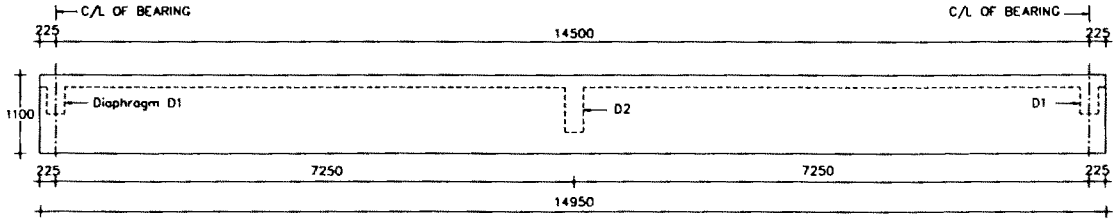
DETAILS OF 14.0m GIRDER & BEARING

DATE : 09/04/1997 | ISSUED BY :

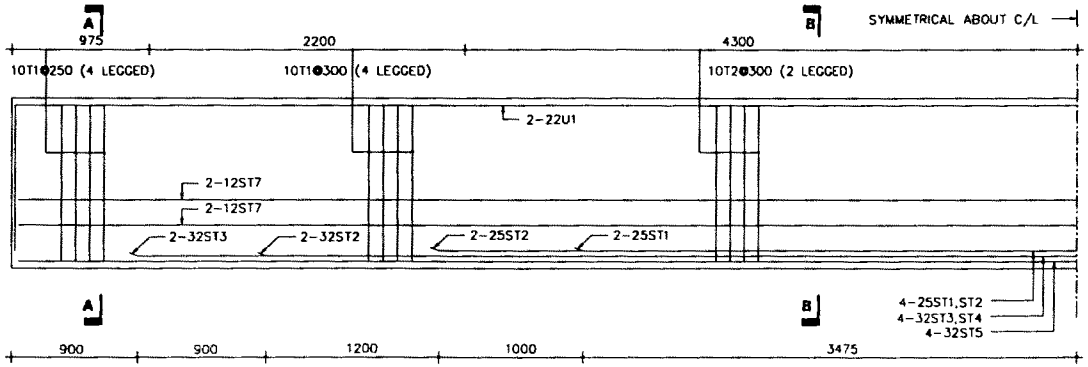
CAD FILE REF : BRDG\G0214001

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



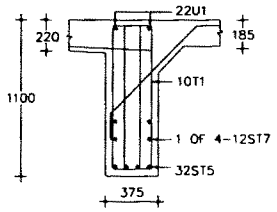
DETAILS OF GIRDER



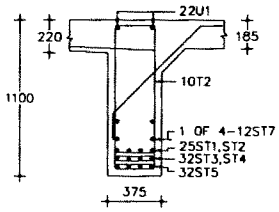
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

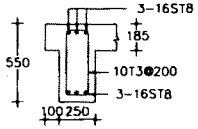
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14910				14910
	6	T2	800	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	240	341	201	311	1203	2128
	12	ST3	8	14870				14870
DECK	16	ST1	50	4180				4180
	12	ST1	50	2475				2475
	16	CR1	50	1572	148	825		4265
	12	ST2	39	14870				14870
	10	C1	102	120	796			1036
GIRDER	25	ST1	4	6950				6950
	25	ST2	4	8950				8950
	32	ST3	4	11350				11350
	32	ST4	4	13150				13150
	32	ST5	8	14850				14850
	22	U1	4	968	14850	968		16786
	12	ST7	8	14850				14850
	10	T1	40	1004	214			2556
	10	T1	56	1004	214			2556
	10	T2	56	1004	295			2718
DIAPHRAGM	16	ST8	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



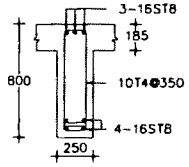
SECTION A-A



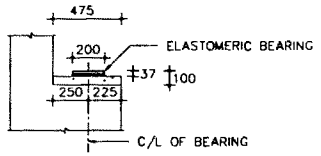
SECTION B-B



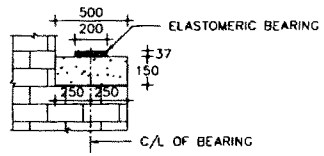
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

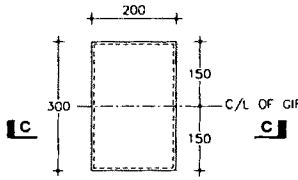


ON BRICK ABUTMENT

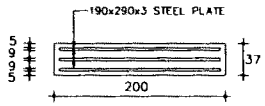
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 doy's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

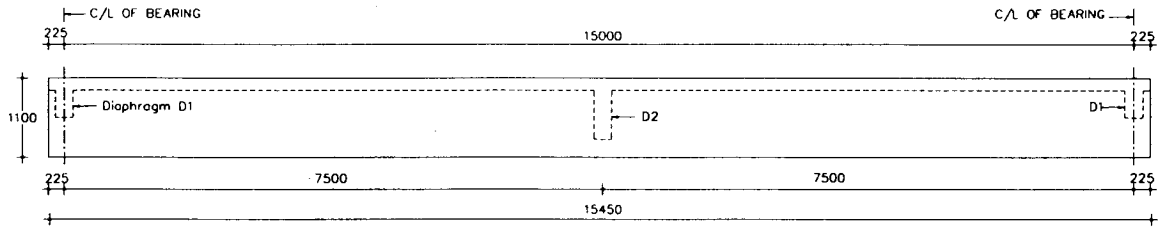
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 14.5m GIRDER & BEARING

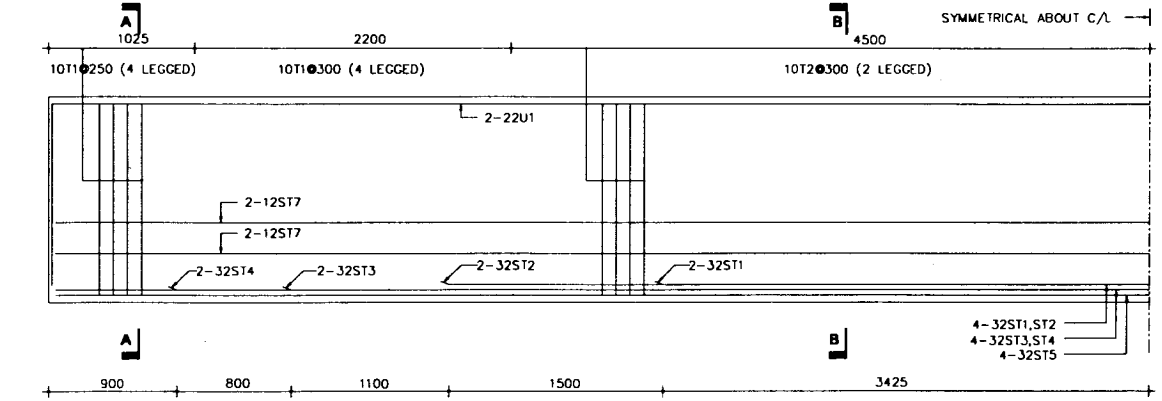
DATE : 09/04/1997 | ISSUED BY :
CAD FILE REF : BRDG\G0214501

Web Copy

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



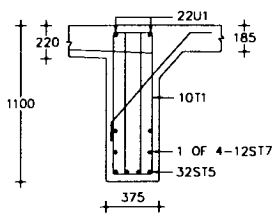
DETAILS OF GIRDER



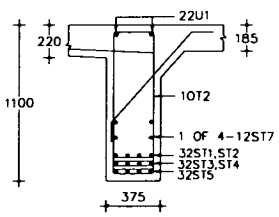
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

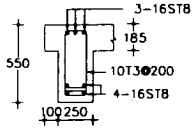
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15410				15410
	6	T2	836	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	248	341	201	311	1203	2128
	12	ST3	8	15370				15370
DECK	16	ST1	52	4180				4180
	12	ST1	52	2475				2475
	16	CR1	51	1572	148	825		4265
	12	ST2	39	15370				15370
	10	C1	104	120	796			1036
GIRDER	32	ST1	4	6850				6850
	32	ST2	4	9850				9850
	32	ST3	4	12050				12050
	32	ST4	4	13650				13650
	32	ST5	8	15350				15350
	22	U1	4	968	15350	968		17286
	12	ST7	8	15350				15350
	10	T1	40	1004	214			2556
	10	T1	56	1004	214			2556
	10	T2	60	1004	295			2718
DIAPHRAGM	16	ST8	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



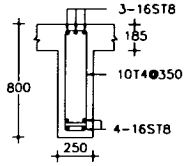
SECTION A-A



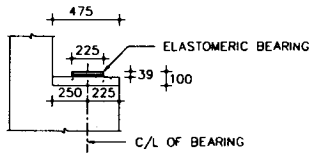
SECTION B-B



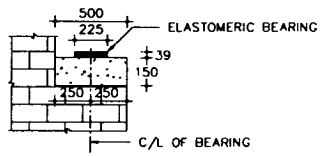
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

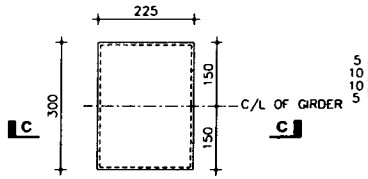


ON BRICK ABUTMENT

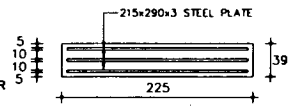
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

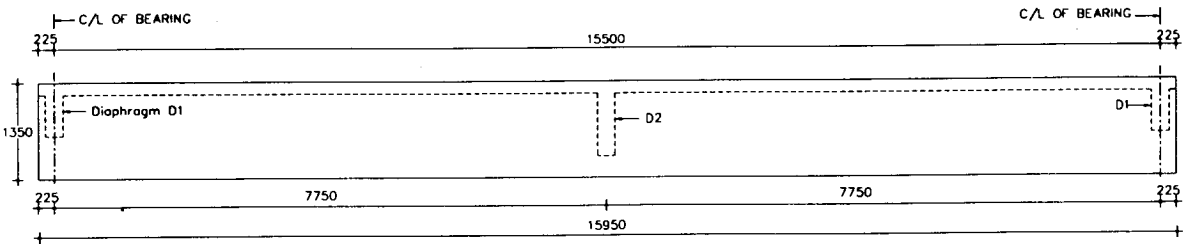
DETAILS OF 15.0m GIRDER & BEARING

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\GD215001	

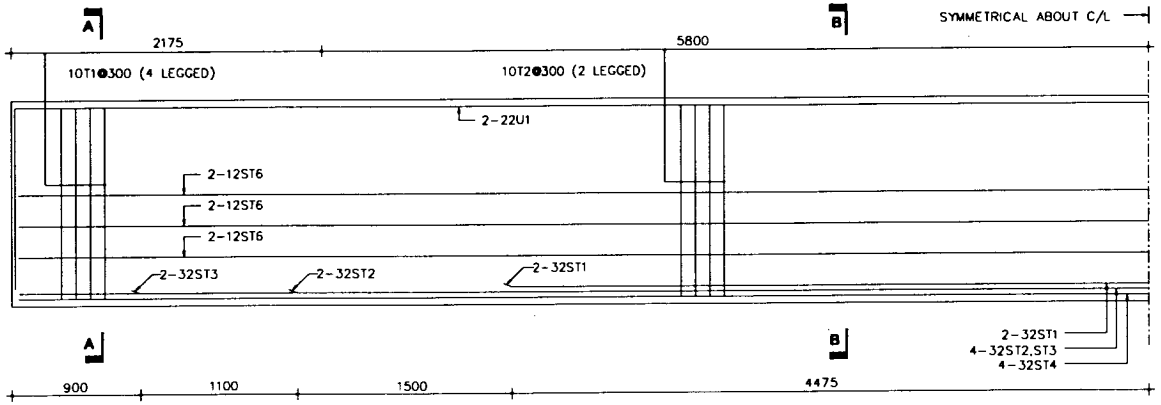
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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



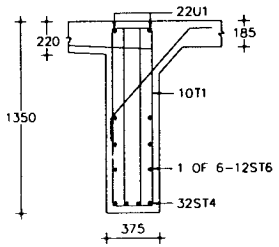
DETAILS OF GIRDER



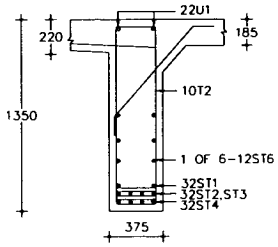
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

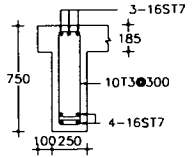
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15910				15910
	6	T2	880	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	256	341	201	311	1203	2128
	12	ST3	8	15870				15870
DECK	16	ST1	54	4180				4180
	12	ST1	54	2475				2475
	16	CR1	53	1572	148	825		4265
	12	ST2	39	15870				15870
	10	C1	108	120	796			1036
GIRDER	32	ST1	4	8950				8950
	32	ST2	4	11950				11950
	32	ST3	4	14150				14150
	32	ST4	8	15850				15850
	22	U1	4	1218	15850	1218		18286
	12	ST6	12	15850				15850
	10	T1	72	1254	214			3056
	10	T2	72	1254	295			3218
DIAPHRAGM	16	ST7	22	2425				2425
	12	ST8	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360



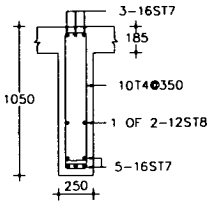
SECTION A-A



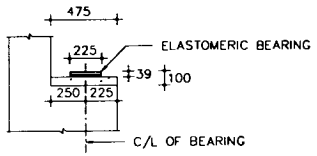
SECTION B-B



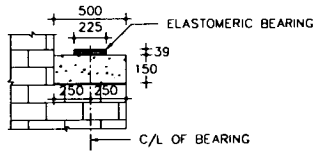
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

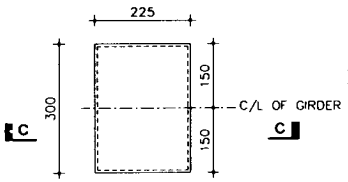


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.5m GIRDER & BEARING

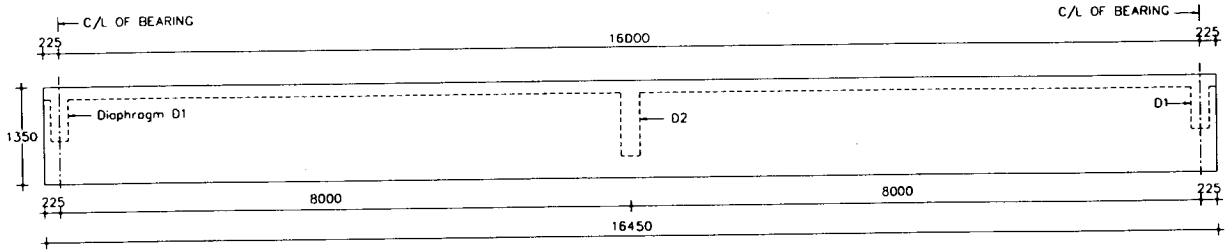
DATE : 09/04/1997

ISSUED BY :

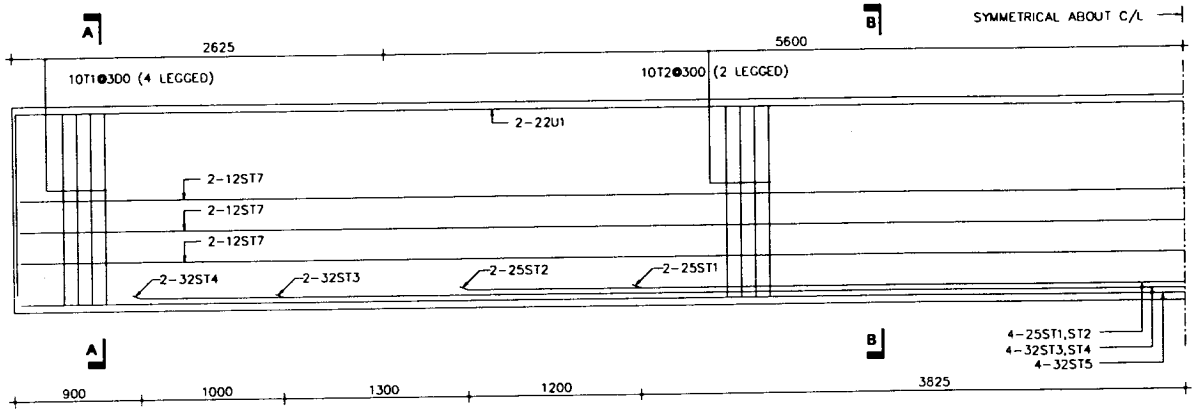
CAD FILE REF : BRDG\G0215501

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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



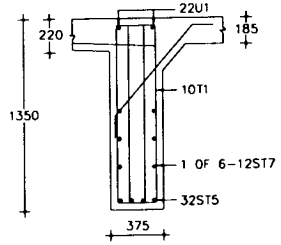
DETAILS OF GIRDER



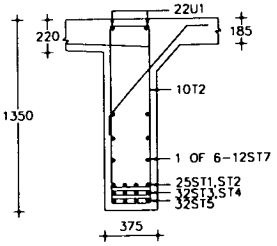
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

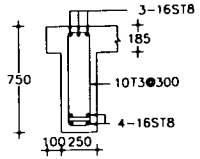
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16410				16410
	6	T2	880	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	264	341	201	311	1203	2128
	12	ST3	8	16370				16370
DECK	16	ST1	55	4180				4180
	12	ST1	55	2475				2475
	16	CR1	55	1572	148	825		4265
	12	ST2	39	16370				16370
	10	C1	112	120	796			1036
GIRDER	25	ST1	4	7650				7650
	25	ST2	4	10050				10050
	32	ST3	4	12650				12650
	32	ST4	4	14650				14650
	32	ST5	8	16350				16350
	22	U1	4	1218	16350	1218		18786
	12	ST7	12	16350				16350
	10	T1	80	1254	214			3056
	10	T2	72	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360



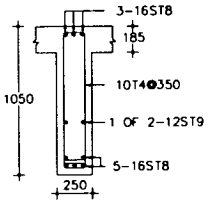
SECTION A-A



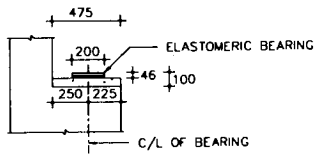
SECTION B-B



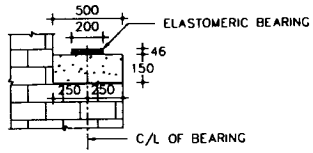
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

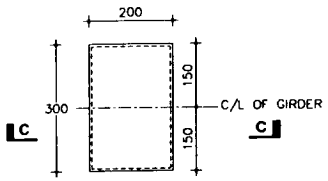


ON BRICK ABUTMENT

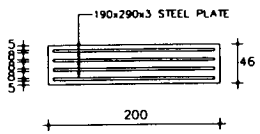
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.0m GIRDER & BEARING

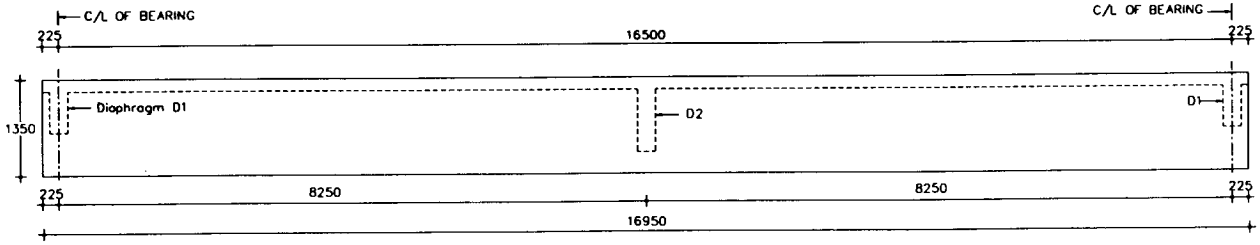
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0216001

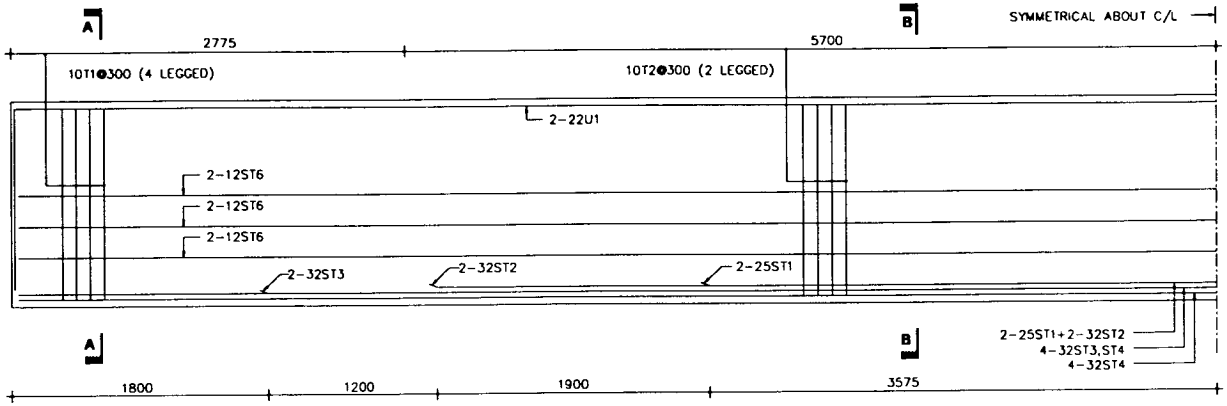
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GB-68

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



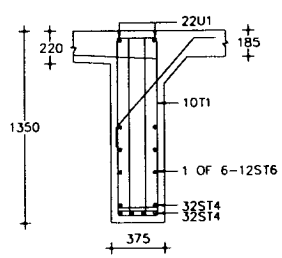
DETAILS OF GIRDER



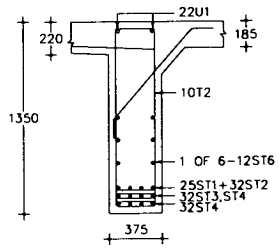
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

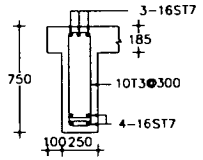
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16910				16910
	6	T2	912	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	272	341	201	311	1203	2128
	12	ST3	8	16870				16870
DECK	16	ST1	57	4180				4180
	12	ST1	57	2475				2475
	16	CR1	56	1572	148	825		4265
	12	ST2	39	16870				16870
	10	C1	114	120	796			1036
GIRDER	25	ST1	4	7150				7150
	32	ST2	4	10950				10950
	32	ST3	4	13350				13350
	32	ST4	12	16850				16850
	22	U1	4	1160	16850	1160		19170
	12	ST6	12	16850				16850
	10	T1	88	1254	214			3056
	10	T2	70	1254	295			3218
DIAPHRAGM	16	ST7	22	2425				2425
	12	ST8	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360



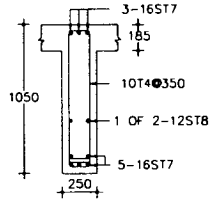
SECTION A-A



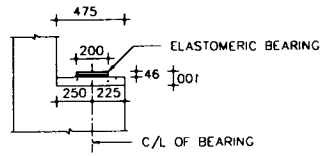
SECTION B-B



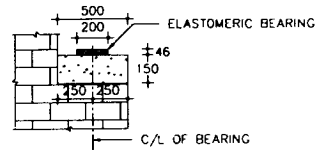
DETAILS OF D1



DETAILS OF D2

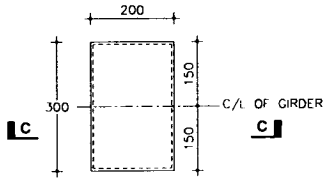


ON R.C.C. ABUTMENT

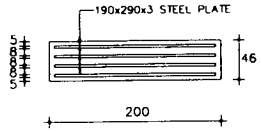


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

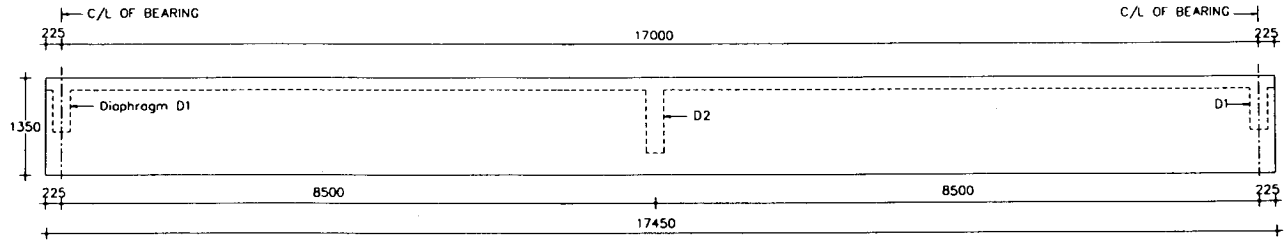
DETAILS OF 16.5m GIRDER & BEARING

DATE : 09/04/1997
CAD FILE REF : BRDG\G0216501

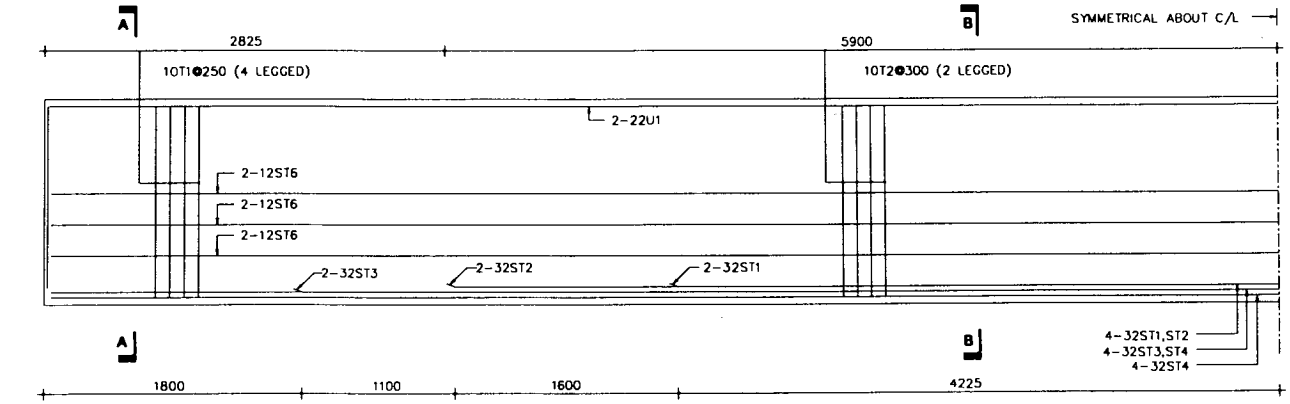
ISSUED BY :

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



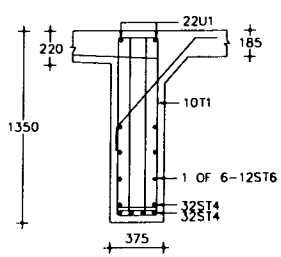
DETAILS OF GIRDER



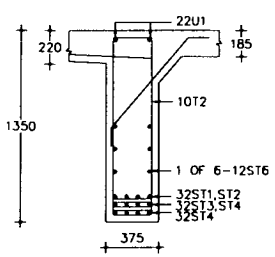
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

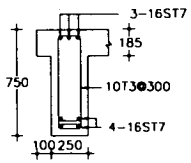
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17410				17410
	6	T2	960	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	280	341	201	311	1203	2128
	12	ST3	8	17370				17370
DECK	16	ST1	59	4180				4180
	12	ST1	59	2475				2475
	16	CR1	58	1572	148	825		4265
	12	ST2	39	17370				17370
	10	C1	118	120	796			1036
GIRDER	32	ST1	4	8450				8450
	32	ST2	4	11650				11650
	32	ST3	4	13850				13850
	32	ST4	12	17350				17350
	22	U1	4	1160	17350	1160		19670
	12	ST6	12	17350				17350
	10	T1	88	1254	214			3056
	10	T2	74	1254	295			3218
DIAPHRAGM	16	ST7	22	2425				2425
	12	ST8	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360



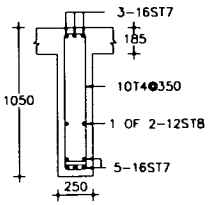
SECTION A-A



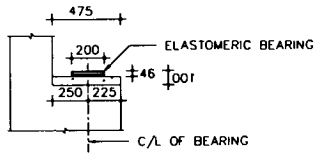
SECTION B-B



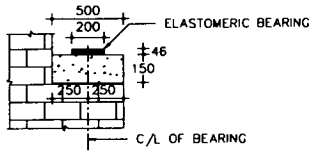
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

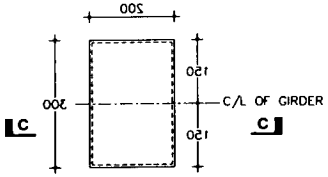


ON BRICK ABUTMENT

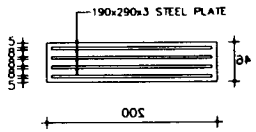
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

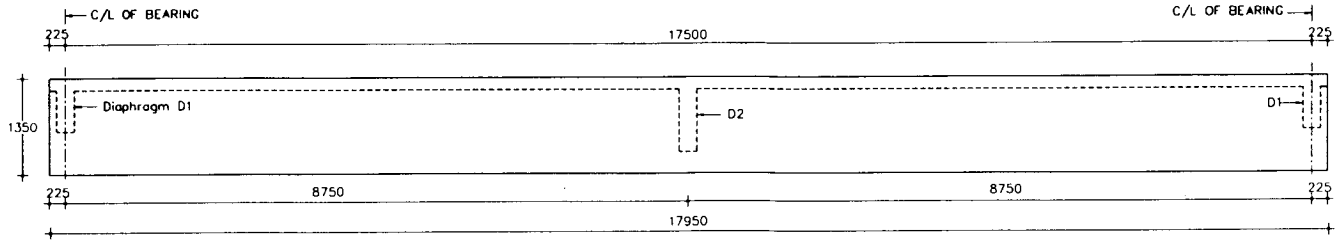
DETAILS OF 17.0m GIRDER & BEARING

DATE : 09/04/1997 | ISSUED BY :

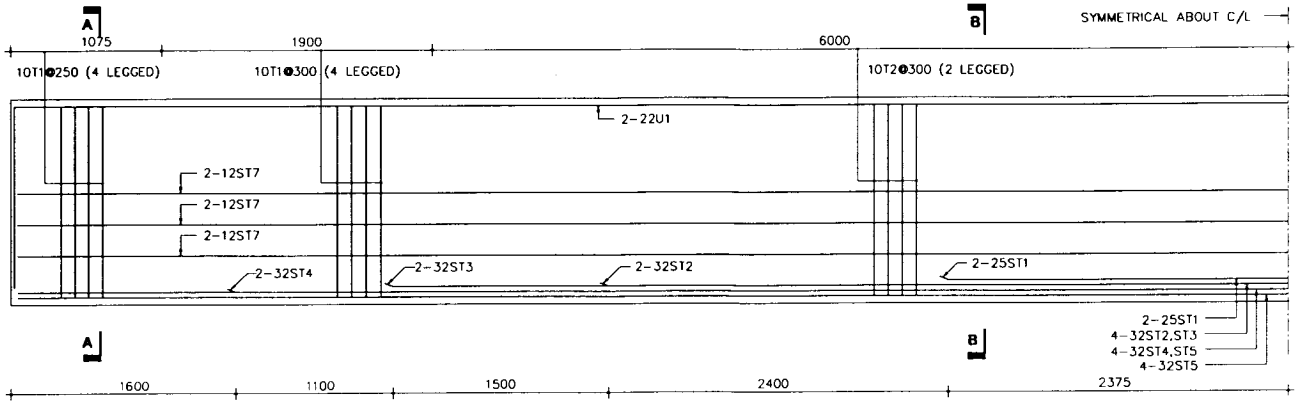
CAD FILE REF : BRDG\GD217001

Web Copy

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



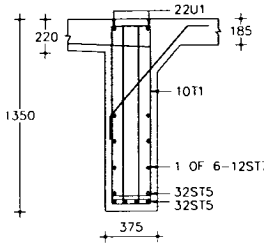
DETAILS OF GIRDER



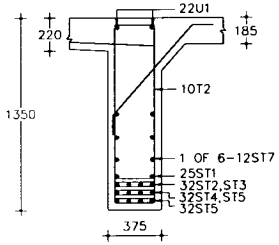
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17910				17910
	6	T2	960	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	288	341	201	311	1203	2128
	12	ST3	8	17870				17870
DECK	16	ST1	60	4180				4180
	12	ST1	60	2475				2475
	16	CR1	60	1572	148	825		4265
	12	ST2	39	17870				17870
	10	C1	122	120	796			1036
GIRDER	25	ST1	4	4750				4750
	32	ST2	4	9550				9550
	32	ST3	4	12550				12550
	32	ST4	4	14750				14750
	32	ST5	12	17850				17850
	22	U1	4	1160	17850	1160		20170
	12	ST7	12	17850				17850
	10	T1	48	1254	214			3056
	10	T1	40	1254	214			3056
	10	T2	80	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

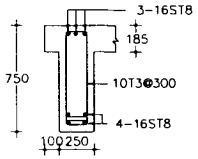
REINF. DETAILS OF GIRDER



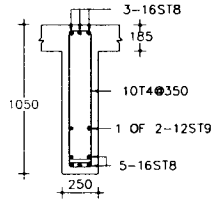
SECTION A-A



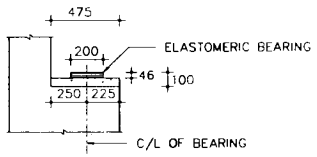
SECTION B-B



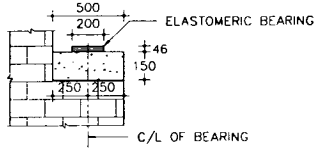
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

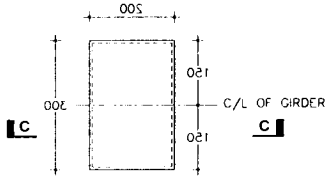


ON BRICK ABUTMENT

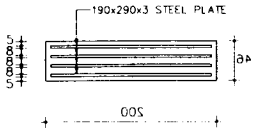
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

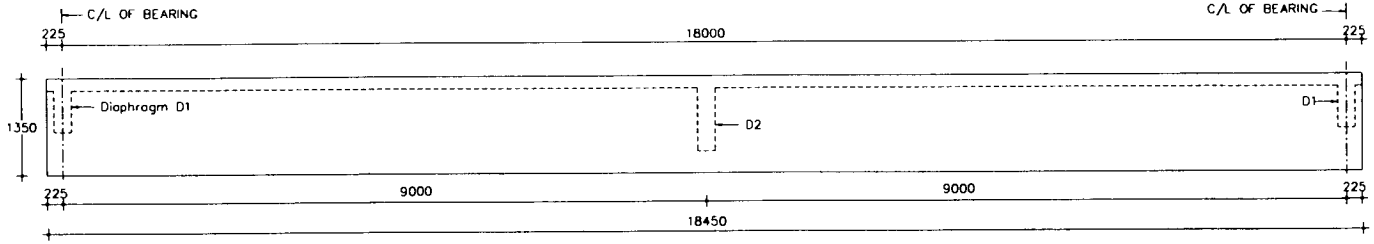
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 17.5m GIRDER & BEARING

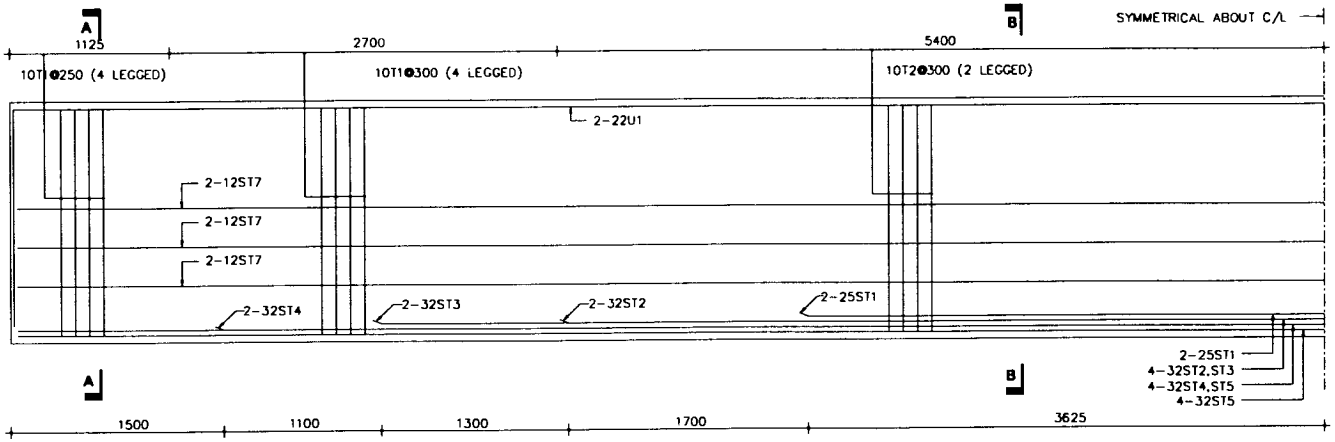
DATE : 09/04/1997
CAD FILE REF : BRDG\G0217501
ISSUED BY :

Web Copy

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



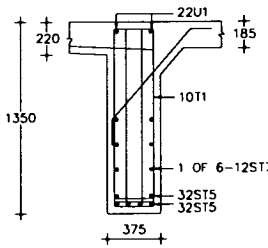
DETAILS OF GIRDER



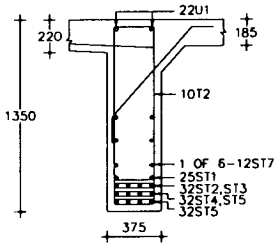
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18410				18410
	6	T2	988	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	168	135	135			612
SIDEWALK	12	EL1	296	341	201	311	1203	2128
	12	ST3	8	18370				18370
DECK	16	ST1	62	4180				4180
	12	ST1	62	2475				2475
	16	CR1	61	1572	148	825		4265
	12	ST2	39	18370				18370
	10	C1	124	120	796			1036
GIRDER	25	ST1	4	7250				7250
	32	ST2	4	10650				10650
	32	ST3	4	13250				13250
	32	ST4	4	15450				15450
	32	ST5	12	18350				18350
	22	U1	4	1160	18350	1160		20670
	12	ST7	12	18350				18350
	10	T1	48	1254	214			3056
	10	T1	64	1254	214			3056
	10	T2	72	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

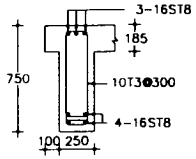
REINF. DETAILS OF GIRDER



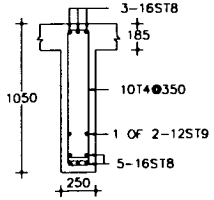
SECTION A-A



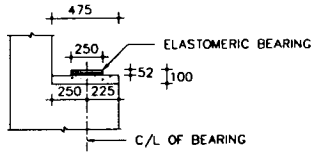
SECTION B-B



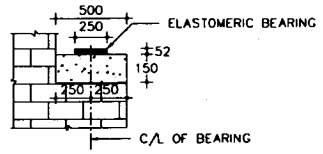
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

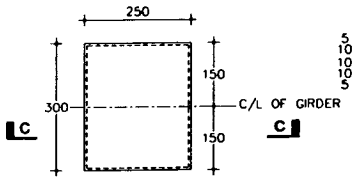


ON BRICK ABUTMENT

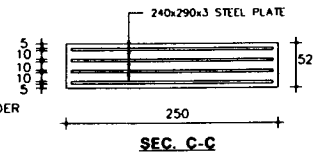
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

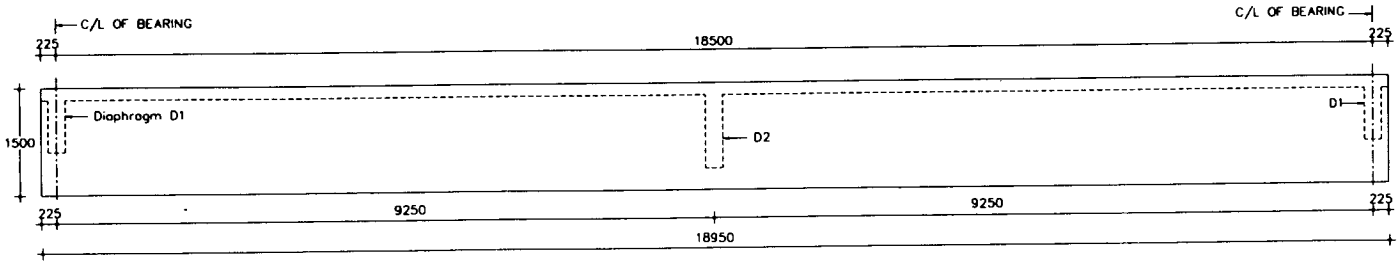
DETAILS OF 18.0m GIRDER & BEARING

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0218001	

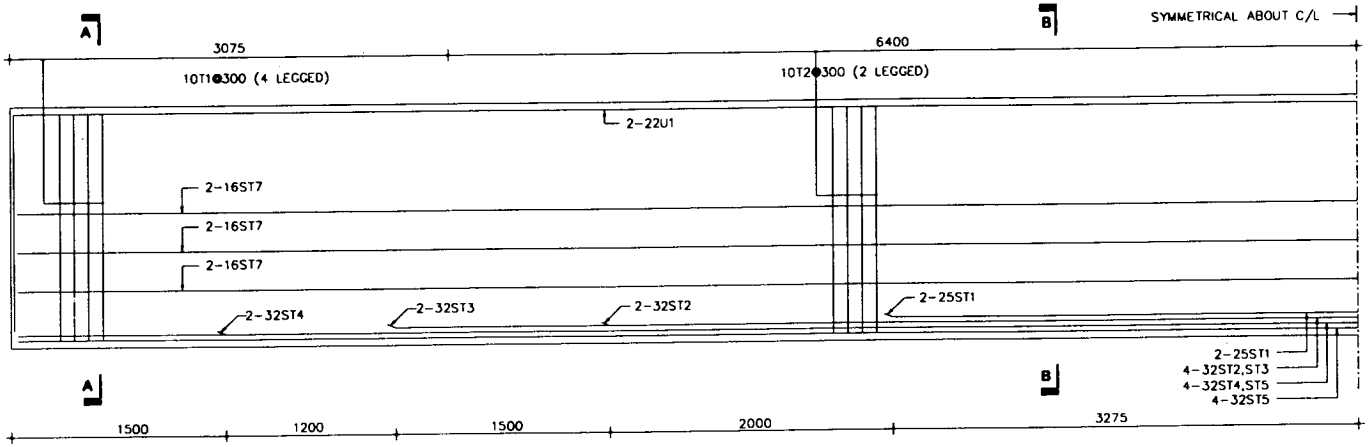
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GB-72

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



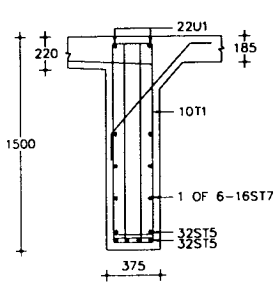
DETAILS OF GIRDER



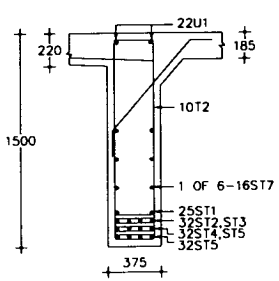
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18910				18910
	6	T2	1040	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	163	135	135			612
SIDEWALK	12	EL1	304	341	201	311	1203	2128
	12	ST3	8	18870				18870
DECK	16	ST1	64	4180				4180
	12	ST1	64	2475				2475
	16	CR1	63	1572	148	825		4265
	12	ST2	39	18870				18870
	10	C1	128	120	796			1036
GIRDER	25	ST1	4	6550				6550
	32	ST2	4	10550				10550
	32	ST3	4	13550				13550
	32	ST4	4	15950				15950
	32	ST5	12	18850				18850
	22	U1	4	1310	18850	1310		21470
	16	ST7	12	18850				18850
	10	T1	96	1404	214			3356
	10	T2	80	1404	295			3518
DIAPHRAGM	16	ST8	23	2425				2425
	12	ST9	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

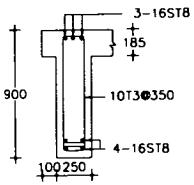
REINF. DETAILS OF GIRDER



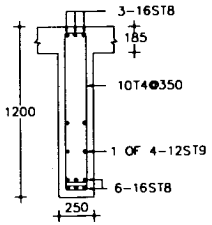
SECTION A-A



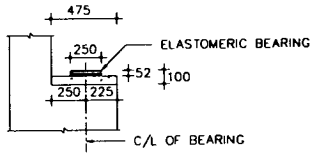
SECTION B-B



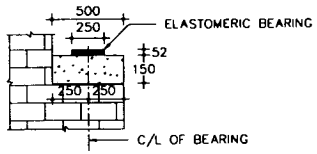
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

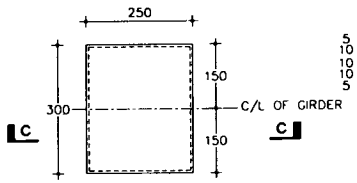


ON BRICK ABUTMENT

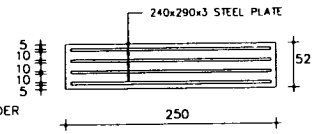
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

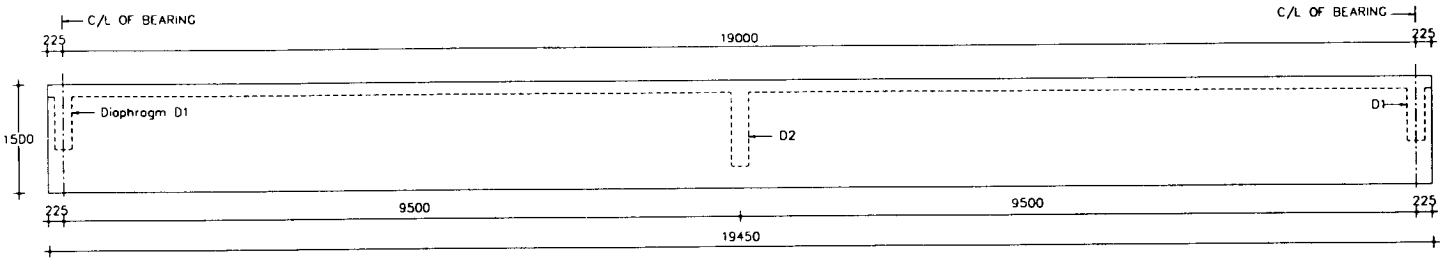
DETAILS OF 18.5m GIRDER & BEARING

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0218501	

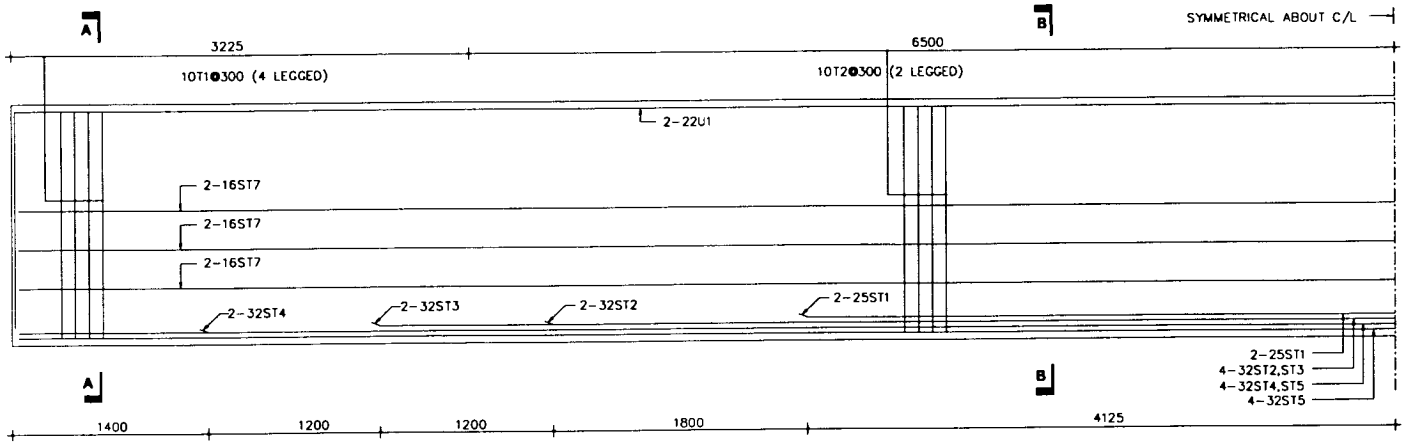
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GB-73

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



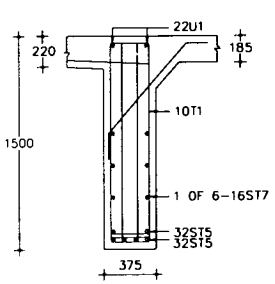
DETAILS OF GIRDER



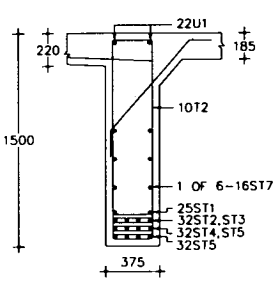
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19410				19410
	6	T2	1040	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	168	135	135			612
SIDEWALK	12	EL1	312	341	201	311	1203	2128
	12	ST3	8	19370				19370
DECK	16	ST1	65	4180				4180
	12	ST1	65	2475				2475
	16	CR1	65	1572	148	825		4265
	12	ST2	39	19370				19370
	10	C1	132	120	796			1036
GIRDER	25	ST1	4	8250				8250
	32	ST2	4	11850				11850
	32	ST3	4	14250				14250
	32	ST4	4	16650				16650
	32	U1	12	1310	19350	1310		21970
	22	ST6	4	19350				19350
	16	ST7	12	19350				19350
	10	T1	96	1404	214			3356
	10	T2	84	1404	295			3518
DIAPHRAGM	16	ST8	23	2425				2425
	12	ST9	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

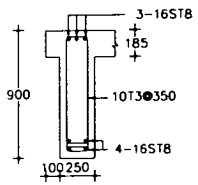
REINF. DETAILS OF GIRDER



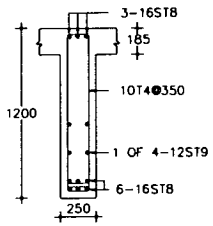
SECTION A-A



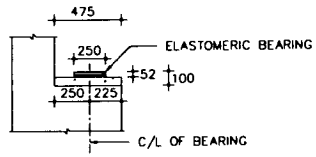
SECTION B-B



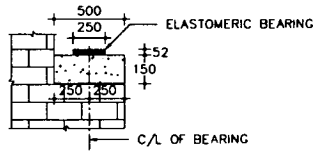
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

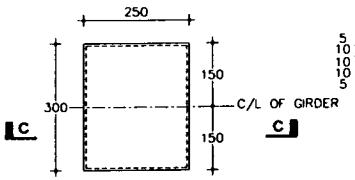


ON BRICK ABUTMENT

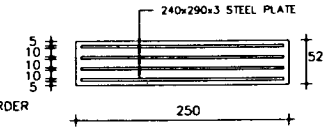
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down groded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hordness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drowing is to be read in conjunction with Shape Code; Cod File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.0m GIRDER & BEARING

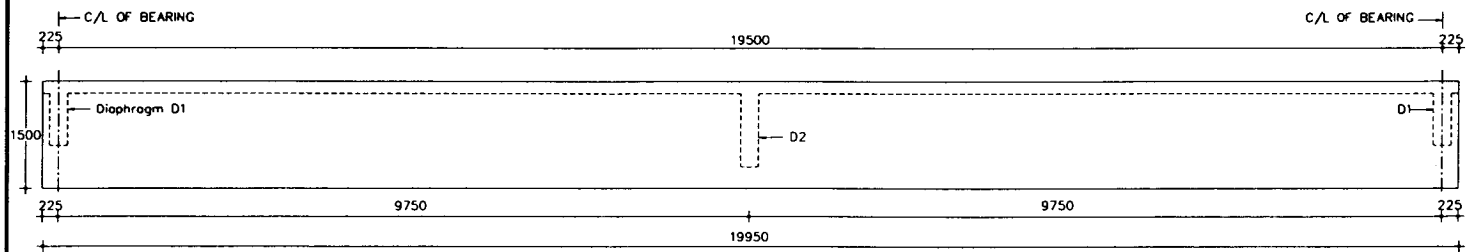
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\GD2190D1

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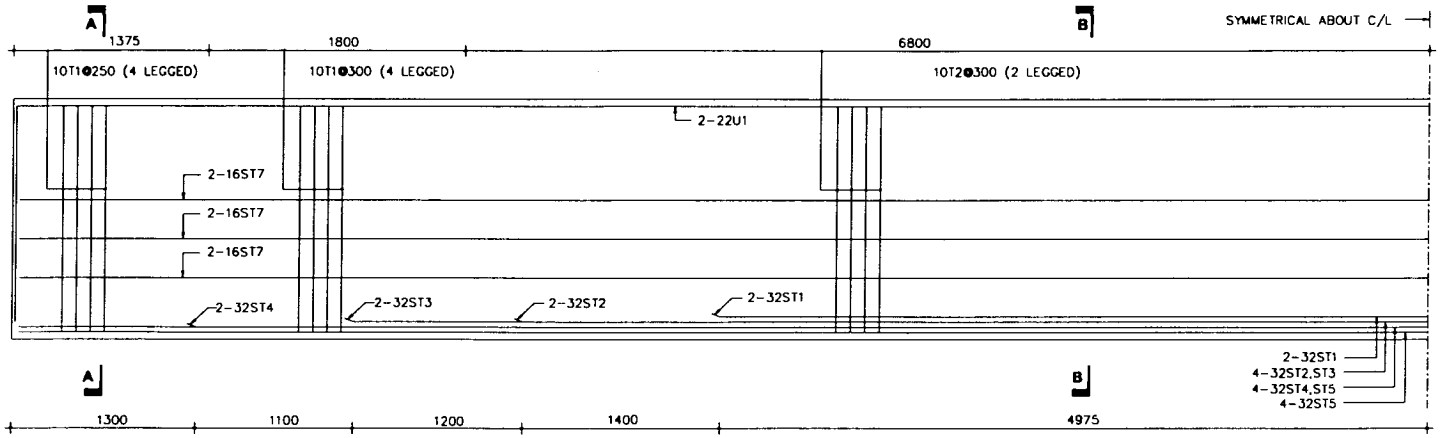
SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - NO



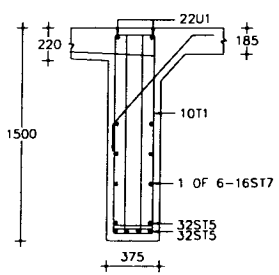
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19910				19910
	6	T2	1064	85	135			512
POST	20	L1	120	971	120			1091
	6	T1	180	135	135			612
SIDEWALK	12	EL1	320	341	201	311	1203	2128
	12	ST3	8	19870				19870
DECK	16	ST1	67	4180				4180
	12	ST1	67	2475				2475
	16	CR1	66	1572	148	825		4265
	12	ST2	39	19870				19870
	10	C1	134	120	796			1036
GIRDER	32	ST1	4	9950				9950
	32	ST2	4	12750				12750
	32	ST3	4	15150				15150
	32	ST4	4	17350				17350
	32	ST5	12	19850				19850
	22	U1	4	1310	19850	1310		22470
	16	ST7	12	19850				19850
	10	T1	56	1404	214			3356
	10	T1	40	1404	214			3356
	10	T2	90	1404	295			3518
DIAPHRAGM	16	ST8	23	2425				2425
	12	ST9	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

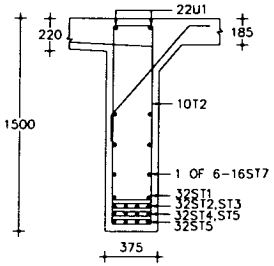
DETAILS OF GIRDER



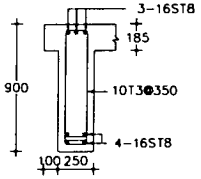
REINF. DETAILS OF GIRDER



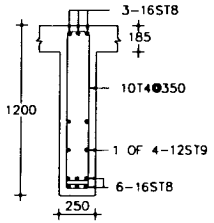
SECTION A-A



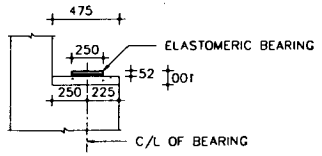
SECTION B-B



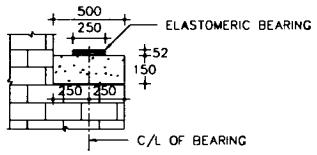
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

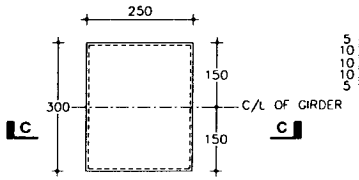


ON BRICK ABUTMENT

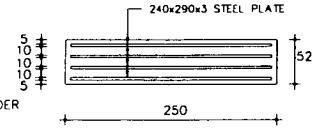
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength ot 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontol spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

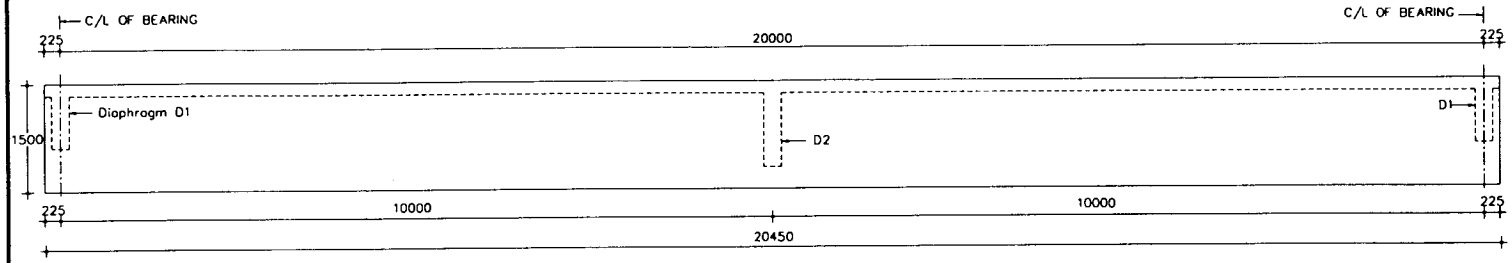
DETAILS OF 19.5m GIRDER & BEARING

DATE : 09/04/1997 | ISSUED BY :

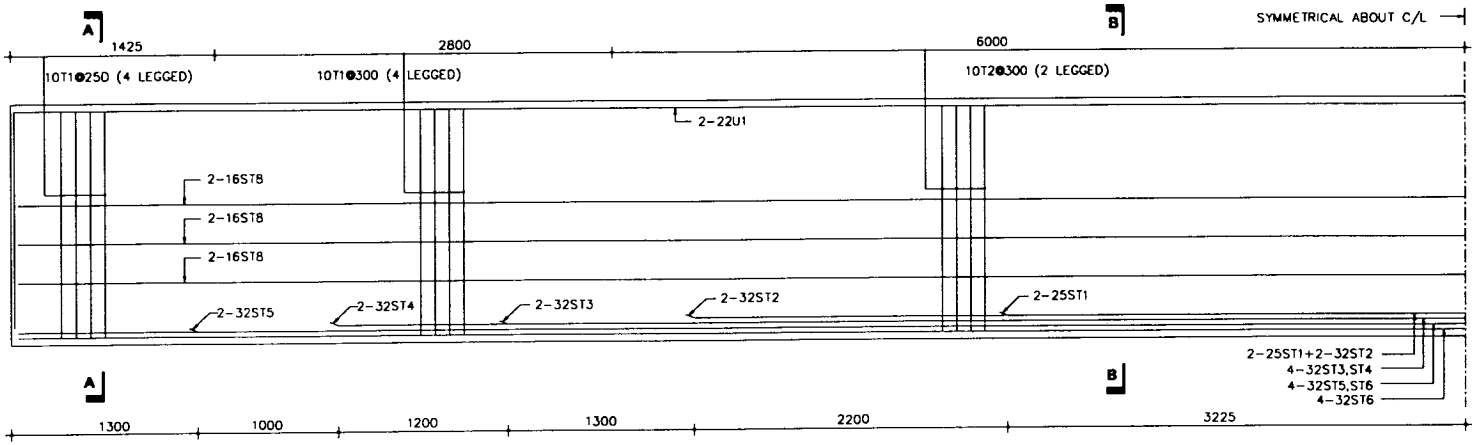
CAD FILE REF : BRDG\G0219501

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – NO



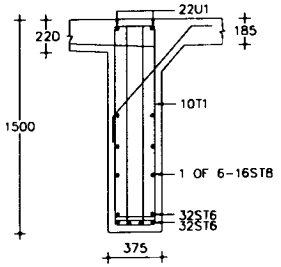
DETAILS OF GIRDER



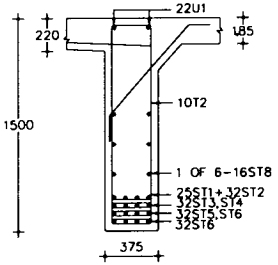
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	20410				20410
	6	T2	1120	85	135			512
POST	20	L1	120	971	120			1091
	6	T1	180	135	135			612
SIDEWALK	12	EL1	328	341	201	311	1203	2128
	12	ST3	8	20370				20370
DECK	16	ST1	69	4180				4180
	12	ST1	69	2475				2475
	16	CR1	68	1572	148	825		4265
	12	ST2	39	20370				20370
	10	C1	138	120	796			1036
GIRDER	25	ST1	4	6450				6450
	32	ST2	4	10850				10850
	32	ST3	4	13450				13450
	32	ST4	4	15850				15850
	32	ST5	4	17850				17850
	32	ST6	12	20350				20350
	22	U1	4	1310	20350	1310		22970
	16	ST8	12	20350				20350
	10	T1	56	1404	214			3356
	10	T1	64	1404	214			3356
	10	T2	82	1404	295			3518
DIAPHRAGM	16	ST9	23	2425				2425
	12	ST10	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

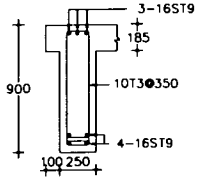
REINF. DETAILS OF GIRDER



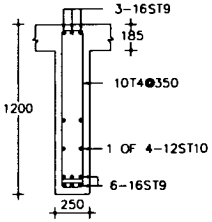
SECTION A-A



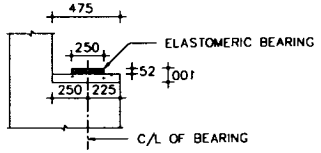
SECTION B-B



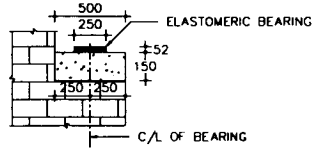
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

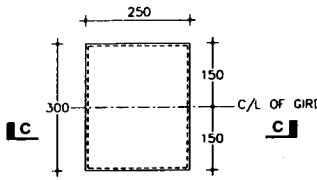


ON BRICK ABUTMENT

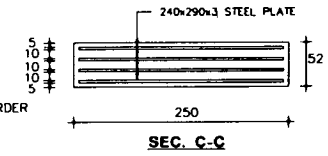
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

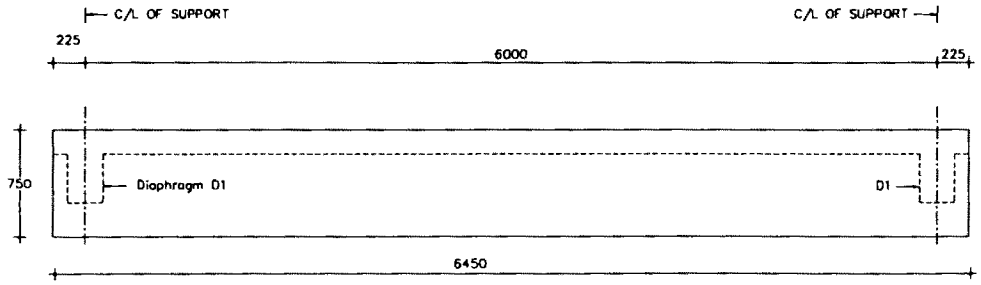
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 20.0m GIRDER & BEARING

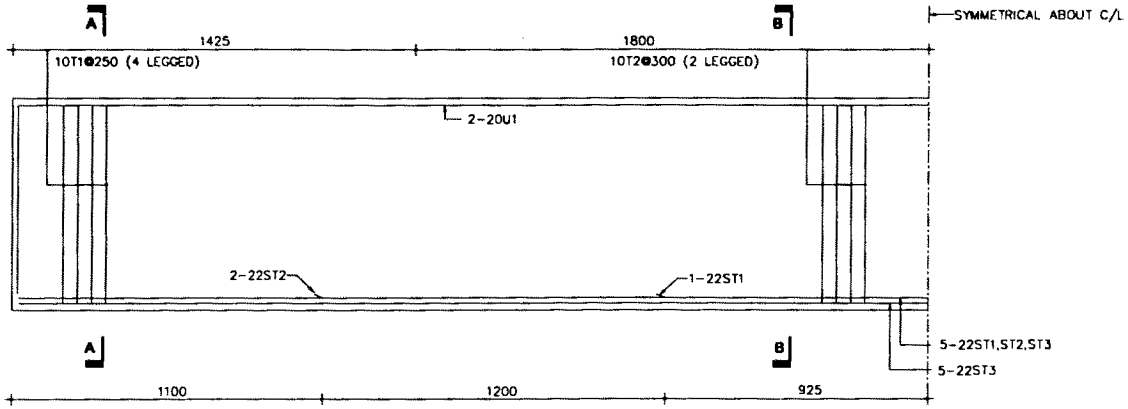
DATE : 09/04/1997
ISSUED BY :
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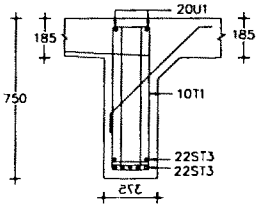
SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



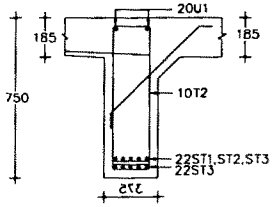
DETAILS OF GIRDER



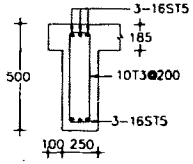
REINF. DETAILS OF GIRDER



SECTION A-A



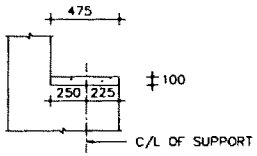
SECTION B-B



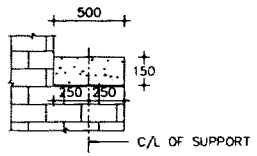
DETAILS OF D1

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6410				6410
	6	T2	340	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	108	329	201	311	1200	2113
	12	ST3	8	6370				6370
DECK	16	ST1	27	4180				4180
	12	ST1	27	2475				2475
	16	CR1	27	1572	148	825		4265
	12	ST2	47	6370				6370
	10	C1	56	120	796			1036
GIRDER	22	ST1	2	1850				1850
	22	ST2	4	4250				4250
	22	ST3	14	6350				6350
	20	U1	4	580	6350	580		7510
	10	T1	56	654	231			1890
	10	T2	20	654	295			2018
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

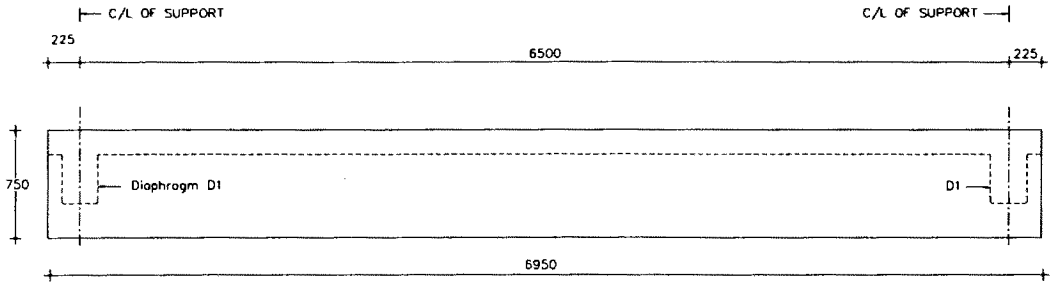
DETAILS OF 6.0m GIRDER

DATE :
ISSUED BY :
CAD FILE REF : BRDG\C0306001

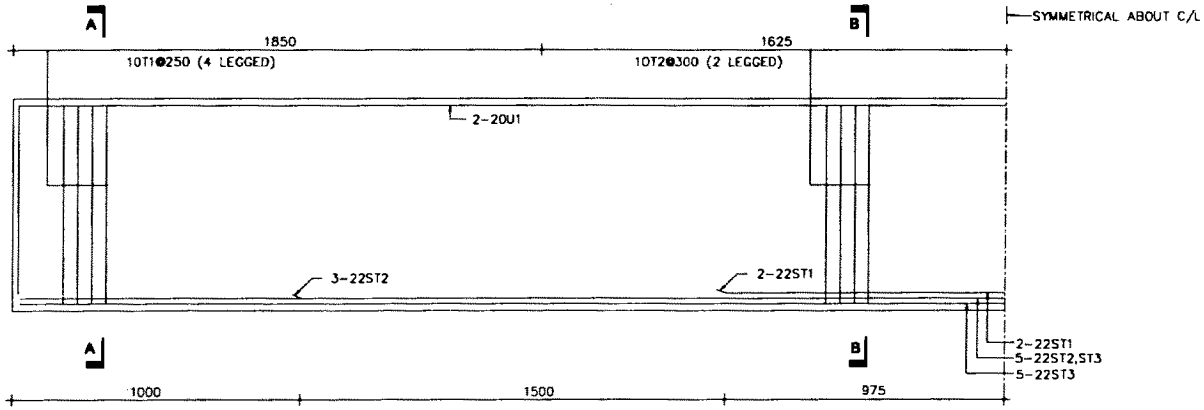
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GB-77

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



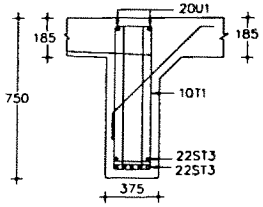
DETAILS OF GIRDER



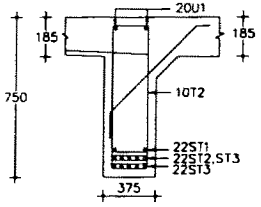
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6910				6910
	6	T2	380	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	118	329	201	311	1200	2113
	12	ST3	8	6870				6870
DECK	16	ST1	29	4180				4180
	12	ST1	29	2475				2475
	16	CR1	29	1572	148	825		4265
	12	ST2	47	6870				6870
	10	C1	60	120	796			1036
GIRDER	22	ST1	4	1950				1950
	22	ST2	6	4950				4950
	22	ST3	14	6850				6850
	20	U1	4	580	6850	580		8010
	10	T1	72	654	231			1890
	10	T2	18	654	295			2018
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260

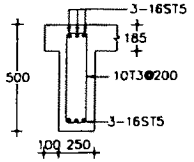
REINF. DETAILS OF GIRDER



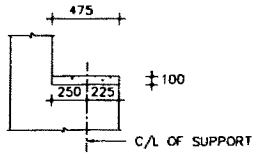
SECTION A-A



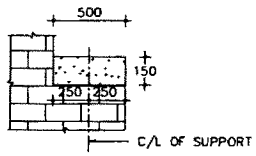
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

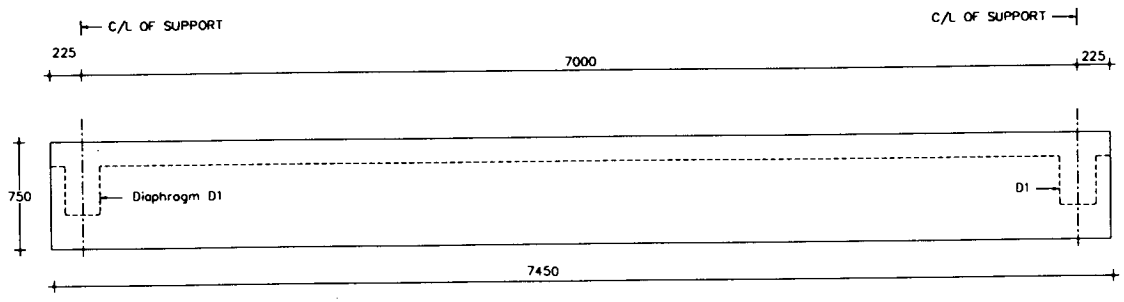
DETAILS OF 6.5m GIRDER

DATE :	ISSUED BY :
CAD FILE REF : BRDG\G0306501	

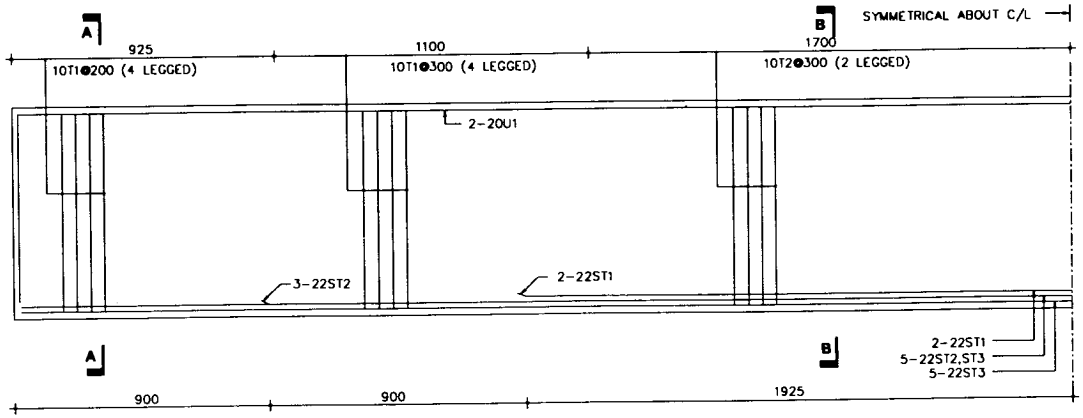
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GB-78

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



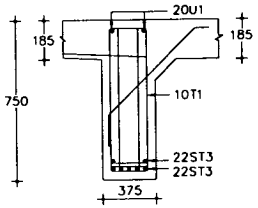
DETAILS OF GIRDER



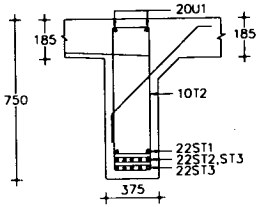
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7410				7410
	6	T2	400	85	135			512
POST	20	L1	48	971	120			1091
	6	T1	72	135	135			612
SIDEWALK	12	EL1	126	329	201	311	1200	2113
	12	ST3	8	7370				7370
DECK	16	ST1	31	4180				4180
	12	ST1	31	2475				2475
	16	CR1	31	1572	148	825		4265
	12	ST2	47	7370				7370
	10	C1	64	120	796			1036
GIRDER	22	ST1	4	3850				3850
	22	ST2	6	5650				5650
	22	ST3	14	7350				7350
	20	U1	4	580	7350	580		8510
	10	T1	48	654	231			1890
	10	T1	24	654	231			1890
	10	T2	22	654	295			2018
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260

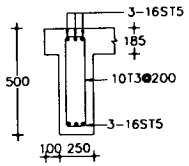
REINF. DETAILS OF GIRDER



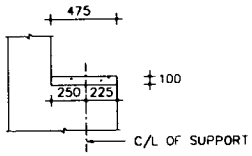
SECTION A-A



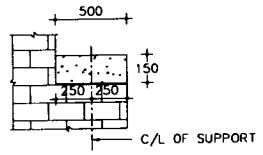
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.0m GIRDER

DATE : 09/04/1997

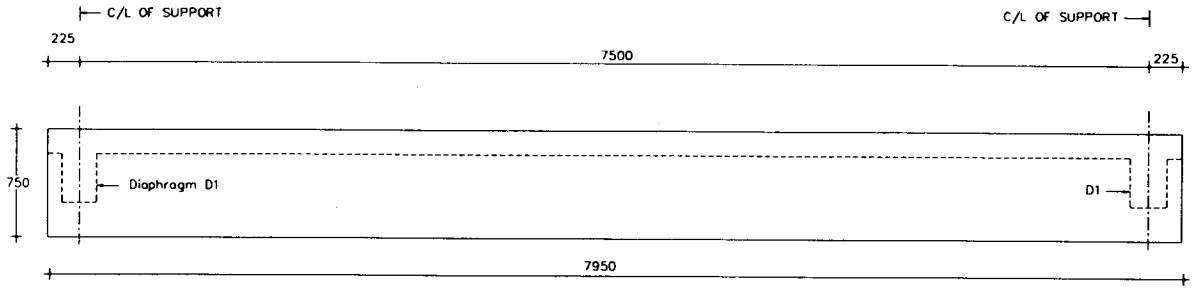
ISSUED BY :

CAD FILE REF : BRDG\G0307001

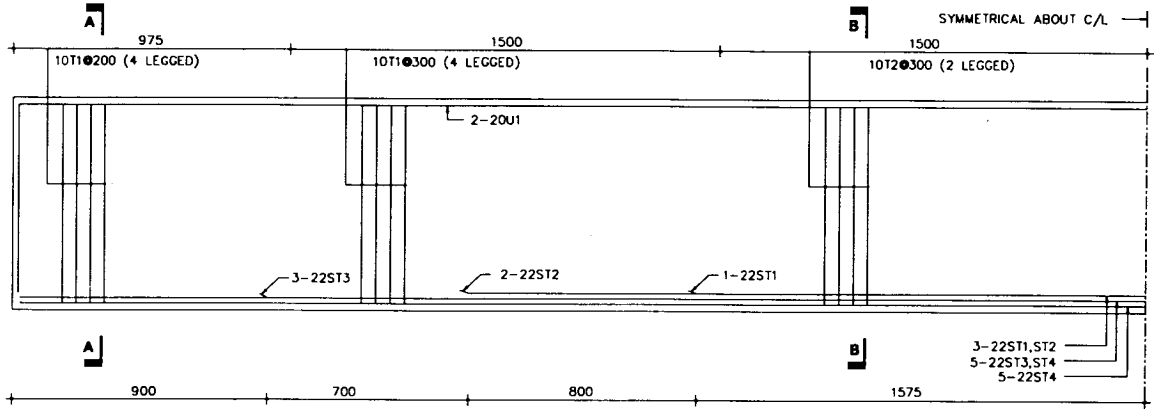
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GB-79

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



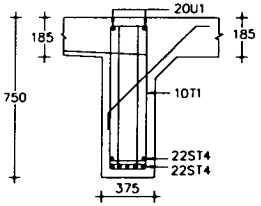
DETAILS OF GIRDER



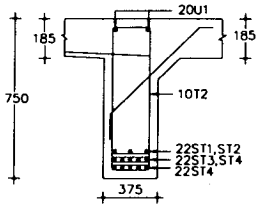
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7910				7910
	6	T2	432	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	134	329	201	311	1200	2113
	12	ST3	8	7870				7870
DECK	16	ST1	34	4180				4180
	12	ST1	34	2475				2475
	16	CR1	33	1572	148	825		4265
	12	ST2	47	7870				7870
	10	C1	68	120	796			1036
GIRDER	22	ST1	2	3150				3150
	22	ST2	4	4750				4750
	22	ST3	6	6150				6150
	22	ST4	14	7850				7850
	20	U1	4	580	7850	580		9010
	10	T1	48	654	231			1890
	10	T1	32	654	231			1890
	10	T2	22	654	295			2018
DIAPHRAGM	16	ST6	12	2425				2425
	10	T3	18	420	150			1260

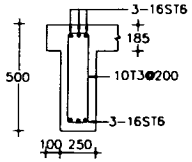
REINF. DETAILS OF GIRDER



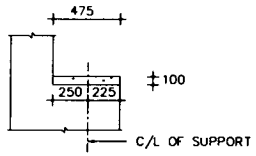
SECTION A-A



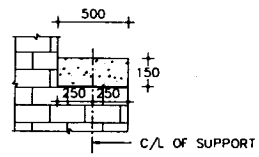
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

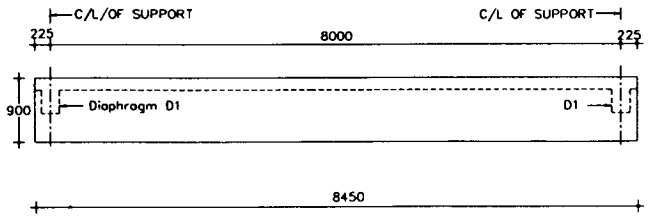
DETAILS OF 7.5m GIRDER

DATE :
ISSUED BY :
CAD FILE REF : BRDG\G0307501

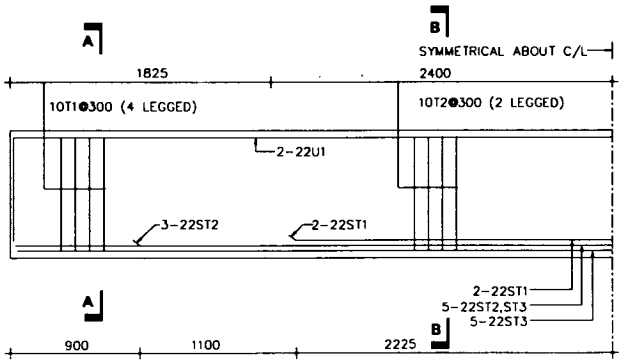
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GB-80

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



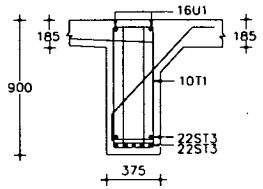
DETAILS OF GIRDER



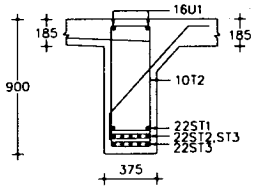
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

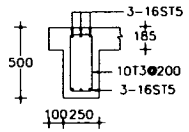
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8410				8410
	6	T2	456	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	142	329	201	311	1200	2113
	12	ST3	8	8370				8370
DECK	16	ST1	36	4180				4180
	12	ST1	36	2475				2475
	16	CR1	35	1572	148	825		4265
	12	ST2	47	8370				8370
	10	C1	72	120	796			1036
GIRDER	22	ST1	4	4450				4450
	22	ST2	6	6650				6650
	22	ST3	14	8350				8350
	22	U1	4	730	8350	730		9810
	10	T1	56	804	211			2190
	10	T2	30	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



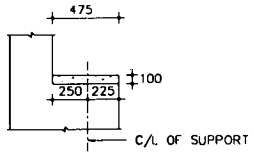
SECTION A-A



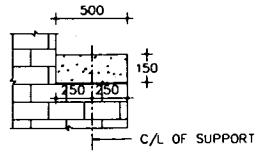
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.0m GIRDER

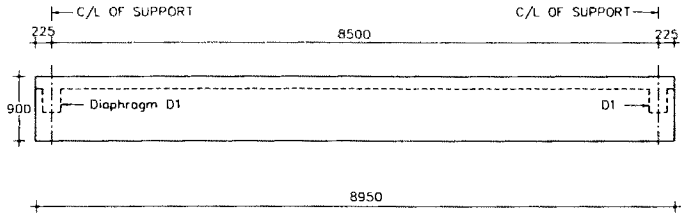
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BROG\G0308001

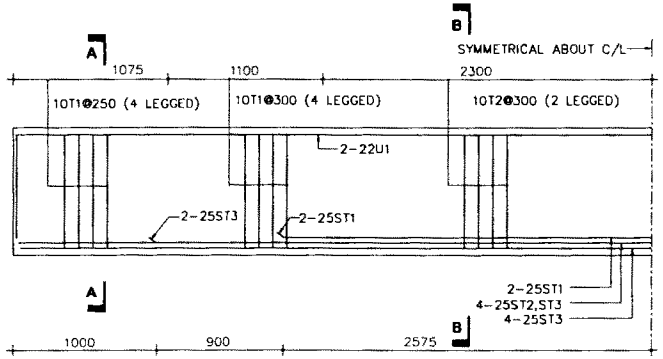
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GB-81

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



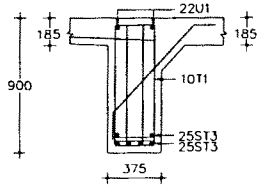
DETAILS OF GIRDER



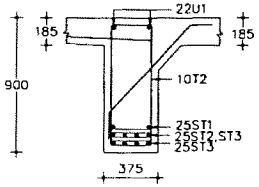
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

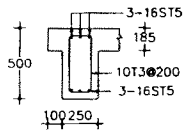
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8910				8910
	6	T2	480	85	135			512
POST	20	L1	56	971	120			1091
	6	T1	84	135	135			612
SIDEWALK	12	EL1	150	329	201	311	1200	2113
	12	ST3	8	8870				8870
DECK	16	ST1	38	4180				4180
	12	ST1	38	2475				2475
	16	CR1	37	1572	148	825		4265
	12	ST2	47	8870				8870
	10	C1	76	120	796			1036
GIRDER	25	ST1	4	5150				5150
	25	ST2	4	6950				6950
	25	ST3	12	8850				8850
	22	U1	4	724	8850	724		10298
	10	T1	48	804	211			2150
	10	T1	16	804	211			2150
	10	T2	32	804	295			2318
DIAPHRAGM	16	ST5	12	2425				2425
	10	T3	18	420	150			1260



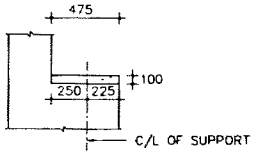
SECTION A-A



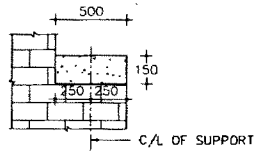
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

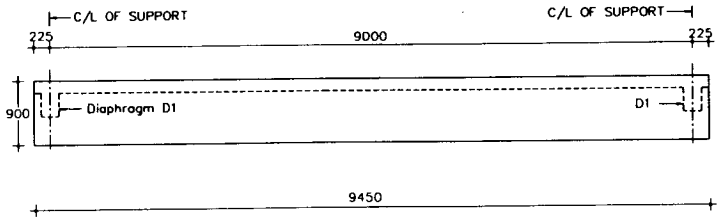
DETAILS OF 8.5m GIRDER

DATE : 09/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G0308501

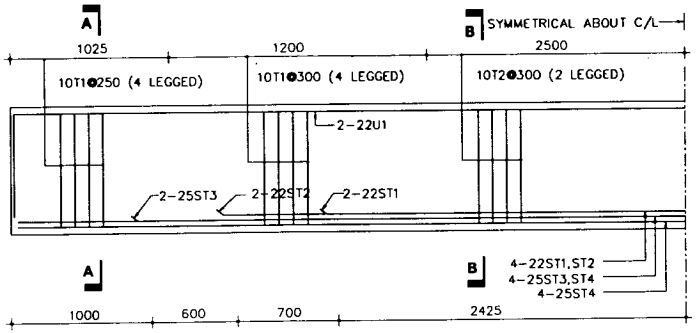
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GB-82

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



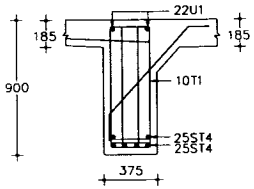
DETAILS OF GIRDER



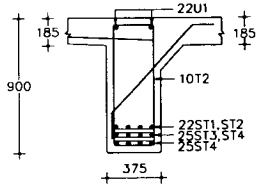
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

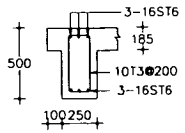
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9410				9410
	6	T2	504	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	158	329	201	311	1200	2113
	12	ST3	8	9370				9370
DECK	16	ST1	40	4180				4180
	12	ST1	40	2475				2475
	16	CR1	39	1572	148	825		4265
	12	ST2	47	9370				9370
	10	C1	80	120	796			1036
GIRDER	22	ST1	4	4850				4850
	22	ST2	4	6250				6250
	25	ST3	4	7450				7450
	25	ST4	12	9350				9350
	22	U1	4	724	9350	724		10798
	10	T1	40	804	211			2150
	10	T1	24	804	211			2150
	10	T2	36	804	295			2318
DIAPHRAGM	16	ST6	12	2425				2425
	10	T3	18	420	150			1260



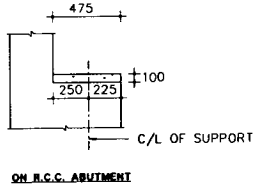
SECTION A-A



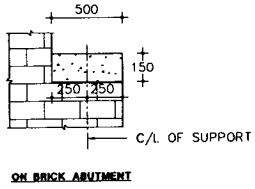
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 9.0m GIRDER

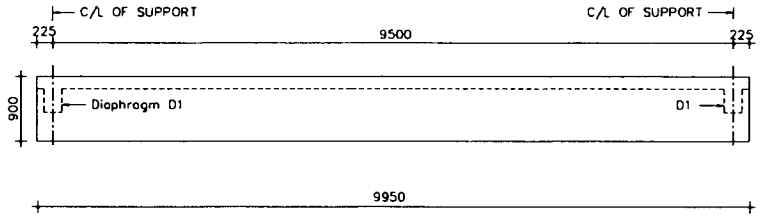
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0309001

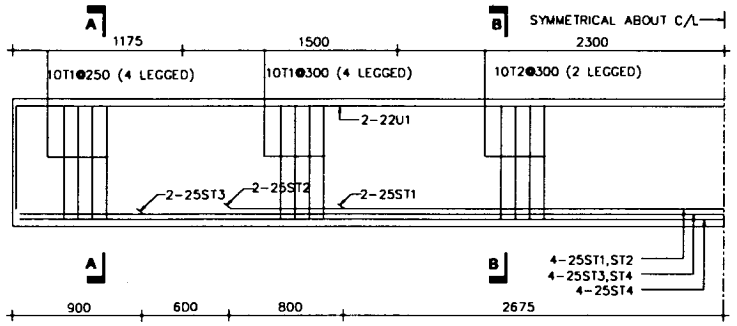
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GB-83

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



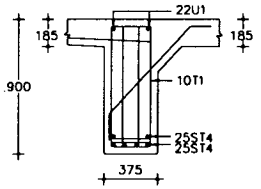
DETAILS OF GIRDER



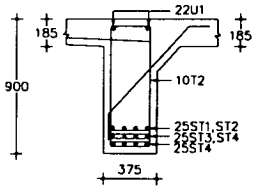
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

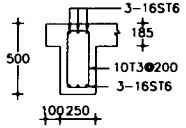
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9910				9910
	6	T2	532	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	168	329	201	311	1200	2113
	12	ST3	8	9870				9870
DECK	16	ST1	42	4180				4180
	12	ST1	42	2475				2475
	16	CR1	41	1572	148	825		4265
	12	ST2	47	9870				9870
	10	C1	84	120	796			1036
GIRDER	25	ST1	4	5350				5350
	25	ST2	4	6950				6950
	25	ST3	4	8150				8150
	25	ST4	12	9850				9850
	22	U1	4	724	9850	724		11298
	10	T1	48	804	211			2150
	10	T1	32	804	211			2150
	10	T2	32	804	295			2318
DIAPHRAGM	16	ST6	12	2425				2425
	10	T3	18	420	150			1260



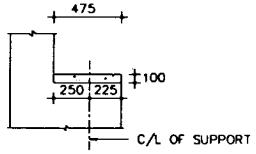
SECTION A-A



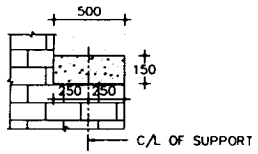
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Cleor cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cod File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

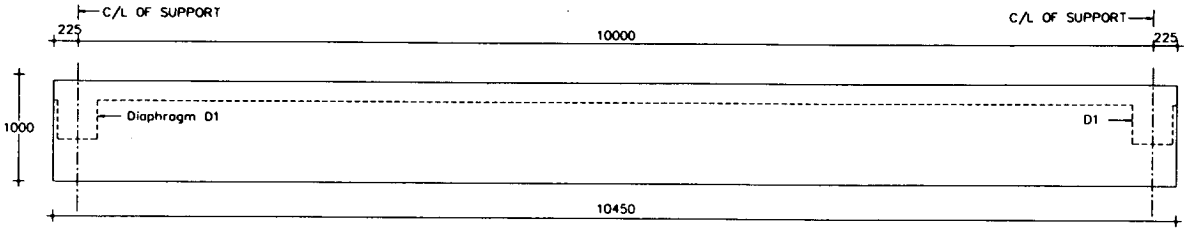
DETAILS OF 9.5m GIRDER

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0309501	

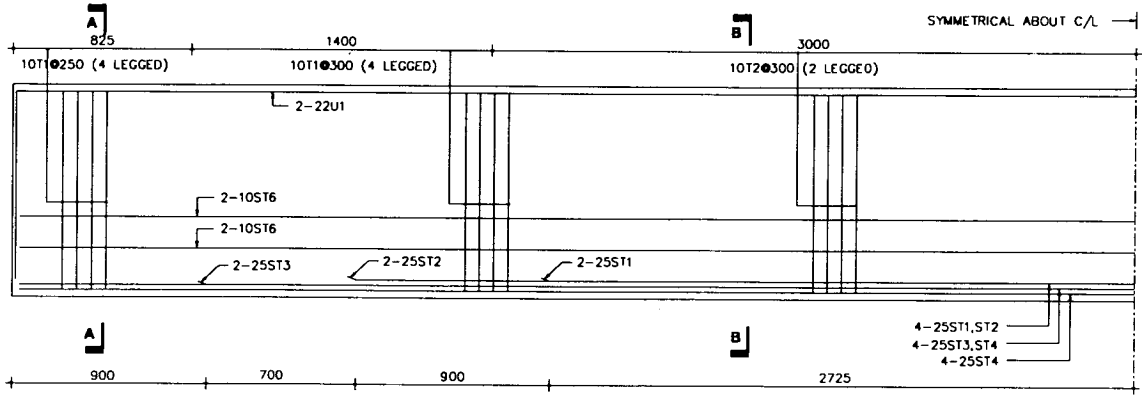
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GB-84

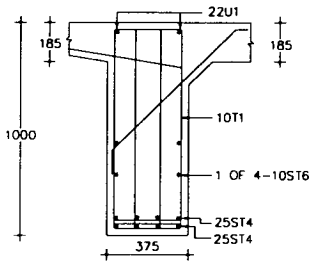
SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



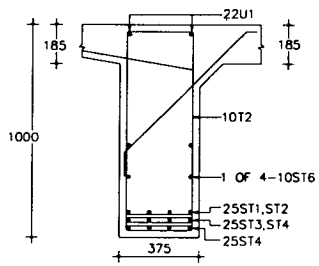
DETAILS OF GIRDER



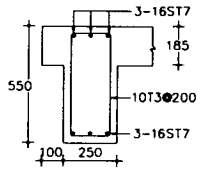
REINF. DETAILS OF GIRDER



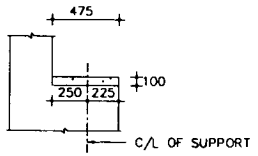
SECTION A-A



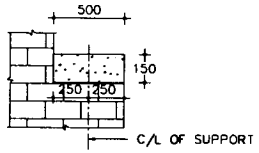
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10410				10410
	6	T2	560	85	135			512
POST	20	L1	64	971	120			1091
	6	T1	96	135	135			612
SIDEWALK	12	EL1	176	329	201	311	1200	2113
	12	ST3	8	10370				10370
DECK	16	ST1	44	4180				4180
	12	ST1	44	2475				2475
	16	CR1	43	1572	148	825		4265
	12	ST2	47	10370				10370
	10	C1	88	120	796			1036
GIRDER	25	ST1	4	5450				5450
	25	ST2	4	7250				7250
	25	ST3	4	8650				8650
	25	ST4	12	10350				10350
	22	U1	4	824	10350	824		11998
	10	ST6	8	10350				10350
	10	T1	40	904	211			2350
	10	T1	24	904	211			2350
	10	T2	42	904	295			2518
DIAPHRAGM	16	ST7	12	2425				2425
	10	T3	18	470	150			1360

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 10.0m GIRDER

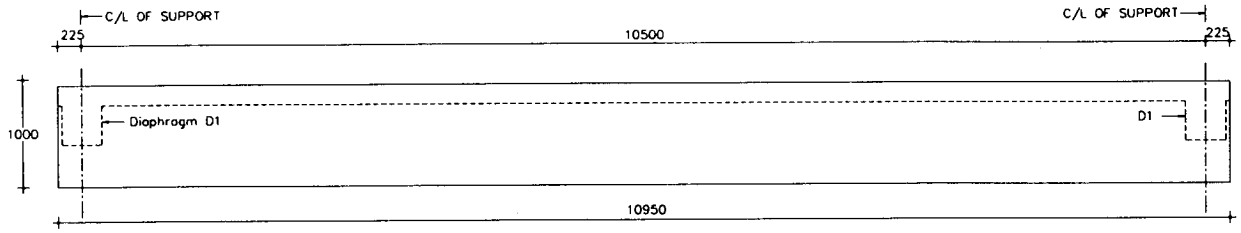
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0310001

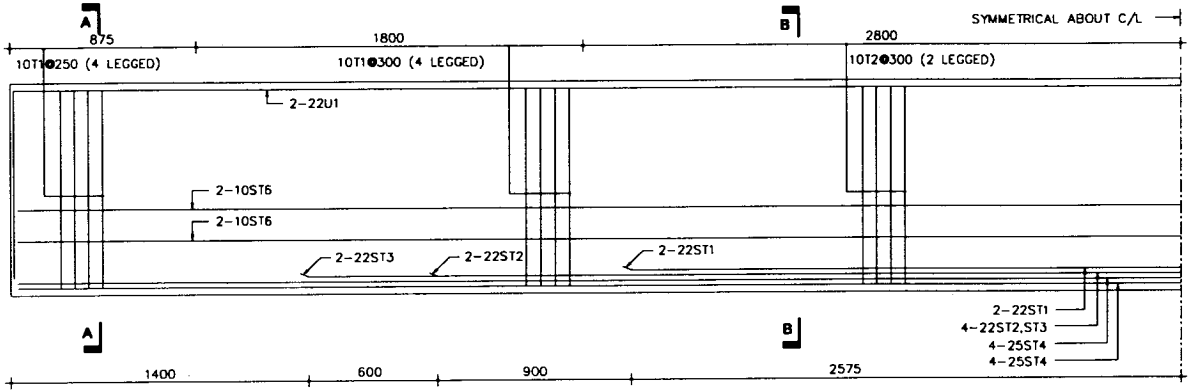
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GB-85

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



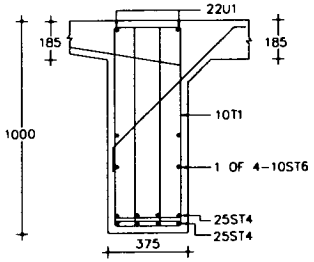
DETAILS OF GIRDER



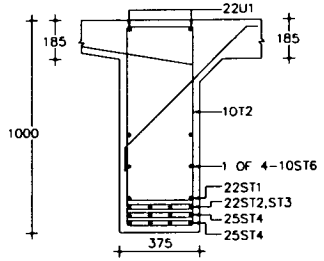
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10910				10910
	6	T2	576	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	184	329	201	311	1200	2113
	12	ST3	8	10870				10870
DECK	16	ST1	46	4180				4180
	12	ST1	46	2475				2475
	16	CR1	46	1572	148	825		4265
	12	ST2	47	10870				10870
	10	C1	92	120	796			1036
GIRDER	22	ST1	4	5150				5150
	22	ST2	4	6950				6950
	22	ST3	4	8150				8150
	25	ST4	16	10850				10850
	22	U1	4	824	10850	824		12498
	10	ST6	8	10850				10850
	10	T1	40	904	211			2350
	10	T1	40	904	211			2350
	10	T2	38	904	295			2518
DIAPHRAGM	16	ST7	12	2425				2425
	10	T3	18	470	150			1360

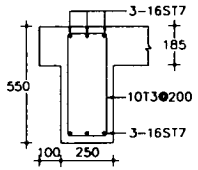
REINF. DETAILS OF GIRDER



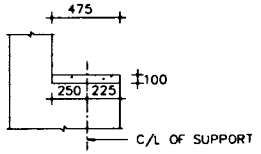
SECTION A-A



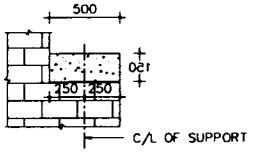
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

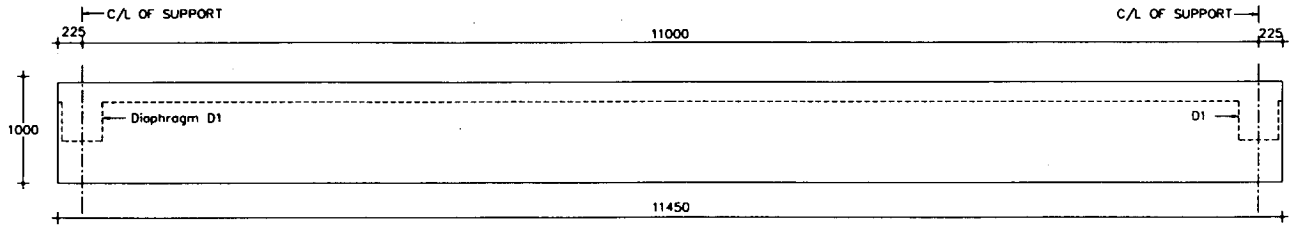
DETAILS OF 10.5m GIRDER

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0310501	

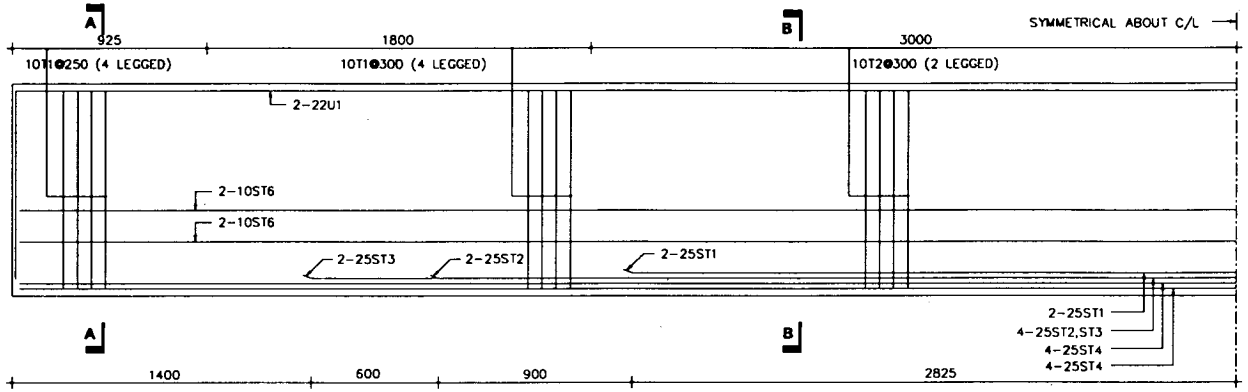
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GB-86

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



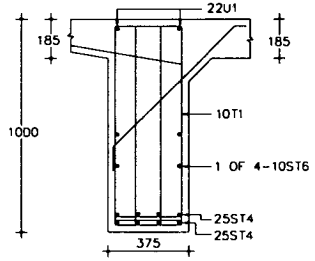
DETAILS OF GIRDER



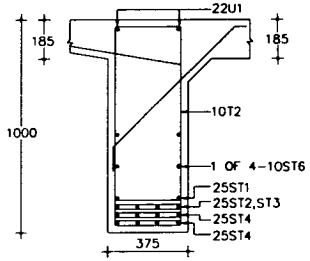
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11410				11410
	6	T2	608	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	192	329	201	311	1200	2113
	12	ST3	8	11370				11370
DECK	16	ST1	48	4180				4180
	12	ST1	48	2475				2475
	16	CR1	48	1572	148	825		4265
	12	ST2	47	11370				11370
	10	C1	96	120	796			1036
GIRDER	25	ST1	4	5650				5650
	25	ST2	4	7450				7450
	25	ST3	4	8650				8650
	25	ST4	16	11350				11350
	22	U1	4	824	11350	824		12998
	10	ST6	8	11350				11350
	10	T1	40	904	211			2350
	10	T1	40	904	211			2350
	10	T2	40	904	295			2518
DIAPHRAGM	16	ST7	12	2425				2425
	10	T3	18	470	150			1360

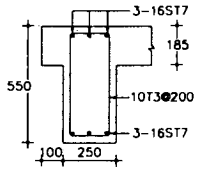
REINF. DETAILS OF GIRDER

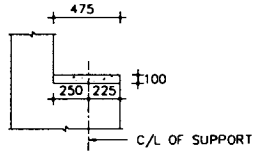


SECTION A-A

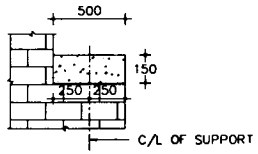


SECTION B-B





ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 11.0m GIRDER

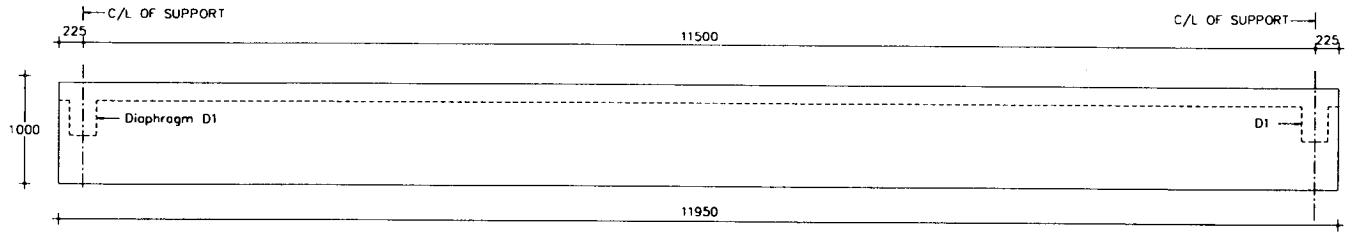
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0311001

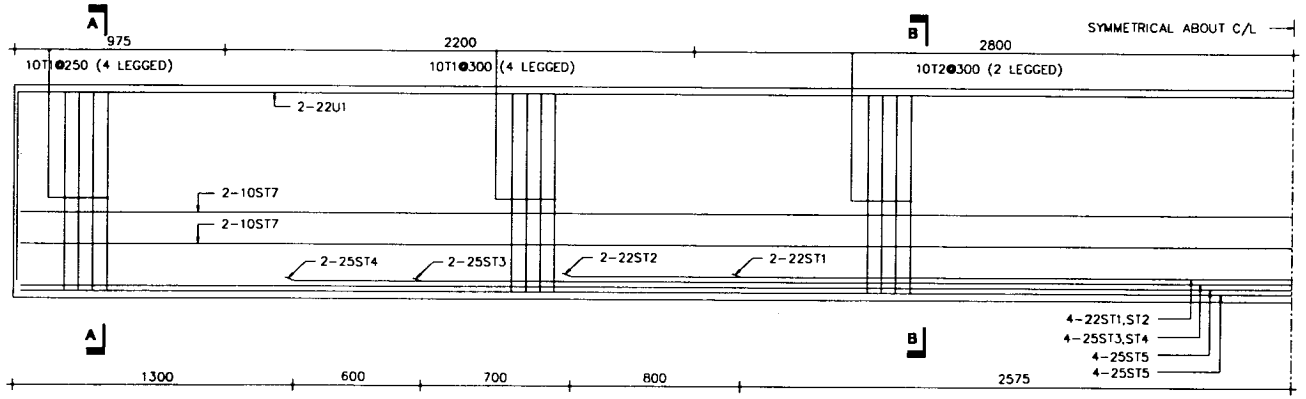
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



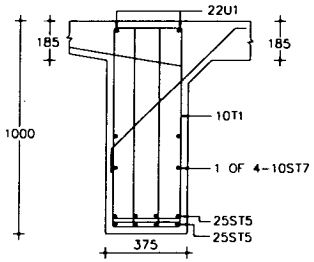
DETAILS OF GIRDER



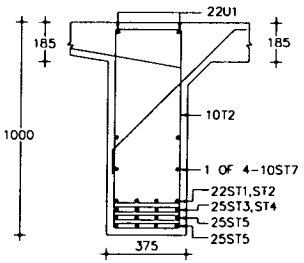
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11910				11910
	6	T2	640	85	135			512
POST	20	L1	72	971	120			1091
	6	T1	108	135	135			612
SIDEWALK	12	EL1	200	329	201	311	1200	2113
	12	ST3	8	11870				11870
DECK	16	ST1	50	4180				4180
	12	ST1	50	2475				2475
	16	CR1	50	1572	148	825		4265
	12	ST2	47	11870				11870
	10	C1	100	120	796			1036
GIRDER	22	ST1	4	5150				5150
	22	ST2	4	6750				6750
	25	ST3	4	8150				8150
	25	ST4	4	9350				9350
	25	ST5	16	11850				11850
	22	U1	4	824	11850	824		13498
	10	ST7	8	11850				11850
	10	T1	40	904	211			2350
	10	T1	56	904	211			2350
	10	T2	36	904	295			2518
DIAPHRAGM	16	ST8	12	2425				2425
	10	T3	18	470	150			1360

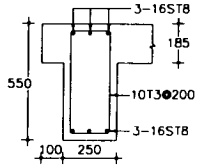
REINF. DETAILS OF GIRDER



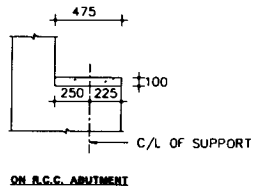
SECTION A-A



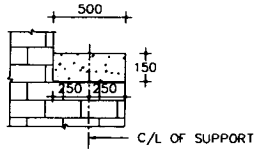
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm dawn graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 11.5m GIRDER

DATE : 09/04/1997

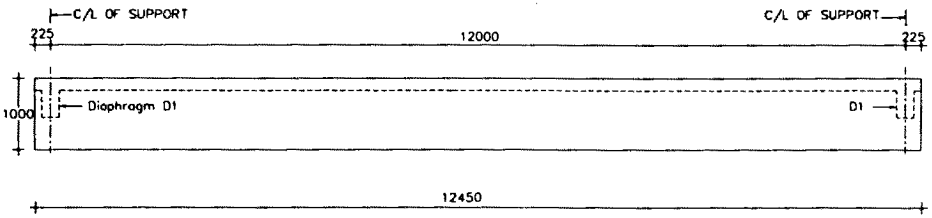
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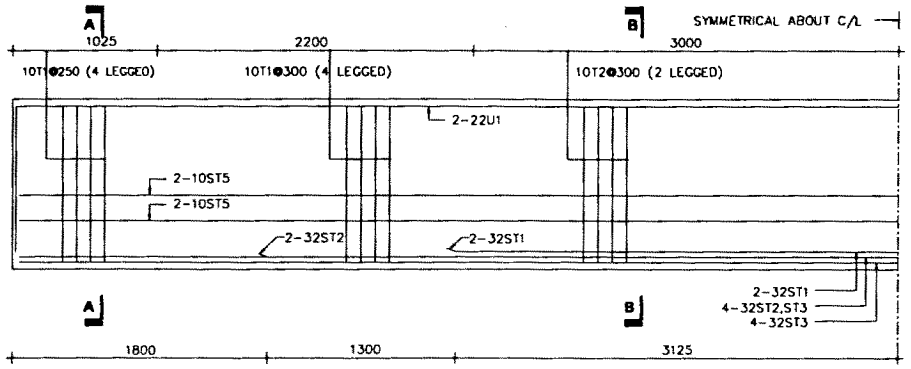
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



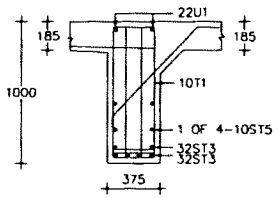
DETAILS OF GIRDER



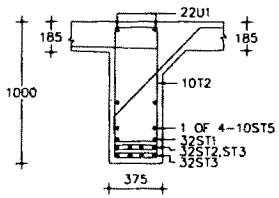
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

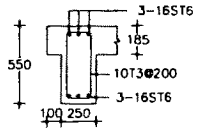
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12410				12410
	6	T2	684	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	208	329	201	311	1200	2113
	12	ST3	8	12370				12370
DECK	16	ST1	52	4180				4180
	12	ST1	52	2475				2475
	16	CR1	52	1572	148	825		4265
	12	ST2	47	12370				12370
	10	C1	106	120	796			1036
GIRDER	32	ST1	4	6250				6250
	32	ST2	4	8850				8850
	32	ST3	12	12350				12350
	22	U1	4	810	12350	810		13970
	10	ST5	8	12350				12350
	10	T1	40	904	214			2356
	10	T1	56	904	214			2356
	10	T2	40	904	295			2518
DIAPHRAGM	16	ST6	12	2425				2425
	10	T3	18	470	150			1360



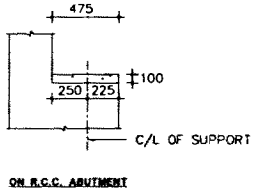
SECTION A-A



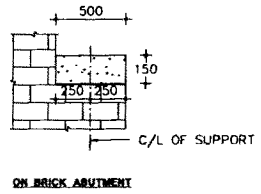
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.0m GIRDER

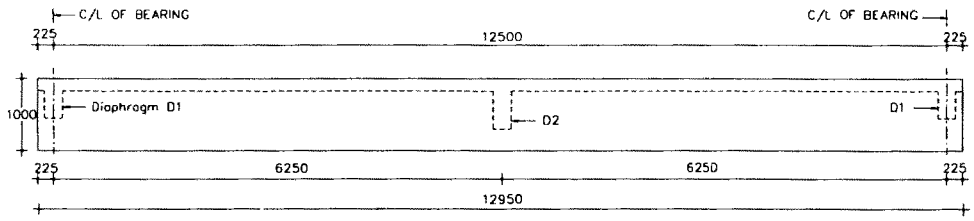
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0312001

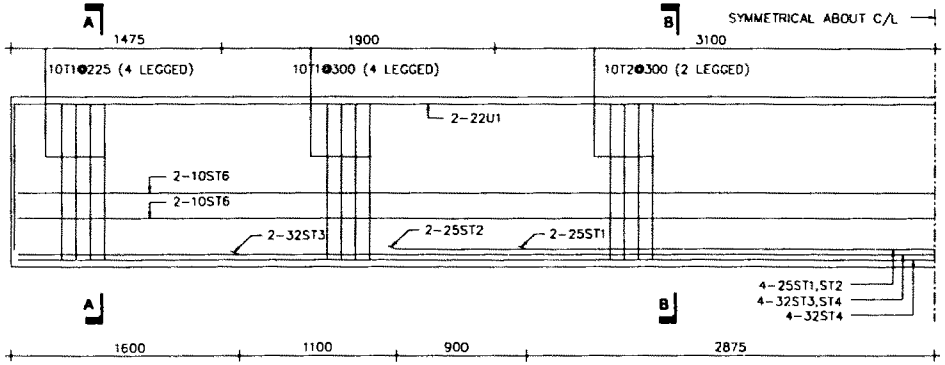
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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



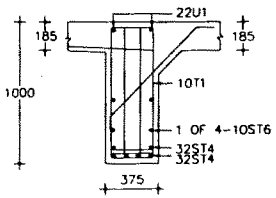
DETAILS OF GIRDER



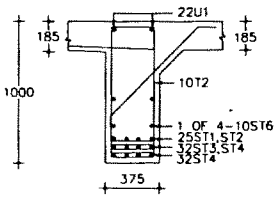
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

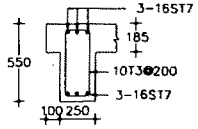
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12910				12910
	6	T2	584	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	218	329	201	311	1200	2113
	12	ST3	8	12870				12870
DECK	16	ST1	54	4180				4180
	12	ST1	54	2475				2475
	16	CR1	54	1572	148	825		4265
	12	ST2	47	12870				12870
	10	C1	110	120	796			1036
GIRDER	25	ST1	4	5750				5750
	25	ST2	4	7550				7550
	32	ST3	4	9750				9750
	32	ST4	12	12850				12850
	22	U1	4	810	2850	810		14470
	10	ST6	8	12850				12850
	10	T1	64	904	214			2356
	10	T1	40	904	214			2356
	10	T2	42	904	295			2518
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	6	620	150			1660



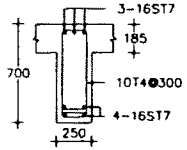
SECTION A-A



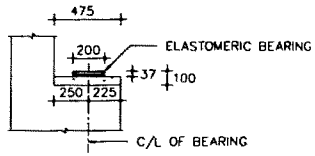
SECTION B-B



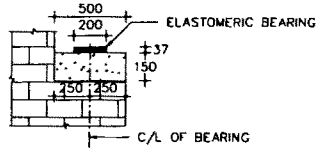
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

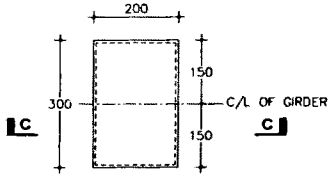


ON BRICK ABUTMENT

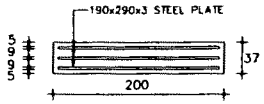
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.5m GIRDER & BEARING

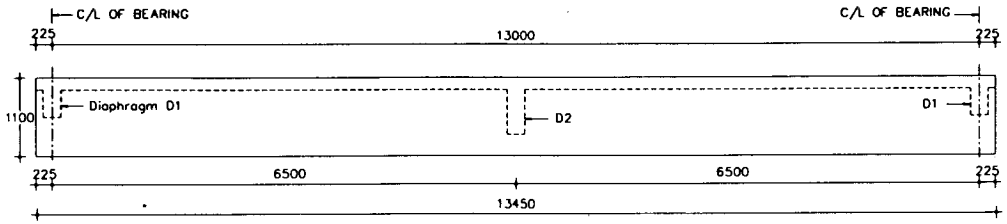
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0312501

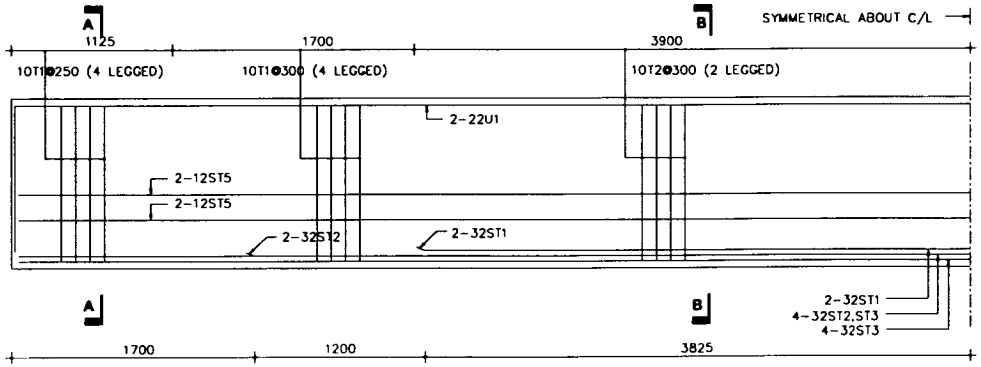
Web Copy

GB-90

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



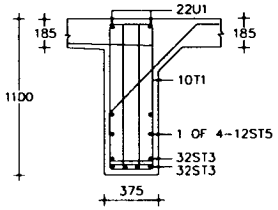
DETAILS OF GIRDER



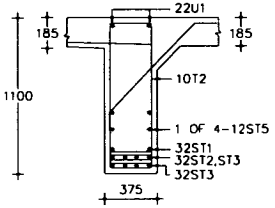
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

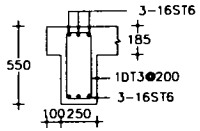
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13410				13410
	6	T2	720	85	135			512
POST	20	L1	80	971	120			1091
	6	T1	120	135	135			612
SIDEWALK	12	EL1	226	329	201	311	1200	2113
	12	ST3	8	13370				13370
DECK	16	ST1	56	4180				4180
	12	ST1	56	2475				2475
	16	CR1	56	1572	148	825		4265
	12	ST2	47	13370				13370
	10	C1	114	120	796			1036
GIRDER	32	ST1	4	7650				7650
	32	ST2	4	10050				10050
	32	ST3	12	13350				13350
	22	U1	4	910	13350	910		15170
	12	ST5	8	13350				13350
	10	T1	48	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	50	1004	295			2718
DIAPHRAGM	16	ST6	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



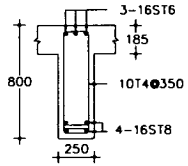
SECTION A-A



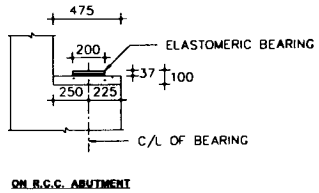
SECTION B-B



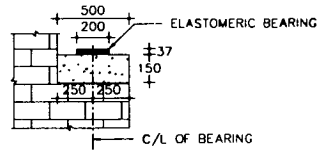
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

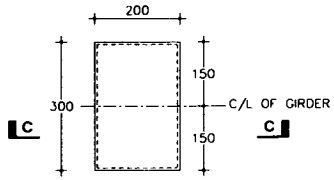


ON BRICK ABUTMENT

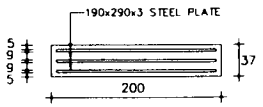
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in beorings shall be of Shore hardness of 60.
7. Steel laminates to be used in beoring shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

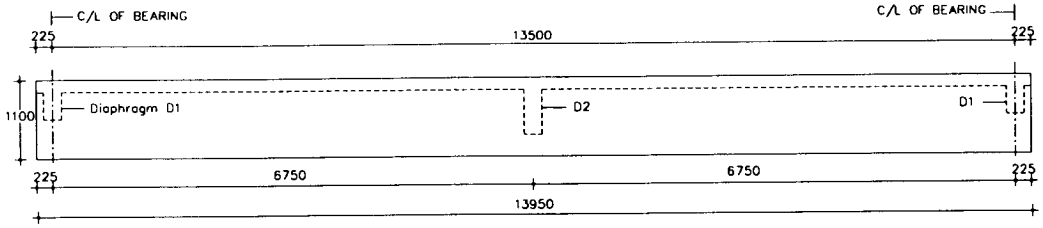
DETAILS OF 13.0m GIRDER & BEARING

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0313001	

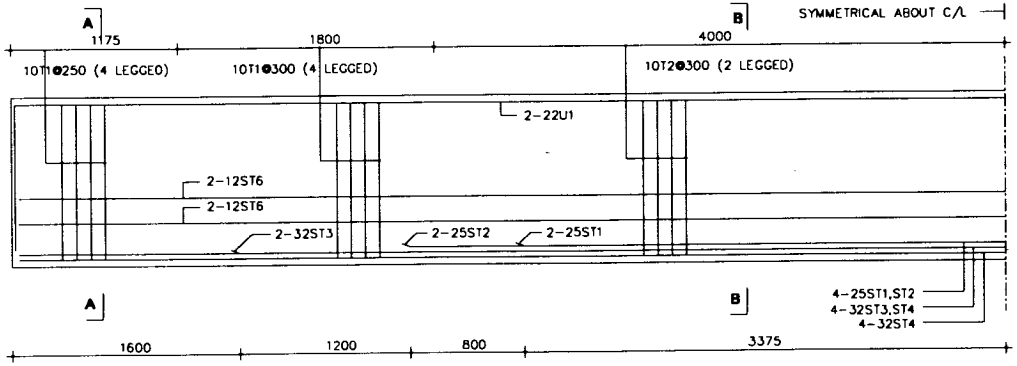
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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



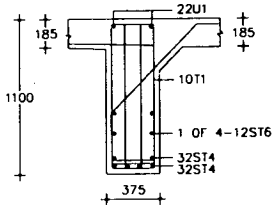
DETAILS OF GIRDER



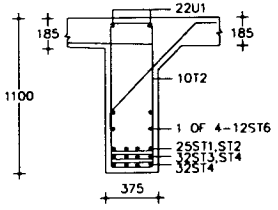
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

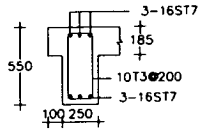
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13910				13910
	6	T2	760	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	234	329	201	311	1200	2113
	12	ST3	8	13870				13870
DECK	16	ST1	59	4180				4180
	12	ST1	59	2475				2475
	16	CR1	58	1572	148	825		4265
	12	ST2	47	13870				13870
	10	C1	118	120	796			1036
GIRDER	25	ST1	4	6750				6750
	25	ST2	4	8350				8350
	32	ST3	4	10750				10750
	32	ST4	12	13850				13850
	22	U1	4	910	13850	910		15670
	12	ST6	8	13850				13850
	10	T1	48	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	54	1004	295			2718
DIAPHRAGM	16	ST9	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



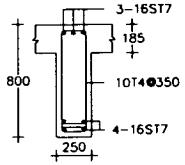
SECTION A-A



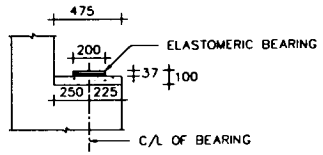
SECTION B-B



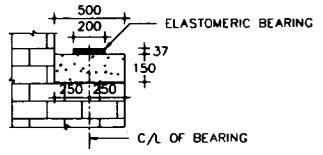
DETAILS OF D1



DETAILS OF D2

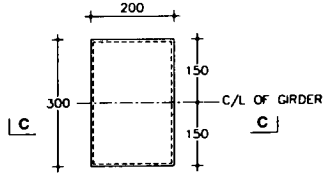


ON R.C.C. ABUTMENT

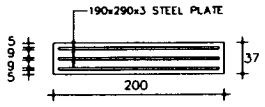


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

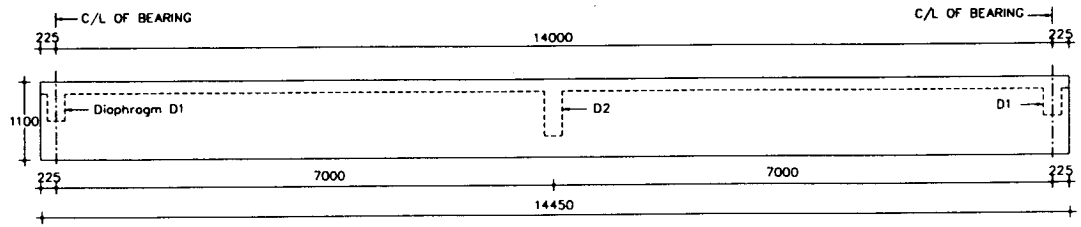
DETAILS OF 13.5m GIRDER & BEARING

DATE : 09/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0313501	

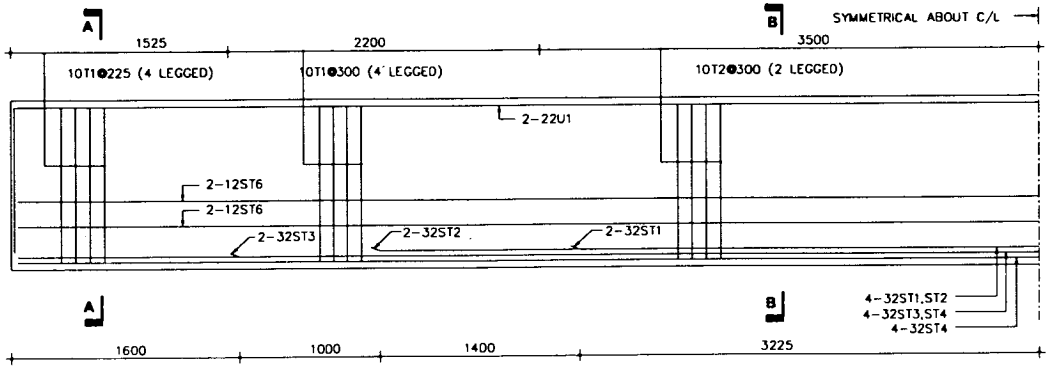
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



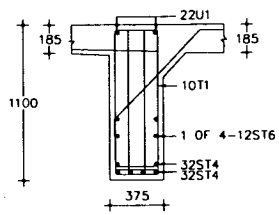
DETAILS OF GIRDER



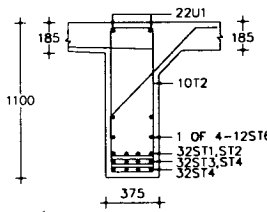
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

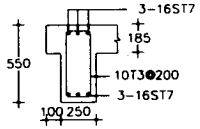
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14410				14410
	6	T2	800	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	242	329	201	311	1200	2113
	12	ST3	8	14370				14370
DECK	16	ST1	61	4180				4180
	12	ST1	61	2475				2475
	16	CR1	60	1572	148	825		4265
	12	ST2	47	14370				14370
	10	C1	122	120	796			1036
GIRDER	32	ST1	4	6450				6450
	32	ST2	4	9250				9250
	32	ST3	4	11250				11250
	32	ST4	12	14350				14350
	22	U1	4	384	14350	384		15118
	12	ST6	8	14350				14350
	10	T1	64	1004	214			2556
	10	T1	56	1004	214			2556
	10	T2	44	1004	295			2718
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



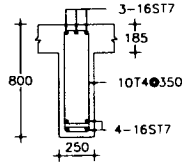
SECTION A-A



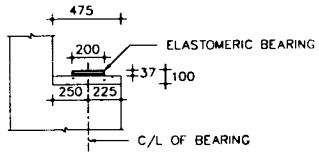
SECTION B-B



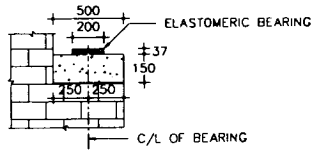
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

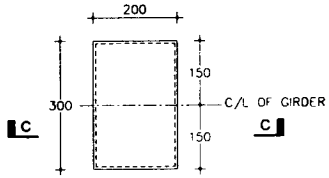


ON BRICK ABUTMENT

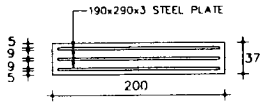
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 14.0m GIRDER & BEARING

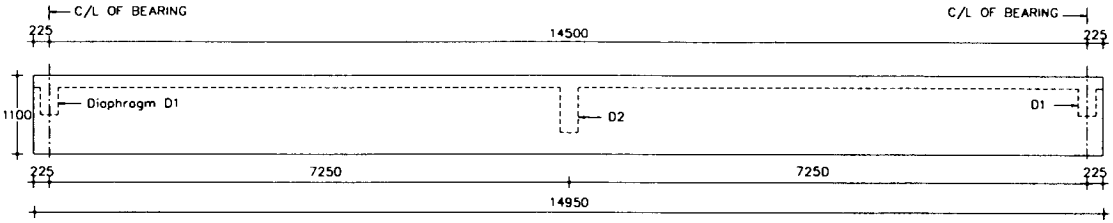
DATE : 09/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0314001

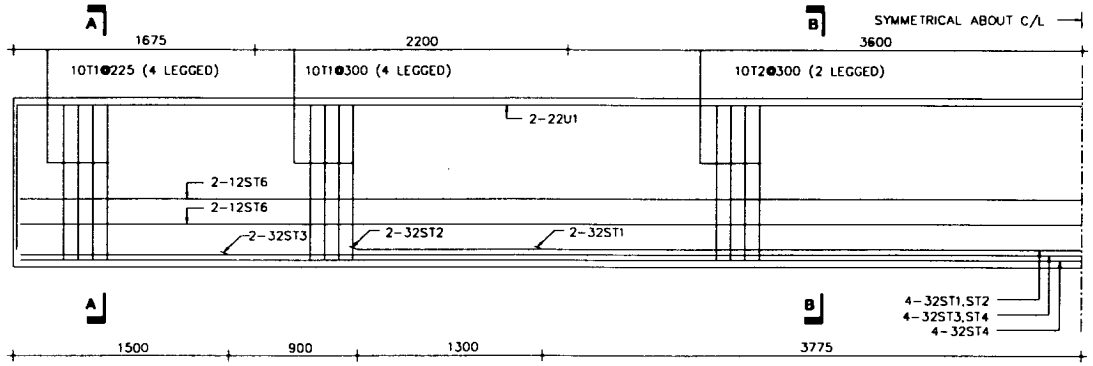
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



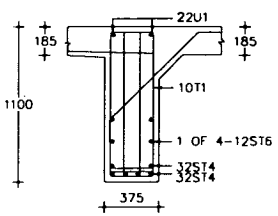
DETAILS OF GIRDER



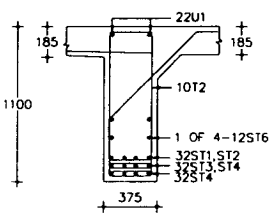
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

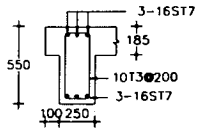
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14910				14910
	6	T2	800	85	135			512
POST	20	L1	88	971	120			1091
	6	T1	132	135	135			612
SIDEWALK	12	EL1	250	329	201	311	1200	2113
	12	ST3	8	14870				14870
DECK	16	ST1	63	4180				4180
	12	ST1	63	2475				2475
	16	CR1	62	1572	148	825		4265
	12	ST2	47	14870				14870
	10	C1	126	120	796			1036
GIRDER	32	ST1	4	7550				7550
	32	ST2	4	10150				10150
	32	ST3	4	11950				11950
	32	ST4	12	14850				14850
	22	U1	4	910	14850	910		16670
	12	ST6	8	14850				14850
	10	T1	72	1004	214			2556
	10	T1	48	1004	214			2556
	10	T2	50	1004	295			2718
DIAPHRAGM	16	ST7	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860



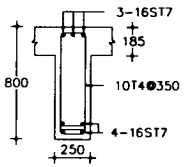
SECTION A-A



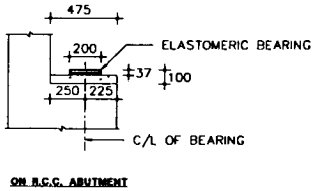
SECTION B-B



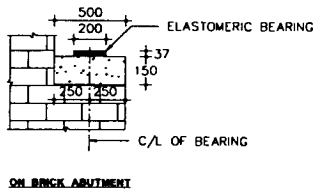
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

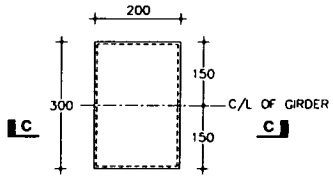


ON BRICK ABUTMENT

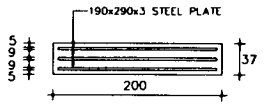
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

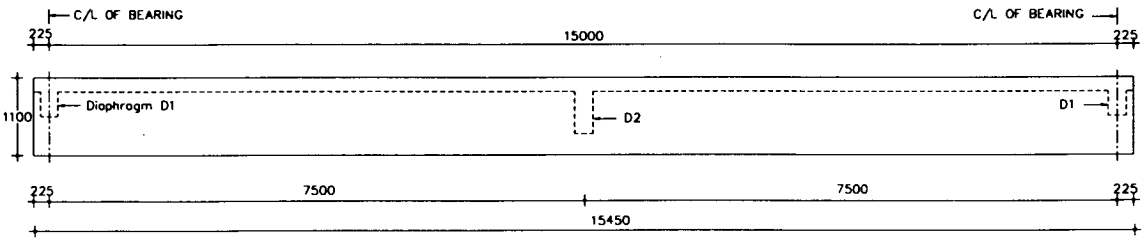
DETAILS OF 14.5m GIRDER & BEARING

DATE : 09/04/1997 | ISSUED BY :

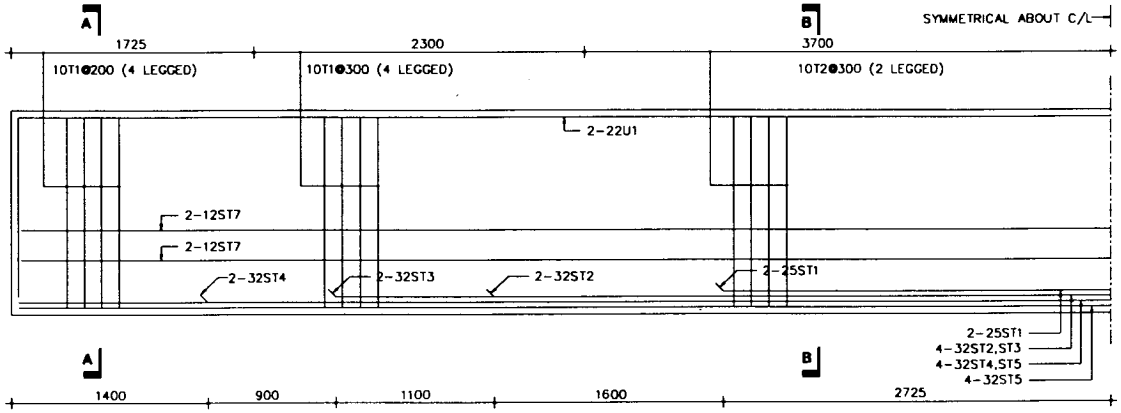
CAD FILE REF : BRDG\GD314501

Web Copy

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



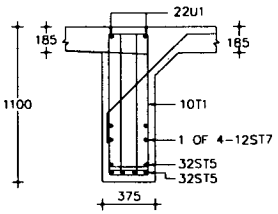
DETAILS OF GIRDER



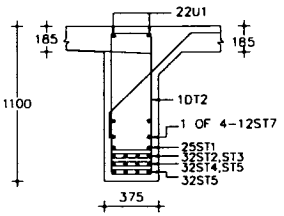
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15410				15410
	6	T2	836	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	258	329	201	311	1200	2113
	12	ST3	8	15370				15370
DECK	16	ST1	65	4180				4180
	12	ST1	65	2475				2475
	16	CR1	64	1572	148	825		4265
	12	ST2	47	15370				15370
	10	C1	130	120	796			1036
GIRDER	25	ST1	4	5450				5450
	32	ST2	4	8650				8650
	32	ST3	4	10850				10850
	32	ST4	4	12650				12650
	32	ST5	12	15350				15350
	22	U1	4	910	15350	910		17170
	12	ST7	8	15350				15350
	10	T1	80	1004	214			2556
	10	T1	56	1004	214			2556
	10	T2	48	1004	295			2718
DIAPHRAGM	16	ST8	19	2425				2425
	10	T3	18	470	150			1360
	10	T4	5	720	150			1860

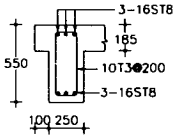
REINF. DETAILS OF GIRDER



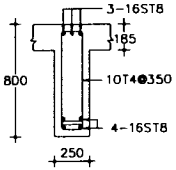
SECTION A-A



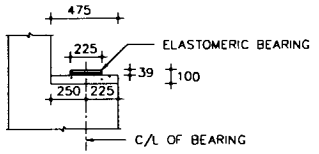
SECTION B-B



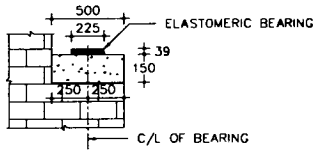
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

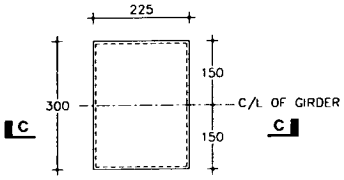


ON BRICK ABUTMENT

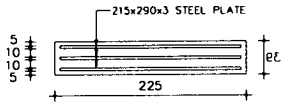
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.0m GIRDER & BEARING

DATE : 10/04/1997

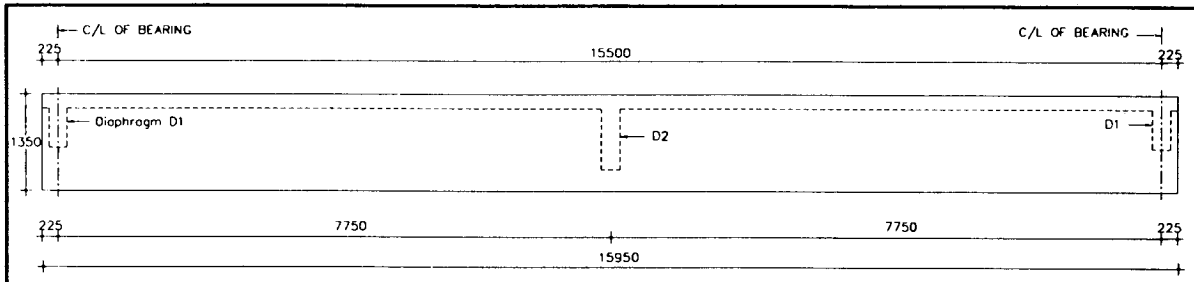
ISSUED BY :

CAD FILE REF : BRDG\G0315001

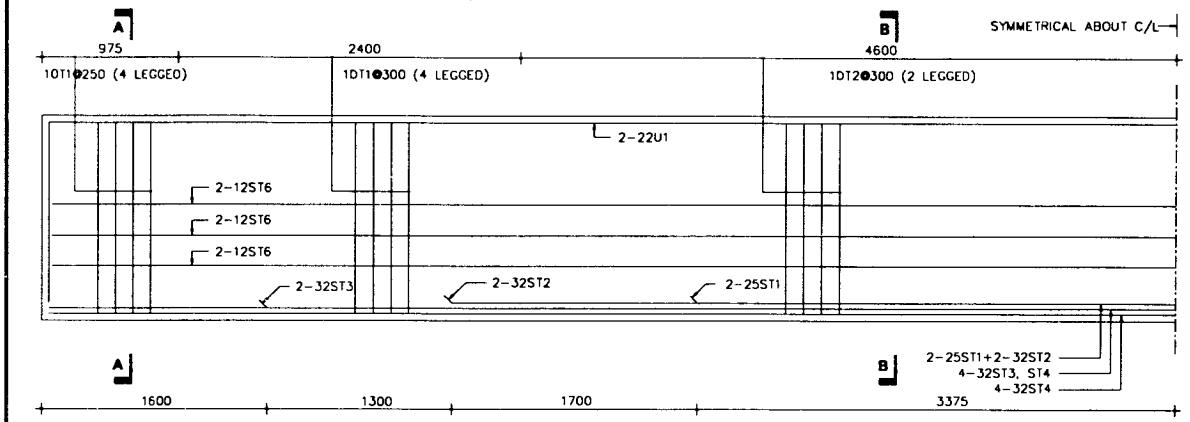
Web Copy

G8-95

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



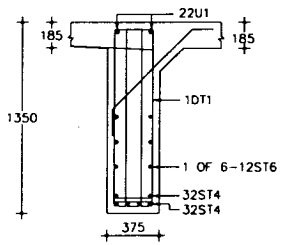
DETAILS OF GIRDER



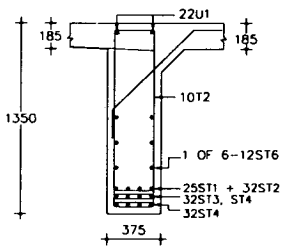
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15910				15910
	6	T2	880	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	268	329	201	311	1200	2113
	12	ST3	8	15870				15870
DECK	16	ST1	67	4180				4180
	12	ST1	67	2475				2475
	16	CR1	66	1572	148	825		4265
	12	ST2	47	15870				15870
	10	C1	134	120	796			1036
GIRDER	25	ST1	4	6750				6750
	32	ST2	4	10150				10150
	32	ST3	4	12750				12750
	32	ST4	12	15850				15850
	22	U1	4	1160	15850	1160		18170
	12	ST6	12	15850				15850
	10	T1	40	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	62	1254	295			3218
DIAPHRAGM	16	ST7	22	2425				2425
	12	ST8	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

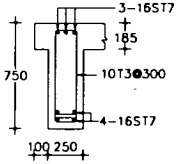
REINF. DETAILS OF GIRDER



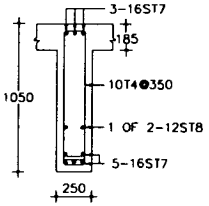
SECTION A-A



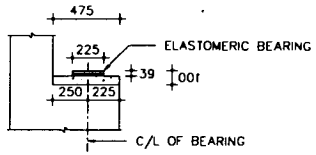
SECTION B-B



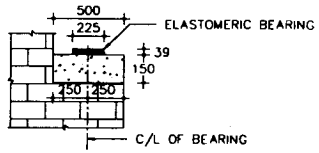
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

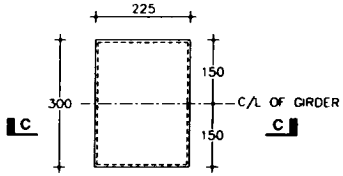


ON BRICK ABUTMENT

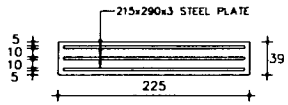
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength ot 28 doy's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.5m GIRDER & BEARING

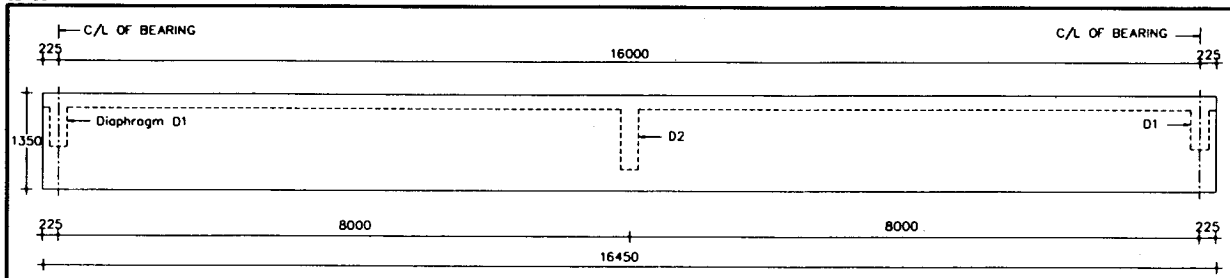
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0315501

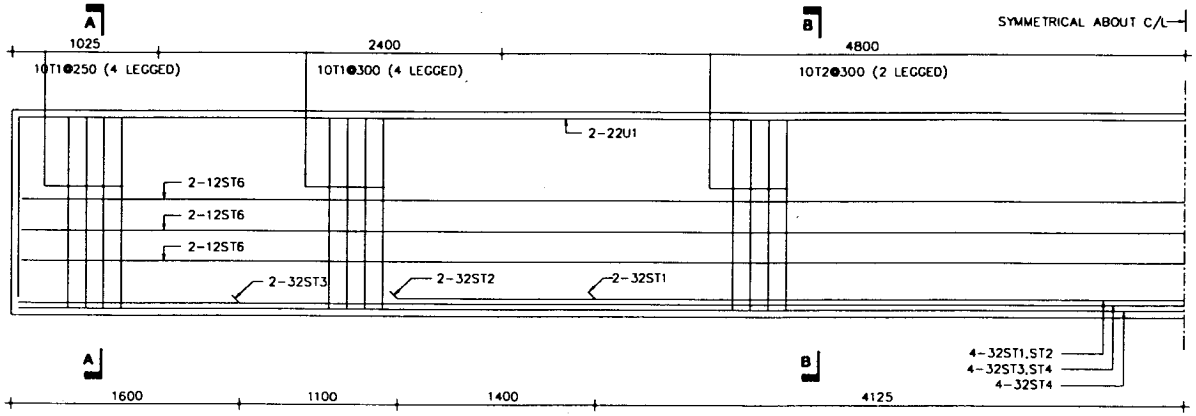
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GB-96

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



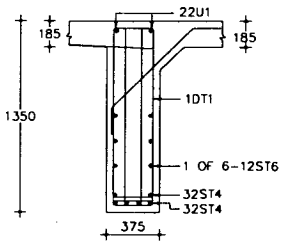
DETAILS OF GIRDER



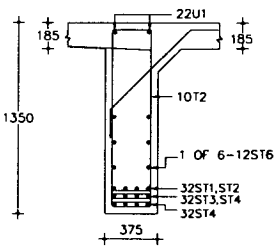
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16410				16410
	6	T2	880	85	135			512
POST	20	L1	96	971	120			1091
	6	T1	144	135	135			612
SIDEWALK	12	EL1	276	329	201	311	1200	2113
	12	ST3	8	16370				16370
DECK	16	ST1	69	4180				4180
	12	ST1	69	2475				2475
	16	CR1	68	1572	148	825		4265
	12	ST2	47	16370				16370
	10	C1	138	120	796			1036
GIRDER	32	ST1	4	8250				8250
	32	ST2	4	11050				11050
	32	ST3	4	13250				13250
	32	ST4	12	16350				16350
	22	U1	4	1160	16350	1160		18670
	12	ST6	12	16350				16350
	10	T1	40	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	66	1254	295			3218
DIAPHRAGM	16	ST7	22	2425				2425
	12	ST8	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

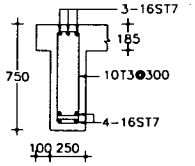
REINF. DETAILS OF GIRDER



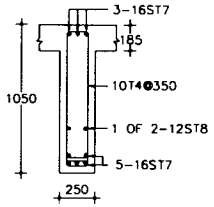
SECTION A-A



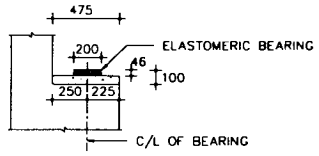
SECTION B-B



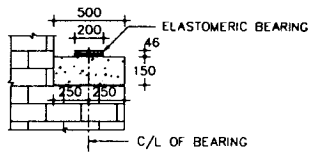
DETAILS OF D1



DETAILS OF D2

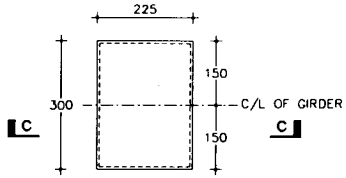


ON R.C.C. ABUTMENT

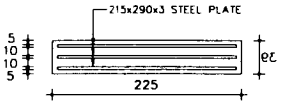


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

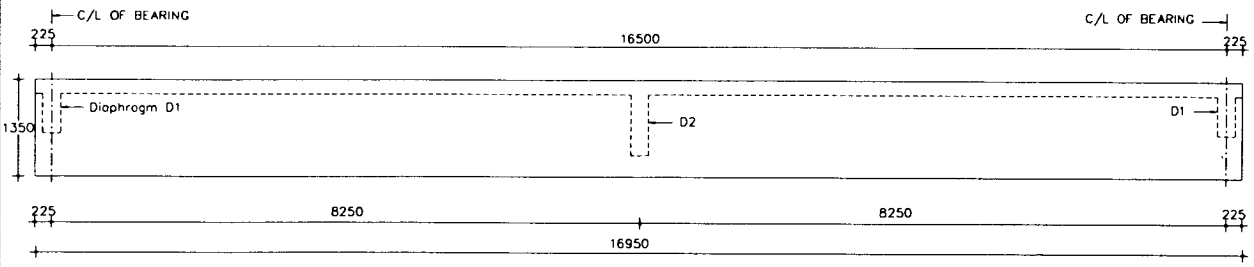
DETAILS OF 16.0m GIRDER & BEARING

DATE : 10/04/1997
CAD FILE REF : BRDG\G0316001
ISSUED BY :

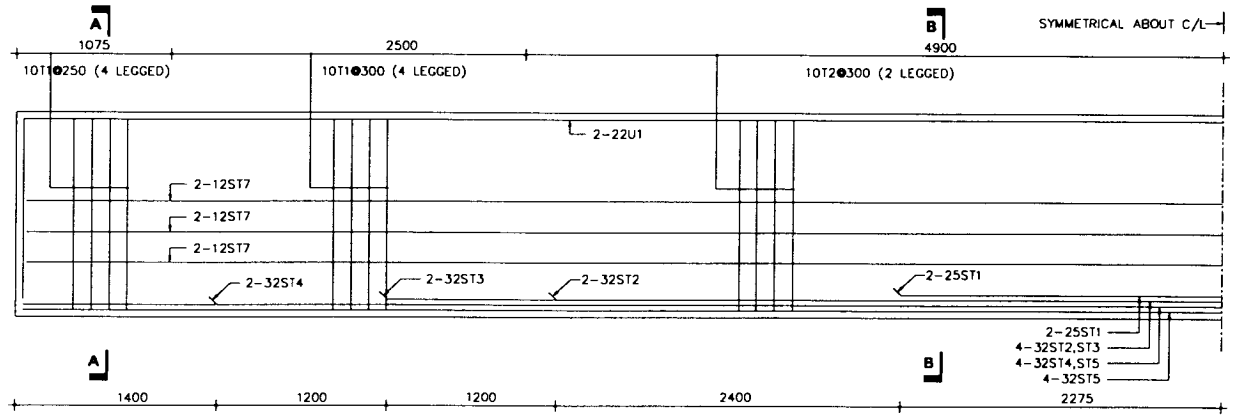
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GB-97

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



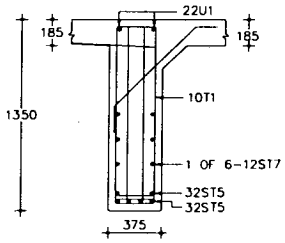
DETAILS OF GIRDER



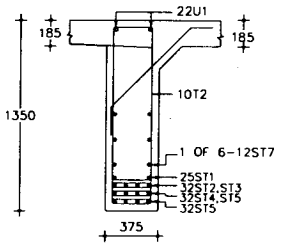
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16910				16910
	6	T2	912	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	284	329	201	311	1200	2113
	12	ST3	8	16870				16870
DECK	16	ST1	71	4180				4180
	12	ST1	71	2475				2475
	16	CR1	71	1572	148	825		4265
	12	ST2	47	16870				16870
	10	C1	142	120	796			1036
GIRDER	25	ST1	4	4550				4550
	32	ST2	4	9350				9350
	32	ST3	4	11750				11750
	32	ST4	4	14150				14150
	32	ST5	12	16850				16850
	22	U1	4	1160	16850	1160		19170
	12	ST7	12	16850				16850
	10	T1	48	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	66	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

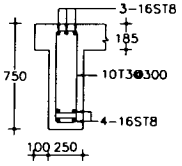
REINF. DETAILS OF GIRDER



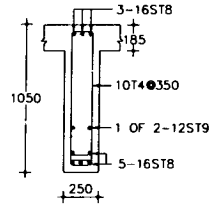
SECTION A-A



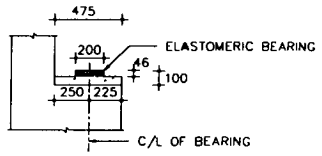
SECTION B-B



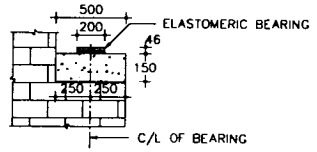
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

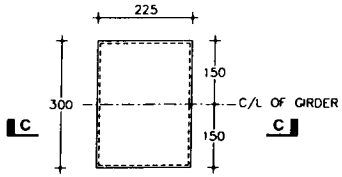


ON BRICK ABUTMENT

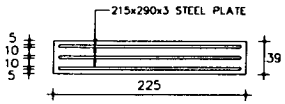
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\SD000001



PLAN OF BEARING



SEC. C-C

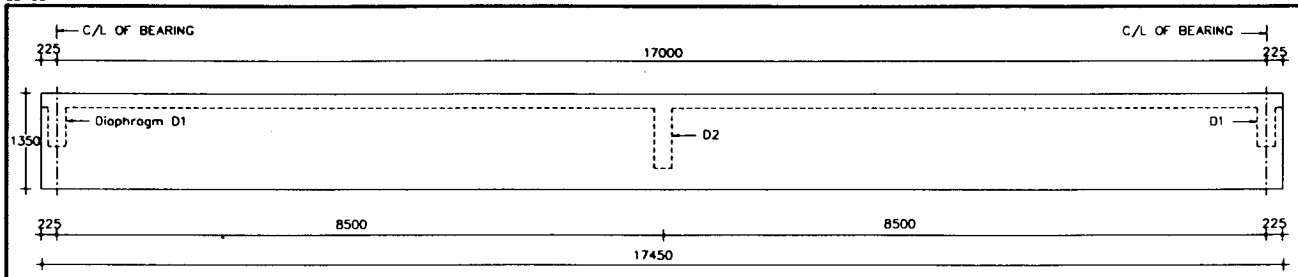
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.5m GIRDER & BEARING

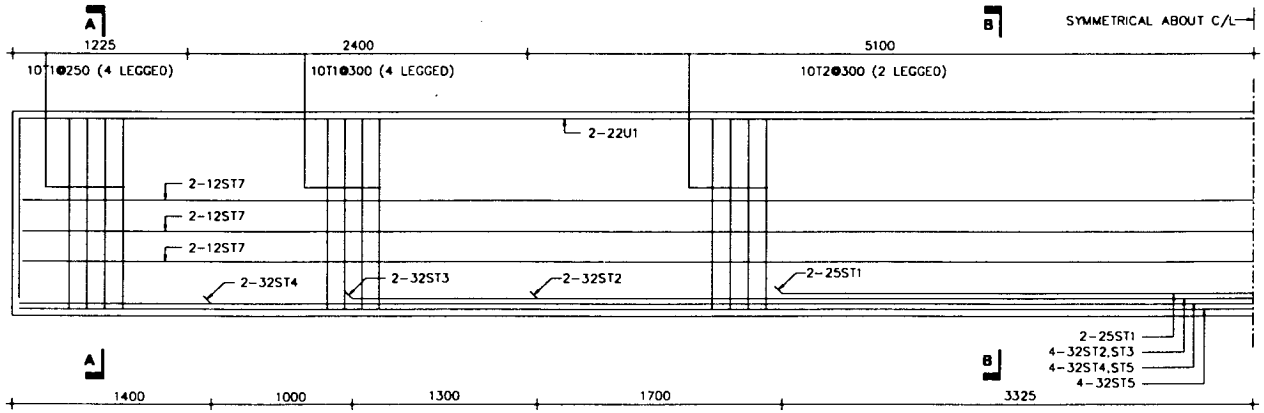
DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0316501	

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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



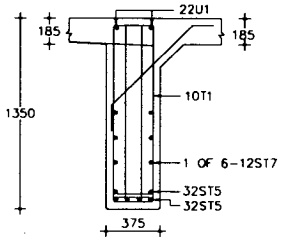
DETAILS OF GIRDER



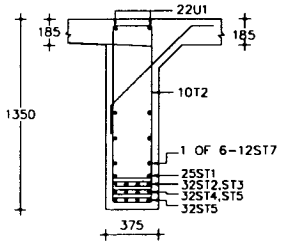
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17410				17410
	6	T2	960	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	292	329	201	311	1200	2113
	12	ST3	8	17370				17370
DECK	16	ST1	73	4180				4180
	12	ST1	73	2475				2475
	16	CR1	73	1572	148	825		4265
	12	ST2	47	17370				17370
	10	C1	146	120	796			1036
GIRDER	25	ST1	4	6650				6650
	32	ST2	4	10050				10050
	32	ST3	4	12650				12650
	32	ST4	4	14650				14650
	32	ST5	12	17350				17350
	22	U1	4	1160	17350	1160		19670
	12	ST7	12	17350				17350
	10	T1	48	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	70	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

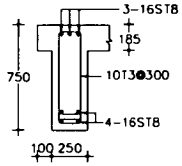
REINF. DETAILS OF GIRDER



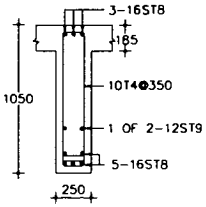
SECTION A-A



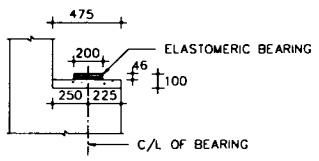
SECTION B-B



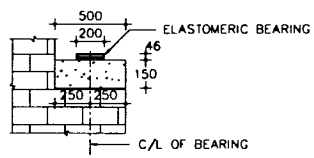
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

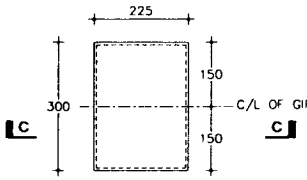


ON BRICK ABUTMENT

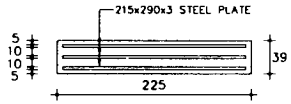
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

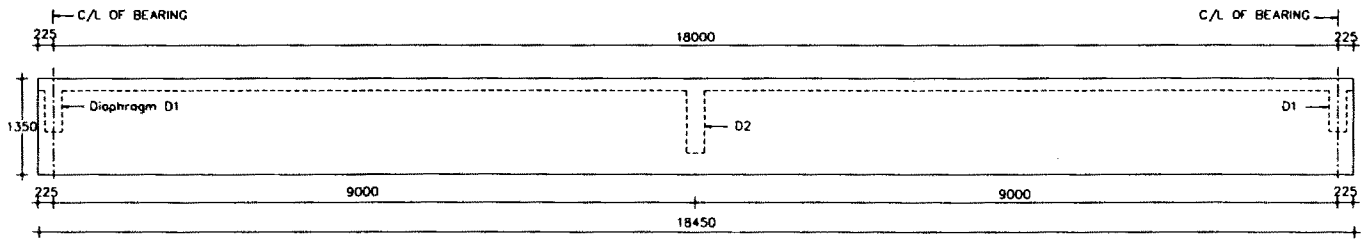
DETAILS OF 17.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G0317001	

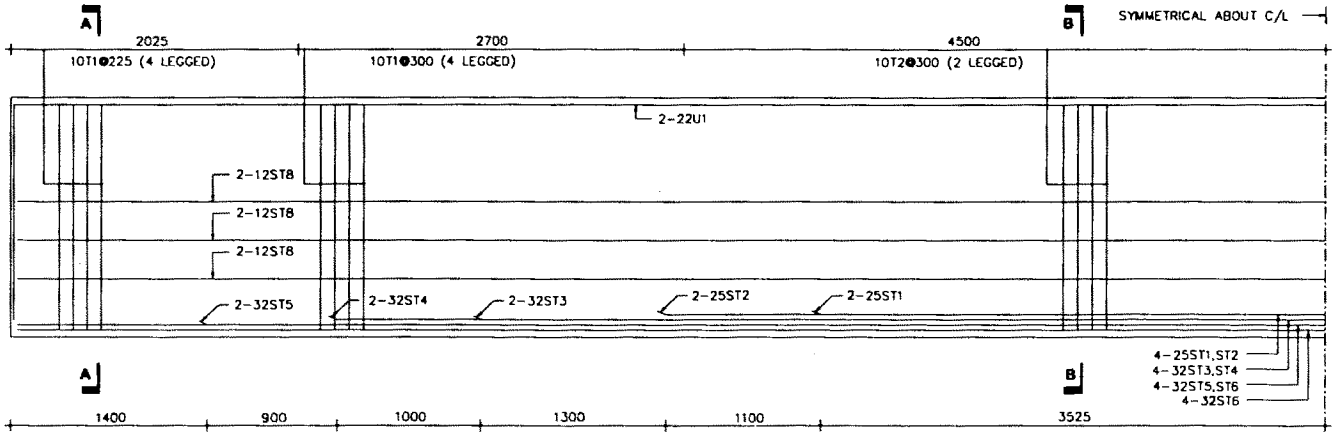
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



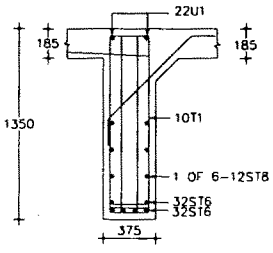
DETAILS OF GIRDER



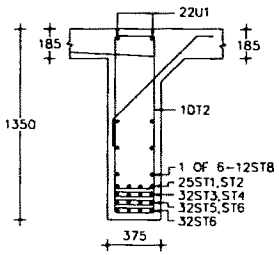
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18410				18410
	6	T2	988	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	168	135	135			612
SIDEWALK	12	EL1	308	329	201	311	1200	2113
	12	ST3	8	18370				18370
DECK	16	ST1	77	4180				4180
	12	ST1	77	2475				2475
	16	CR1	77	1572	148	825		4265
	12	ST2	47	18370				18370
	10	C1	156	120	796			1036
GIRDER	25	ST1	4	7050				7050
	25	ST2	4	9250				9250
	32	ST3	4	11850				11850
	32	ST4	4	13850				13850
	32	ST5	4	15650				15650
	32	ST6	12	18350				18350
	22	U1	4	1160	18350	1160		20670
	12	ST8	12	18350				18350
	10	T1	80	1254	214			3056
	10	T1	64	1254	214			3056
	10	T2	62	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

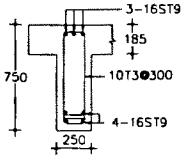
REINF. DETAILS OF GIRDER



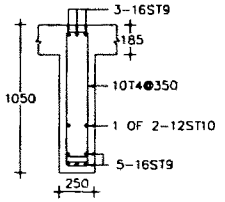
SECTION A-A



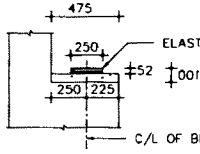
SECTION B-B



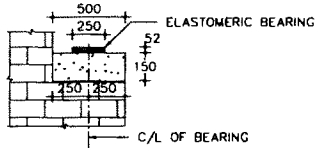
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

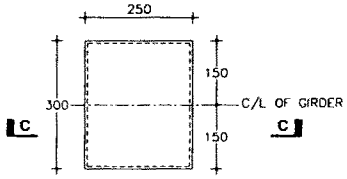


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

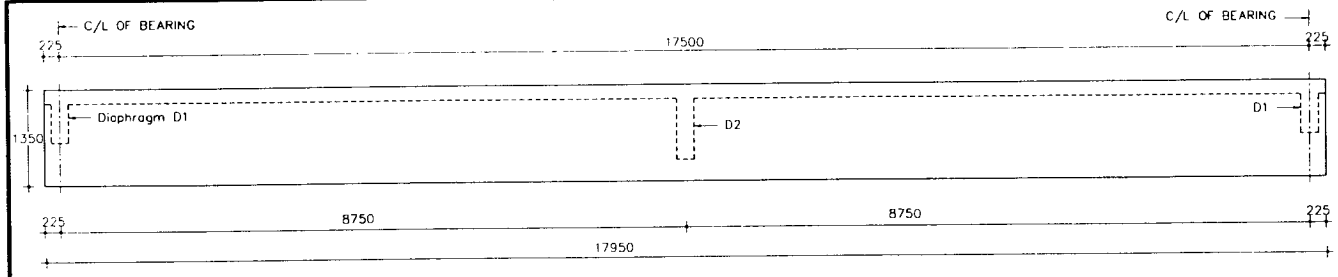
DETAILS OF 18.0m GIRDER & BEARING

DATE : 10/04/1997 | ISSUED BY :

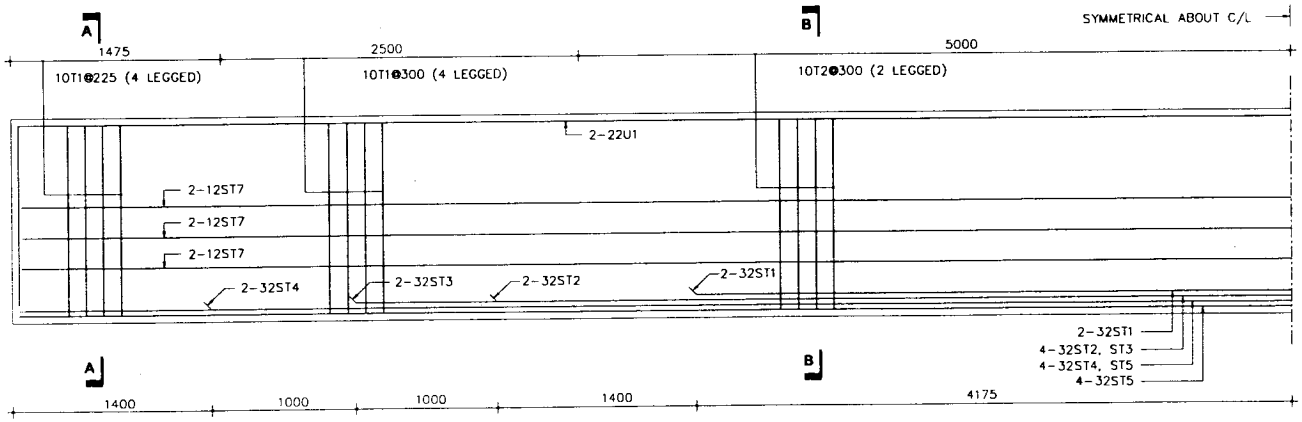
CAD FILE REF : BRDG\G0318001

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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



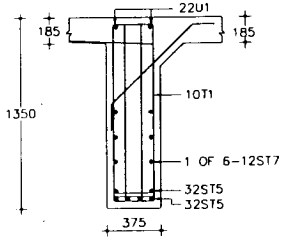
DETAILS OF GIRDER



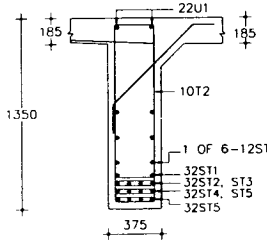
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17910				17910
	6	T2	960	85	135			512
POST	20	L1	104	971	120			1091
	6	T1	156	135	135			612
SIDEWALK	12	EL1	300	329	201	311	1200	2113
	12	ST3	8	17870				17870
DECK	16	ST1	75	4180				4180
	12	ST1	75	2475				2475
	16	CR1	75	1572	148	825		4265
	12	ST2	47	17870				17870
	10	C1	150	120	796			1036
GIRDER	32	ST1	4	8350				8350
	32	ST2	4	11150				11150
	32	ST3	4	13150				13150
	32	ST4	4	15150				15150
	32	ST5	12	17850				17850
	22	U1	4	1160	17850	1160		20170
	12	ST7	12	17850				17850
	10	T1	64	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	68	1254	295			3218
DIAPHRAGM	16	ST8	22	2425				2425
	12	ST9	2	2425				2425
	10	T3	12	670	150			1760
	10	T4	5	970	150			2360

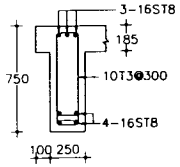
REINF. DETAILS OF GIRDER



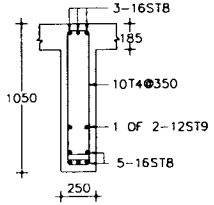
SECTION A-A



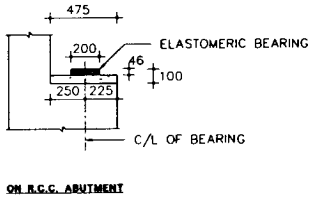
SECTION B-B



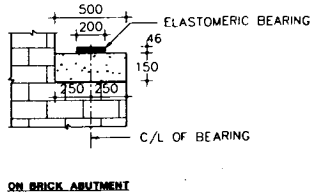
DETAILS OF D1



DETAILS OF D2

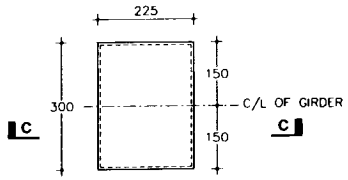


ON R.C.C. ABUTMENT

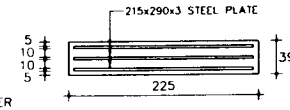


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 17.5m GIRDER & BEARING

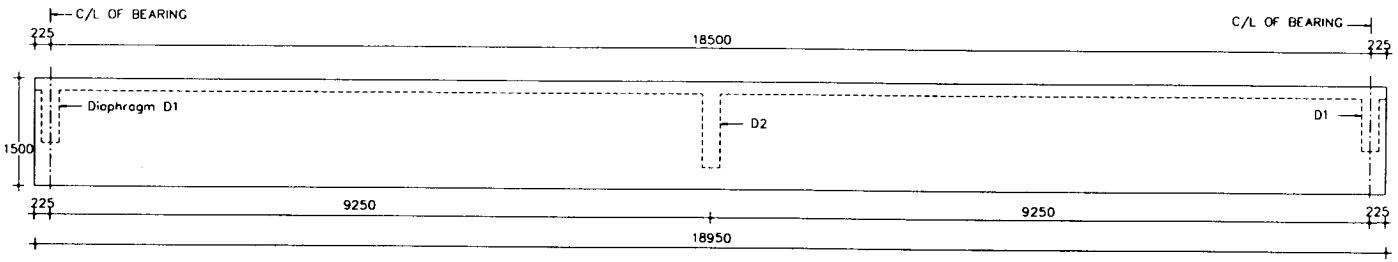
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0317501

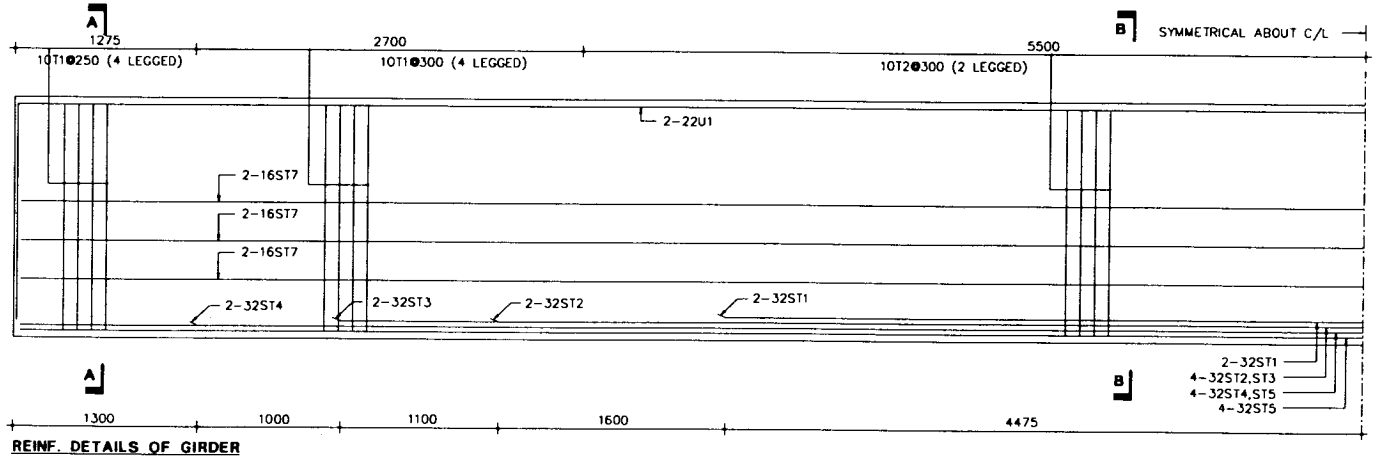
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GB-101

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – NO



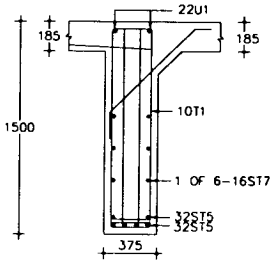
DETAILS OF GIRDER



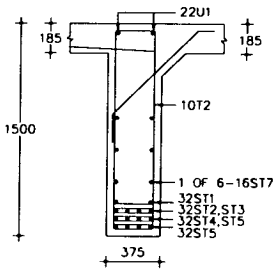
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18910				18910
	6	T2	1040	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	168	135	135			612
SIDEWALK	12	EL1	318	329	201	311	1200	2113
	12	ST3	8	18870				18870
DECK	16	ST1	79	4180				4180
	12	ST1	79	2475				2475
	16	CR1	79	1572	148	825		4265
	12	ST2	47	18870				18870
	10	C1	160	120	796			1036
GIRDER	32	ST1	4	8950				8950
	32	ST2	4	12150				12150
	32	ST3	4	14350				14350
	32	ST4	4	16350				16350
	32	ST5	12	18850				18850
	22	U1	4	1310	18850	1310		21470
	16	ST7	12	18850				18850
	10	T1	48	1404	214			3356
	10	T1	64	1404	214			3356
	10	T2	76	1404	295			3518
DIAPHRAGM	16	ST8	23	2425				2425
	12	ST9	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

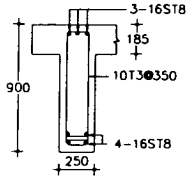
REINF. DETAILS OF GIRDER



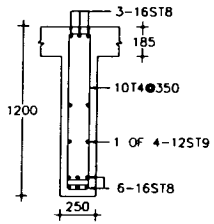
SECTION A-A



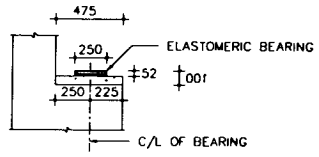
SECTION B-B



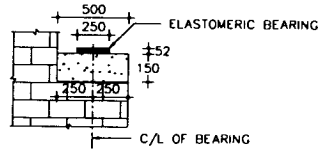
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

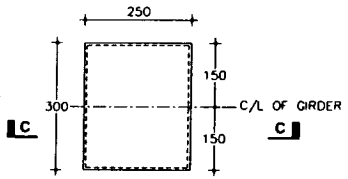


ON BRICK ABUTMENT

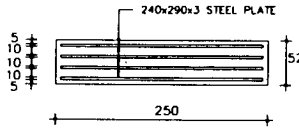
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 18.5m GIRDER & BEARING

DATE : 10/04/1997

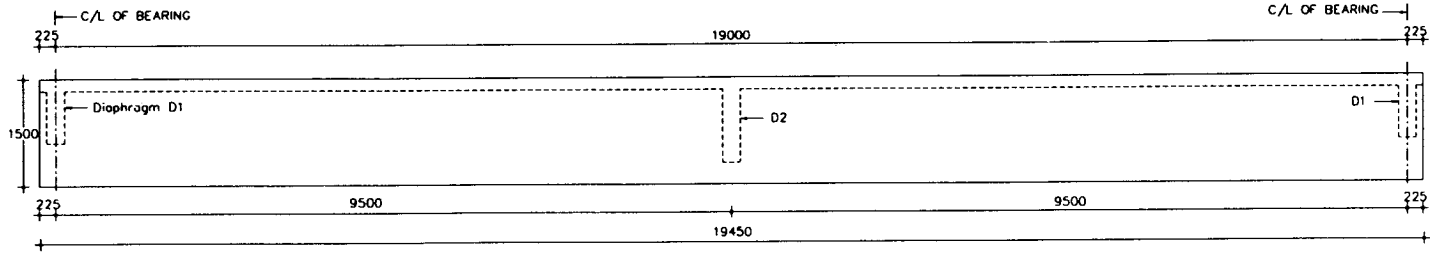
ISSUED BY :

CAD FILE REF : BRDG\G0318501

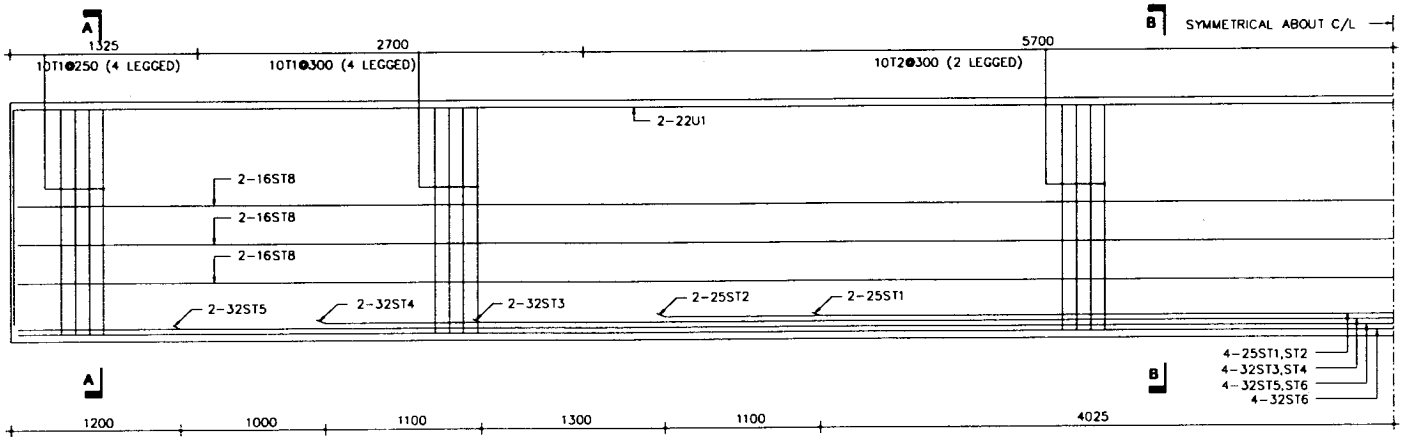
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



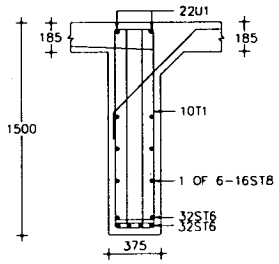
DETAILS OF GIRDER



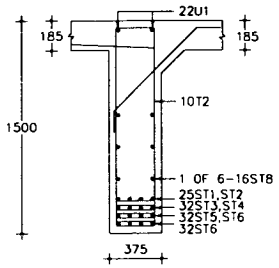
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19410				19410
	6	T2	1040	85	135			512
POST	20	L1	112	971	120			1091
	6	T1	168	135	135			612
SIDEWALK	12	EL1	326	329	201	311	1200	2113
	12	ST3	8	19370				19370
DECK	16	ST1	81	4180				4180
	12	ST1	81	2475				2475
	16	CR1	81	1572	148	825		4265
	12	ST2	47	19370				19370
	10	C1	164	120	796			1036
GIRDER	25	ST1	4	8050				8050
	25	ST2	4	10250				10250
	32	ST3	4	12850				12850
	32	ST4	4	15050				15050
	32	ST5	4	17050				17050
	32	ST6	12	19350				19350
	22	U1	4	1310	19350	1310		21970
	16	ST8	12	19350				19350
	10	T1	56	1404	214			3356
	10	T1	64	1404	214			3356
	10	T2	76	1404	295			3518
DIAPHRAGM	16	ST9	23	2425				2425
	12	ST10	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

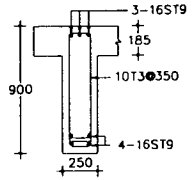
REINF. DETAILS OF GIRDER



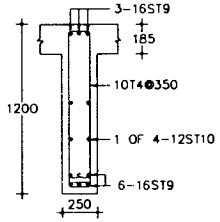
SECTION A-A



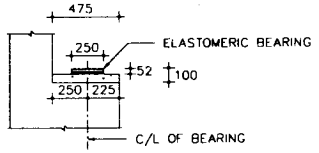
SECTION B-B



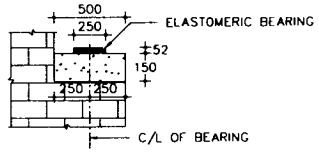
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

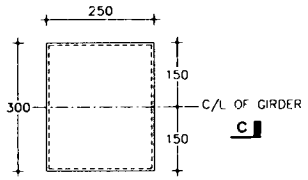


ON BRICK ABUTMENT

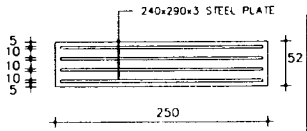
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cod File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.0m GIRDER & BEARING

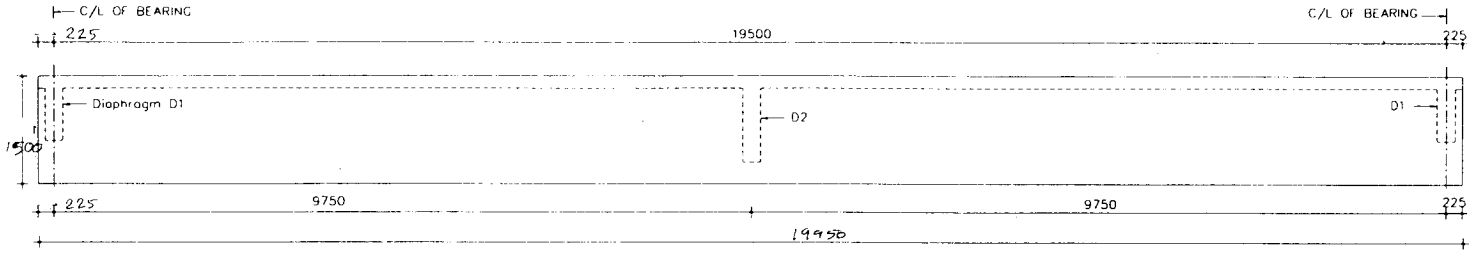
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G0319001

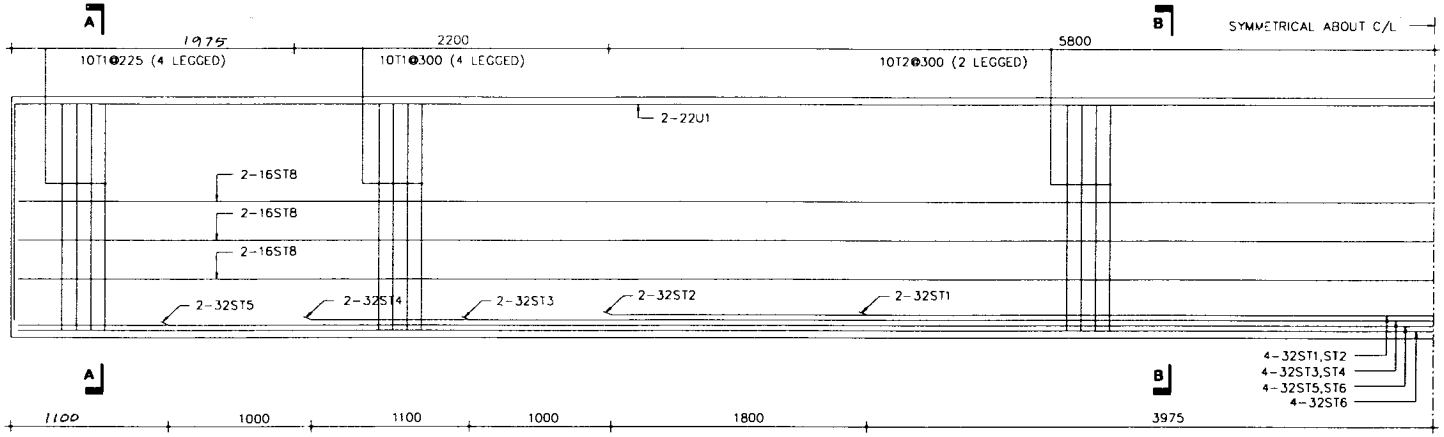
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GB-103

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



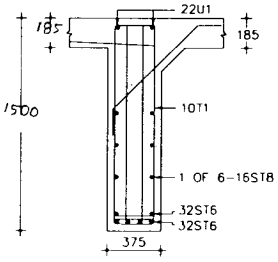
DETAILS OF GIRDER



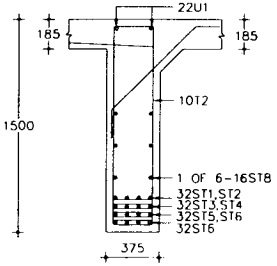
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19910				19910
	6	T2	1064	85	135			512
POST	20	L1	120	971	120			1091
	6	T1	180	135	135			612
SIDEWALK	12	EL1	334	329	201	311	1200	2113
	12	ST3	8	19870				19870
DECK	16	ST1	84	4180				4180
	12	ST1	84	2475				2475
	16	CR1	83	1572	148	825		4265
	12	ST2	47	19870				19870
	10	C1	168	120	796			1036
GIRDER	32	ST1	4	7950				7950
	32	ST2	4	11550				11550
	32	ST3	4	13550				13550
	32	ST4	4	15750				15750
	32	ST5	4	17750				17750
	32	ST6	12	19850				19850
	22	U1	4	1310	19850	1310		22470
	16	ST8	12	19850				19850
	10	T1	80	1404	214			3356
	10	T1	56	1404	214			3356
	10	T2	76	1404	295			3518
DIAPHRAGM	16	ST9	23	2425				2425
	12	ST10	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

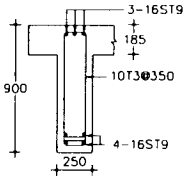
REINF. DETAILS OF GIRDER



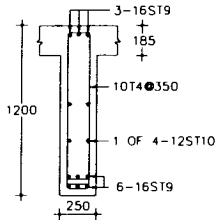
SECTION A-A



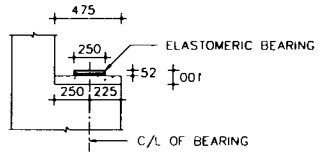
SECTION B-B



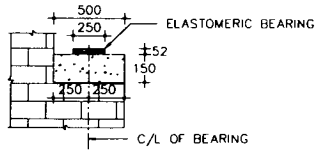
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

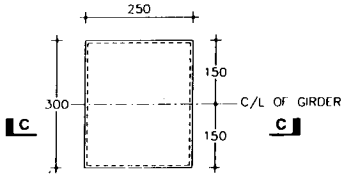


ON BRICK ABUTMENT

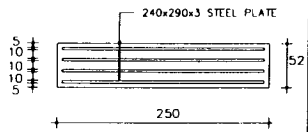
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.5m GIRDER & BEARING

DATE : 10/04/1997

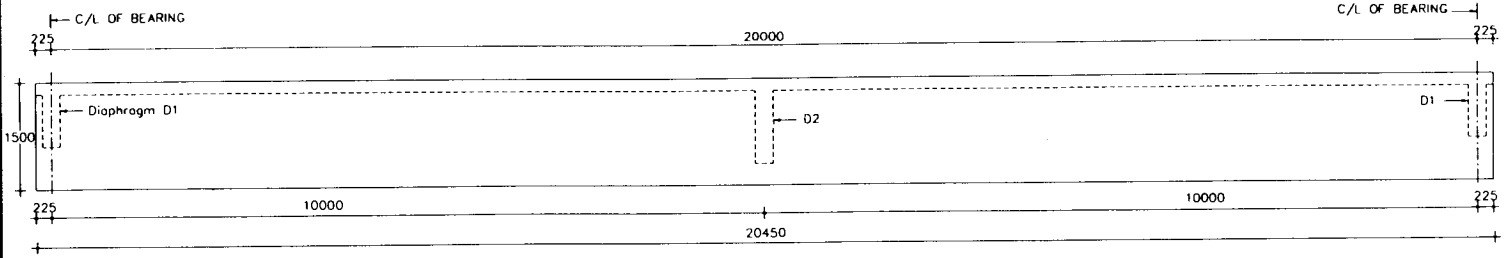
ISSUED BY :

CAD FILE REF : BRDG\C0319501

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GB-104

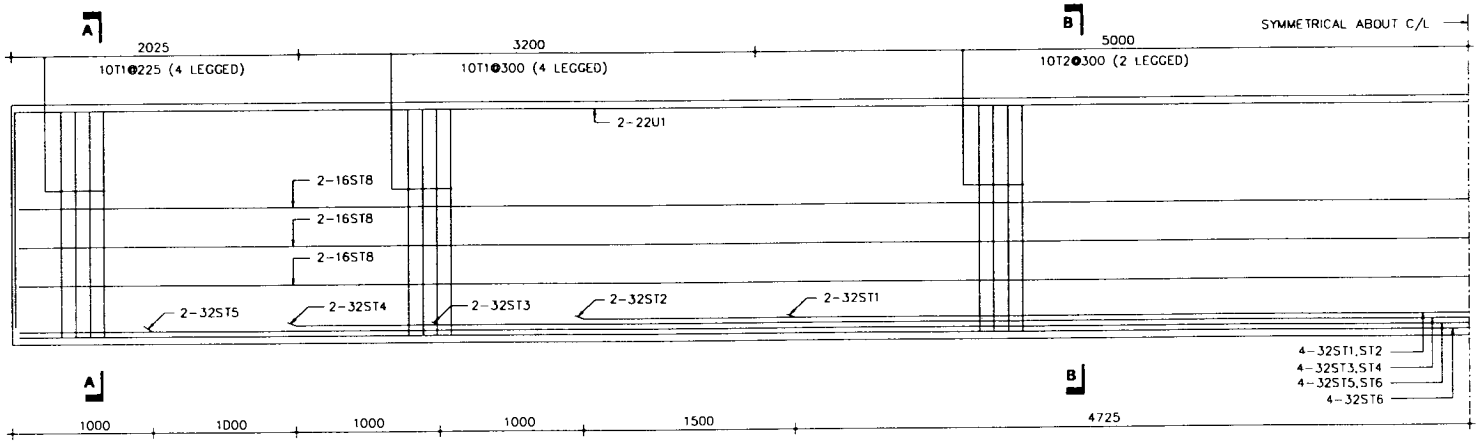
SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - NO



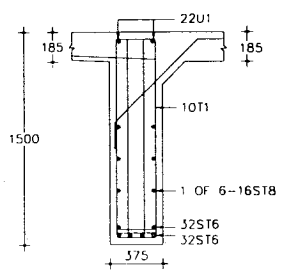
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	20410				20410
	6	T2	1120	85	135			512
POST	20	L1	120	971	120			1091
	6	T1	180	135	135			612
SIDEWALK	12	EL1	342	329	201	311	1200	2113
	12	ST3	8	20370				20370
DECK	16	ST1	86	4180				4180
	12	ST1	86	2475				2475
	16	CR1	85	1572	148	825		4265
	12	ST2	47	20370				20370
	10	C1	172	120	796			1036
GIRDER	32	ST1	4	9450				9450
	32	ST2	4	12450				12450
	32	ST3	4	14450				14450
	32	ST4	4	16450				16450
	32	ST5	4	18450				18450
	32	ST6	12	20350				20350
	22	U1	4	1310	20350	1310		22970
	16	ST8	12	20350				20350
	10	T1	80	1404	214			3356
	10	T1	80	1404	214			3356
	10	T2	66	1404	295			3518
DIAPHRAGM	16	ST9	23	2425				2425
	12	ST10	4	2425				2425
	10	T3	10	820	150			2060
	10	T4	5	1120	150			2660

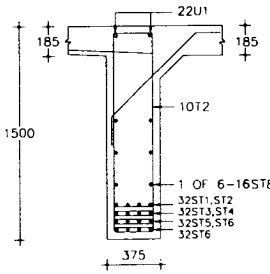
DETAILS OF GIRDER



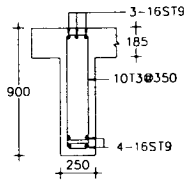
REINF. DETAILS OF GIRDER



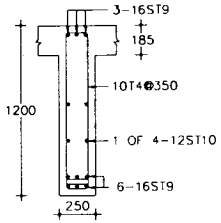
SECTION A-A



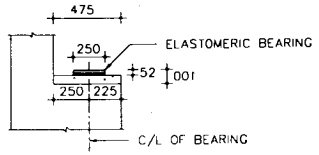
SECTION B-B



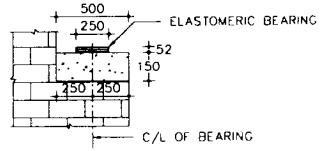
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

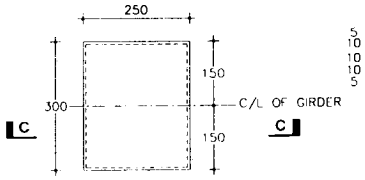


ON BRICK ABUTMENT

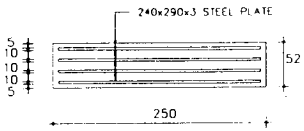
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This, drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 20.0m GIRDER & BEARING

DATE : 10/04/1997

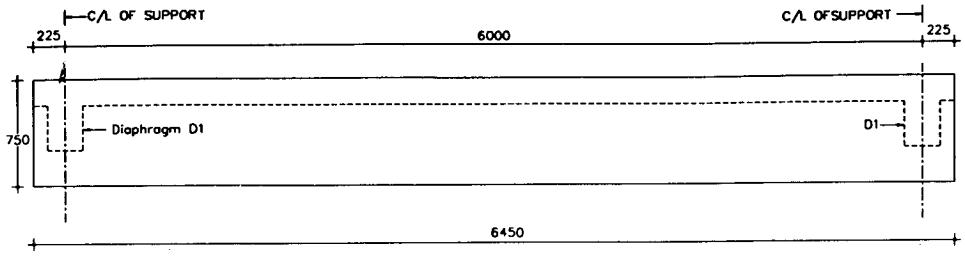
ISSUED BY :

CAD FILE REF : BRDG\G0320001

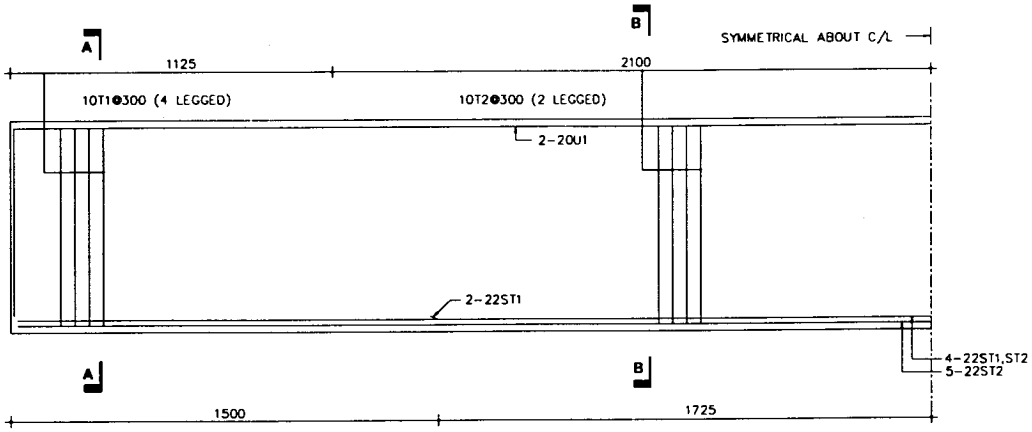
Web Copy

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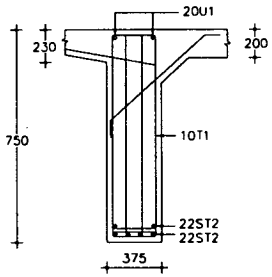
SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



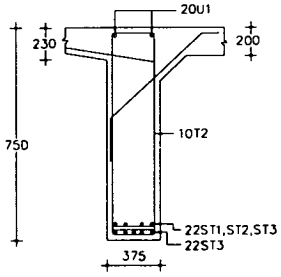
DETAILS OF GIRDER



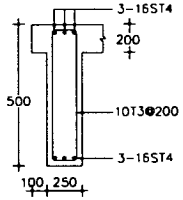
REINF. DETAILS OF GIRDER



SECTION A-A



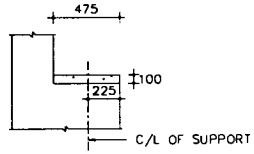
SECTION B-B



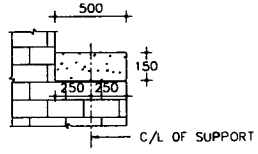
DETAILS OF D1

BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6410				6410
	6	T2	340	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	60	370	577	311	1378	2708
	12	ST3	12	6370				6370
DECK	16	ST1	25	4930				4930
	12	ST1	25	2875				2875
	16	CR1	25	1832	169	1025		5027
	12	ST2	45	6370				6370
	10	C1	40	120	818			1058
GIRDER	22	ST1	4	3450				3450
	22	ST2	14	6350				6350
	20	U1	4	580	6350	580		7510
	10	T1	40	654	231			1890
	10	T2	24	654	295			2018
DIAPHRAGM	16	ST4	12	2825				2825
	10	T3	22	420	150			1260



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

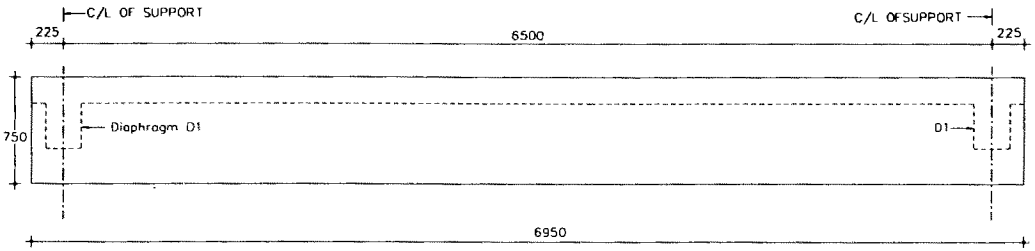
DETAILS OF 6.0m GIRDER

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1206001	

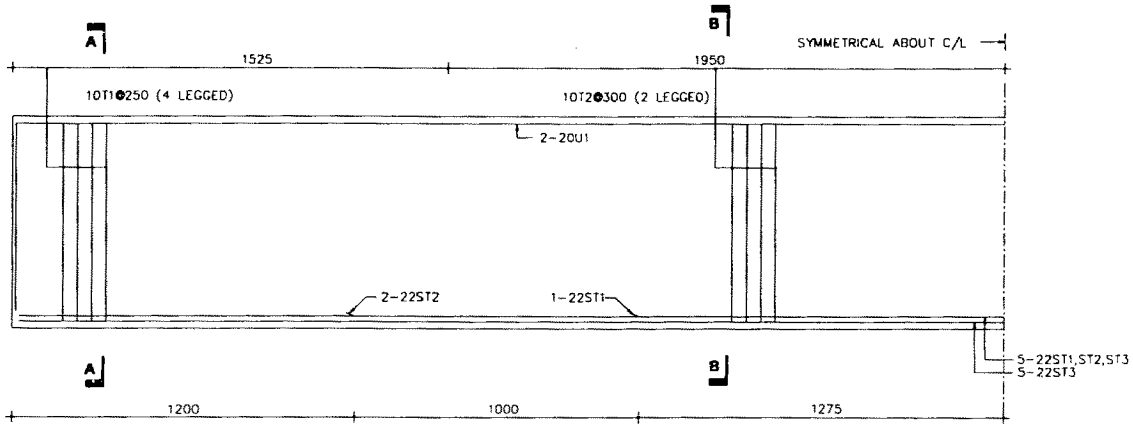
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



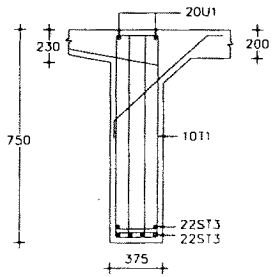
DETAILS OF GIRDER



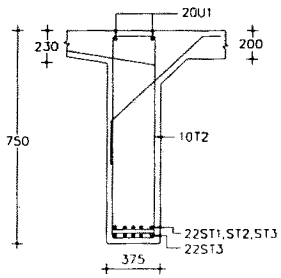
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

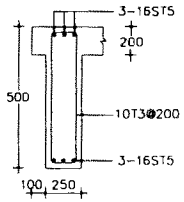
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6910				6910
	6	T2	380	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	64	370	577	311	1378	2708
	12	ST3	12	6870				6870
DECK	16	ST1	27	4930				4930
	12	ST1	27	2875				2875
	16	CR1	27	1832	169	1025		5027
	12	ST2	45	6870				6870
	10	C1	44	120	818			1058
GIRDER	22	ST1	2	2550				2550
	22	ST2	4	4550				4550
	22	ST3	14	6850				6850
	20	U1	4	580	6850	580		8010
	10	T1	48	654	231			1890
	10	T2	24	654	295			2018
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260



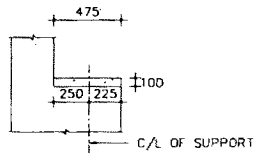
SECTION A-A



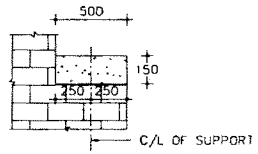
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

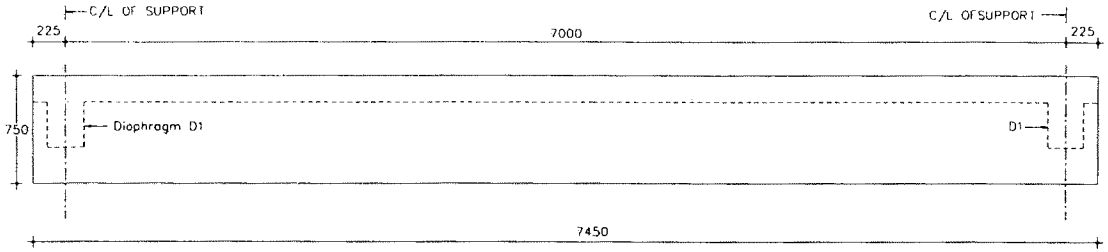
DETAILS OF 6.5m GIRDER

DATE 10/04/1997 | ISSUED BY

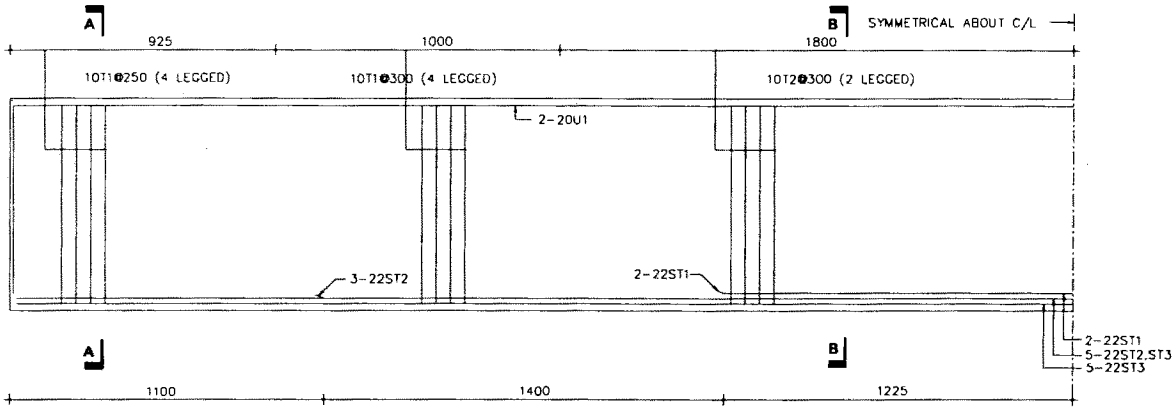
CAD FILE REF : BRDG\G1206501

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



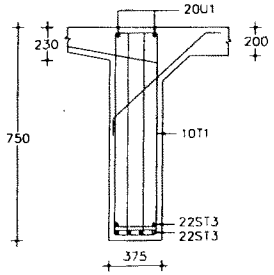
DETAILS OF GIRDER



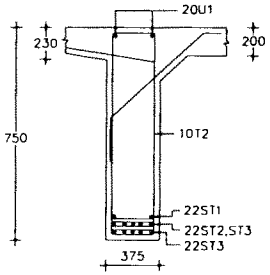
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7410				7410
	6	T2	400	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	70	370	577	311	1378	2708
	12	ST3	12	7370				7370
DECK	16	ST1	29	4930				4930
	12	ST1	29	2875				2875
	16	CR1	29	1832	169	1025		5027
	12	ST2	45	7370				7370
	10	C1	46	120	818			1058
GIRDER	22	ST1	4	2450				2450
	22	ST2	6	5250				5250
	22	ST3	14	7350				7350
	20	U1	4	580	7350	580		8510
	10	T1	40	654	231			1890
	10	T1	16	654	231			1890
	10	T2	26	654	295			2018
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260

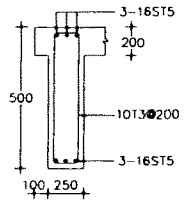
REINF. DETAILS OF GIRDER



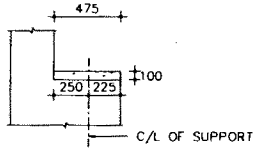
SECTION A-A



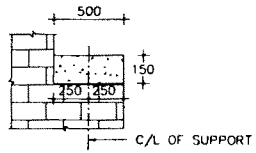
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

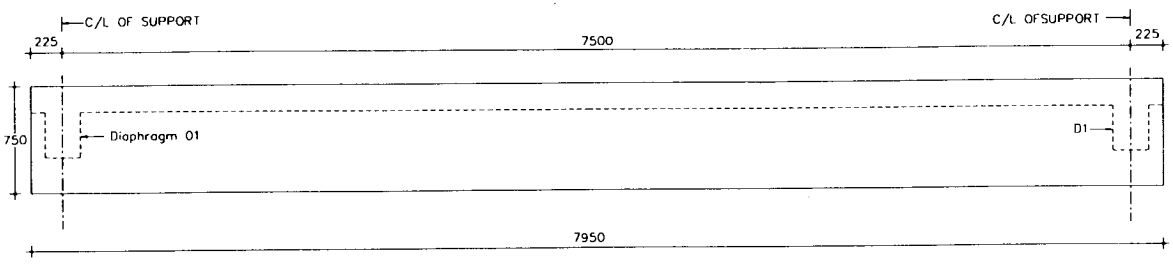
DETAILS OF 7.0m GIRDER

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1207001

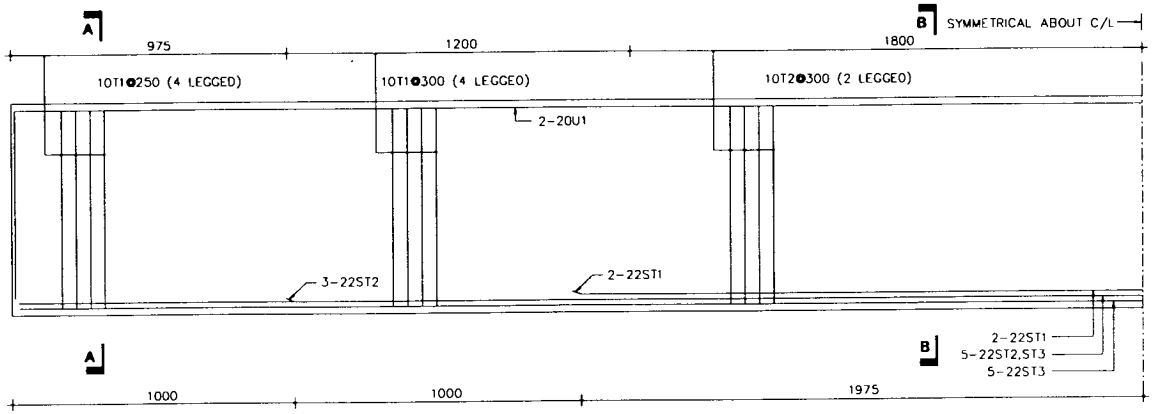
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GB-108

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



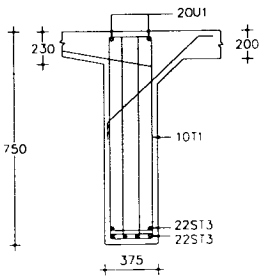
DETAILS OF GIRDER



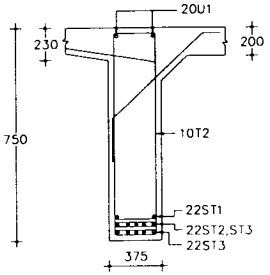
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7910				7910
	6	T2	432	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	74	370	577	311	1378	2708
	12	ST3	12	7870				7870
DECK	16	ST1	31	4930				4930
	12	ST1	31	2875				2875
	16	CR1	31	1832	169	1025		5027
	12	ST2	45	7870				7870
	10	C1	50	120	818			1058
GIRDER	22	ST1	4	3950				3950
	22	ST2	6	5950				5950
	22	ST3	14	7850				7850
	20	U1	4	580	7850	580		9010
	10	T1	40	654	231			1890
	10	T1	24	654	231			1890
	10	T2	26	654	295			2018
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260

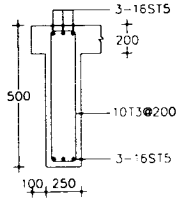
REINF. DETAILS OF GIRDER



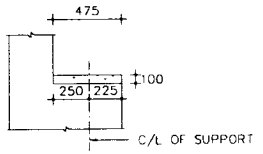
SECTION A-A



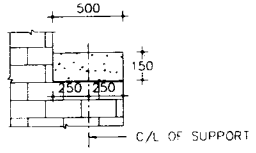
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa--ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

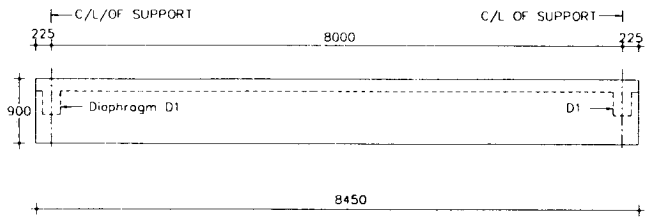
DETAILS OF 7.5m GIRDER

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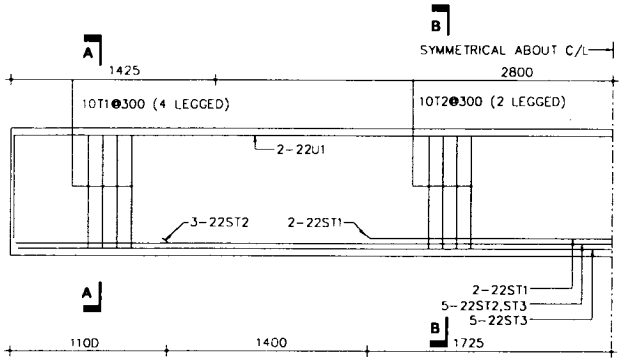
CAD FILE REF : BRDG\G1207501

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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



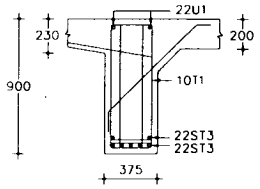
DETAILS OF GIRDER



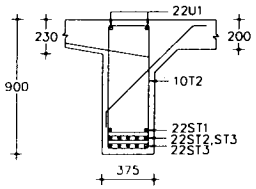
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

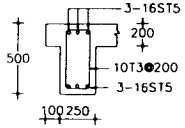
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8410				8410
	6	T2	456	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	78	370	577	311	1378	2708
	12	ST3	12	8370				8370
DECK	16	ST1	33	4930				4930
	12	ST1	33	2875				2875
	16	CR1	32	1832	169	1025		5027
	12	ST2	45	8370				8370
	10	C1	52	120	818			1058
GIRDER	22	ST1	4	3450				3450
	22	ST2	6	6250				6250
	22	ST3	14	8350				8350
	22	U1	4	730	8350	730		9810
	10	T1	48	804	231			2190
	10	T2	34	804	295			2318
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260



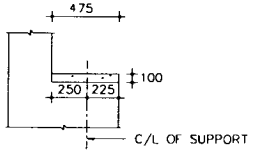
SECTION A-A



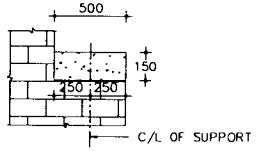
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.0m GIRDER

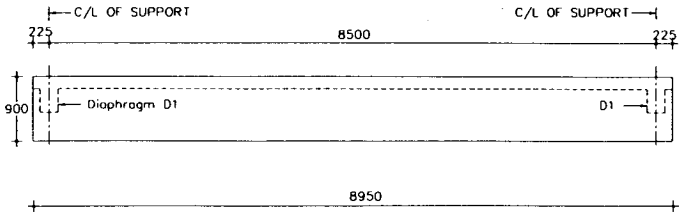
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1208001

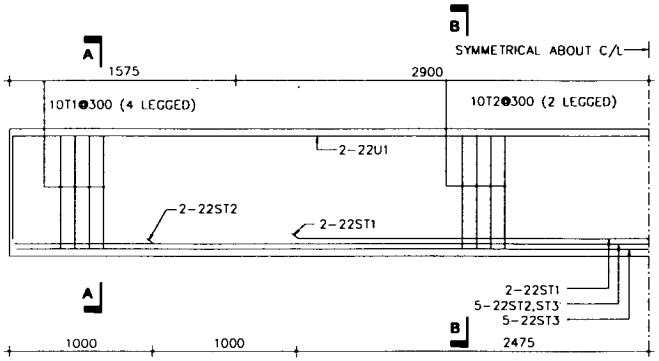
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



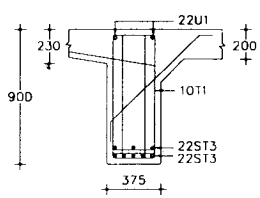
DETAILS OF GIRDER



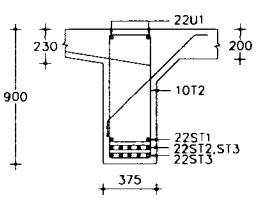
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

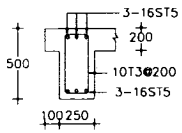
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8910				8910
	6	T2	480	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	84	370	577	311	1378	2708
	12	ST3	12	8870				8870
DECK	16	ST1	35	4930				4930
	12	ST1	35	2875				2875
	16	CR1	34	1832	169	1025		5027
	12	ST2	45	8870				8870
	10	C1	56	120	818			1058
GIRDER	22	ST1	4	4950				4950
	22	ST2	4	6950				6950
	22	ST3	16	8850				8850
	22	U1	4	730	8850	730		10310
	10	T1	56	804	231			2190
	10	T2	34	804	295			2318
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260



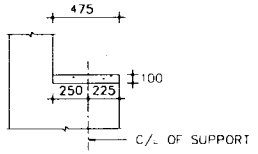
SECTION A-A



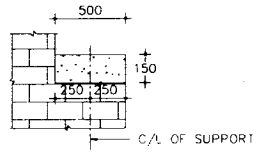
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.5m GIRDER

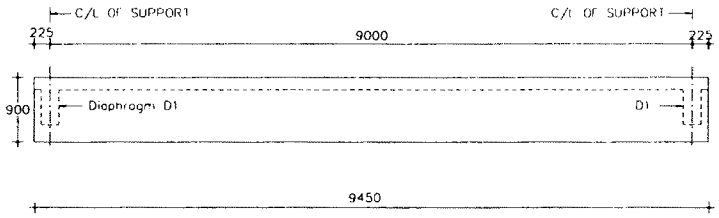
DATE 10/04/1997 | ISSUED BY

CAD FILE REF : BRDG\G1208501

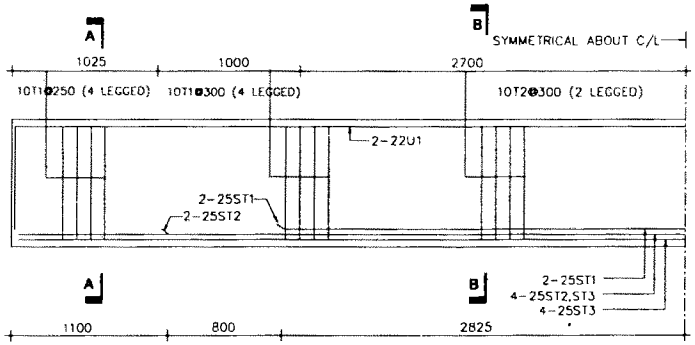
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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



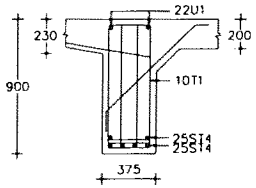
DETAILS OF GIRDER



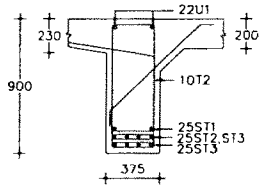
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

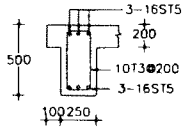
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9410				9410
	6	T2	504	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	88	370	577	311	1378	2708
	12	ST3	12	9370				9370
DECK	16	ST1	37	4930				4930
	12	ST1	37	2875				2875
	16	CR1	36	1832	169	1025		5027
	12	ST2	45	9370				9370
	10	C1	58	120	818			1058
GIRDER	25	ST1	4	5650				5650
	25	ST2	4	7250				7250
	25	ST3	12	9350				9350
	22	U1	4	724	9350	724		10798
	10	T1	40	804	211			2150
	10	T1	24	804	211			2150
	10	T2	36	804	295			2318
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260



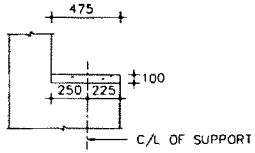
SECTION A-A



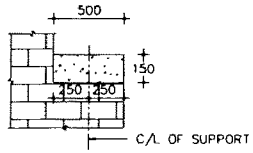
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

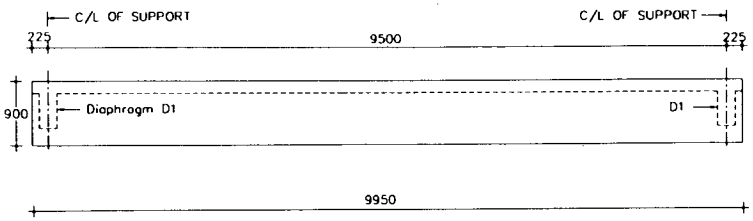
DETAILS OF 9.0m GIRDER

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1209001	

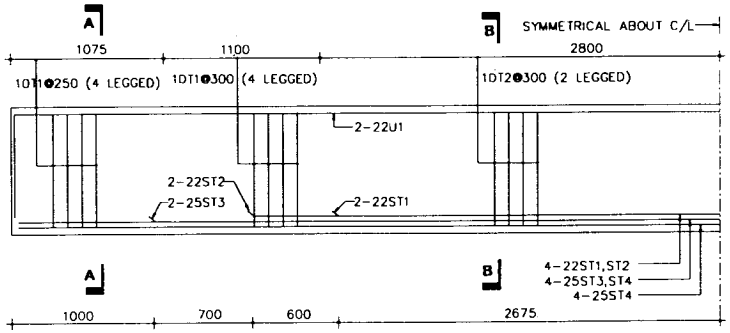
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



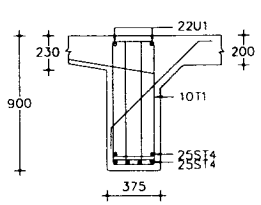
DETAILS OF GIRDER



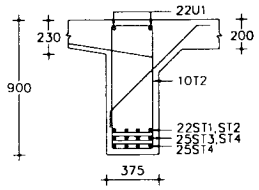
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

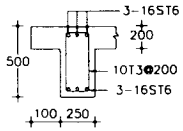
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9910				9910
	6	T2	532	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	92	370	577	311	1378	2708
	12	ST3	12	9870				9870
DECK	16	ST1	39	4930				4930
	12	ST1	39	2875				2875
	16	CR1	38	1832	169	1025		5027
	12	ST2	45	9870				9870
	10	C1	62	120	818			1058
GIRDER	22	ST1	4	5350				5350
	22	ST2	4	6550				6550
	25	ST3	4	7950				7950
	25	ST4	12	9850				9850
	22	U1	4	724	9850	724		11298
	10	T1	48	804	211			2150
	10	T1	16	804	211			2150
	10	T2	40	804	295			2318
DIAPHRAGM	16	ST6	12	2825				2825
	10	T3	22	420	150			1260



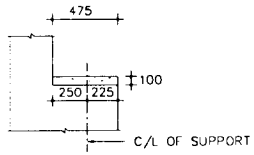
SECTION A-A



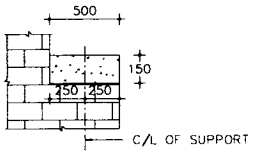
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 9.5m GIRDER

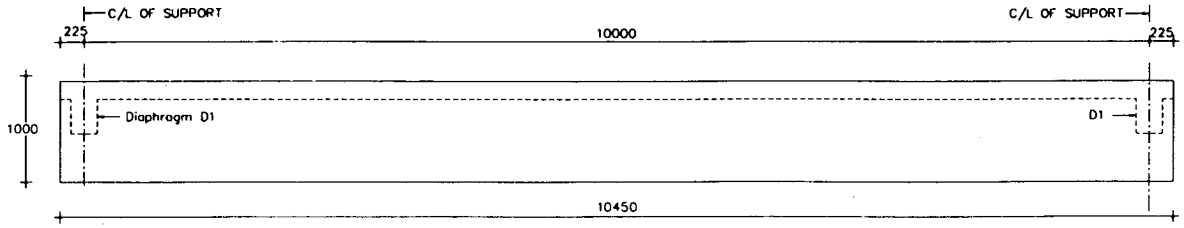
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\C1209501

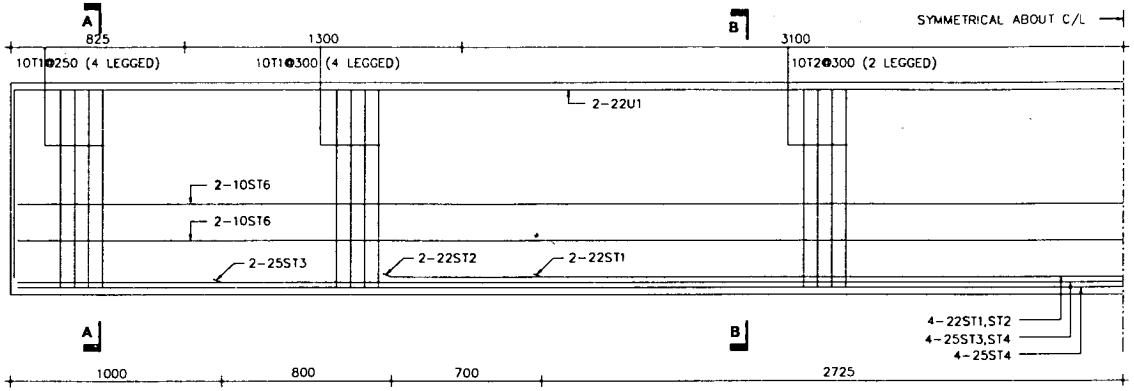
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GB-113

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



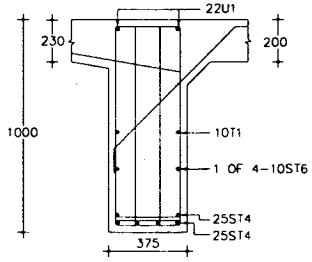
DETAILS OF GIRDER



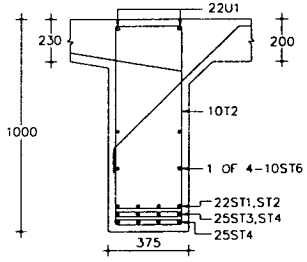
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

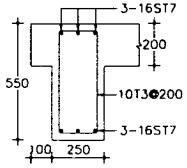
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10410				10410
	6	T2	560	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	96	370	577	311	1378	2708
	12	ST3	12	10370				10370
DECK	16	ST1	41	4930				4930
	12	ST1	41	2875				2875
	16	CR1	40	1832	169	1025		5027
	12	ST2	45	10370				10370
	10	C1	64	120	818			1058
GIRDER	22	ST1	4	5450				5450
	22	ST2	4	6850				6850
	25	ST3	4	8450				8450
	25	ST4	12	10350				10350
	22	U1	4	824	10350	824		11998
	10	ST6	8	10350				10350
	10	T1	40	904	211			2350
	10	T1	24	904	211			2350
	10	T2	42	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



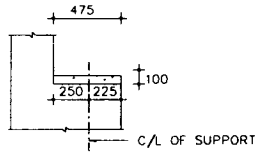
SECTION A-A



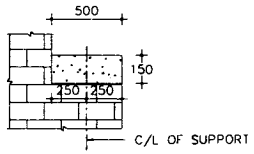
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 10.0m GIRDER

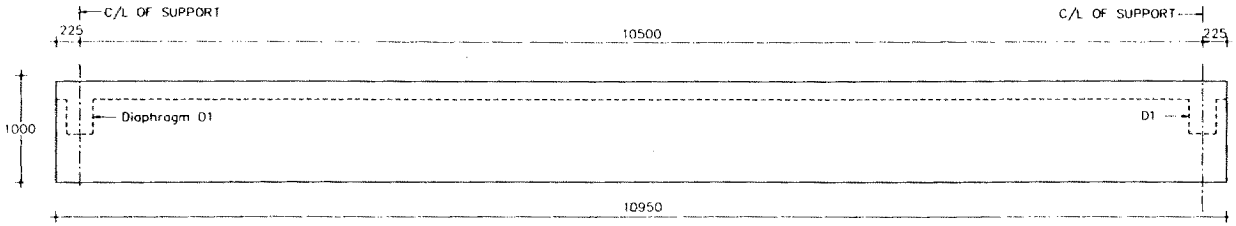
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1210001

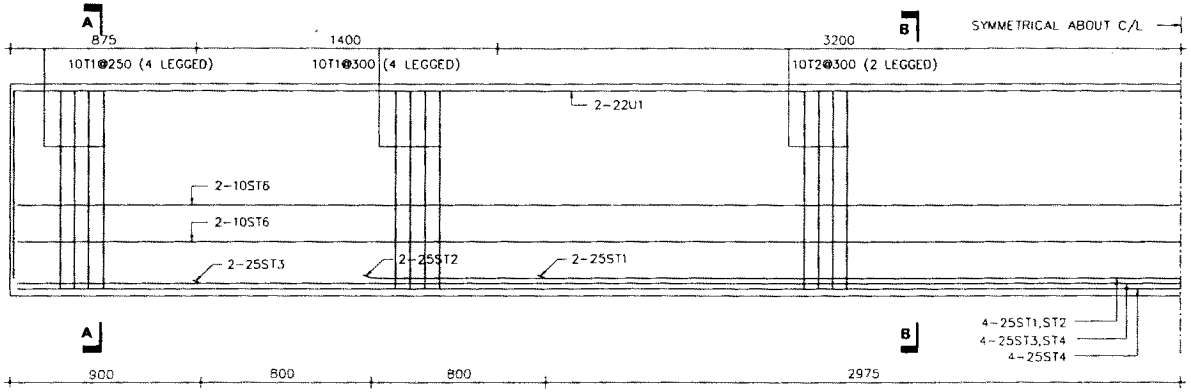
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



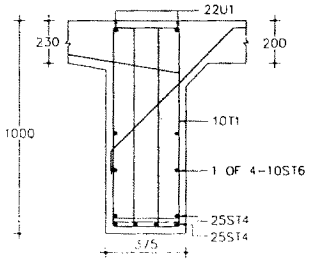
DETAILS OF GIRDER



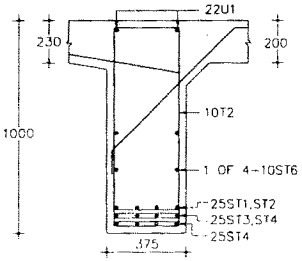
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10910				10910
	6	T2	576	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	102	370	577	311	1378	2708
	12	ST3	12	10870				10870
DECK	16	ST1	43	4930				4930
	12	ST1	43	2875				2875
	16	CR1	42	1832	169	1025		5027
	12	ST2	45	10870				10870
	10	C1	68	120	818			1058
GIRDER	25	ST1	4	5950				5950
	25	ST2	4	7550				7550
	25	ST3	4	9150				9150
	25	ST4	12	10850				10850
	22	U1	4	824	10850	824		12498
	10	ST6	8	10850				10850
	10	T1	40	904	211			2350
	10	T1	32	904	211			2350
	10	T2	42	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360

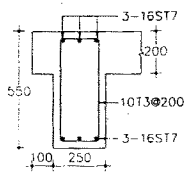
REINF. DETAILS OF GIRDER



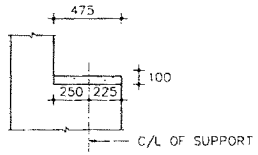
SECTION A-A



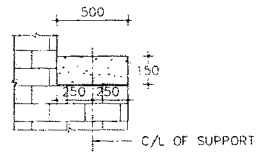
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

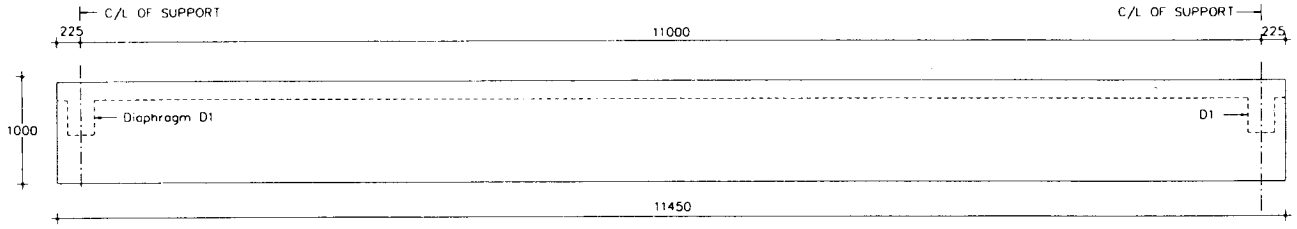
DETAILS OF 10.5m GIRDER

DATE : 10/04/1997 | ISSUED BY

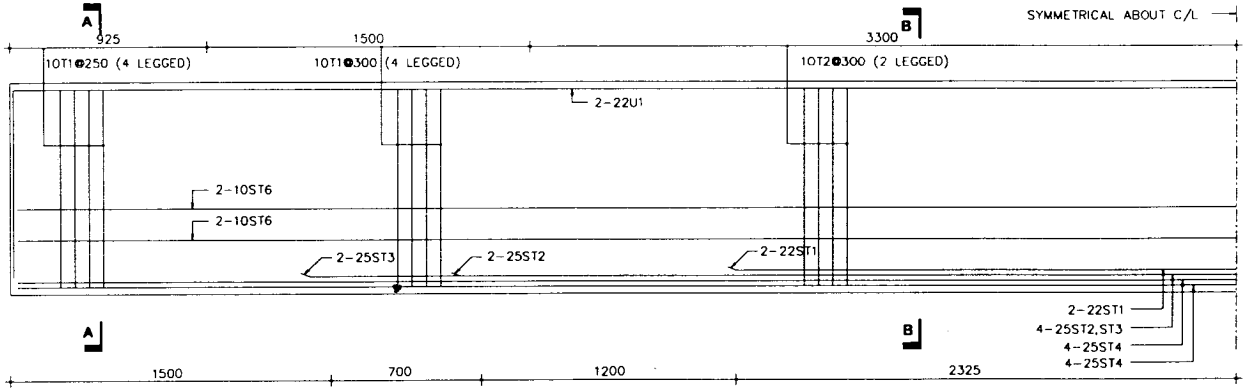
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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



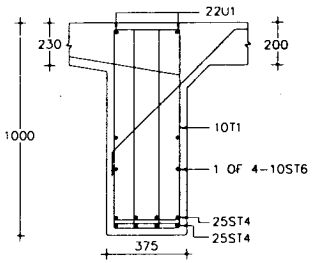
DETAILS OF GIRDER



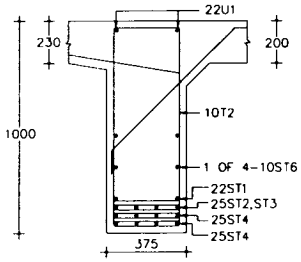
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

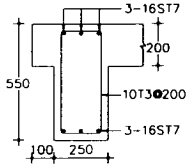
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11410				11410
	6	T2	608	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	106	370	577	311	1378	2708
	12	ST3	12	11370				11370
DECK	16	ST1	44	4930				4930
	12	ST1	44	2875				2875
	16	CR1	44	1832	169	1025		5027
	12	ST2	45	11370				11370
	10	C1	70	120	818			1058
GIRDER	22	ST1	4	4650				4650
	25	ST2	4	7050				7050
	25	ST3	4	8450				8450
	25	ST4	16	11350				11350
	22	U1	4	824	11350	824		12998
	10	ST6	8	11350				11350
	10	T1	40	904	211			2350
	10	T1	32	904	211			2350
	10	T2	44	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



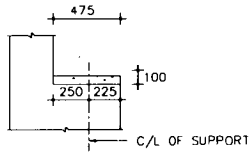
SECTION A-A



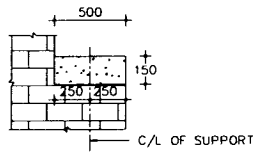
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

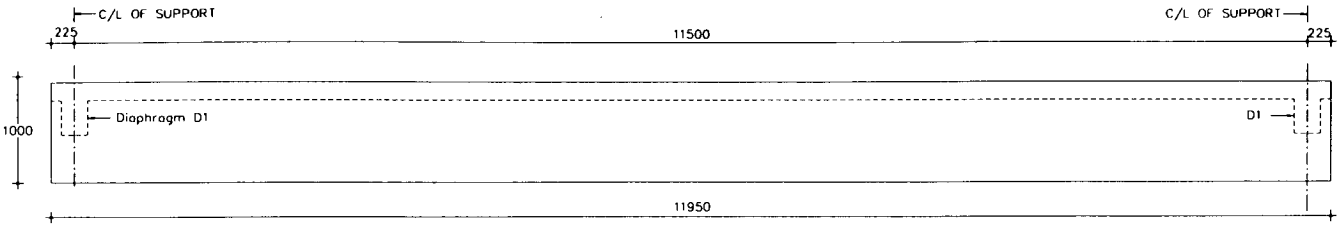
DETAILS OF 11.0m GIRDER

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1211001	

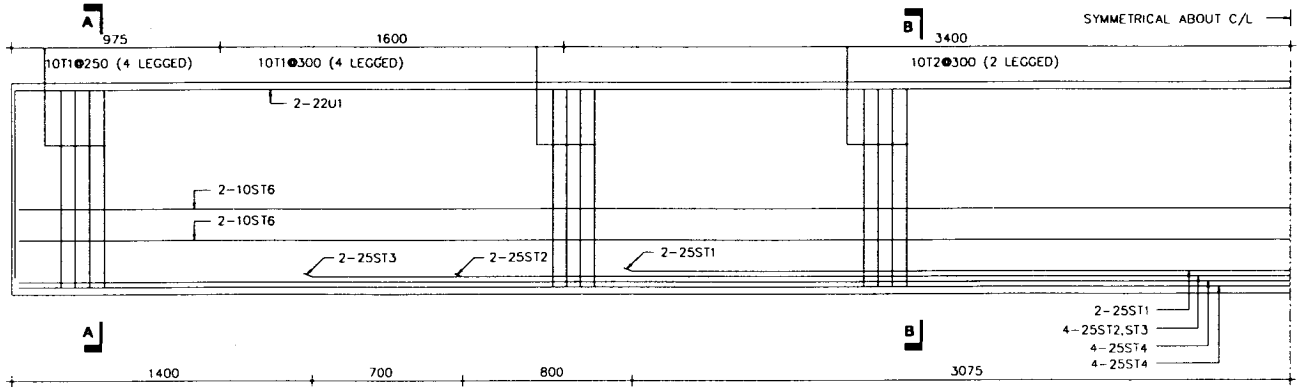
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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



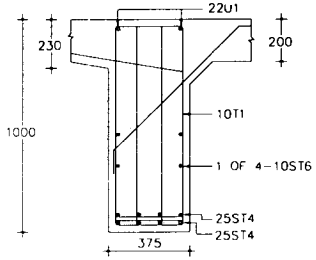
DETAILS OF GIRDER



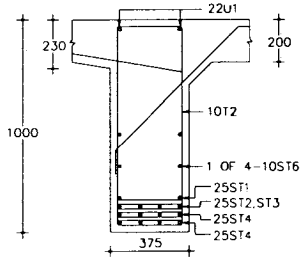
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12410				11910
	6	T2	640	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	110	370	577	311	1378	2708
	12	ST3	12	12370				11870
DECK	16	ST1	46	4930				4930
	12	ST1	46	2875				2875
	16	CR1	46	1832	169	1025		5027
	12	ST2	45	12370				11870
	10	C1	74	120	818			1058
GIRDER	25	ST1	4	5650				6150
	25	ST2	4	8650				7750
	25	ST3	4	10650				9150
	25	ST4	16	12350				11850
	22	U1	4	868	12350	868		14086
	10	ST6	8	12350				11850
	10	T1	40	904	211			2350
	10	T1	40	904	211			2350
	10	T2	44	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360

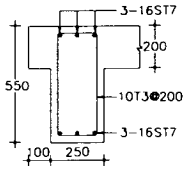
REINF. DETAILS OF GIRDER



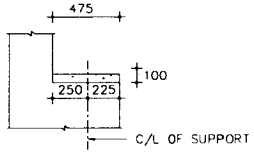
SECTION A-A



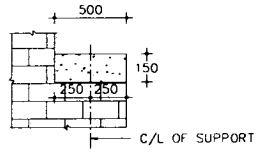
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 11.5m GIRDER

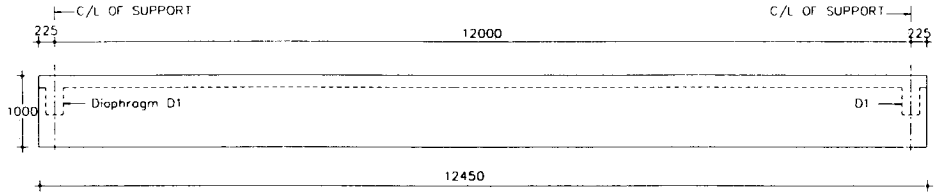
DATE : 10/04/1997 | ISSUED BY

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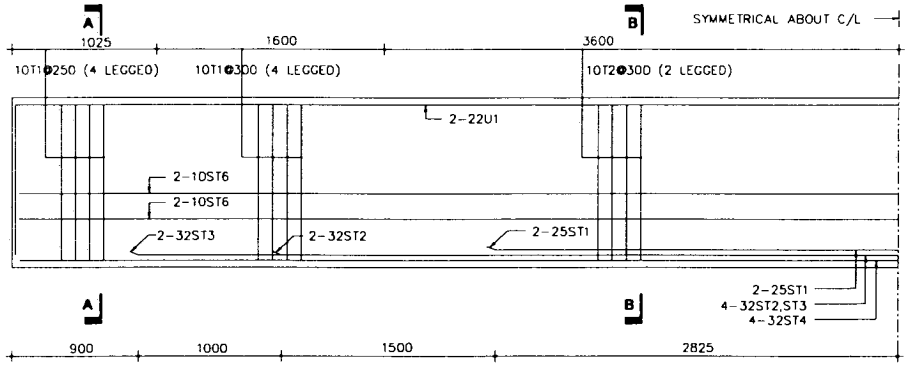
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SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



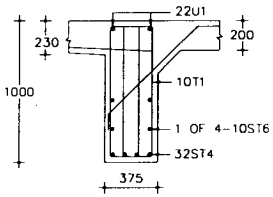
DETAILS OF GIRDER



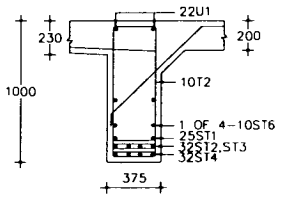
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

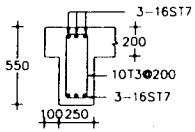
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12410				12410
	6	T2	684	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	114	370	577	311	1378	2708
	12	ST3	12	12370				12370
DECK	16	ST1	48	4930				4930
	12	ST1	48	2875				2875
	16	CR1	48	1832	169	1025		5027
	12	ST2	45	12370				12370
	10	C1	76	120	818			1058
GIRDER	25	ST1	4	5650				5650
	32	ST2	4	8650				8650
	32	ST3	4	10650				10650
	32	ST4	8	12350				12350
	22	U1	4	868	12350	868		14086
	10	ST6	8	12350				12350
	10	T1	40	904	214			2356
	10	T1	40	904	214			2356
	10	T2	48	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



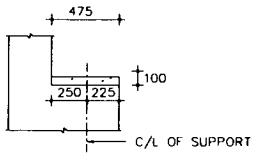
SECTION A-A



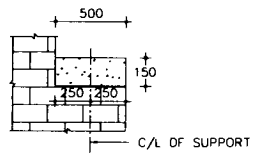
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.0m GIRDER

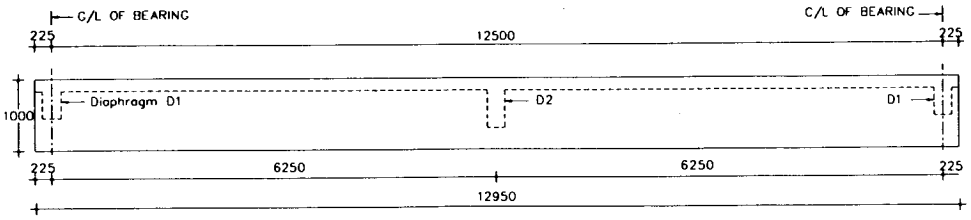
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1212001

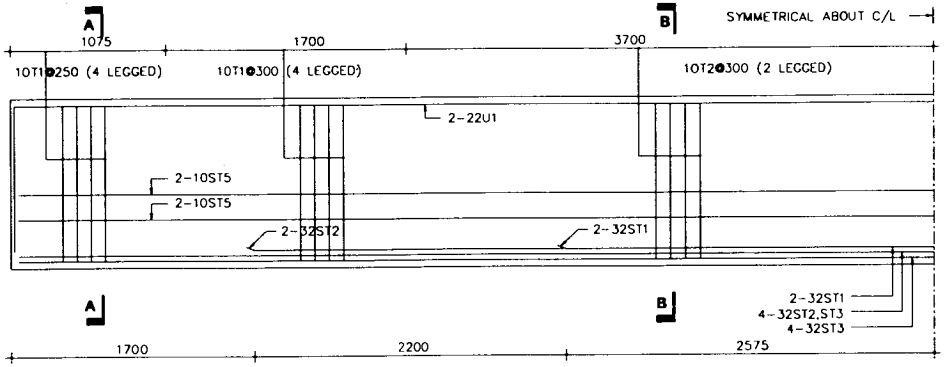
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GB-118

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



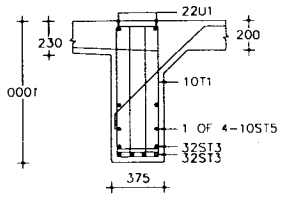
DETAILS OF GIRDER



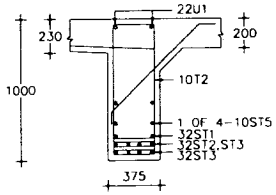
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

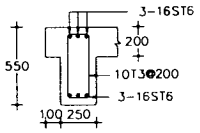
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12910				12910
	6	T2	684	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	120	370	577	311	1378	2708
	12	ST3	12	12870				12870
DECK	16	ST1	50	4930				4930
	12	ST1	50	2875				2875
	16	CR1	50	1832	169	1025		5027
	12	ST2	45	12870				12870
	10	C1	80	120	818			1058
GIRDER	32	ST1	4	5150				5150
	32	ST2	4	9550				9550
	32	ST3	12	12850				12850
	22	U1	4	810	12850	810		14470
	10	ST5	8	12850				12850
	10	T1	48	904	214			2356
	10	T1	32	904	214			2356
	10	T2	52	904	295			2518
DIAPHRAGM	16	ST6	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	620	150			1660



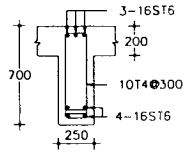
SECTION A-A



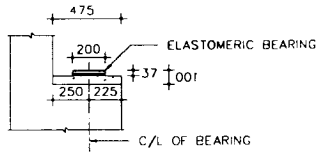
SECTION B-B



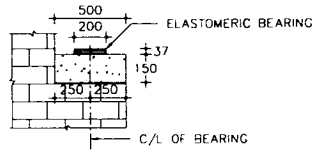
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

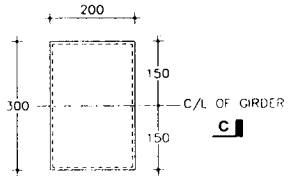


ON BRICK ABUTMENT

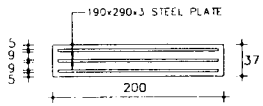
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.5m GIRDER & BEARING

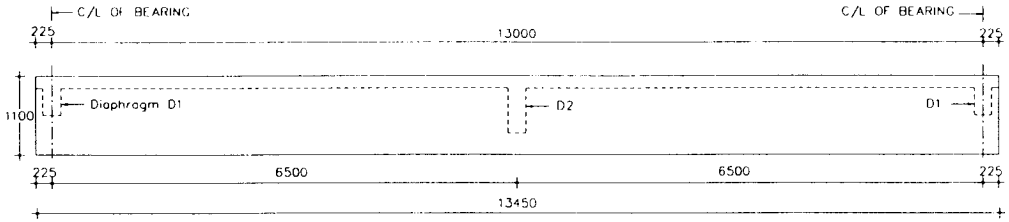
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1212501

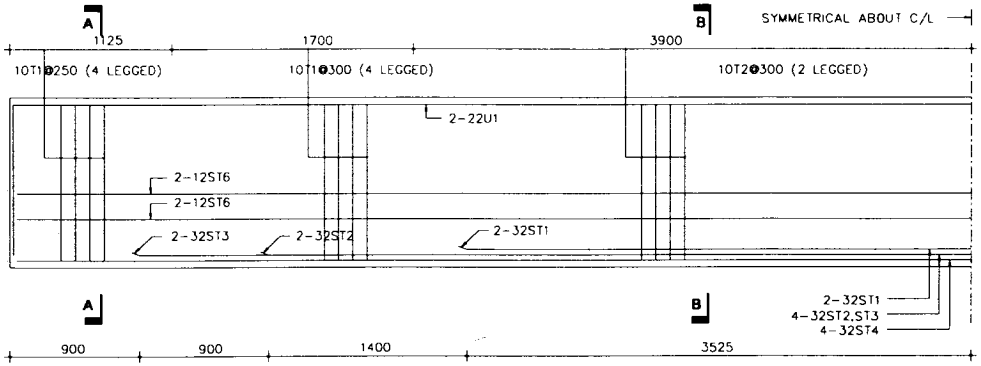
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GB-119

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



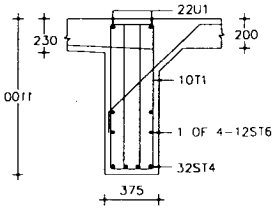
DETAILS OF GIRDER



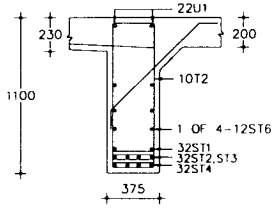
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

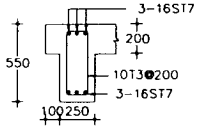
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13410				13410
	6	T2	720	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	124	370	577	311	1378	2708
	12	ST3	12	13370				13370
DECK	16	ST1	52	4930				4930
	12	ST1	52	2875				2875
	16	CR1	52	1832	169	1025		5027
	12	ST2	45	13370				13370
	10	C1	84	120	818			1058
GIRDER	32	ST1	4	7050				7050
	32	ST2	4	9850				9850
	32	ST3	4	11650				11650
	32	ST4	8	13350				13350
	22	U1	4	968	13350	968		15286
	12	ST6	8	13350				13350
	10	T1	48	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	50	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



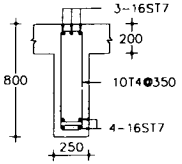
SECTION A-A



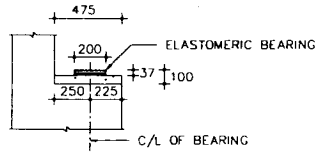
SECTION B-B



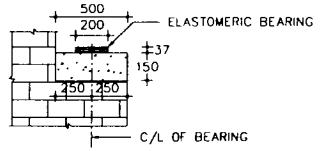
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

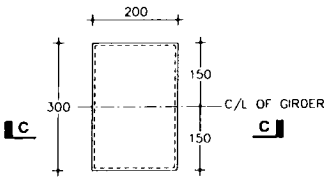


ON BRICK ABUTMENT

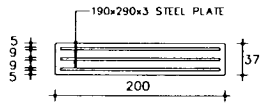
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

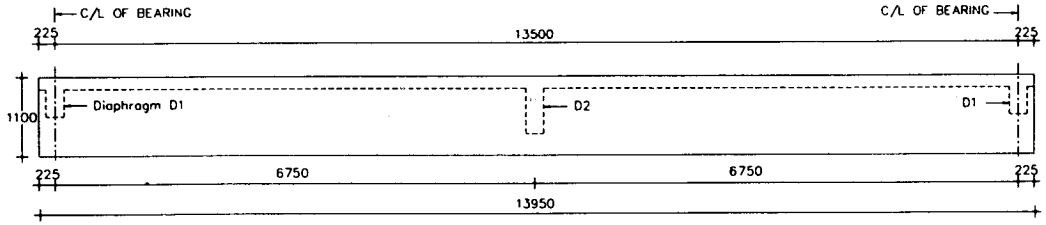
DETAILS OF 13.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1213001	

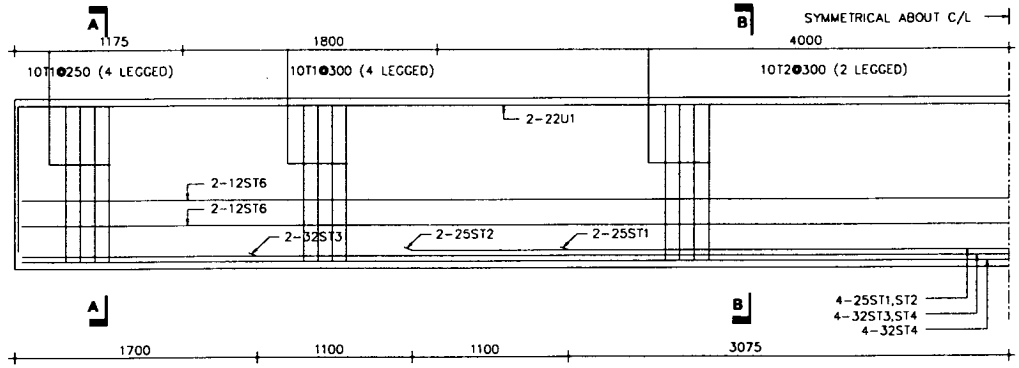
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GB-120

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



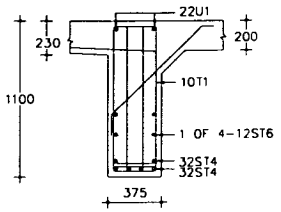
DETAILS OF GIRDER



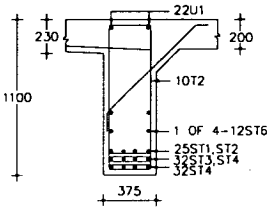
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

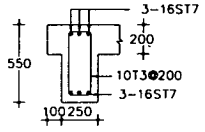
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13910				13910
	6	T2	760	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	128	370	577	311	1378	2708
	12	ST3	12	13870				13870
DECK	16	ST1	54	4930				4930
	12	ST1	54	2875				2875
	16	CR1	54	1832	169	1025		5027
	12	ST2	45	13870				13870
	10	C1	86	120	818			1058
GIRDER	25	ST1	4	6150				6150
	25	ST2	4	8350				8350
	32	ST3	4	10550				10550
	32	ST4	12	13850				13850
	22	U1	4	910	13850	910		15670
	12	ST6	8	13850				13850
	10	T1	48	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	54	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



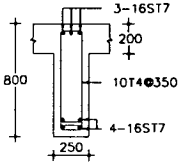
SECTION A-A



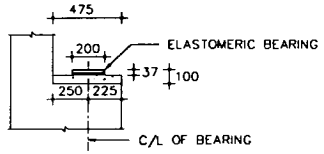
SECTION B-B



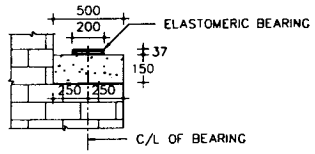
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

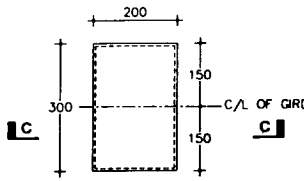


ON BRICK ABUTMENT

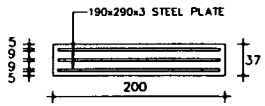
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

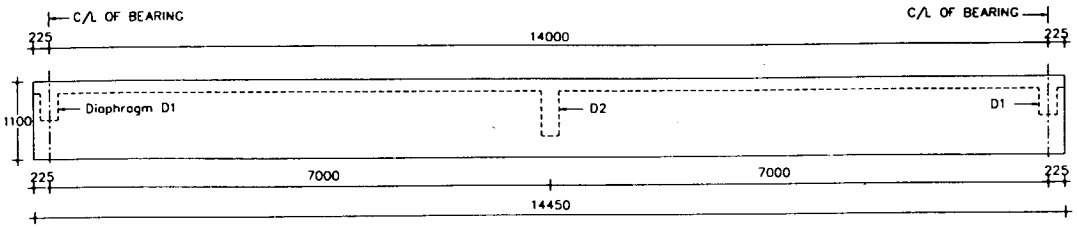
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 13.5m GIRDER & BEARING

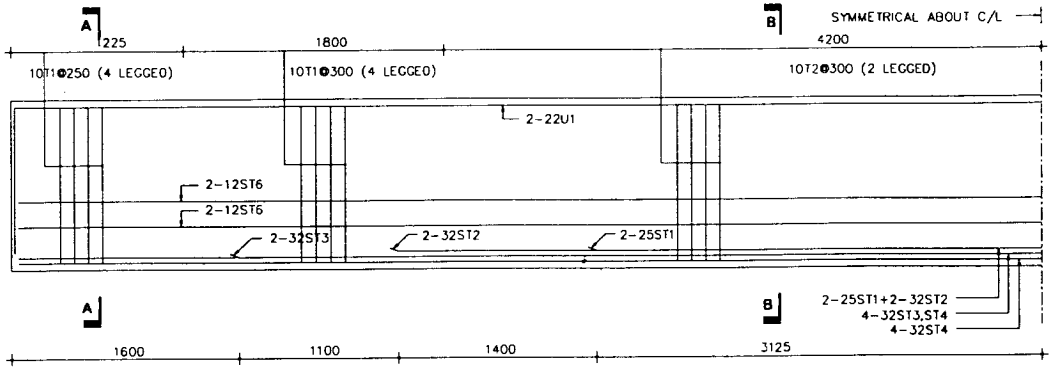
DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\C1213501

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SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



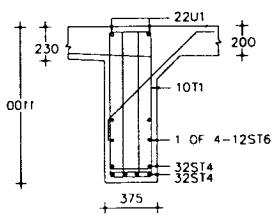
DETAILS OF GIRDER



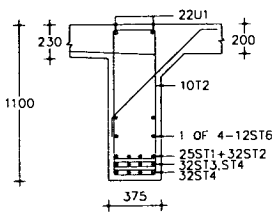
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

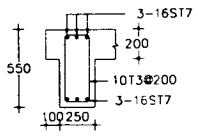
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14410				14410
	6	T2	800	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	134	370	577	311	1378	2708
	12	ST3	12	14370				14370
DECK	16	ST1	56	4930				4930
	12	ST1	56	2875				2875
	16	CR1	56	1832	169	1025		5027
	12	ST2	45	14370				14370
	10	C1	90	120	818			1058
GIRDER	25	ST1	4	6250				6250
	32	ST2	4	9050				9050
	32	ST3	4	11250				11250
	32	ST4	12	14350				14350
	22	U1	4	910	14350	910		16170
	12	ST6	8	14350				14350
	10	T1	48	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	58	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



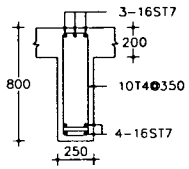
SECTION A-A



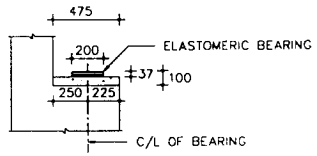
SECTION B-B



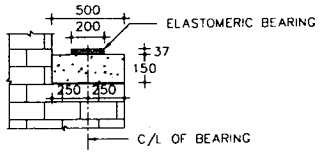
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

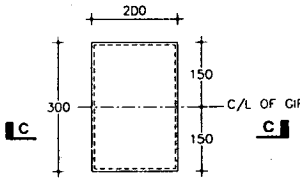


ON BRICK ABUTMENT

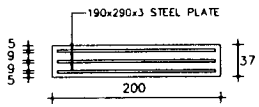
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

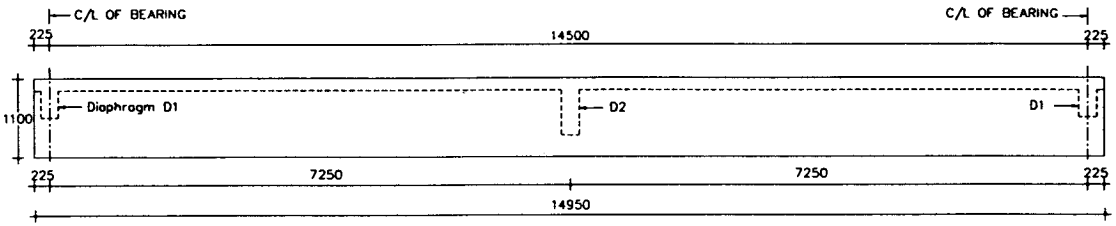
DETAILS OF 14.0m GIRDER & BEARING

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\C1214001

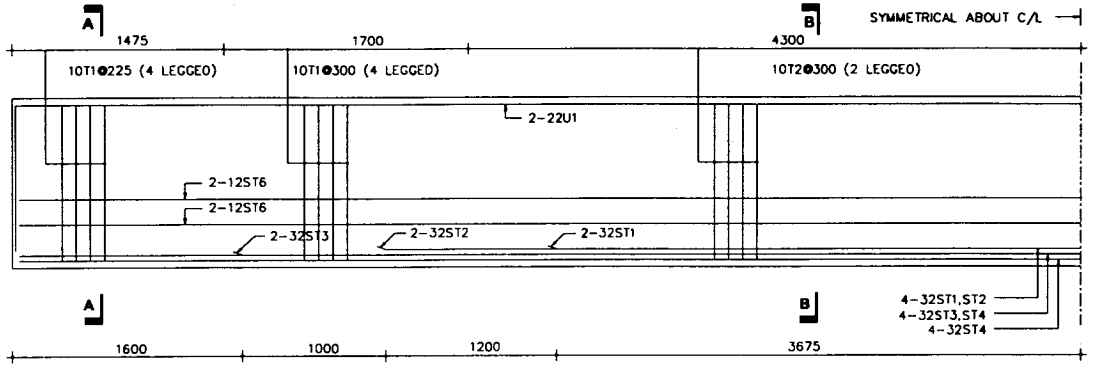
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GB-122

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



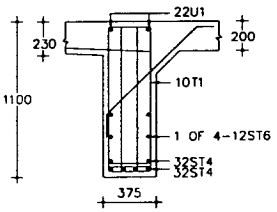
DETAILS OF GIRDER



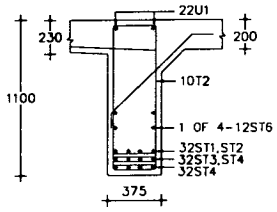
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

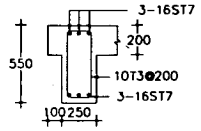
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14910				14910
	6	T2	800	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	138	370	577	311	1378	2708
	12	ST3	12	14870				14870
DECK	16	ST1	58	4930				4930
	12	ST1	58	2875				2875
	16	CR1	57	1832	169	1025		5027
	12	ST2	45	14870				14870
	10	C1	92	120	818			1058
GIRDER	32	ST1	4	7350				7350
	32	ST2	4	9750				9750
	32	ST3	4	11750				11750
	32	ST4	12	14850				14850
	22	U1	4	910	14850	910		16670
	12	ST6	8	14850				14850
	10	T1	64	1004	214			2556
	10	T1	40	1004	214			2556
	10	T2	56	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



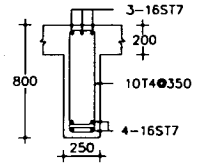
SECTION A-A



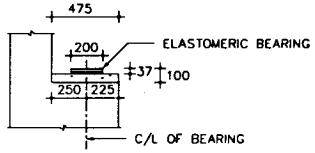
SECTION B-B



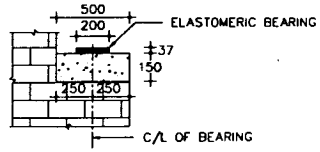
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

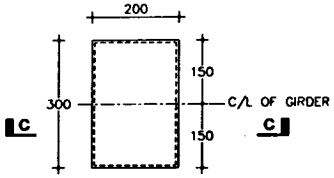


ON BRICK ABUTMENT

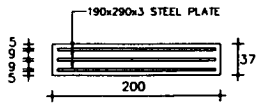
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 14.5m GIRDER & BEARING

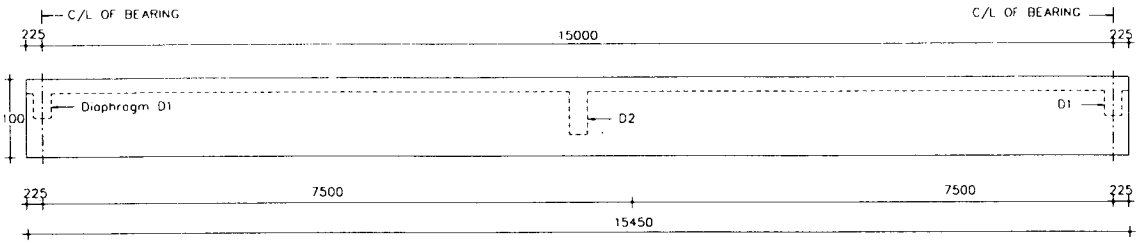
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1214501

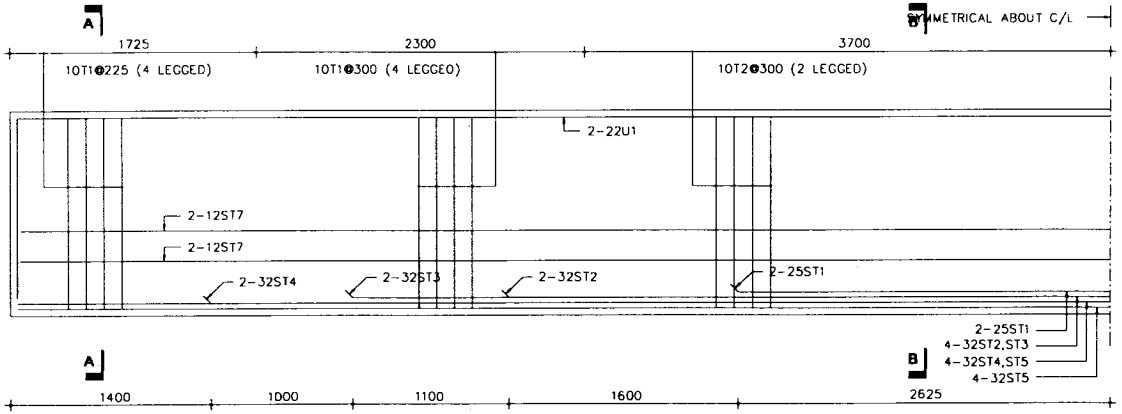
Web Copy

GB-123

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



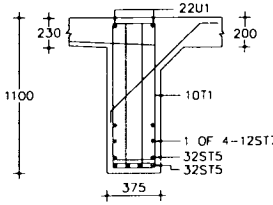
DETAILS OF GIRDER



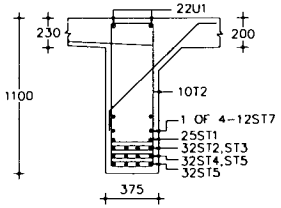
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15410				15410
	6	T2	836	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	142	370	577	311	1378	2708
	12	ST3	12	15370				15370
DECK	16	ST1	60	4930				4930
	12	ST1	60	2875				2875
	16	CR1	59	1832	169	1025		5027
	12	ST2	45	15370				15370
	10	C1	96	120	818			1058
GIRDER	25	ST1	4	5250				5250
	32	ST2	4	8450				8450
	32	ST3	4	10650				10650
	32	ST4	4	12650				12650
	32	ST5	12	15350				15350
	22	U1	4	910	15350	910		17170
	12	ST7	8	15350				15350
	10	T1	72	1004	214			2556
	10	T1	56	1004	214			2556
	10	T2	48	1004	295			2718
DIAPHRAGM	16	ST8	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860

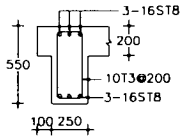
REINF. DETAILS OF GIRDER



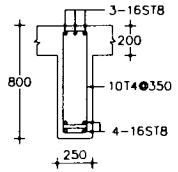
SECTION A-A



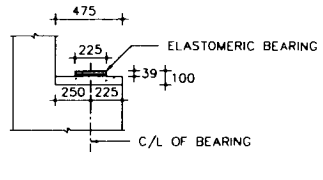
SECTION B-B



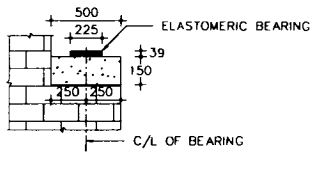
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

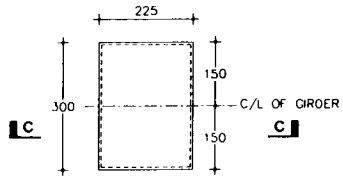


ON BRICK ABUTMENT

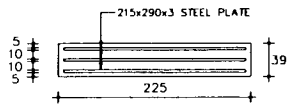
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drowing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

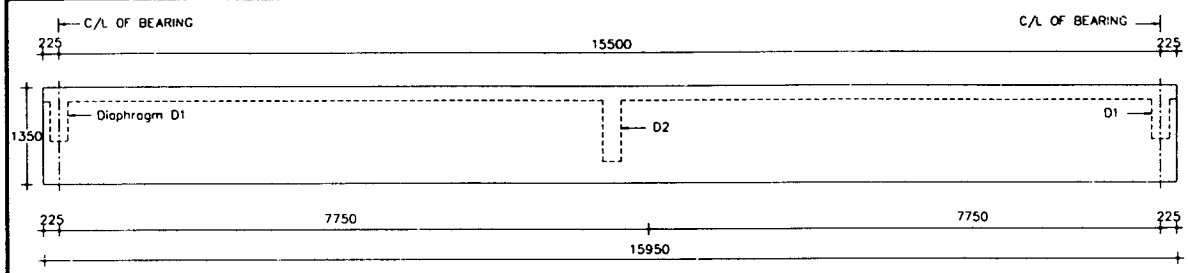
DETAILS OF 15.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1215001	

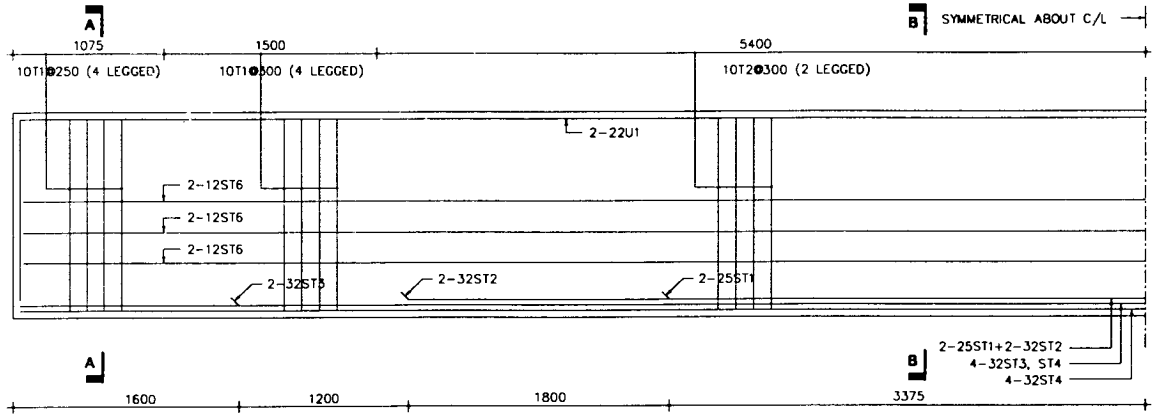
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GB-124

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



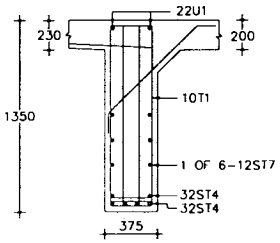
DETAILS OF GIRDER



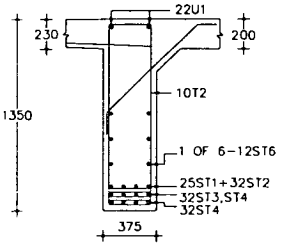
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15910				15910
	6	T2	880	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	146	370	577	311	1378	2708
	12	ST3	12	15870				15870
DECK	16	ST1	62	4930				4930
	12	ST1	62	2875				2875
	16	CR1	61	1832	169	1025		5027
	12	ST2	45	15870				15870
	10	C1	98	120	818			1058
GIRDER	25	ST1	4	6750				6750
	32	ST2	4	10350				10350
	32	ST3	4	12750				12750
	32	ST4	12	15850				15850
	22	U1	4	1160	15850	1160		18170
	12	ST6	12	15850				15850
	10	T1	48	1254	214			3056
	10	T1	32	1254	214			3056
	10	T2	72	1254	295			3218
DIAPHRAGM	16	ST7	22	2825				2825
	12	ST8	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

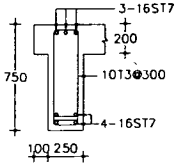
REINF. DETAILS OF GIRDER



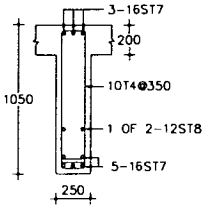
SECTION A-A



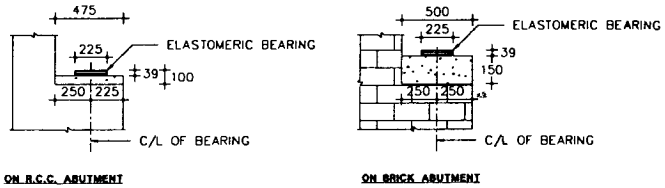
SECTION B-B



DETAILS OF D1



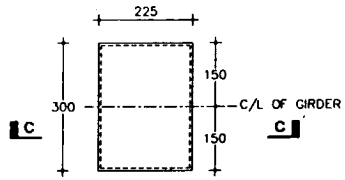
DETAILS OF D2



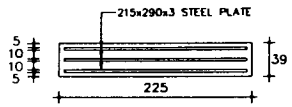
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Cleor cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.5m GIRDER & BEARING

DATE : 10/04/1997

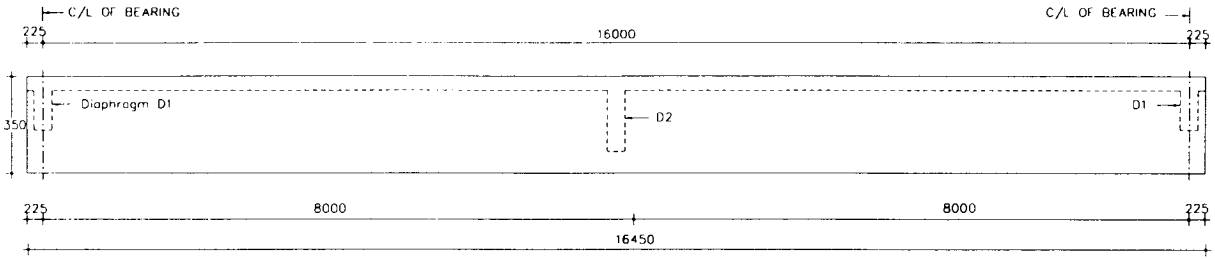
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CAD FILE REF : BRDG\G1215501

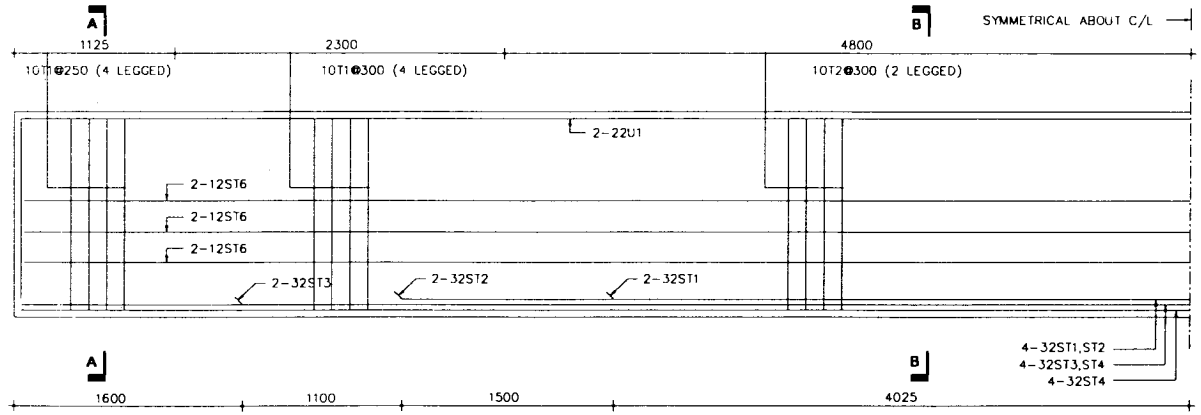
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GB-125

SHEET 1 OF 1	
LOADING – AASHTO H15	
SIDEWALK – YES	



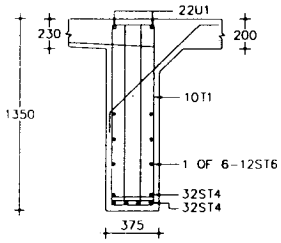
DETAILS OF GIRDER



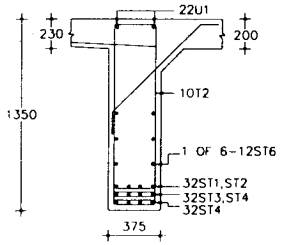
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16410				16410
	6	T2	880	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	152	370	577	311	1378	2708
	12	ST3	12	16370				16370
DECK	16	ST1	64	4930				4930
	12	ST1	64	2875				2875
	16	CR1	63	1832	169	1025		5027
	12	ST2	45	16370				16370
	10	C1	102	120	818			1058
GIRDER	32	ST1	4	8050				8050
	32	ST2	4	11050				11050
	32	ST3	4	13250				13250
	32	ST4	12	16350				16350
	22	U1	4	1160	16350	1160		18670
	12	ST6	12	16350				16350
	10	T1	48	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	62	1254	295			3218
DIAPHRAGM	16	ST7	22	2825				2825
	12	ST8	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

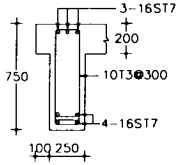
REINF. DETAILS OF GIRDER



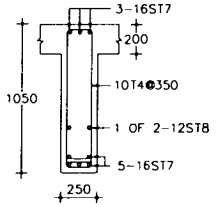
SECTION A-A



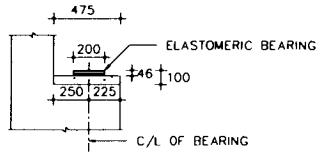
SECTION B-B



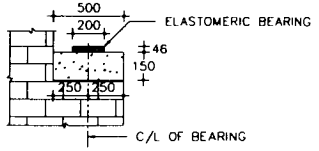
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

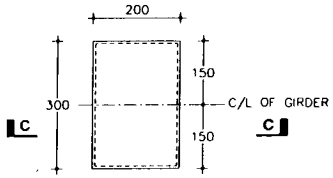


ON BRICK ABUTMENT

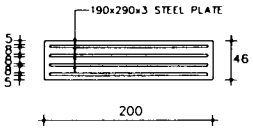
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.0m GIRDER & BEARING

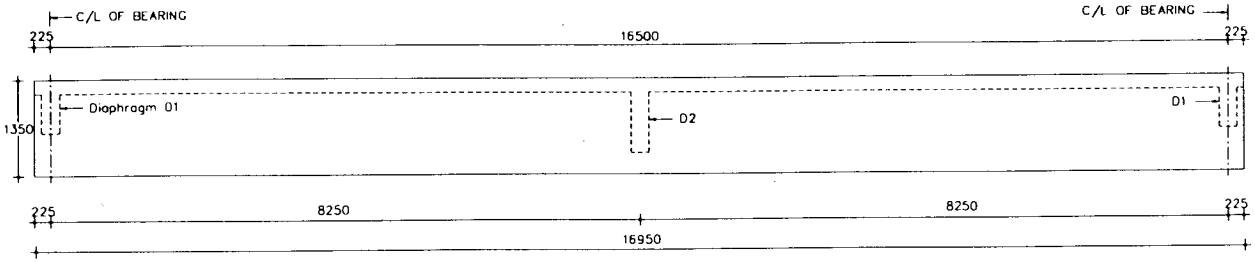
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1216001

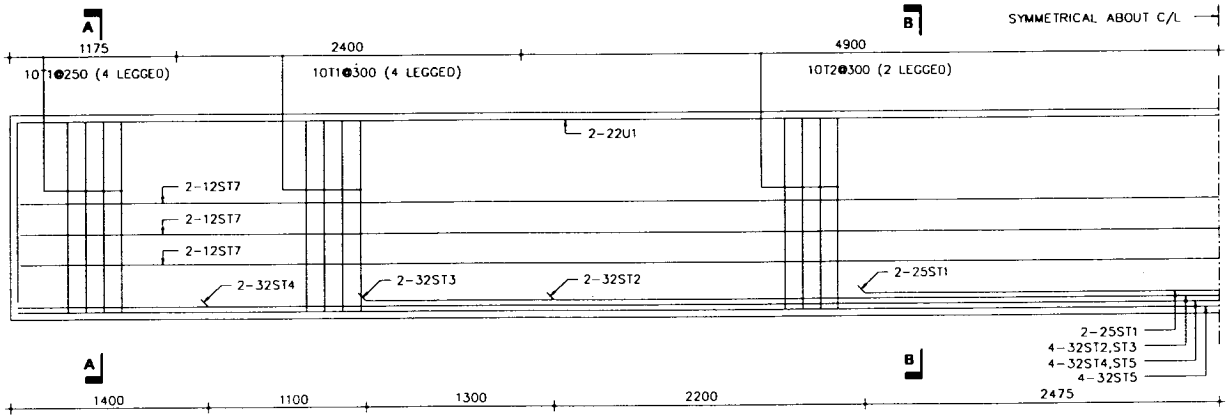
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GB-126

SHEET 1 OF 1
LOADING - AASHTO HS
SIDEWALK - YES



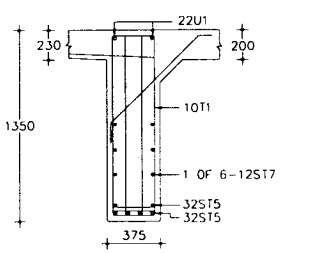
DETAILS OF GIRDER



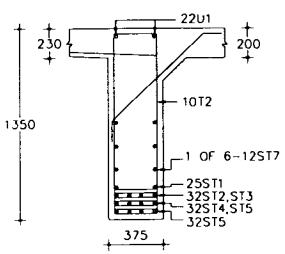
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16910				16910
	6	T2	912	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	156	370	577	311	1378	2708
	12	ST3	12	16870				16870
DECK	16	ST1	66	4930				4930
	12	ST1	66	2875				2875
	16	CR1	65	1832	169	1025		5027
	12	ST2	45	16870				16870
	10	C1	104	120	818			1058
GIRDER	25	ST1	4	4950				4950
	32	ST2	4	9350				9350
	32	ST3	4	11950				11950
	32	ST4	4	14150				14150
	32	ST5	12	16850				16850
	22	U1	4	1160	16850	1160		19170
	12	ST7	12	16850				13850
	10	T1	48	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	66	1254	295			3218
DIAPHRAGM	16	ST8	22	2825				2825
	12	ST9	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

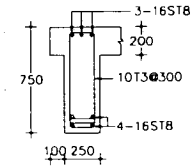
REINF. DETAILS OF GIRDER



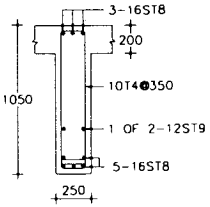
SECTION A-A



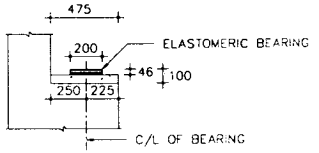
SECTION B-B



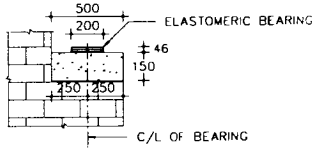
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

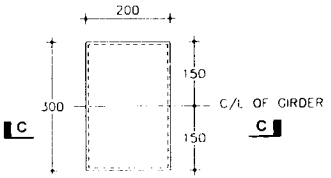


ON BRICK ABUTMENT

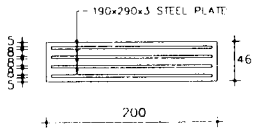
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.5m GIRDER & BEARING

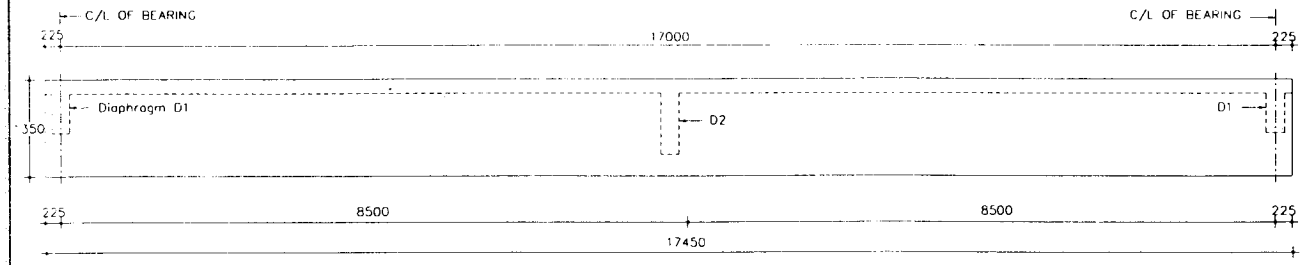
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1216501

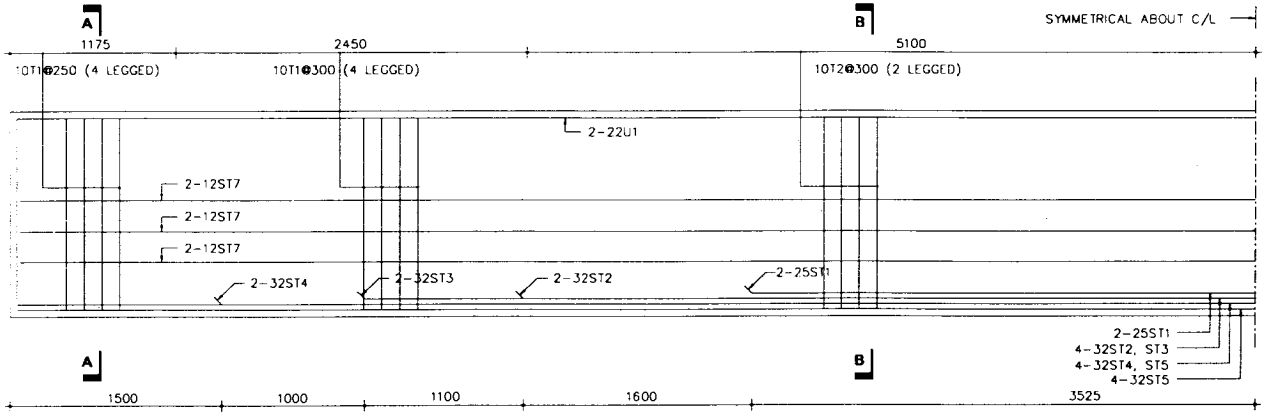
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GB-127

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



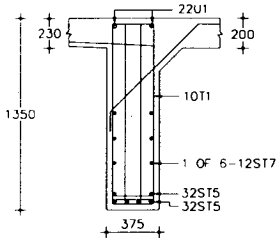
DETAILS OF GIRDER



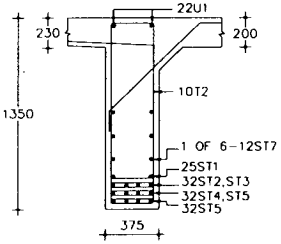
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17410				17410
	6	T2	960	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	160	370	577	311	1378	2708
	12	ST3	12	17370				17370
DECK	16	ST1	68	4930				4930
	12	ST1	68	2875				2875
	16	CR1	67	1832	169	1025		5027
	12	ST2	45	17370				17370
	10	C1	108	120	818			1058
GIRDER	25	ST1	4	7050				7050
	32	ST2	4	10250				10250
	32	ST3	4	12450				12450
	32	ST4	4	14450				14450
	32	ST5	12	17350				17350
	22	U1	4	1160	17350	1160		19670
	12	ST7	12	17350				17350
	10	T1	48	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	70	1254	295			3218
DIAPHRAGM	16	ST8	22	2825				2825
	12	ST9	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

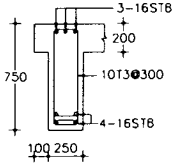
REINF. DETAILS OF GIRDER



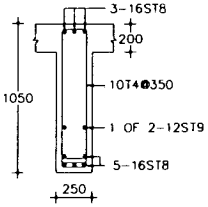
SECTION A-A



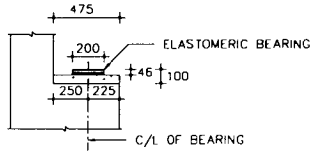
SECTION B-B



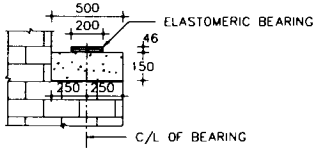
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

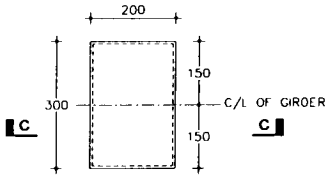


ON BRICK ABUTMENT

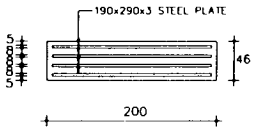
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

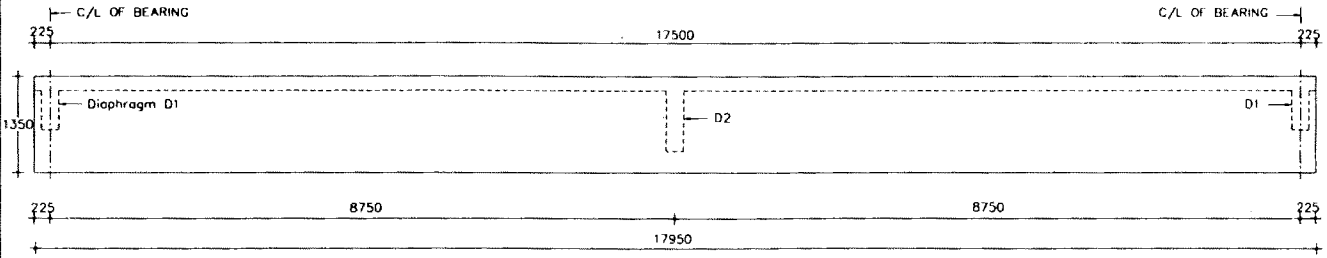
DETAILS OF 17.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1217D01	

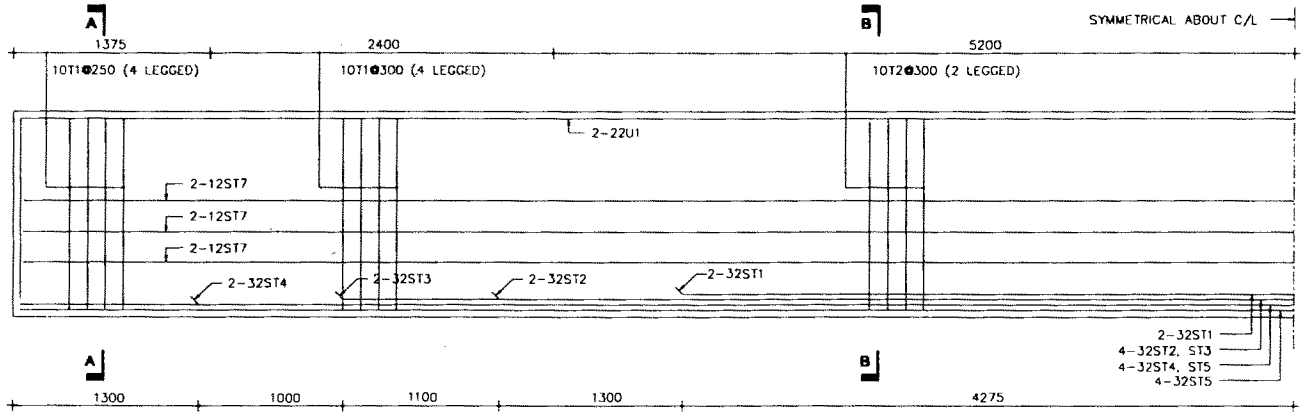
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GB-128

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



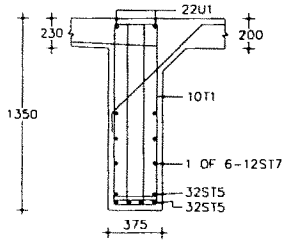
DETAILS OF GIRDER



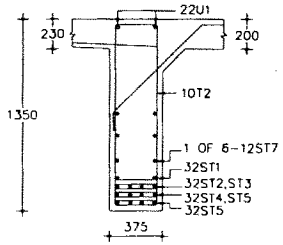
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17910				17910
	6	T2	960	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	164	370	577	311	1378	2708
	12	ST3	12	17870				17870
DECK	16	ST1	69	4930				4930
	12	ST1	69	2875				2875
	16	CR1	69	1832	169	1025		5027
	12	ST2	45	17870				17870
	10	C1	110	120	818			1058
GIRDER	32	ST1	4	8550				8550
	32	ST2	4	11150				11150
	32	ST3	4	13350				13350
	32	ST4	4	15350				15350
	32	ST5	12	17850				17850
	22	U1	4	1160	17850	1160		20170
	12	ST7	12	17850				17850
	10	T1	56	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	70	1254	295			3218
DIAPHRAGM	16	ST8	22	2825				2825
	12	ST9	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

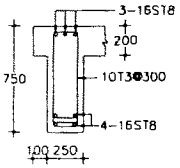
REINF. DETAILS OF GIRDER



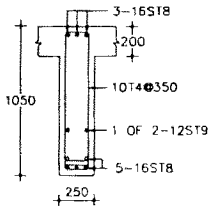
SECTION A-A



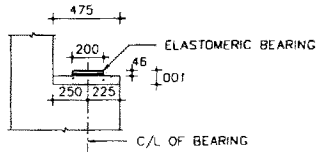
SECTION B-B



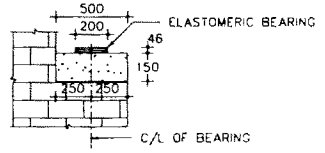
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

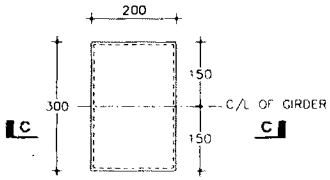


ON BRICK ABUTMENT

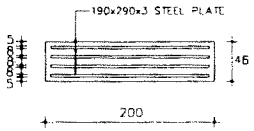
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa--ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

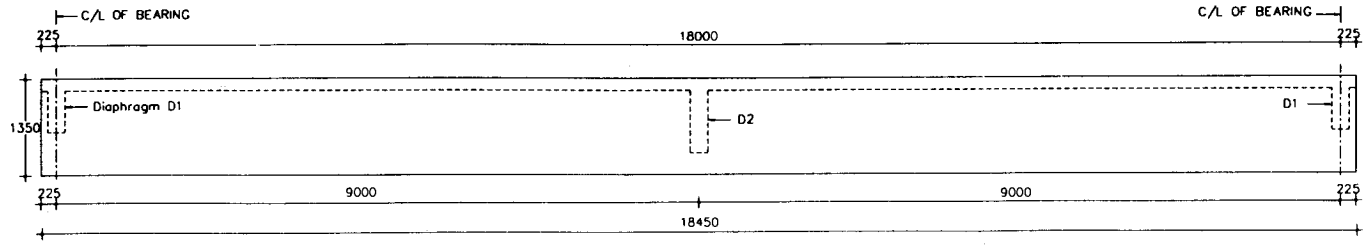
DETAILS OF 17.5m GIRDER & BEARING

DATE : 10/04/1997 | ISSUED BY :

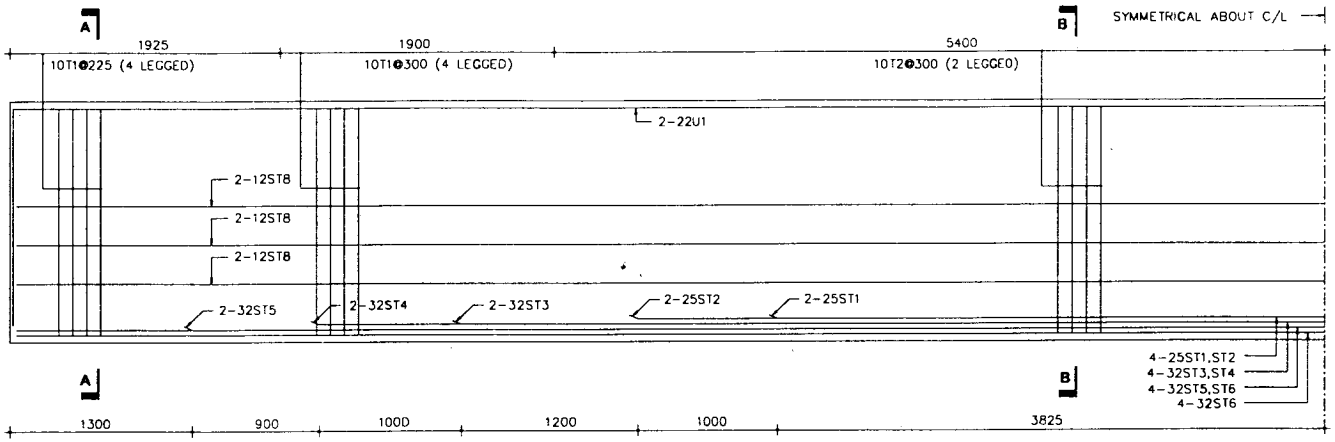
CAD FILE REF : BRDG\G1217501

Web Copy

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



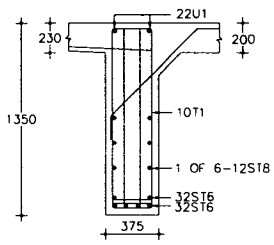
DETAILS OF GIRDER

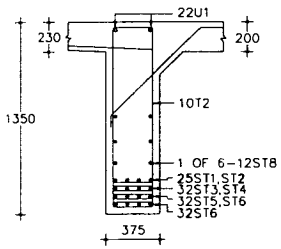


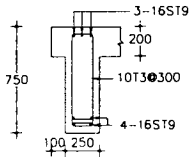
BAR BENDING SCHEDULE

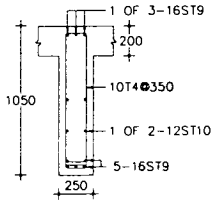
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18410				18410
	6	T2	988	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	170	370	577	311	1378	2708
	12	ST3	12	18370				18370
DECK	16	ST1	71	4930				4930
	12	ST1	71	2875				2875
	16	CR1	71	1832	169	1025		5027
	12	ST2	45	18370				18370
	10	C1	114	120	818			1058
GIRDER	25	ST1	4	7650				7650
	25	ST2	4	9650				9650
	32	ST3	4	12050				12050
	32	ST4	4	14050				14050
	32	ST5	4	15850				15850
	32	ST6	12	18350				18350
	22	U1	4	1160	18350	1160		20670
	12	ST8	12	18350				18350
	10	T1	80	1254	214			3056
	10	T1	40	1254	214			3056
	10	T2	74	1254	295			3218
DIAPHRAGM	16	ST9	22	2825				2825
	12	ST10	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

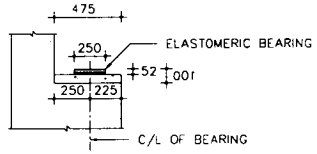
REINF. DETAILS OF GIRDER



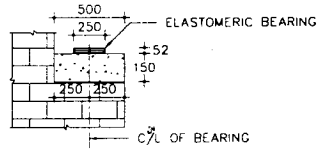








ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

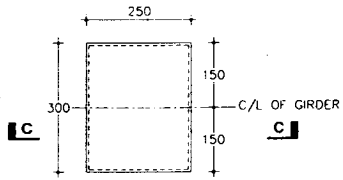
SIDE ELEVATION OF PLACEMENT OF BEARING

SECTION A-A

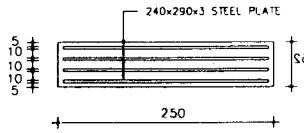
SECTION B-B

DETAILS OF D1

DETAILS OF D2



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code: Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

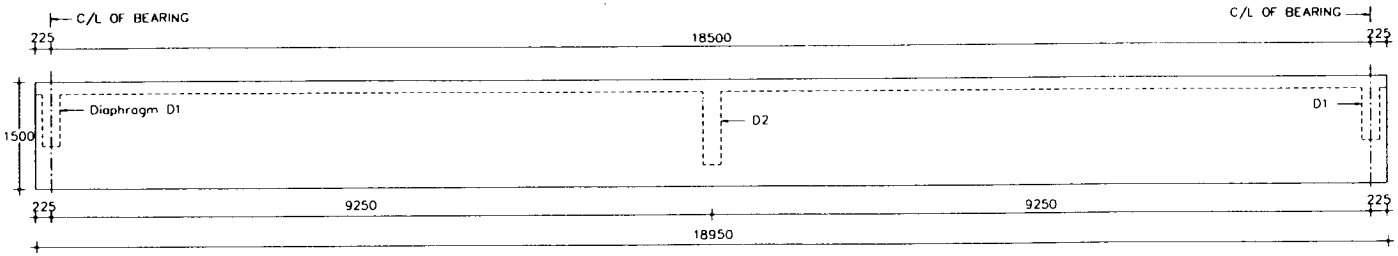
DETAILS OF 18.0m GIRDER & BEARING

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1218D01

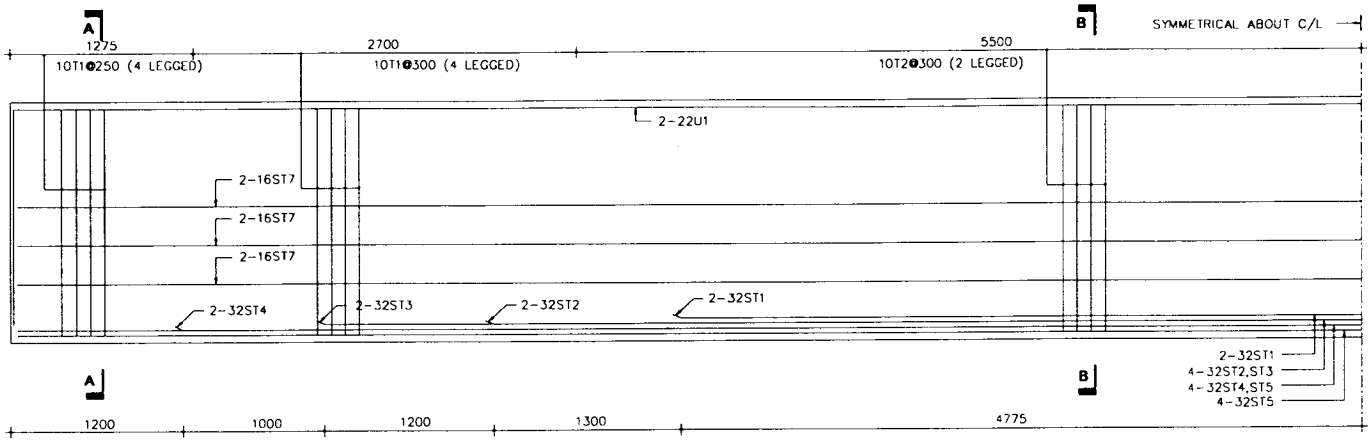
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GB-130

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



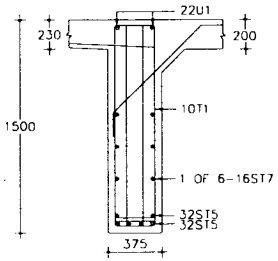
DETAILS OF GIRDER



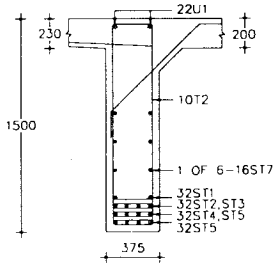
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18910				18910
	6	T2	1040	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	174	370	577	311	1378	2708
	12	ST3	12	18870				18870
DECK	16	ST1	73	4930				4930
	12	ST1	73	2875				2875
	16	CR1	73	1832	169	1025		5027
	12	ST2	45	18870				18870
	10	C1	116	120	818			1058
GIRDER	32	ST1	4	9550				9550
	32	ST2	4	12150				12150
	32	ST3	4	14550				14550
	32	ST4	4	16550				16550
	32	ST5	12	18850				18850
	22	U1	4	1310	18850	1310		21470
	16	ST7	12	18850				18850
	10	T1	48	1404	214			3356
	10	T1	64	1404	214			3356
	10	T2	76	1404	295			3518
DIAPHRAGM	16	ST8	23	2825				2825
	12	ST9	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

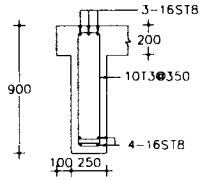
REINF. DETAILS OF GIRDER



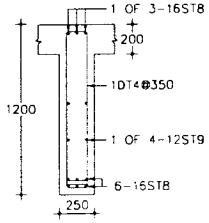
SECTION A-A

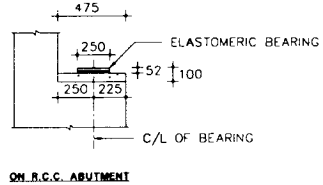


SECTION B-B

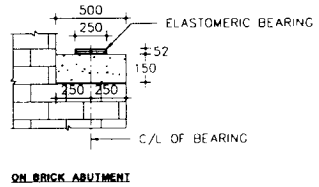


DETAILS OF D1





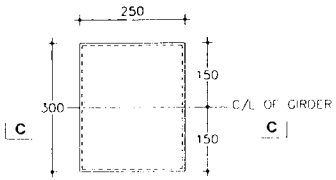
ON R.C.C. ABUTMENT



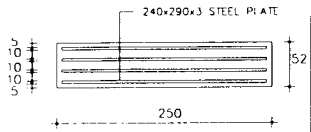
ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING

DETAILS OF D2



PLAN OF BEARING



SEC. C-C

NOTES:

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 18.5m GIRDER & BEARING

DATE : 10/04/1997

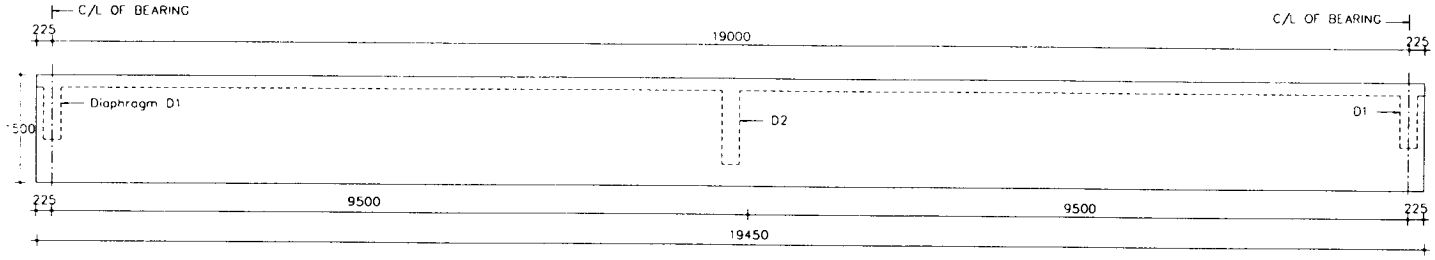
ISSUED BY

CAD FILE REF : BRDG\G1218501

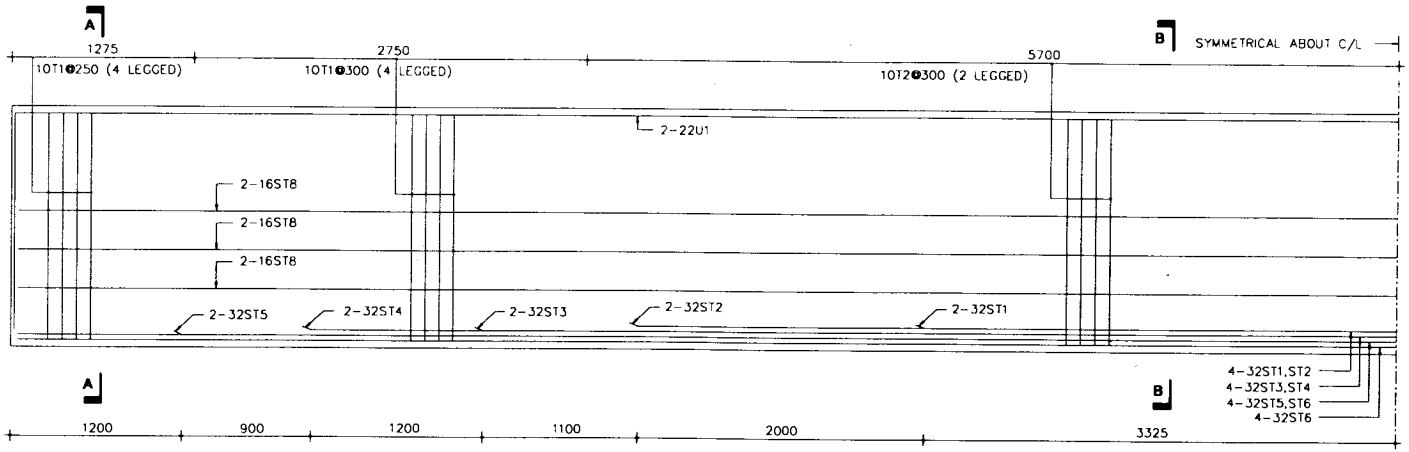
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GH 1.31

SHEET 1 OF 1	
LOADING - AASHTO H15	
SIDEWALK - YES	



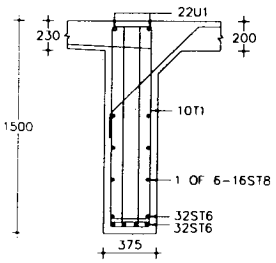
DETAILS OF GIRDER



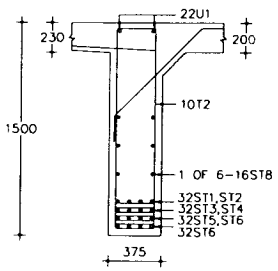
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19410				19410
	6	T2	1040	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	178	370	577	311	1378	2708
	12	ST3	12	19370				19370
DECK	16	ST1	75	4930				4930
	12	ST1	75	2875				2875
	16	CR1	75	1832	169	1025		5027
	12	ST2	45	19370				19370
	10	C1	120	120	818			1058
GIRDER	32	ST1	4	6650				6650
	32	ST2	4	10650				10650
	32	ST3	4	12850				12850
	32	ST4	4	15250				15250
	32	ST5	4	17050				17050
	32	ST6	12	19350				19350
	22	U1	4	1310	19350	1310		21970
	16	ST8	12	19350				19350
	10	T1	48	1404	214			3356
	10	T1	72	1404	214			3356
	10	T2	74	1404	295			3518
DIAPHRAGM	16	ST9	23	2825				2825
	12	ST10	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

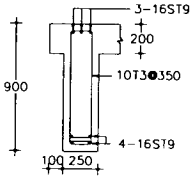
REINF. DETAILS OF GIRDER



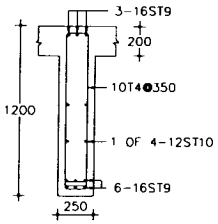
SECTION A-A



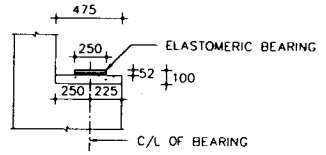
SECTION B-B



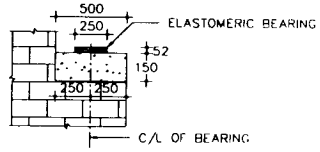
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

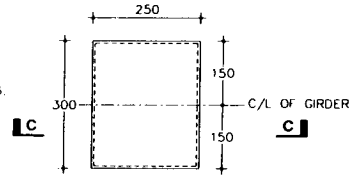


ON BRICK ABUTMENT

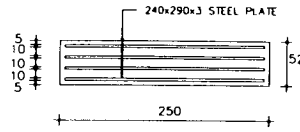
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

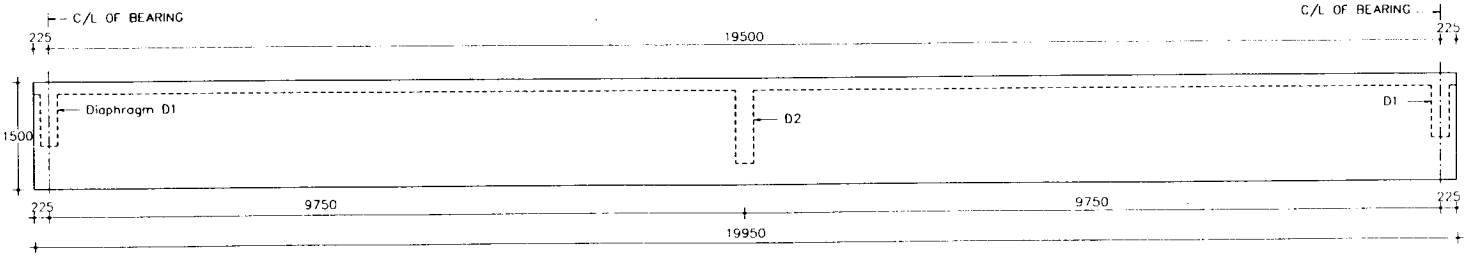
DETAILS OF 19.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
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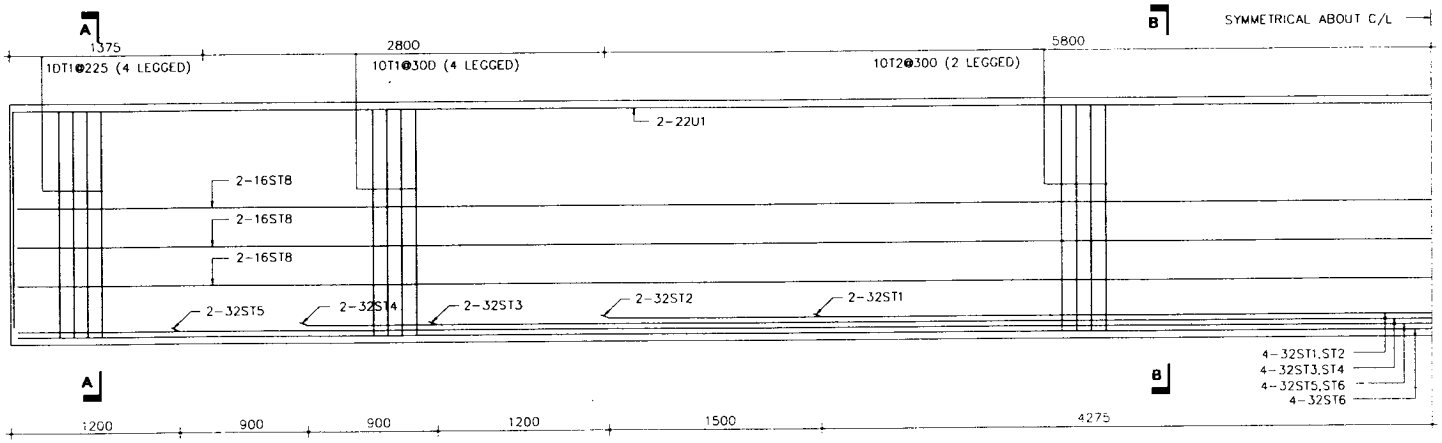
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GB-132

SHEET 1 OF 1
LOADING – AASHTO H15
SIDEWALK – YES



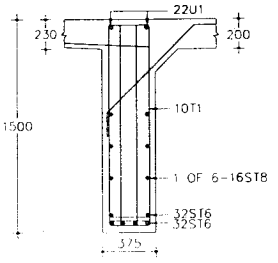
DETAILS OF GIRDER



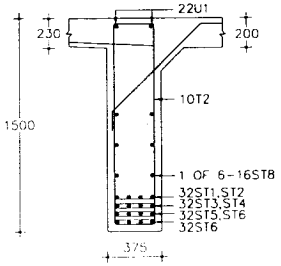
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19910				19910
	6	T2	1064	85	135			512
POST	20	L1	120	1181	120			1301
	6	T1	300	135	135			612
SIDEWALK	12	EL1	184	370	577	311	1378	2708
	12	ST3	12	19870				19870
DECK	16	ST1	77	4930				4930
	12	ST1	77	2875				2875
	16	CR1	77	1832	169	1025		5027
	12	ST2	45	19870				19870
	10	C1	122	120	818			1058
GIRDER	32	ST1	4	8550				8550
	32	ST2	4	11550				11550
	32	ST3	4	13950				13950
	32	ST4	4	15750				15750
	32	ST5	4	17550				17550
	32	ST6	12	19850				19850
	22	U1	4	1310	19850	1310		22470
	16	ST8	12	19850				19850
	10	T1	56	1404	214			3356
	10	T1	72	1404	214			3356
	10	T2	76	1404	295			3518
DIAPHRAGM	16	ST9	23	2825				2825
	12	ST10	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

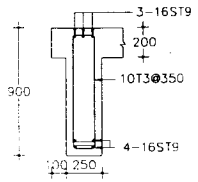
REINF. DETAILS OF GIRDER



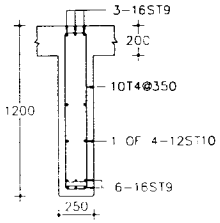
SECTION A-A



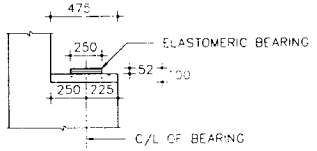
SECTION B-B



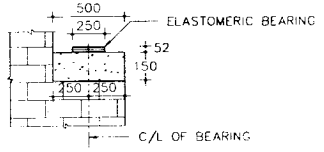
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

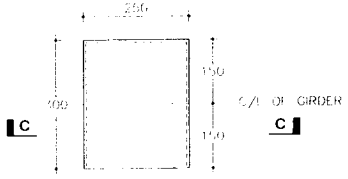


ON BRICK ABUTMENT

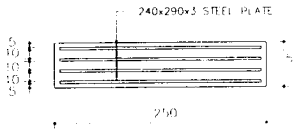
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's = 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength = 276MPa - ASTM A615.
5. Clear cover over main reinforcement = 50mm & stirrup = 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, spacing = 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.5m GIRDER & BEARING

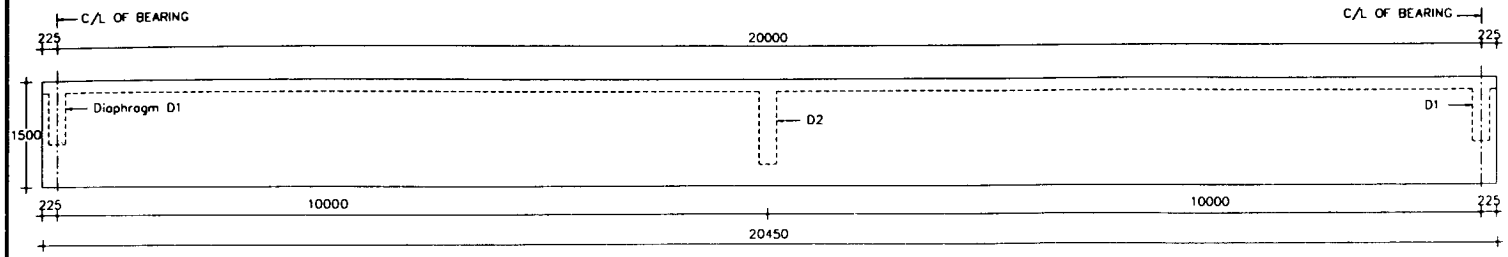
DATE : 10/04/1997 | ISSUED BY

CAD FILE REF : BRDG\GT219501

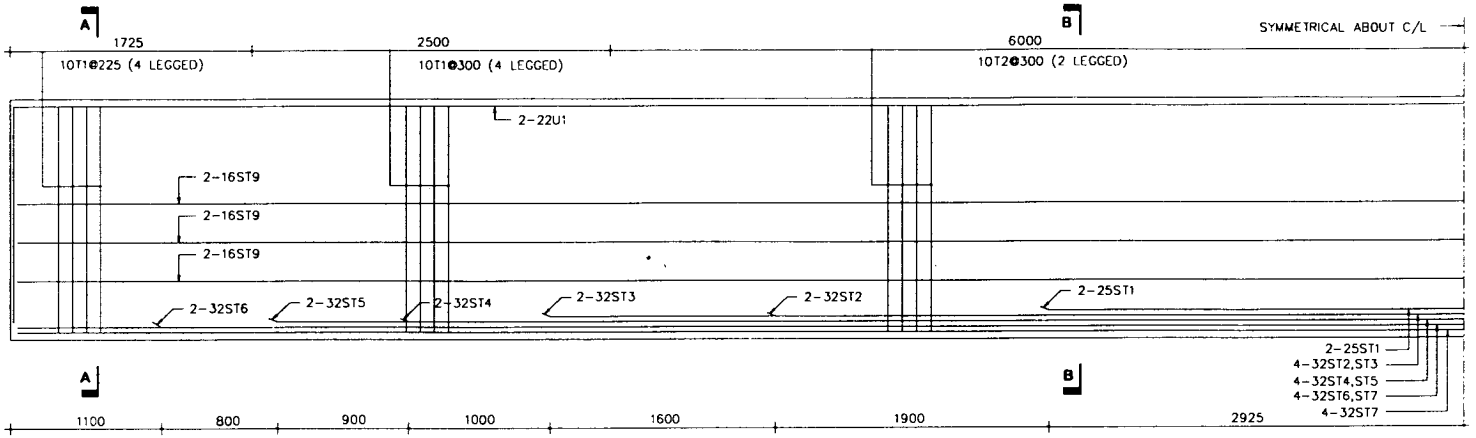
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GB-133

SHEET 1 OF 1
LOADING - AASHTO H15
SIDEWALK - YES



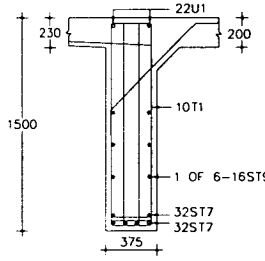
DETAILS OF GIRDER



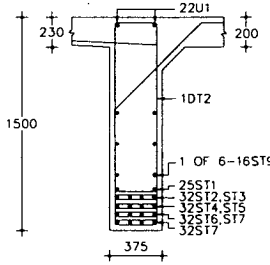
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	20410				20410
	6	T2	1120	85	135			512
POST	20	L1	120	1181	120			1301
	6	T1	300	135	135			612
SIDEWALK	12	EL1	188	370	577	311	1378	2708
	12	ST3	12	20370				20370
DECK	16	ST1	79	4930				4930
	12	ST1	79	2875				2875
	16	CR1	79	1832	169	1025		5027
	12	ST2	45	20370				20370
	10	C1	126	120	818			1058
GIRDER	25	ST1	4	5850				5850
	32	ST2	4	9650				9650
	32	ST3	4	12850				12850
	32	ST4	4	14850				14850
	32	ST5	4	16650				16650
	32	ST6	4	18250				18250
	32	ST7	12	20350				20350
	22	U1	4	1310	20350	1310		22970
	16	ST9	12	20350				20350
	10	T1	72	1404	214			3356
	10	T1	56	1404	214			3356
	10	T2	82	1404	295			3518
DIAPHRAGM	16	ST10	23	2825				2825
	12	ST11	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

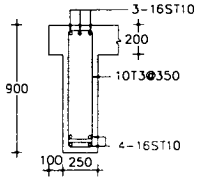
REINF. DETAILS OF GIRDER



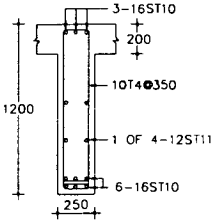
SECTION A-A



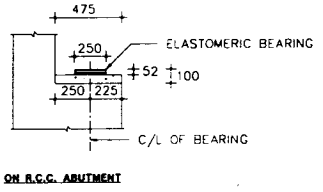
SECTION B-B



DETAILS OF D1



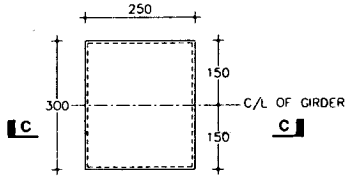
DETAILS OF D2



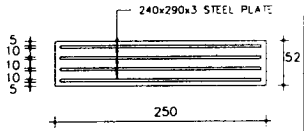
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 20.0m GIRDER & BEARING

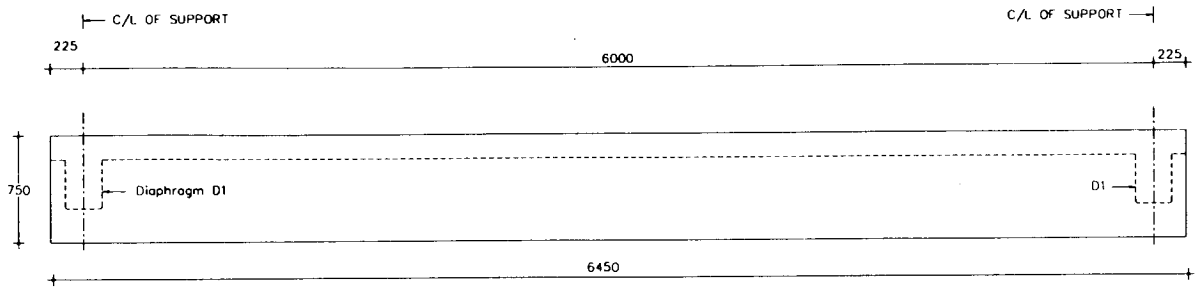
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BROG\G1220001

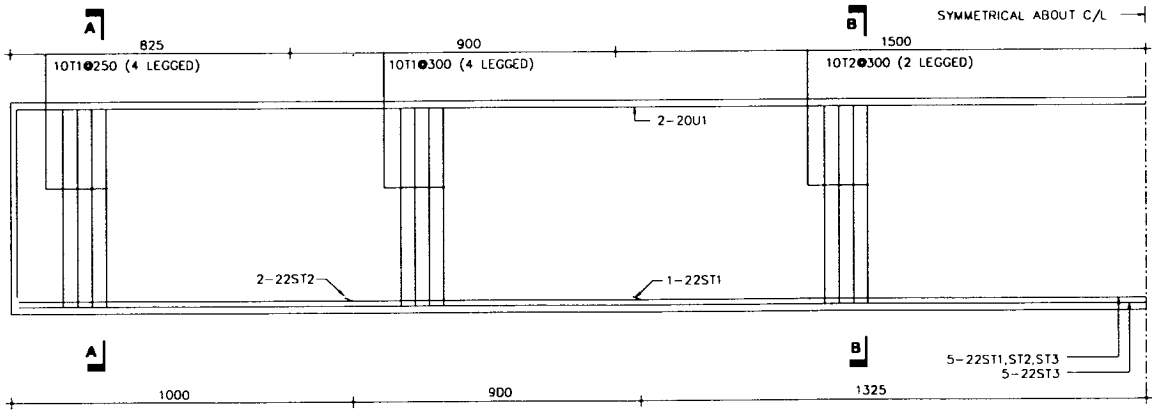
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GB-134

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



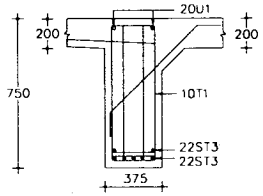
DETAILS OF GIRDER



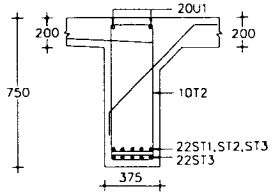
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6410				6410
	6	T2	340	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	66	350	577	311	1376	2686
	12	ST3	12	6370				6370
DECK SLAB	16	ST1	33	4930				4930
	12	ST1	33	2875				2875
	16	CR1	32	1832	169	1025		5027
	12	ST2	50	6370				6370
	10	C1	44	120	818			1058
GIRDER	22	ST1	2	2650				2650
	22	ST2	4	4450				4450
	22	ST3	14	6350				6350
	20	U1	4	580	6350	580		7510
	10	T1	40	654	231			1890
	10	T1	16	654	231			1890
	10	T2	20	654	295			2018
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260

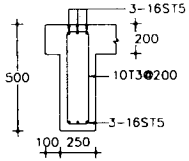
REINF. DETAILS OF GIRDER



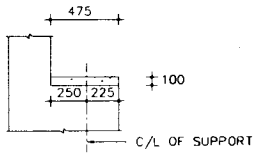
SECTION A-A



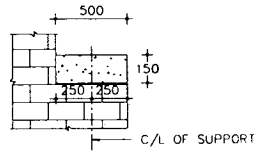
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 6.0m GIRDER

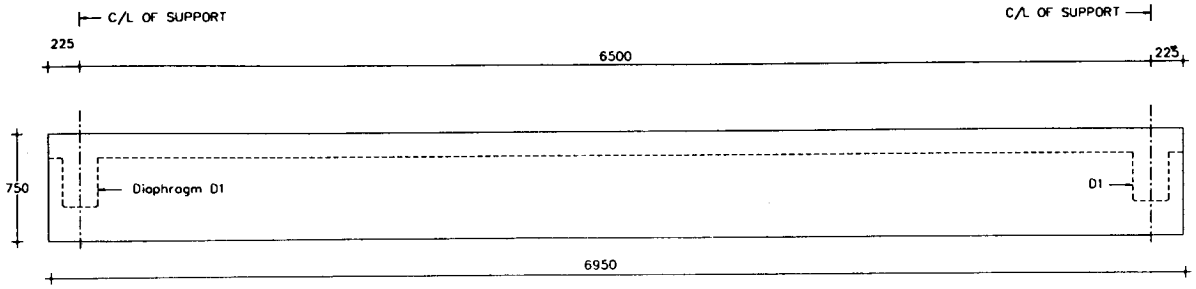
DATE : 10/04/1997 | ISSUED BY :

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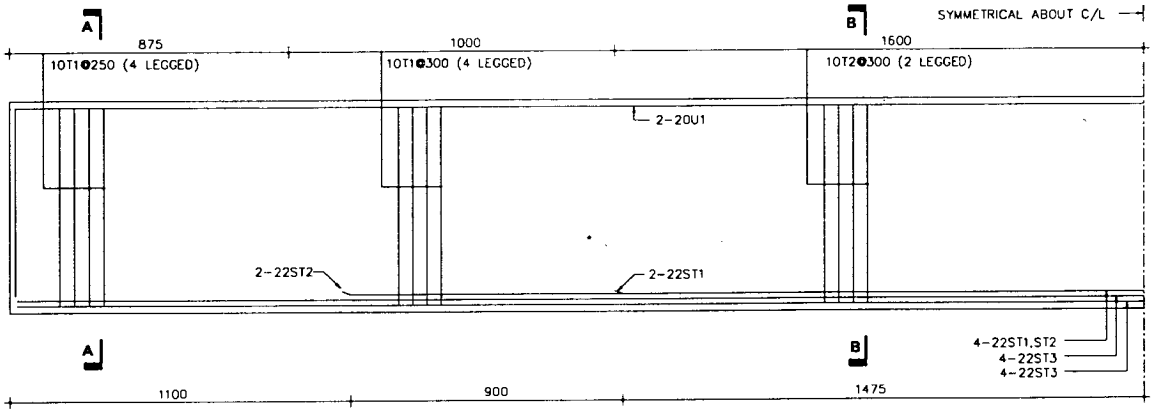
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GB-135

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



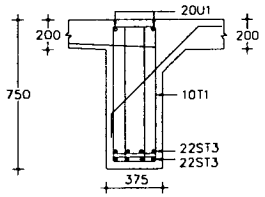
DETAILS OF GIRDER



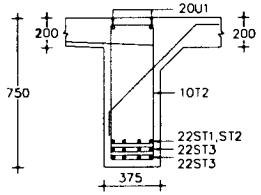
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	6910				6910
	6	T2	380	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	72	350	577	311	1376	2686
	12	ST3	12	6870				6870
DECK SLAB	16	ST1	35	4930				4930
	12	ST1	35	2875				2875
	16	CR1	35	1832	169	1025		5027
	12	ST2	50	6870				6870
	10	C1	48	120	818			1058
GIRDER	22	ST1	4	2950				2950
	22	ST2	4	4750				4750
	22	ST3	16	6850				6850
	20	U1	4	580	6850	580		8010
	10	T1	40	654	210			1848
	10	T1	16	654	210			1848
	10	T2	22	654	295			2018
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260

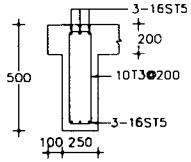
REINF. DETAILS OF GIRDER



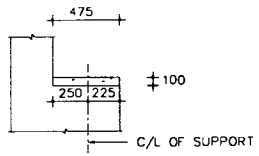
SECTION A-A



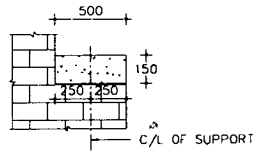
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code: Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 6.5m GIRDER

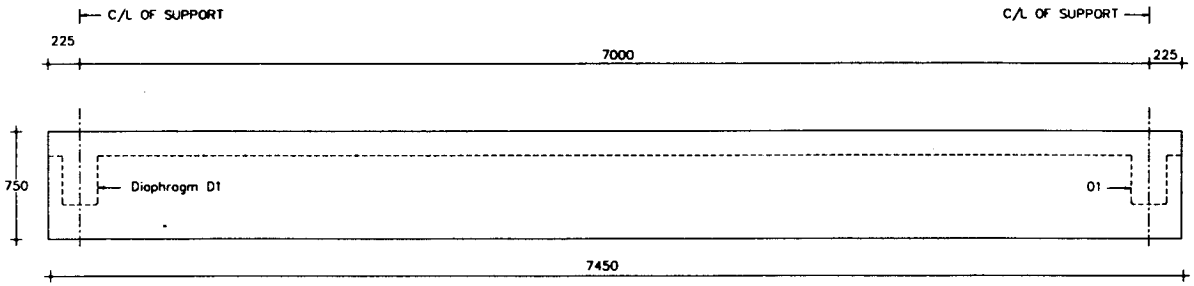
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1306501

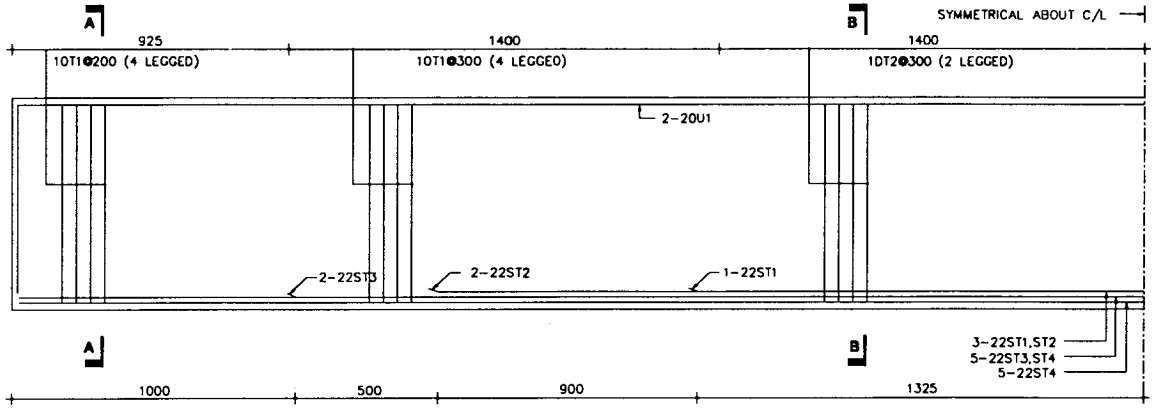
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GB-136

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



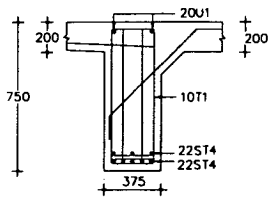
DETAILS OF GIRDER



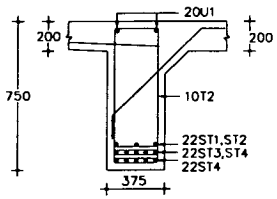
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7410				7410
	6	T2	400	85	135			512
POST	20	L1	48	1181	120			1301
	6	T1	120	135	135			612
SIDEWALK	12	EL1	76	350	577	311	1376	2686
	12	ST3	12	7370				7370
DECK SLAB	16	ST1	38	4930				4930
	12	ST1	38	2875				2875
	16	CR1	37	1832	169	1025		5027
	12	ST2	50	7370				7370
	10	C1	52	120	818			1058
GIRDER	22	ST1	2	2650				2650
	22	ST2	4	4450				4450
	22	ST3	4	5450				5450
	22	ST4	16	7350				7350
	20	U1	4	580	7350	580		8510
	10	T1	48	654	231			1890
	10	T1	32	654	231			1890
	10	T2	18	654	295			2018
DIAPHRAGM	16	ST6	12	2825				2825
	10	T3	22	420	150			1260

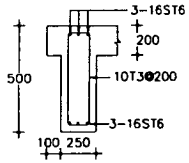
REINF. DETAILS OF GIRDER



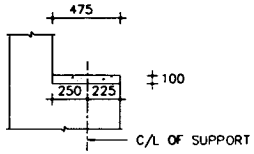
SECTION A-A



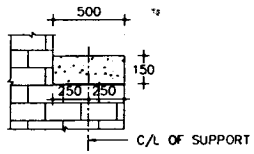
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Cleor cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.0m GIRDER

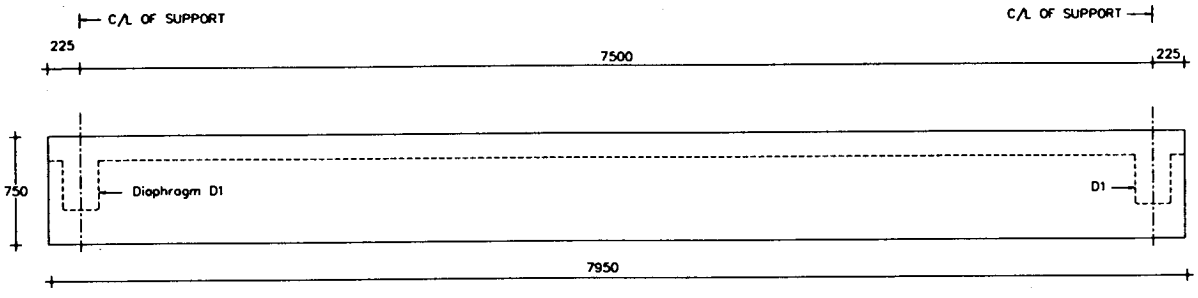
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1307001

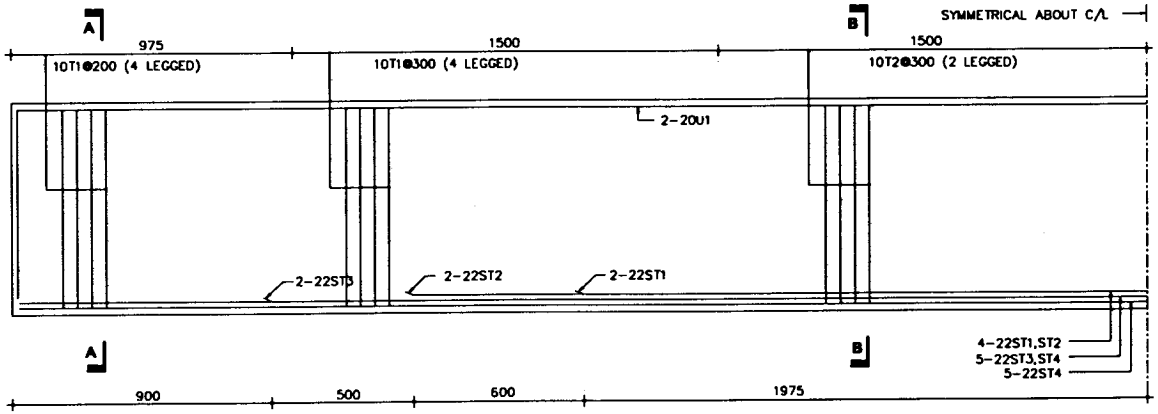
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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



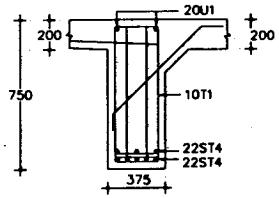
DETAILS OF GIRDER



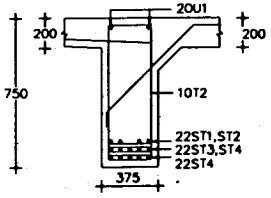
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	7910				7910
	6	T2	432	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	82	350	577	311	1376	2686
	12	ST3	12	7870				7870
DECK SLAB	16	ST1	40	4930				4930
	12	ST1	40	2875				2875
	16	CR1	40	1832	169	1025		5027
	12	ST2	50	7870				7870
	10	C1	54	120	818			1058
GIRDER	22	ST1	4	3950				3950
	22	ST2	4	5150				5150
	22	ST3	4	6150				6150
	22	ST4	16	7850				7850
	20	U1	4	580	7850	580		10170
	10	T1	48	654	231			1890
	10	T1	32	654	231			1890
	10	T2	22	654	295			2018
DIAPHRAGM	16	ST6	12	2825				2825
	10	T3	22	420	150			1260

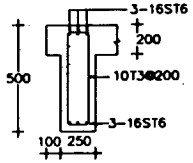
REINF. DETAILS OF GIRDER



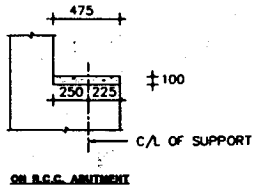
SECTION A-A

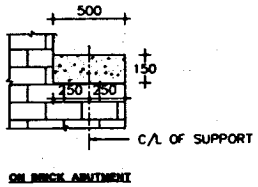


SECTION B-B



DETAILS OF D1





SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 7.5m GIRDER

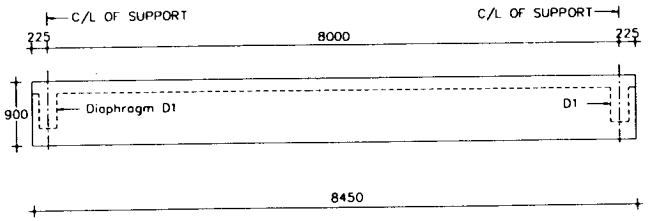
DATE : 10/04/1997 ISSUED BY :

CAD FILE REF : BRDG\G1307501

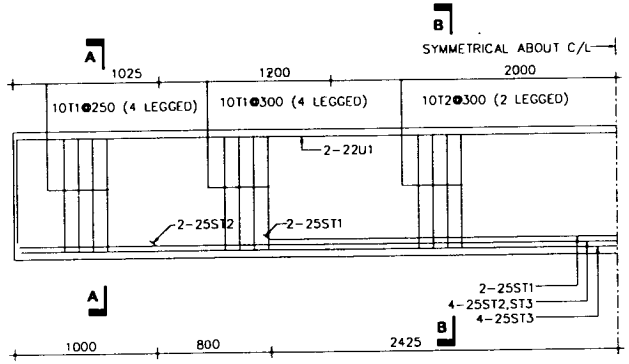
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



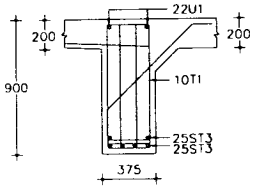
DETAILS OF GIRDER



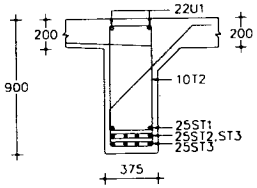
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

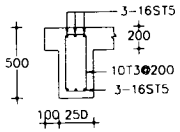
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8410				8410
	6	T2	456	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	86	350	577	311	1376	2686
	12	ST3	12	8370				8370
DECK SLAB	16	ST1	43	4930				4930
	12	ST1	43	2875				2875
	16	CR1	42	1832	169	1025		5027
	12	ST2	50	8370				8370
	10	C1	58	120	818			1058
GIRDER	25	ST1	4	4850				4850
	25	ST2	4	6450				6450
	25	ST3	12	8350				8350
	22	U1	4	724	8350	724		9798
	10	T1	40	804	211			2150
	10	T1	24	804	211			2150
	10	T2	28	804	295			2318
DIAPHRAGM	16	ST5	12	2825				2825
	10	T3	22	420	150			1260



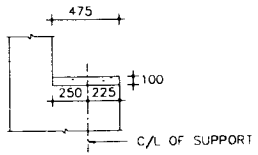
SECTION A-A



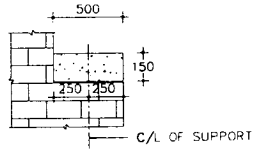
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C.
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.0m GIRDER

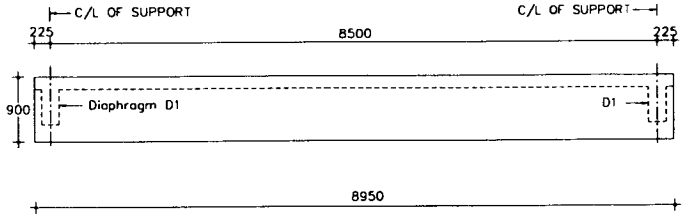
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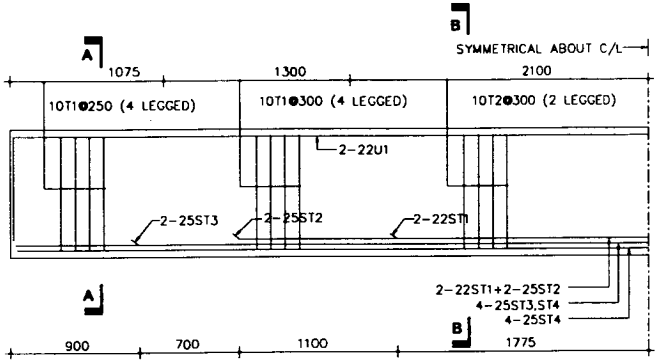
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



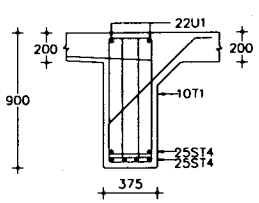
DETAILS OF GIRDER



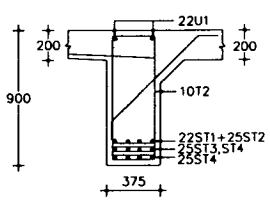
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

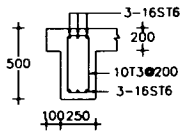
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	8910				8910
	6	T2	480	85	135			512
POST	20	L1	56	1181	120			1301
	6	T1	140	135	135			612
SIDEWALK	12	EL1	92	350	577	311	1376	2686
	12	ST3	12	8870				8870
DECK SLAB	16	ST1	45	4930				4930
	12	ST1	45	2875				2875
	16	CR1	45	1832	169	1025		5027
	12	ST2	50	8870				8870
	10	C1	62	120	818			1058
GIRDER	22	ST1	4	3550				3550
	25	ST2	4	5750				5750
	25	ST3	4	7150				7150
	25	ST4	12	8850				8850
	22	U1	4	724	8850	724		10298
	10	T1	48	804	211			2150
	10	T1	24	804	211			2150
	10	T2	28	804	295			2318
DIAPHRAGM	16	ST6	12	2825				2825
	10	T3	22	420	150			1260



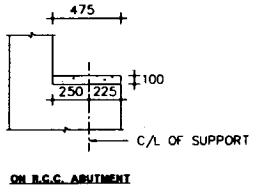
SECTION A-A



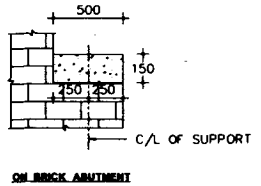
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

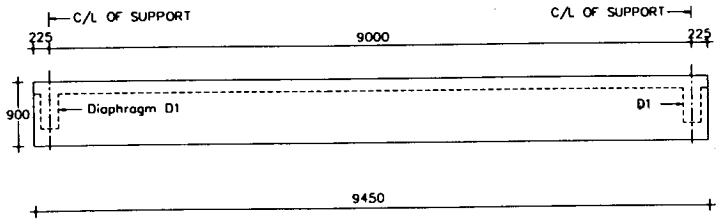
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 8.5m GIRDER

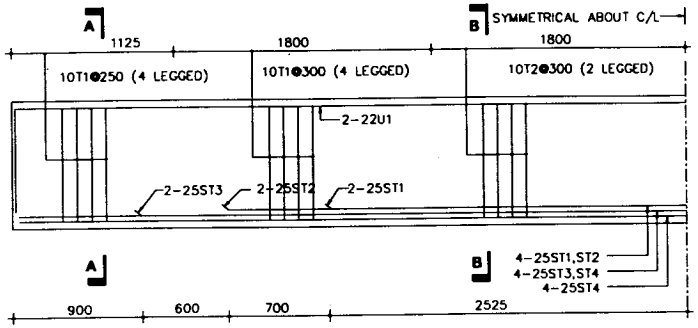
DATE : 10/04/1997	ISSUED BY :
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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



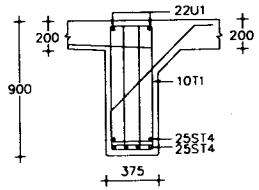
DETAILS OF GIRDER



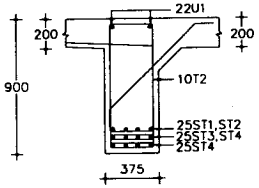
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

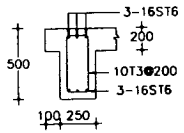
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9410				9410
	6	T2	504	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	96	350	577	311	1376	2686
	12	ST3	12	9370				9370
DECK SLAB	16	ST1	48	4930				4930
	12	ST1	48	2875				2875
	16	CR1	47	1832	169	1025		5027
	12	ST2	50	9370				9370
	10	C1	64	120	818			1058
GIRDER	25	ST1	4	5050				5050
	25	ST2	4	6450				6450
	25	ST3	4	7650				7650
	25	ST4	12	9350				9350
	22	U1	4	724	9350	724		10798
	10	T1	48	804	211			2150
	10	T1	40	804	211			2150
	10	T2	24	804	295			2318
DIAPHRAGM	16	ST6	12	2825				2825
	10	T3	22	420	150			1260



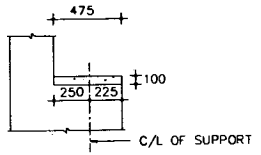
SECTION A-A



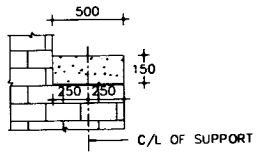
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm dawn graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

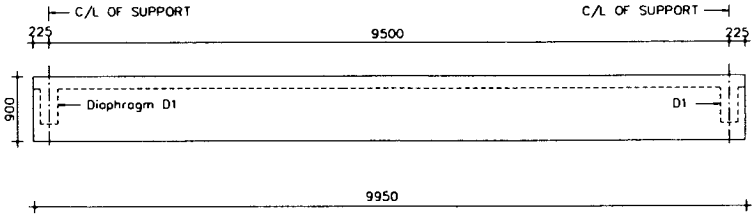
DETAILS OF 9.0m GIRDER

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1309001	

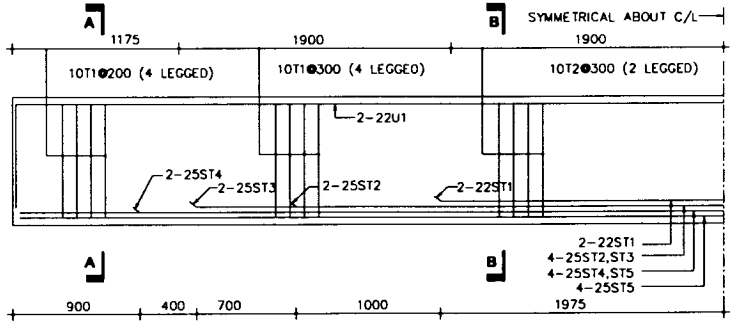
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GB-141

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



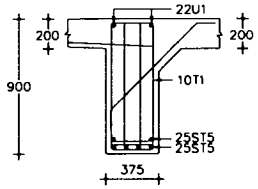
DETAILS OF GIRDER



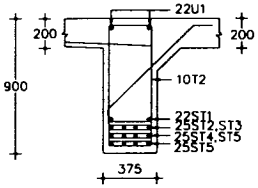
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

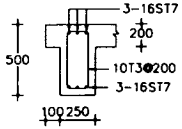
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	9910				9910
	6	T2	532	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	102	350	577	311	1376	2686
	12	ST3	12	9870				9870
DECK SLAB	16	ST1	50	4930				4930
	12	ST1	50	2875				2875
	16	CR1	50	1832	169	1025		5027
	12	ST2	50	9870				9870
	10	C1	68	120	818			1058
GIRDER	22	ST1	4	3950				3950
	25	ST2	4	5950				5950
	25	ST3	4	7350				7350
	25	ST4	4	8150				8150
	25	ST5	12	9850				9850
	22	U1	4	724	9850	724		11298
	10	T1	56	804	211			2150
	10	T1	48	804	211			2150
	10	T2	24	804	295			2318
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	420	150			1260



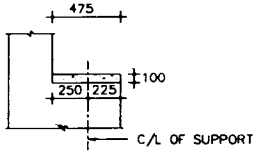
SECTION A-A



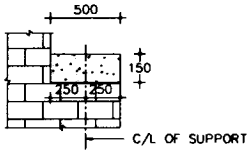
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

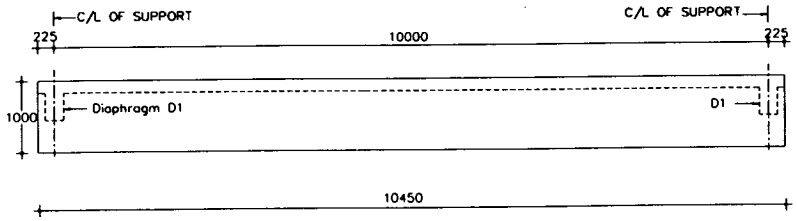
DETAILS OF 9.5m GIRDER

DATE : 10/04/1997 | ISSUED BY :

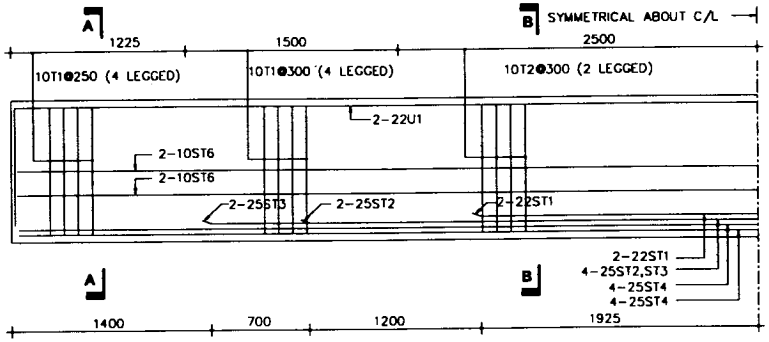
CAD FILE REF : BRDG\G1309501

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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



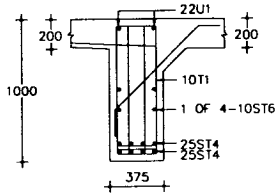
DETAILS OF GIRDER



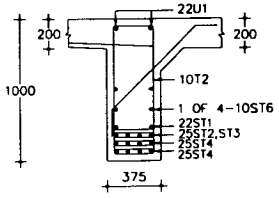
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

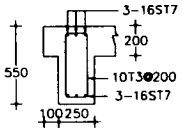
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10410				10410
	6	T2	560	85	135			512
POST	20	L1	64	1181	120			1301
	6	T1	160	135	135			612
SIDEWALK	12	EL1	106	350	577	311	1376	2686
	12	ST3	12	10370				10370
DECK SLAB	16	ST1	53	4930				4930
	12	ST1	53	2875				2875
	16	CR1	52	1832	169	1025		5027
	12	ST2	50	10370				10370
	10	C1	72	120	818			1058
GIRDER	22	ST1	4	3850				3850
	25	ST2	4	6250				6250
	25	ST3	4	7650				7650
	25	ST4	16	10350				10350
	22	U1	4	824	10350	824		11998
	10	ST6	8	10350				10350
	10	T1	48	904	211			2350
	10	T1	32	904	211			2350
	10	T2	34	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



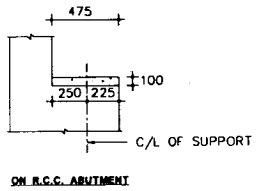
SECTION A-A



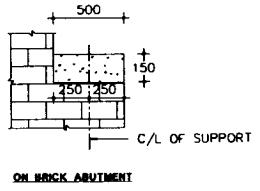
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

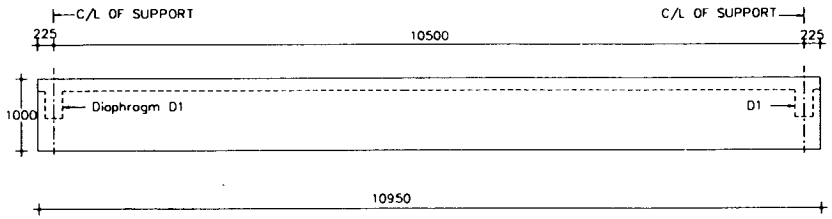
DETAILS OF 10.0m GIRDER

DATE : 10/04/1997
CAD FILE REF : BRDG\G1310001
ISSUED BY :

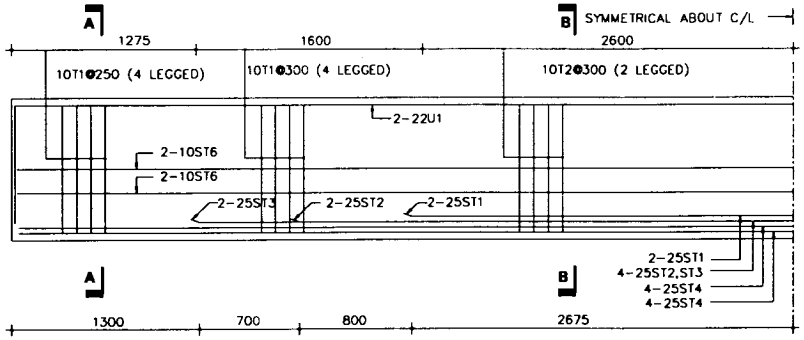
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GB-143

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



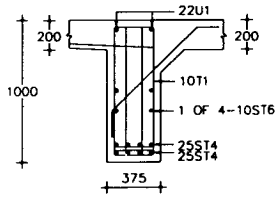
DETAILS OF GIRDER



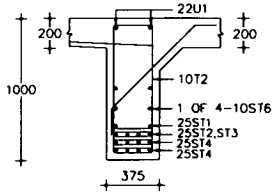
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

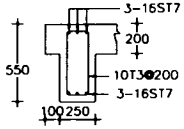
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	10910				10910
	6	T2	576	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	112	350	577	311	1376	2686
	12	ST3	12	10870				10870
DECK SLAB	16	ST1	55	4930				4930
	12	ST1	55	2875				2875
	16	CR1	55	1832	169	1025		5027
	12	ST2	50	10870				10870
	10	C1	74	120	818			1058
GIRDER	25	ST1	4	5350				5350
	25	ST2	4	6950				6950
	25	ST3	4	8350				8350
	25	ST4	16	10850				10850
	22	U1	4	824	10850	824		12498
	10	ST6	8	10850				10850
	10	T1	48	904	211			2350
	10	T1	48	904	211			2350
	10	T2	30	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



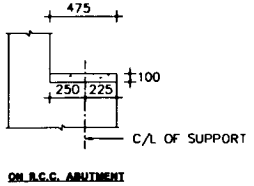
SECTION A-A



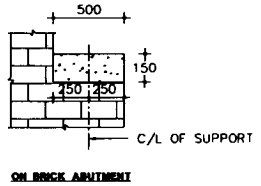
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

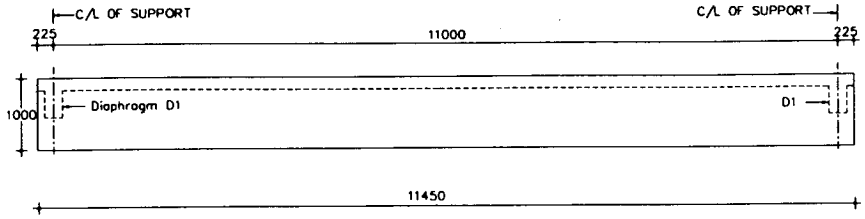
DETAILS OF 10.5m GIRDER

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1310501	

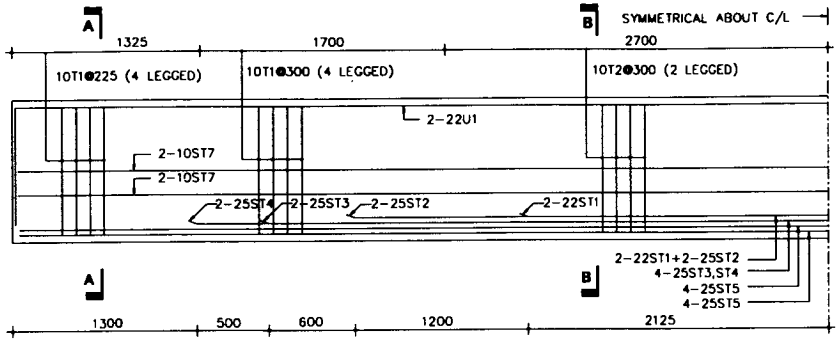
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GB-144

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



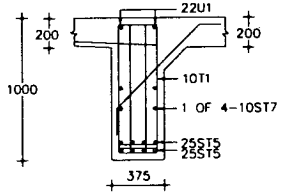
DETAILS OF GIRDER



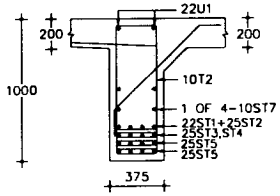
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

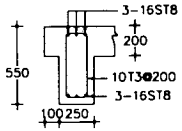
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11410				11410
	6	T2	608	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	116	350	577	311	1376	2686
	12	ST3	12	11370				11370
DECK SLAB	16	ST1	58	4930				4930
	12	ST1	58	2875				2875
	16	CR1	57	1832	169	1025		5027
	12	ST2	50	11370				11370
	10	C1	78	120	818			1058
GIRDER	22	ST1	4	4250				4250
	25	ST2	4	6650				6650
	25	ST3	4	7850				7850
	25	ST4	4	8850				8850
	25	ST5	16	11350				11350
	22	U1	4	824	11350	824		12998
	10	ST7	8	11350				11350
	10	T1	40	904	211			2350
	10	T1	56	904	211			2350
	10	T2	36	904	295			2518
DIAPHRAGM	16	ST8	12	2825				2825
	10	T3	22	470	150			1360



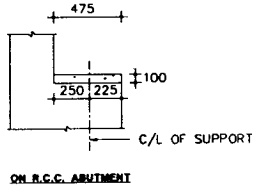
SECTION A-A

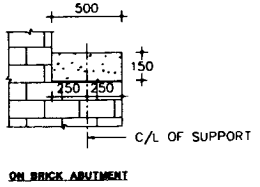


SECTION B-B



DETAILS OF D1





SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

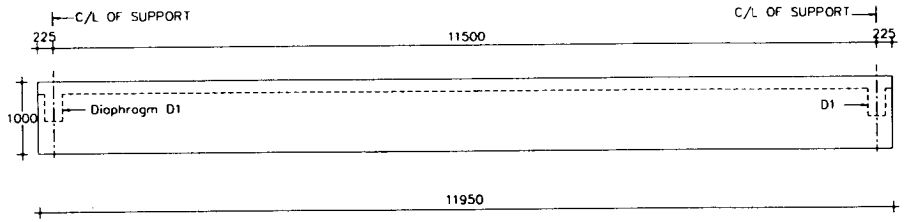
DETAILS OF 11.0m GIRDER

DATE : 10/04/1997 | ISSUED BY :

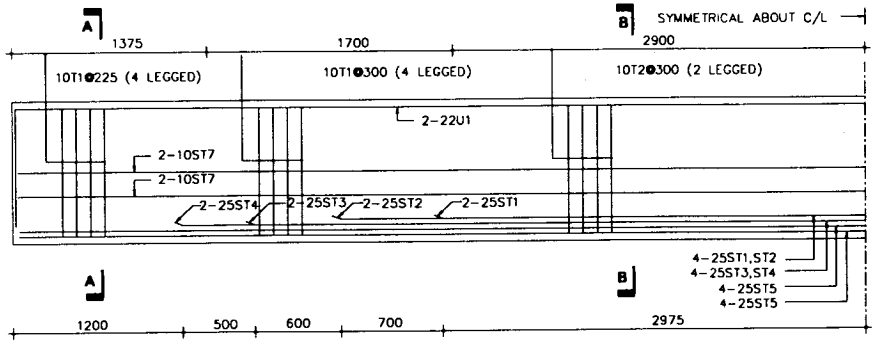
CAD FILE REF : BRDG\G1311001

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SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



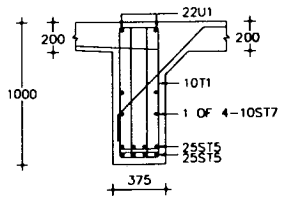
DETAILS OF GIRDER



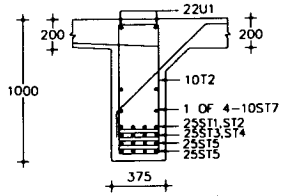
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

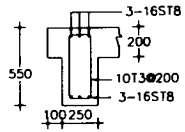
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	11910				11910
	6	T2	640	85	135			512
POST	20	L1	72	1181	120			1301
	6	T1	180	135	135			612
SIDEWALK	12	EL1	122	350	577	311	1376	2686
	12	ST3	12	11870				11870
DECK SLAB	16	ST1	60	4930				4930
	12	ST1	60	2875				2875
	16	CR1	60	1832	169	1025		5027
	12	ST2	50	11870				11870
	10	C1	82	120	818			1058
GIRDER	25	ST1	4	5950				5950
	25	ST2	4	7350				7350
	25	ST3	4	8550				8550
	25	ST4	4	9550				9550
	25	ST5	16	11850				11850
	22	U1	4	824	11850	824		13498
	10	ST7	8	11850				11850
	10	T1	56	904	211			2350
	10	T1	40	904	211			2350
	10	T2	40	904	295			2518
DIAPHRAGM	16	ST8	12	2825				2825
	10	T3	22	470	150			1360



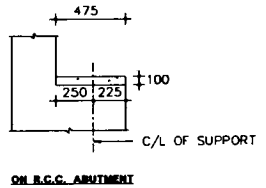
SECTION A-A



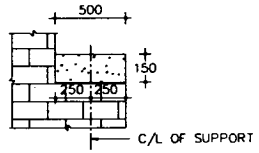
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT.

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

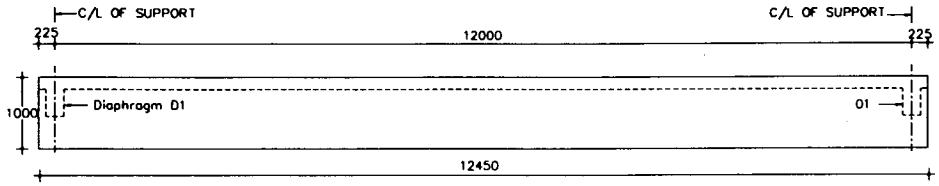
DETAILS OF 11.5m GIRDER

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1311501

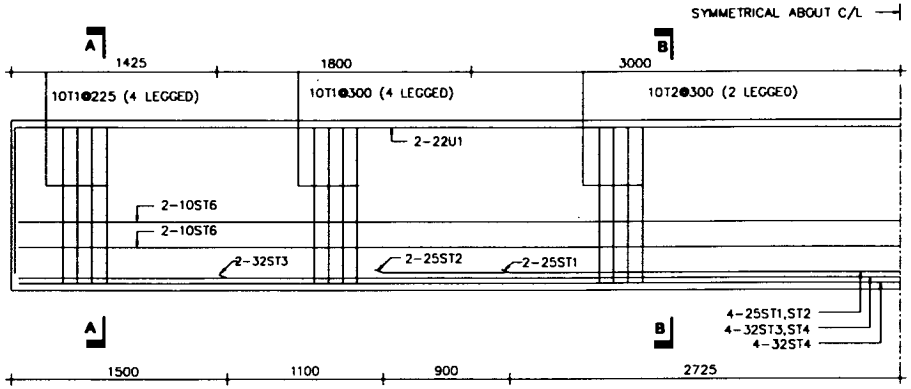
Web Copy

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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



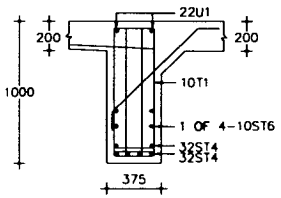
DETAILS OF GIRDER



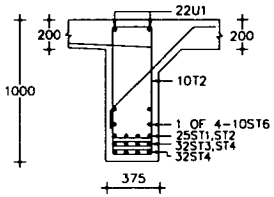
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

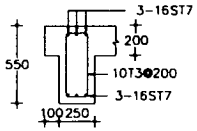
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12410				12410
	6	T2	684	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	126	350	577	311	1376	2686
	12	ST3	12	12370				12370
DECK SLAB	16	ST1	63	4930				4930
	12	ST1	63	2875				2875
	16	CR1	62	1832	169	1025		5027
	12	ST2	50	12370				12350
	10	C1	84	120	818			1058
GIRDER	25	ST1	4	5450				5450
	25	ST2	4	7250				7250
	32	ST3	4	9450				9450
	32	ST4	12	12350				12350
	22	U1	4	810	12350	810		13970
	10	ST6	8	12350				12350
	10	T1	64	904	214			2356
	10	T1	40	904	214			2356
	10	T2	40	904	295			2518
DIAPHRAGM	16	ST7	12	2825				2825
	10	T3	22	470	150			1360



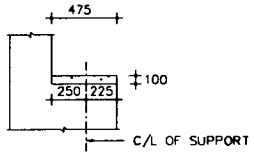
SECTION A-A



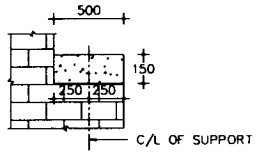
SECTION B-B



DETAILS OF D1



ON R.C.C. ABUTMENT



ON BRICK ABUTMENT

SIDE ELEVATION OF GIRDER SEAT

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cod File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 12.0m GIRDER

DATE : 10/04/1997

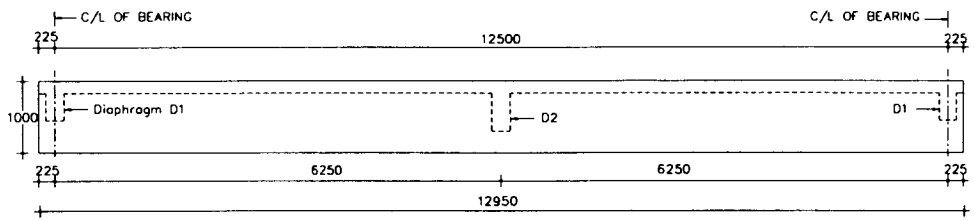
ISSUED BY :

CAD FILE REF : BRDG\G1312001

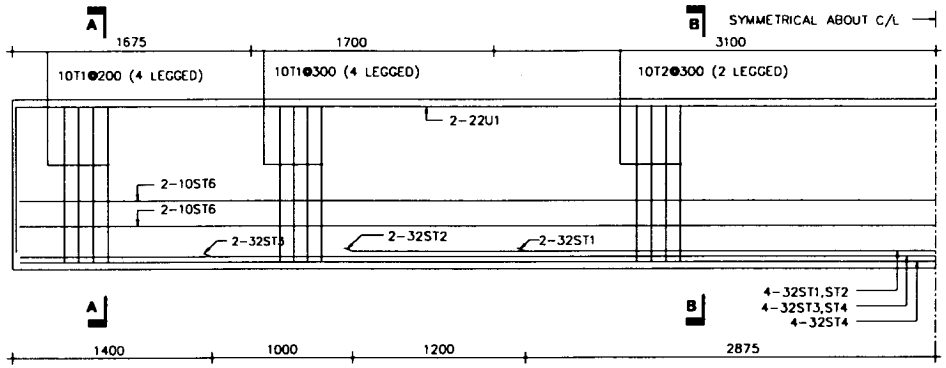
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



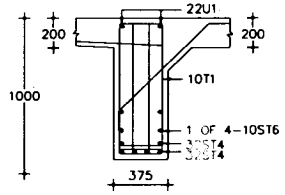
DETAILS OF GIRDER



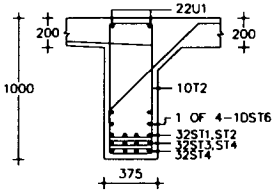
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

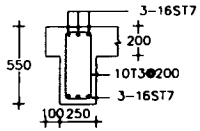
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	12910				12910
	6	T2	684	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	132	350	577	311	1376	2686
	12	ST3	12	12870				12870
DECK SLAB	16	ST1	65	4930				4930
	12	ST1	65	2875				2875
	16	CR1	65	1832	169	1025		5027
	12	ST2	50	12870				12870
	10	C1	88	120	818			1058
GIRDER	32	ST1	4	5750				5750
	32	ST2	4	8150				8150
	32	ST3	4	10150				10150
	32	ST4	12	12850				12850
	22	U1	4	810	12850	810		14470
	10	ST6	8	12850				12850
	10	T1	80	904	214			2356
	10	T1	40	904	214			2356
	10	T2	40	904	295			2518
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	8	620	150			1660



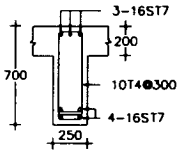
SECTION A-A



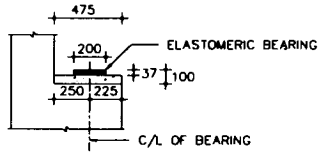
SECTION B-B



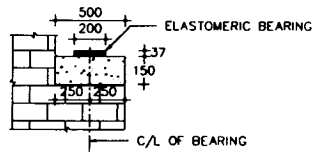
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

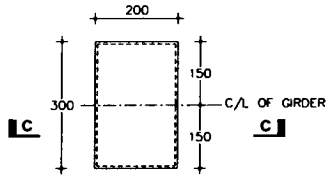


ON BRICK ABUTMENT

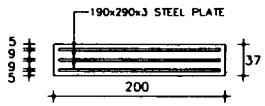
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions ore in millimeter unless otherwise specified.
2. Concrete, Cylinder strength ot 28 day's : 21MPa-ASTM C39.
3. Coorse oggregote for concrete shall be 19mm down groded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Cleor cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elostomer to be used in bearings shall be of Shore hardness of 60.
7. Steel lominotes to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dio. of horizontol spocer will be 25mm, Spocing : 3500 C/C .
9. This drowing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

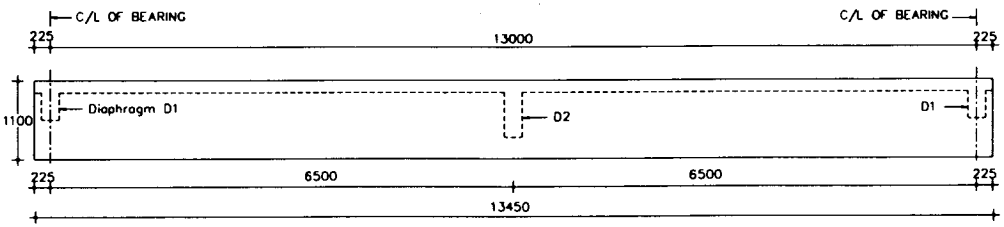
DETAILS OF 12.5m GIRDER & BEARING

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1312501

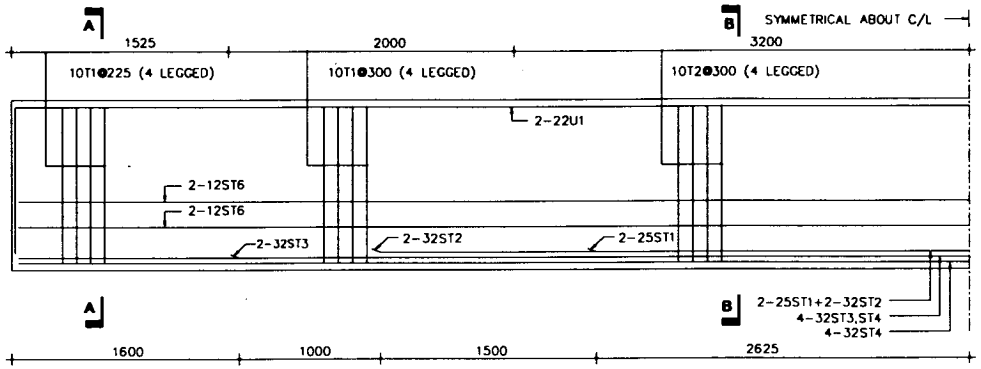
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



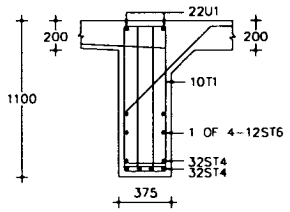
DETAILS OF GIRDER



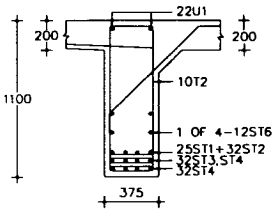
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

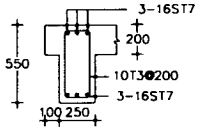
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13410				13410
	6	T2	720	85	135			512
POST	20	L1	80	1181	120			1301
	6	T1	200	135	135			612
SIDEWALK	12	EL1	136	350	577	311	1376	2686
	12	ST3	12	13370				13370
DECK SLAB	16	ST1	68	4930				4930
	12	ST1	68	2875				2875
	16	CR1	67	1832	169	1025		5027
	12	ST2	50	13370				13370
	10	C1	92	120	818			1058
GIRDER	25	ST1	4	5250				5250
	32	ST2	4	8250				8250
	32	ST3	4	10250				10250
	32	ST4	12	13350				13350
	22	U1	4	910	13350	910		15170
	12	ST6	8	13350				13350
	10	T1	64	1004	214			2556
	10	T1	48	1004	214			2556
	10	T2	42	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



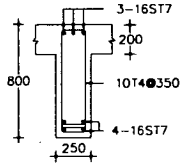
SECTION A-A



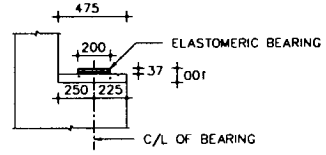
SECTION B-B



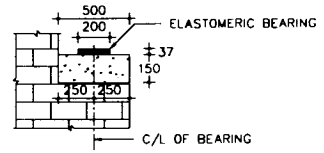
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

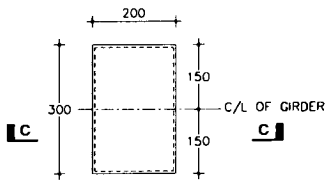


ON BRICK ABUTMENT

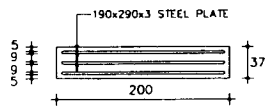
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

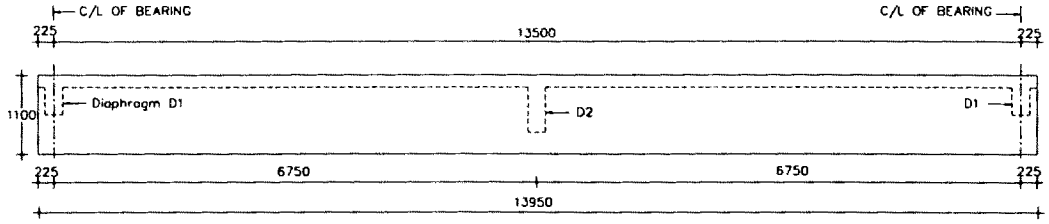
DETAILS OF 13.0m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1313001	

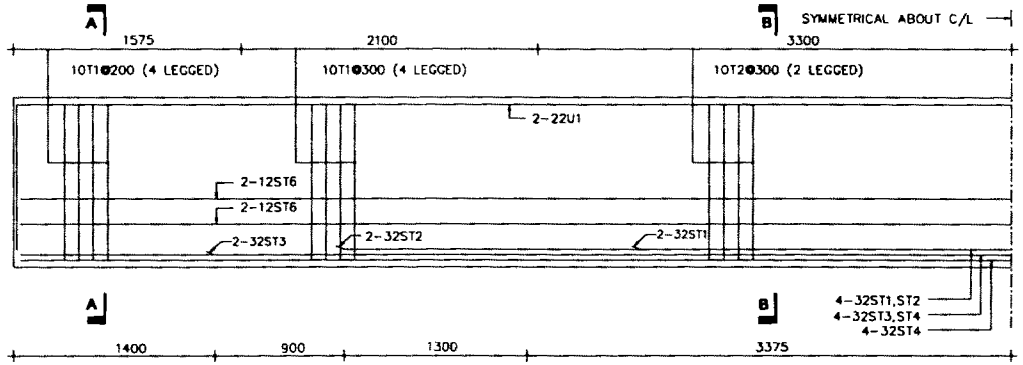
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



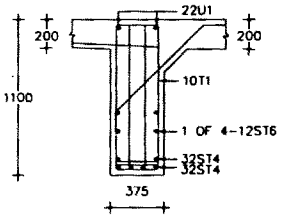
DETAILS OF GIRDER



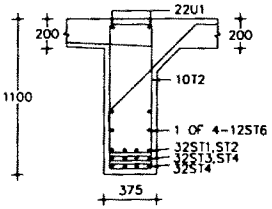
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

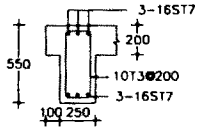
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	13910				13910
	6	T2	760	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	142	350	577	311	1376	2686
	12	ST3	12	13870				13870
DECK SLAB	16	ST1	70	4930				4930
	12	ST1	70	2875				2875
	16	CR1	70	1832	169	1025		5027
	12	ST2	50	13870				13870
	10	C1	94	120	818			1058
GIRDER	32	ST1	4	6750				6750
	32	ST2	4	9350				9350
	32	ST3	4	11150				11150
	32	ST4	12	13850				13850
	22	U1	4	910	13850	910		15670
	12	ST6	8	13850				13850
	10	T1	72	1004	214			2556
	10	T1	48	1004	214			2556
	10	T2	46	1004	295			2718
DIAPHRAGM	16	ST7	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



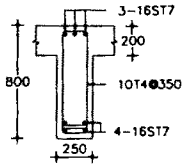
SECTION A-A



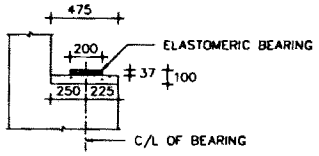
SECTION B-B



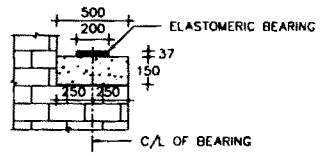
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

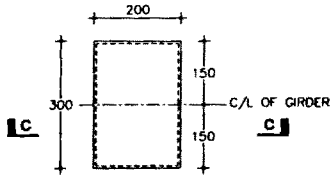


ON BRICK ABUTMENT

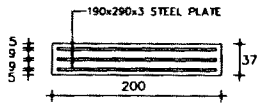
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 13.5m GIRDER & BEARING

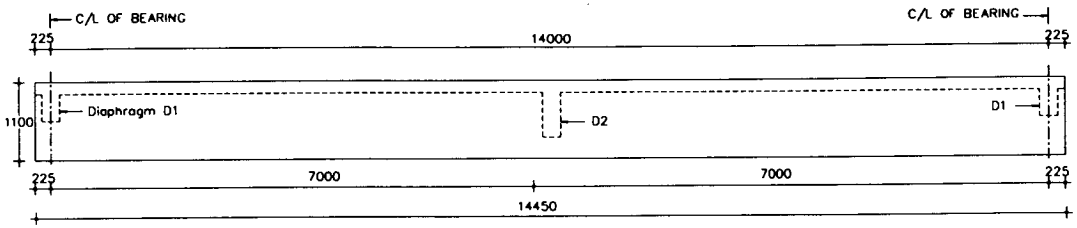
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1313501

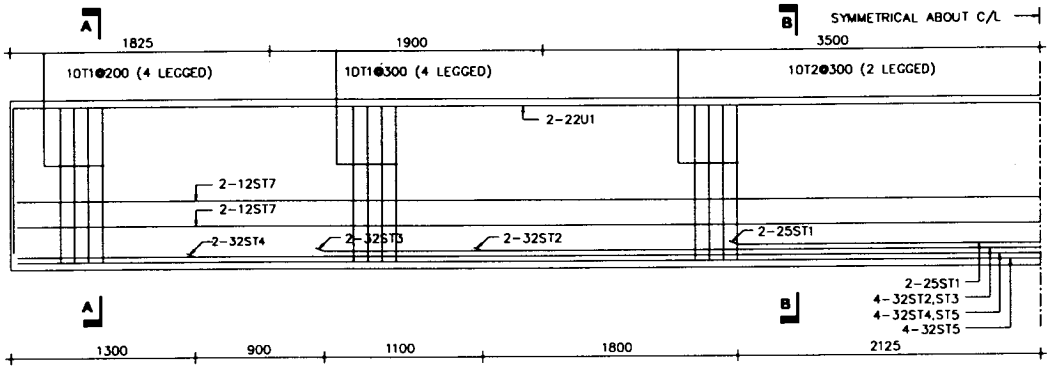
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GB-150

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



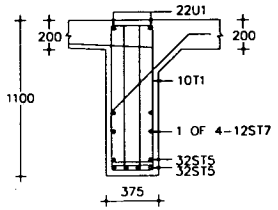
DETAILS OF GIRDER



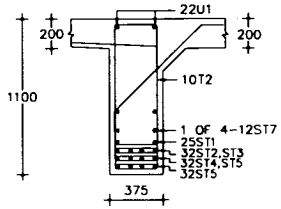
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

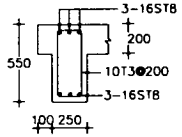
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14410				14410
	6	T2	800	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	146	350	577	311	1376	2686
	12	ST3	12	14370				14370
DECK SLAB	16	ST1	73	4930				4930
	12	ST1	73	2875				2875
	16	CR1	72	1832	169	1025		5027
	12	ST2	50	14370				14370
	10	C1	98	120	818			1058
GIRDER	25	ST1	4	4250				4250
	32	ST2	4	7850				7850
	32	ST3	4	10050				10050
	32	ST4	4	11850				11850
	32	ST5	12	14350				14350
	22	U1	4	910	14350	910		16170
	12	ST7	8	14350				14350
	10	T1	80	1004	214			2556
	10	T1	48	1004	214			2556
	10	T2	46	1004	295			2718
DIAPHRAGM	16	ST8	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



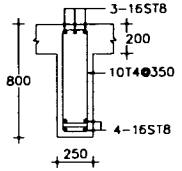
SECTION A-A



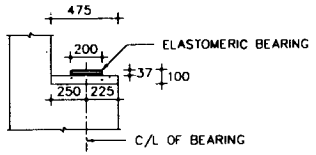
SECTION B-B



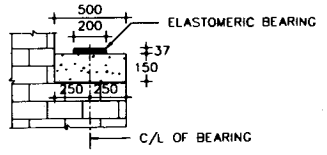
DETAILS OF D1



DETAILS OF D2

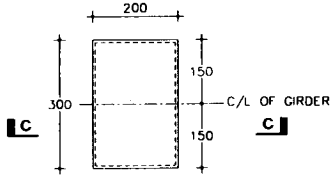


ON R.C.C. ABUTMENT

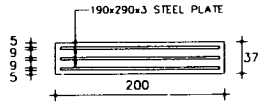


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 14.0m GIRDER & BEARING

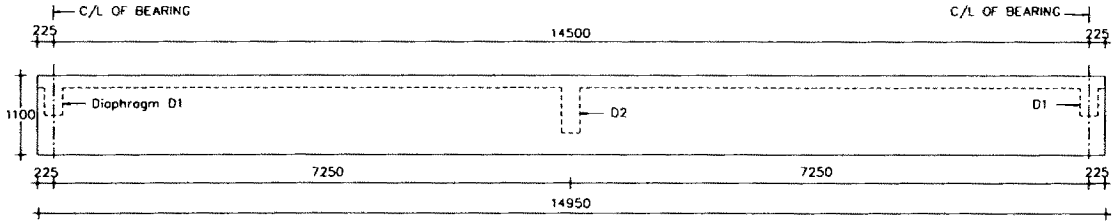
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1314001

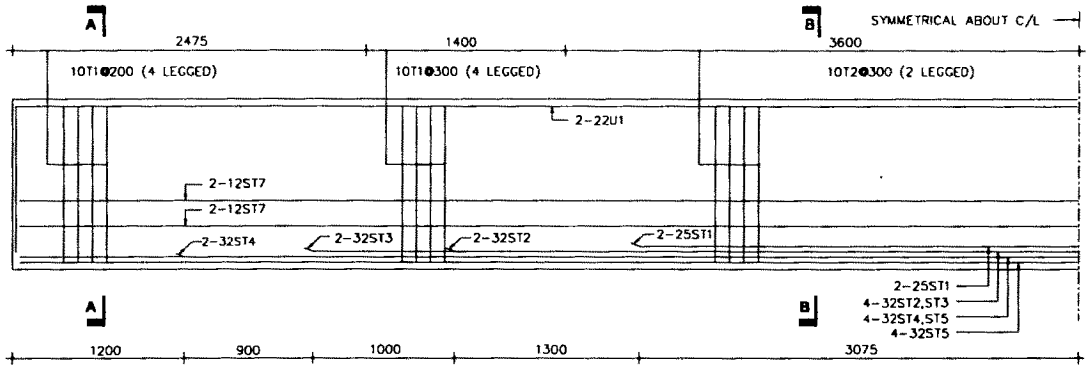
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GB-151

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



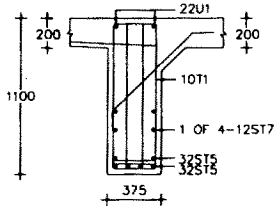
DETAILS OF GIRDER



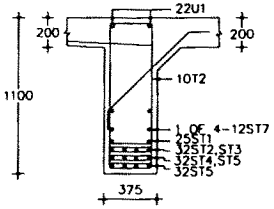
REINF. DETAILS OF GIRDER

BAR BENDING SCHEDULE

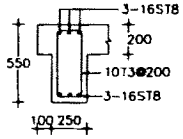
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	14910				14910
	6	T2	800	85	135			512
POST	20	L1	88	1181	120			1301
	6	T1	220	135	135			612
SIDEWALK	12	EL1	152	350	577	311	1376	2686
	12	ST3	12	14870				14870
DECK SLAB	16	ST1	75	4930				4930
	12	ST1	75	2875				2875
	16	CR1	75	1832	169	1025		5027
	12	ST2	50	14870				14870
	10	C1	102	120	818			1058
GIRDER	25	ST1	4	6150				6150
	32	ST2	4	8750				8750
	32	ST3	4	10750				10750
	32	ST4	4	12550				12550
	32	ST5	12	14850				14850
	22	U1	4	910	14850	910		16670
	12	ST7	8	14850				14850
	10	T1	112	1004	214			2556
	10	T1	32	1004	214			2556
	10	T2	46	1004	295			2718
DIAPHRAGM	16	ST8	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860



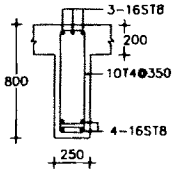
SECTION A-A



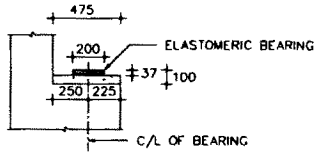
SECTION B-B



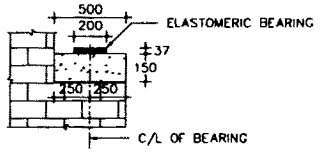
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

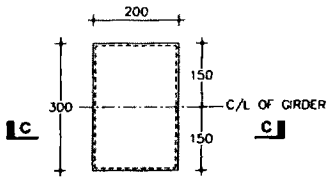


ON BRICK ABUTMENT

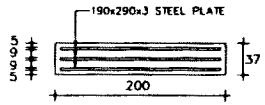
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

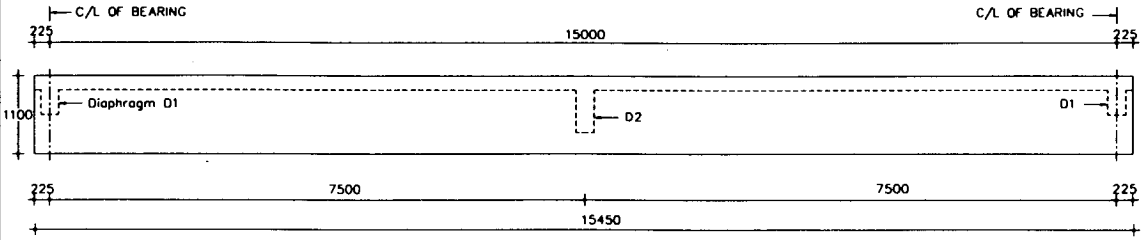
DETAILS OF 14.5m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1314501	

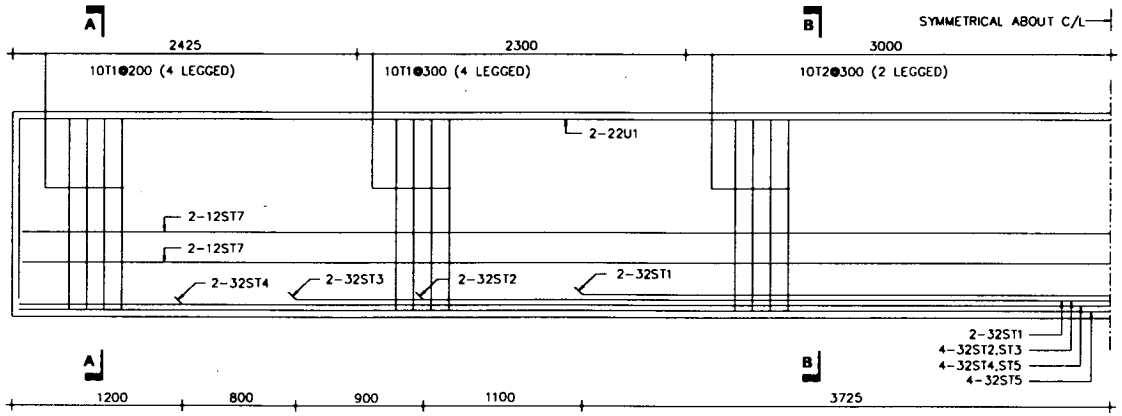
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GB-152

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



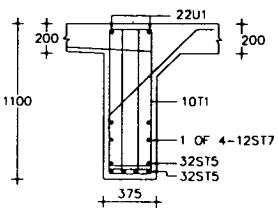
DETAILS OF GIRDER



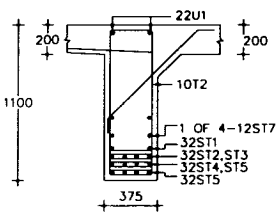
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15410				15410
	6	T2	836	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	156	350	577	311	1376	2686
	12	ST3	12	15370				15370
DECK SLAB	16	ST1	78	4930				4930
	12	ST1	78	2875				2875
	16	CR1	77	1832	169	1025		5027
	12	ST2	50	15370				15370
	10	C1	104	120	818			1058
GIRDER	32	ST1	4	7450				7450
	32	ST2	4	9650				9650
	32	ST3	4	11450				11450
	32	ST4	4	13050				13050
	32	ST5	12	15350				15350
	22	U1	4	910	15350	910		17170
	12	ST7	8	15350				15350
	10	T1	104	1004	214			1556
	10	T1	56	1004	214			2556
	10	T2	40	1004	295			2718
DIAPHRAGM	16	ST8	19	2825				2825
	10	T3	22	470	150			1360
	10	T4	7	720	150			1860

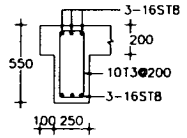
REINF. DETAILS OF GIRDER



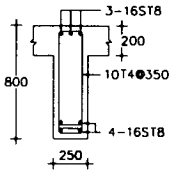
SECTION A-A



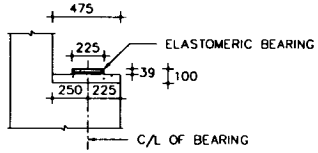
SECTION B-B



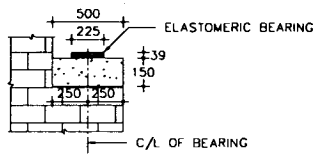
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

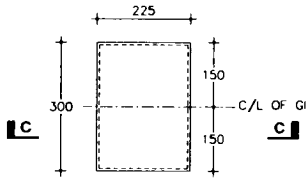


ON BRICK ABUTMENT

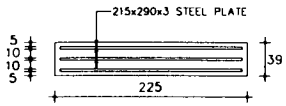
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 15.0m GIRDER & BEARING

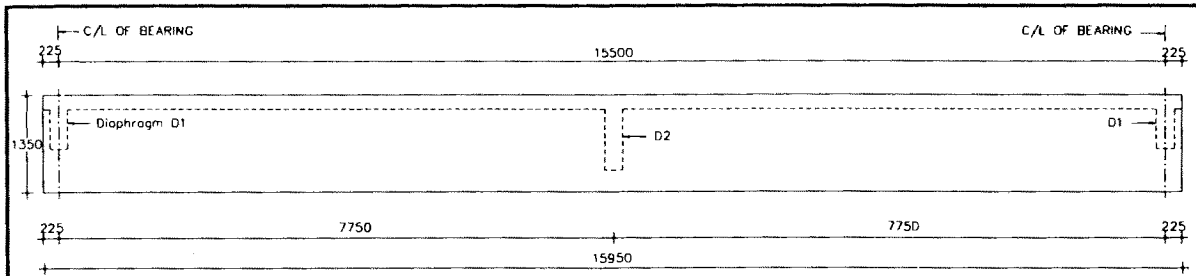
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1315001

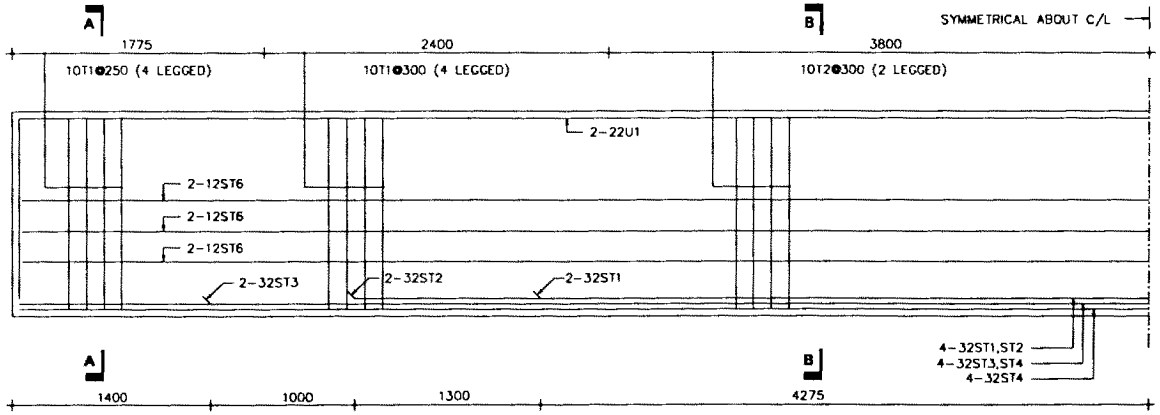
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GB-153

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



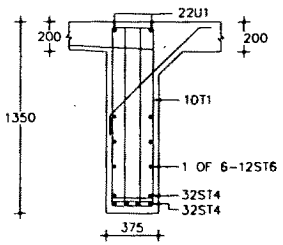
DETAILS OF GIRDER



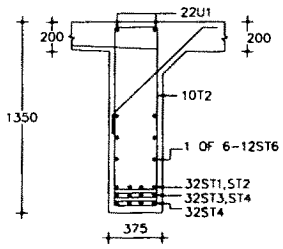
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	15910				15910
	6	T2	880	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	162	350	577	311	1376	2686
	12	ST3	12	15870				15870
DECK SLAB	16	ST1	80	4930				4930
	12	ST1	80	2875				2875
	16	CR1	80	1832	169	1025		5027
	12	ST2	50	15870				15870
	10	C1	108	120	818			1058
GIRDER	32	ST1	4	8550				8550
	32	ST2	4	11150				11150
	32	ST3	4	13150				13150
	32	ST4	12	15850				15850
	22	U1	4	1160	15850	1160		18170
	12	ST6	12	15850				15850
	10	T1	64	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	52	1254	295			3218
	32	L1	16	1160	384			1544
DIAPHRAGM	16	ST7	22	2825				2825
	12	ST8	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

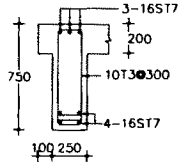
REINF. DETAILS OF GIRDER



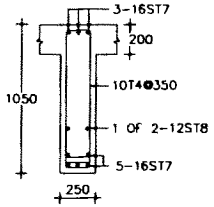
SECTION A-A



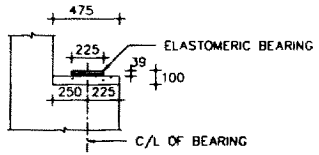
SECTION B-B



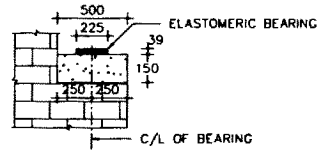
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

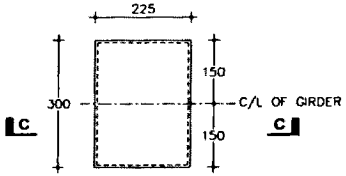


ON BRICK ABUTMENT

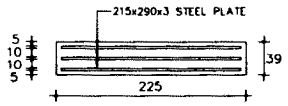
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

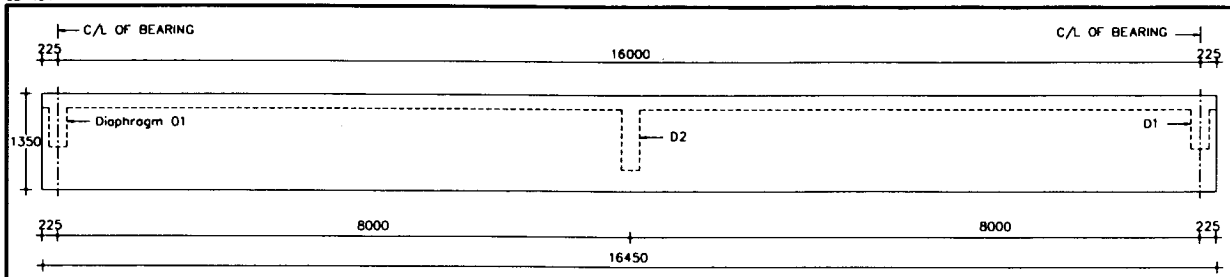
DETAILS OF 15.5m GIRDER & BEARING

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1315501

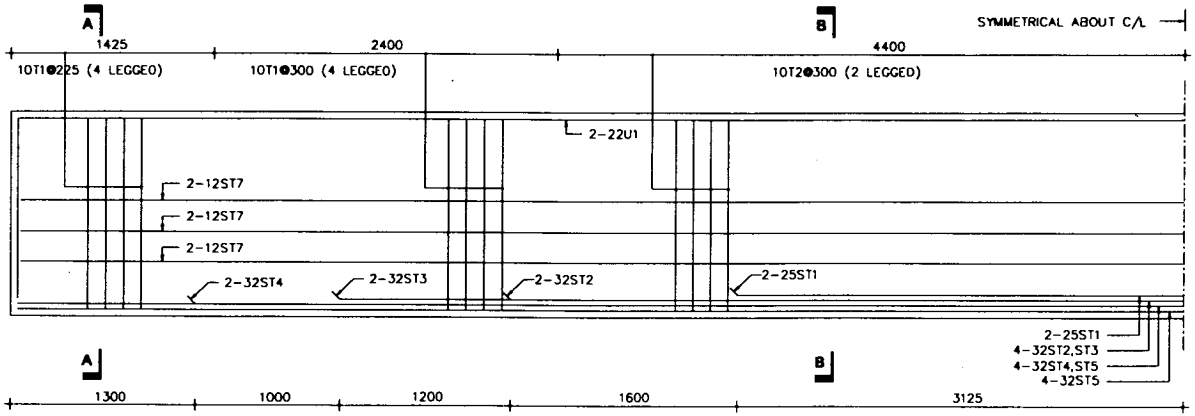
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GB-154

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



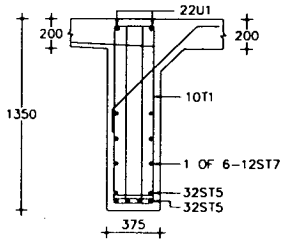
DETAILS OF GIRDER



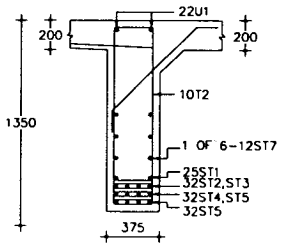
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16410				16410
	6	T2	880	85	135			512
POST	20	L1	96	1181	120			1301
	6	T1	240	135	135			612
SIDEWALK	12	EL1	166	350	577	311	1376	2686
	12	ST3	12	16370				16370
DECK SLAB	16	ST1	83	4930				4930
	12	ST1	83	2875				2875
	16	CR1	82	1832	169	1025		5027
	12	ST2	50	16370				16370
	10	C1	112	120	818			1058
GIRDER	25	ST1	4	6250				6250
	32	ST2	4	9450				9450
	32	ST3	4	11850				11850
	32	ST4	4	13850				13850
	32	ST5	12	16350				16350
	22	U1	4	1160	16350	1160		18670
	12	ST7	12	16350				16350
	10	T1	64	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	58	1254	295			3218
DIAPHRAGM	16	ST8	22	2825				2825
	12	ST9	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

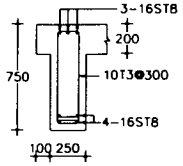
REINF. DETAILS OF GIRDER



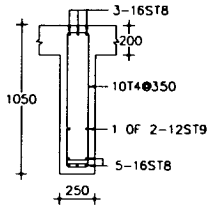
SECTION A-A



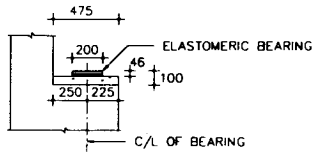
SECTION B-B



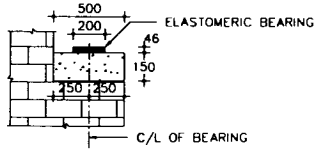
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

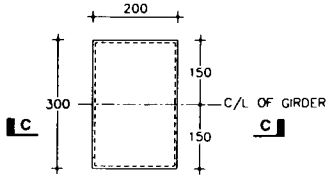


ON BRICK ABUTMENT

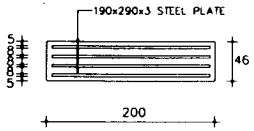
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 16.0m GIRDER & BEARING

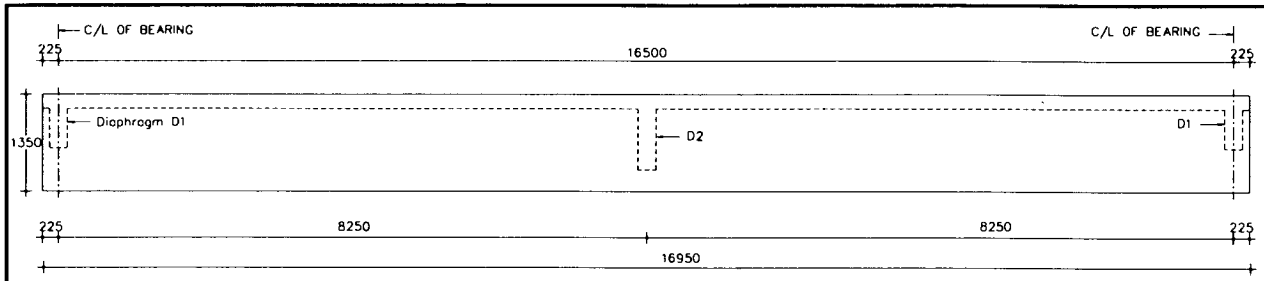
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1316001

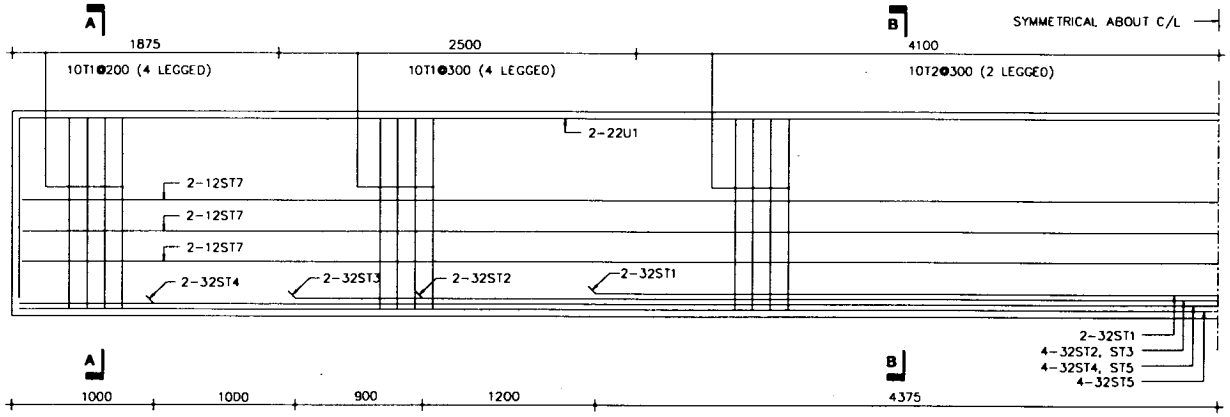
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GB-155

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



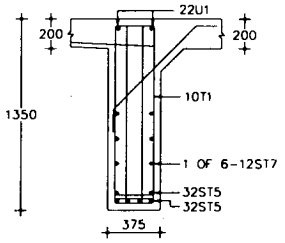
DETAILS OF GIRDER



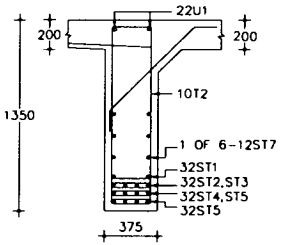
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	16910				16910
	6	T2	912	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	172	350	577	311	1376	2686
	12	ST3	12	16870				16870
DECK SLAB	16	ST1	85	4930				4930
	12	ST1	85	2875				2875
	16	CR1	85	1832	169	1025		5027
	12	ST2	50	16870				16870
	10	C1	114	120	818			1058
GIRDER	32	ST1	4	8750				8750
	32	ST2	4	11150				11150
	32	ST3	4	12950				12950
	32	ST4	4	14950				14950
	32	ST5	12	16850				16850
	22	U1	4	1160	16850	1160		19170
	12	ST7	12	16850				16850
	10	T1	88	1254	214			3056
	10	T1	56	1254	214			3056
	10	T2	56	1254	295			3218
DIAPHRAGM	16	ST8	22	2825				2825
	12	ST9	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

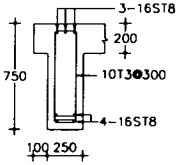
REINF. DETAILS OF GIRDER



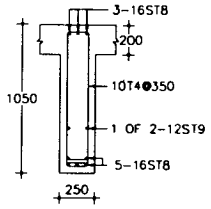
SECTION A-A



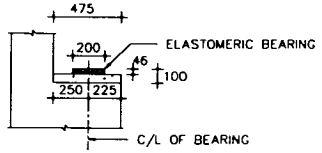
SECTION B-B



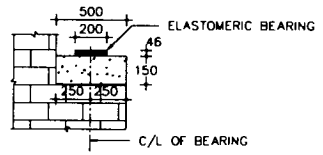
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

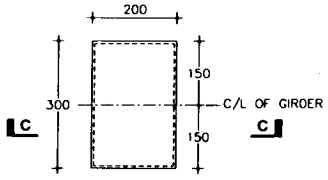


ON BRICK ABUTMENT

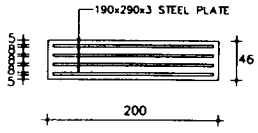
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

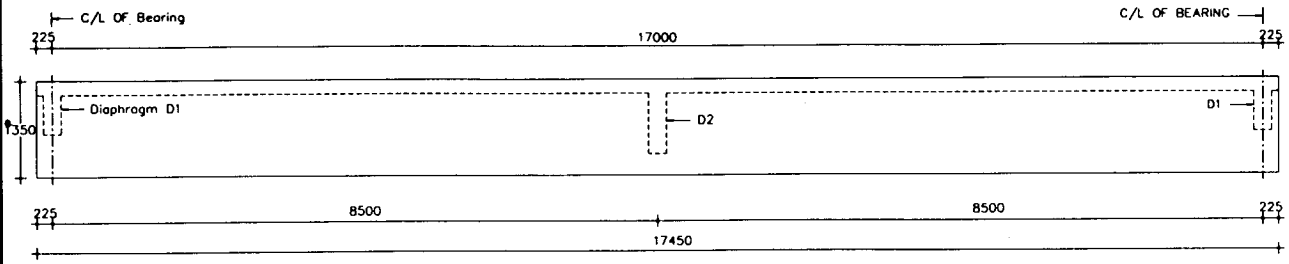
DETAILS OF 16.5m GIRDER & BEARING

DATE : 10/04/1997	ISSUED BY :
CAD FILE REF : BRDG\G1316501	

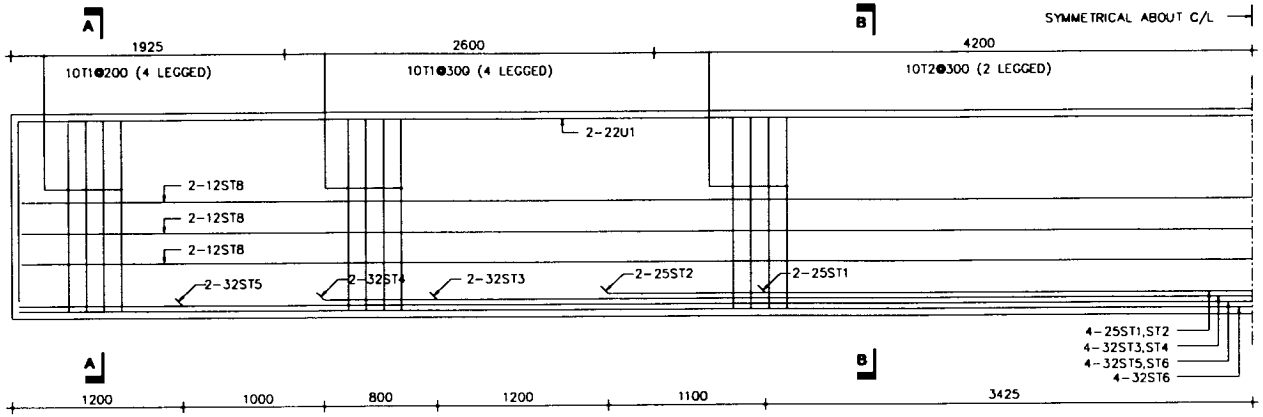
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GB-156

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



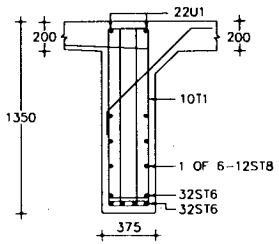
DETAILS OF GIRDER



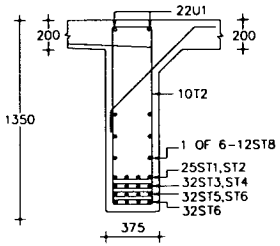
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17410				17410
	6	T2	960	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	176	350	577	311	1376	2686
	12	ST3	12	17370				17370
DECK SLAB	16	ST1	88	4930				4930
	12	ST1	88	2875				2875
	16	CR1	87	1832	169	1025		5027
	12	ST2	50	17370				17370
	10	C1	118	120	818			1058
GIRDER	25	ST1	4	6850				6850
	25	ST2	4	9050				9050
	32	ST3	4	11450				11450
	32	ST4	4	13050				13050
	32	ST5	4	15050				15050
	32	ST6	12	17350				17350
	22	U1	4	1160	17350	1160		19670
	12	ST8	12	17350				17350
	10	T1	88	1254	214			3056
	10	T1	64	1254	214			3056
	10	T2	56	1254	295			3218
DIAPHRAGM	16	ST9	22	2825				2825
	12	ST10	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

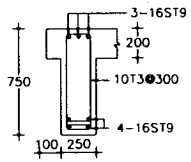
REINF. DETAILS OF GIRDER



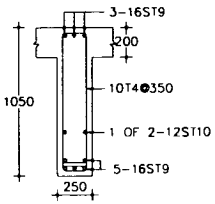
SECTION A-A



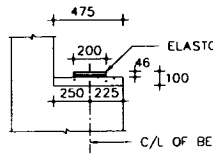
SECTION B-B



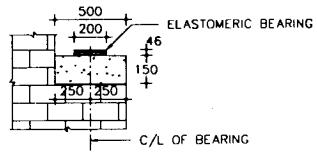
DETAILS OF D1



DETAILS OF D2

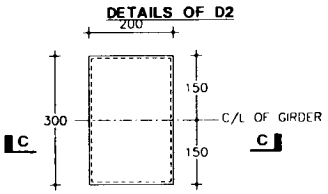


ON R.C.C. ABUTMENT

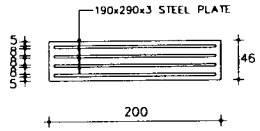


ON BRICK ABUTMENT

SIDE ELEVATION OF PLACEMENT OF BEARING



PLAN OF BEARING



SEC. C-C

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

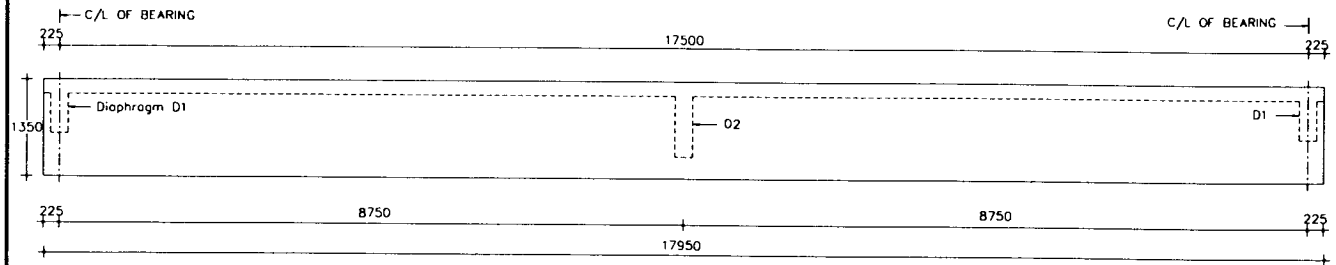
DETAILS OF 17.0m GIRDER & BEARING

DATE : 10/04/1997
ISSUED BY :
CAD FILE REF : BRDG\G1317001

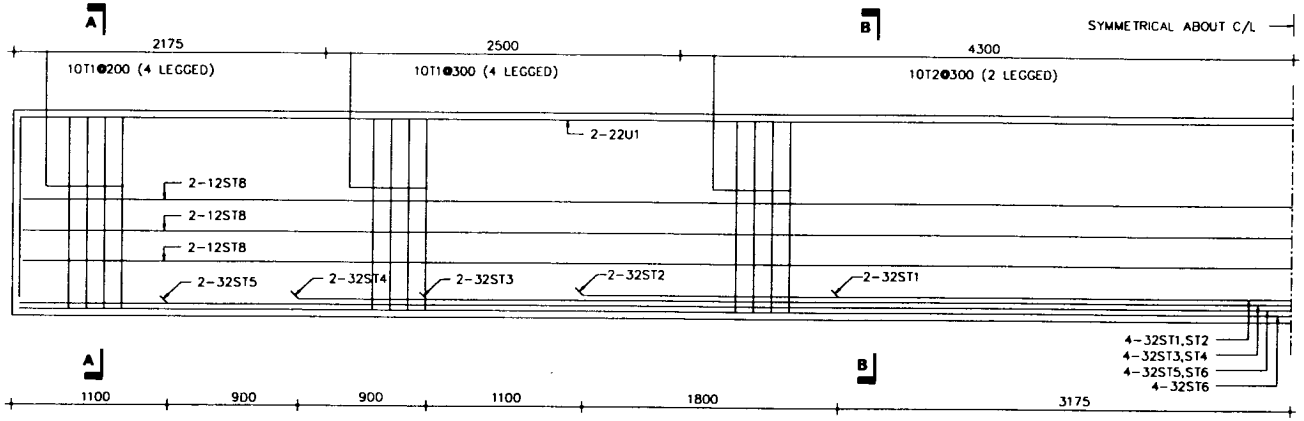
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SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



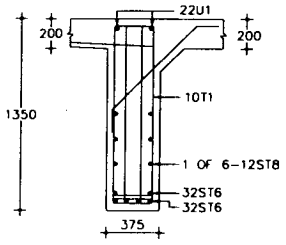
DETAILS OF GIRDER



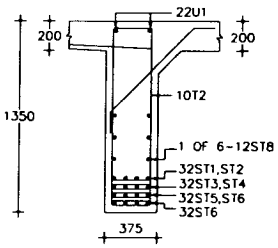
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	17910				17910
	6	T2	960	85	135			512
POST	20	L1	104	1181	120			1301
	6	T1	260	135	135			612
SIDEWALK	12	EL1	182	350	577	311	1376	2686
	12	ST3	12	17870				17870
DECK SLAB	16	ST1	90	4930				4930
	12	ST1	90	2875				2875
	16	CR1	90	1832	169	1025		5027
	12	ST2	50	17870				17870
	10	C1	122	120	818			1058
GIRDER	32	ST1	4	6350				6350
	32	ST2	4	9950				9950
	32	ST3	4	12150				12150
	32	ST4	4	13950				13950
	32	ST5	4	15750				15750
	32	ST6	12	17850				17850
	22	U1	4	1160	17850	1160		20170
	12	ST8	12	17850				17850
	10	T1	96	1254	214			3056
	10	T1	64	1254	214			3056
	10	T2	56	1254	295			3218
DIAPHRAGM	16	ST9	22	2825				2825
	12	ST10	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

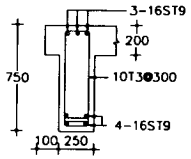
REINF. DETAILS OF GIRDER



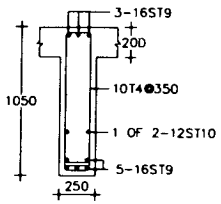
SECTION A-A



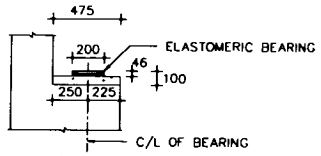
SECTION B-B



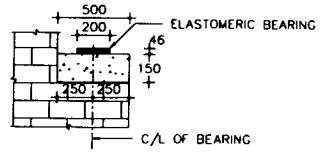
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

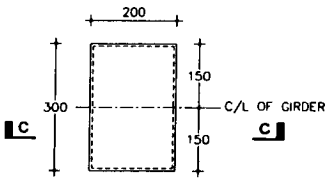


ON BRICK ABUTMENT

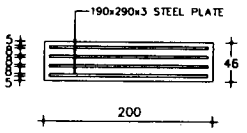
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 17.5m GIRDER & BEARING

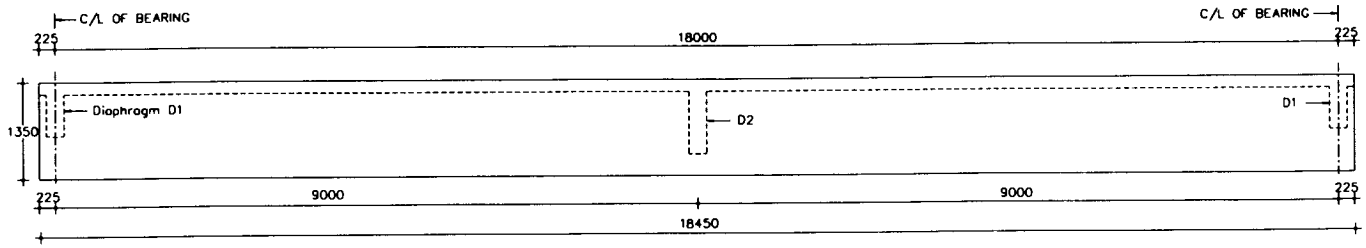
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G13175D1

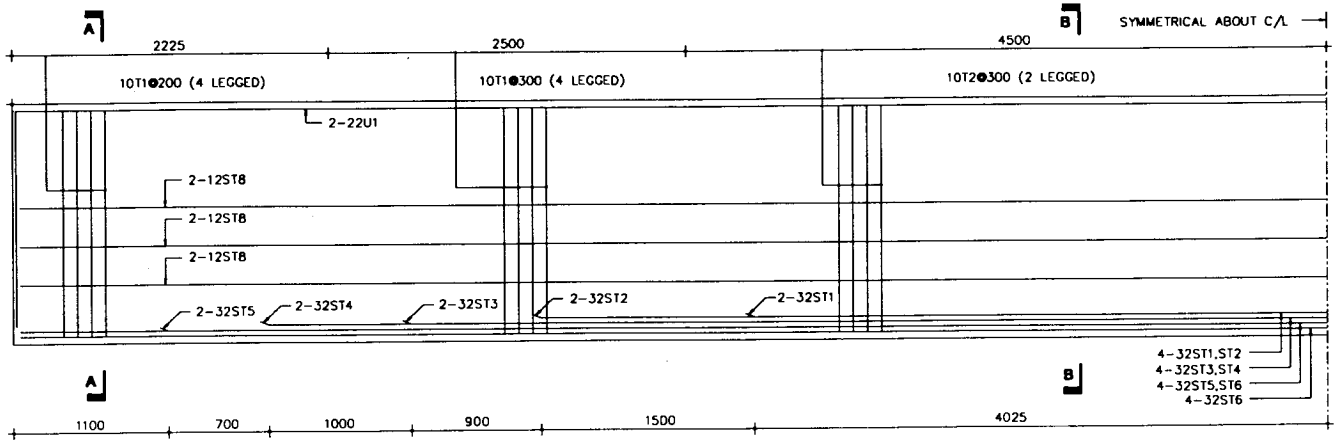
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GB-158

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



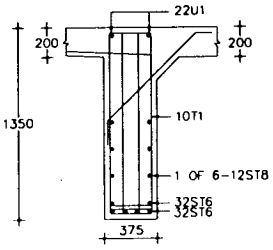
DETAILS OF GIRDER



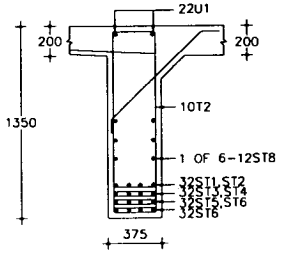
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18410				18410
	6	T2	988	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	186	350	577	311	1376	2686
	12	ST3	12	18370				18370
DECK SLAB	16	ST1	93	4930				4930
	12	ST1	93	2875				2875
	16	CR1	92	1832	169	1025		5027
	12	ST2	50	18370				18370
	10	C1	124	120	818			1058
GIRDER	32	ST1	4	8050				8050
	32	ST2	4	11050				11050
	32	ST3	4	12850				12850
	32	ST4	4	14850				14850
	32	ST5	4	16250				16250
	32	ST6	12	18350				18350
	22	U1	4	1160	18350	1160		20670
	12	ST8	12	18350				18350
	10	T1	96	1254	214			3056
	10	T1	64	1254	214			3056
	10	T2	60	1254	295			3218
DIAPHRAGM	16	ST9	22	2825				2825
	12	ST10	2	2825				2825
	10	T3	16	670	150			1760
	10	T4	7	970	150			2360

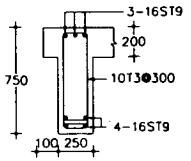
REINF. DETAILS OF GIRDER



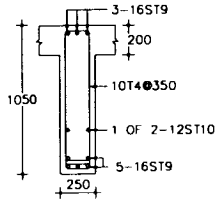
SECTION A-A



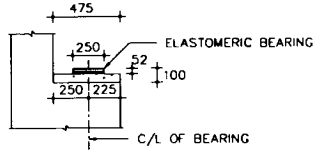
SECTION B-B



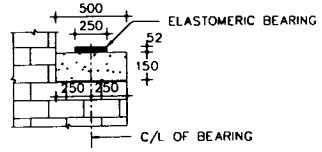
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

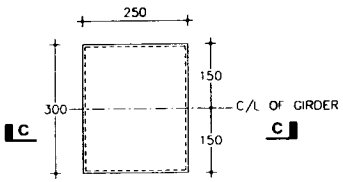


ON BRICK ABUTMENT

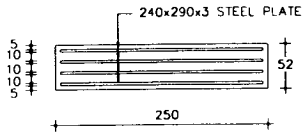
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 18.0m GIRDER & BEARING

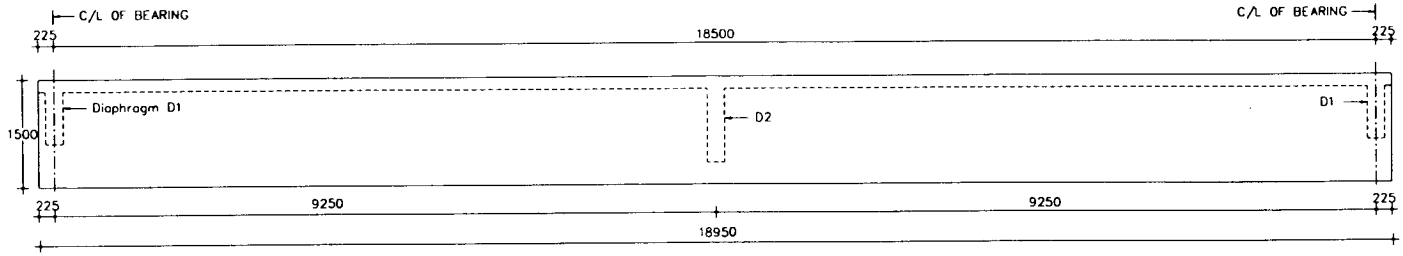
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1318001

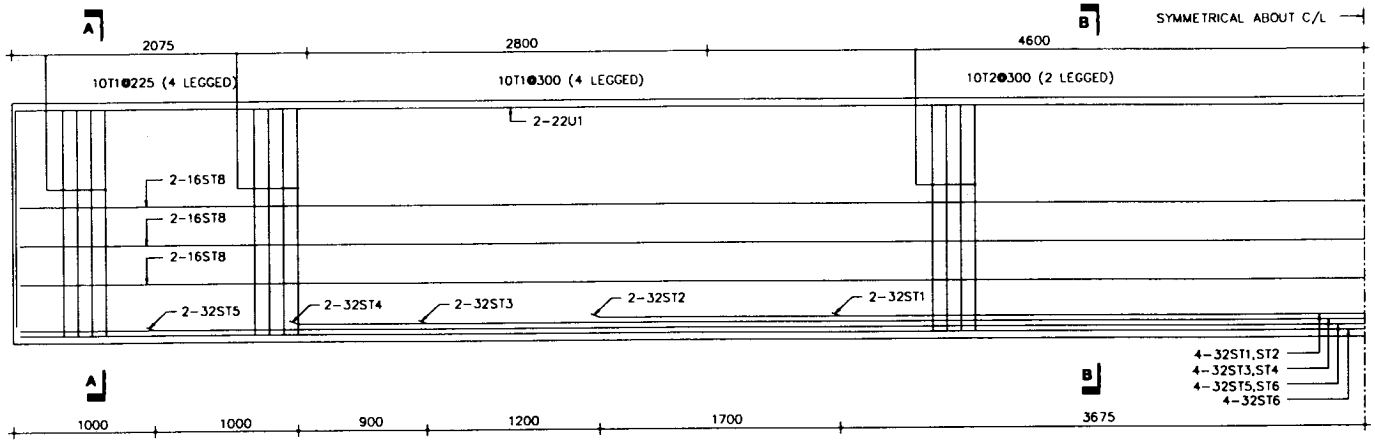
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GB-159

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



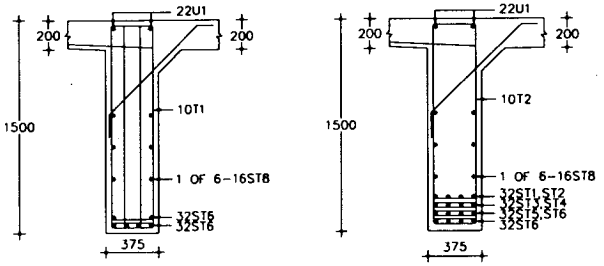
DETAILS OF GIRDER



BAR BENDING SCHEDULE

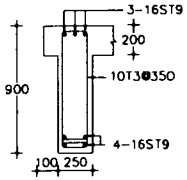
MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	18910				18910
	6	T2	1040	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	192	350	577	311	1376	2686
	12	ST3	12	18870				18870
DECK SLAB	16	ST1	95	4930				4930
	12	ST1	95	2875				2875
	16	CR1	95	1832	169	1025		5027
	12	ST2	50	18870				18870
	10	C1	128	120	818			1058
GIRDER	32	ST1	4	7350				7350
	32	ST2	4	10750				10750
	32	ST3	4	13150				13150
	32	ST4	4	14950				14950
	32	ST5	4	16950				16950
	32	ST6	12	18850				18850
	22	U1	4	1310	18850	1310		21470
	16	ST8	12	18850				18850
	10	T1	88	1404	214			3356
	10	T1	64	1404	214			3356
	10	T2	62	1404	295			3518
DIAPHRAGM	16	ST9	23	2825				2825
	12	ST10	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

REINF. DETAILS OF GIRDER

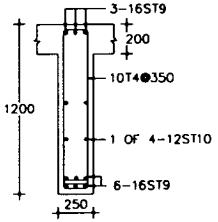


SECTION A-A

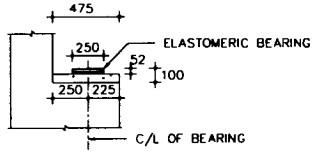
SECTION B-B



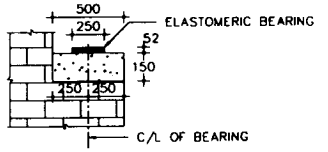
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

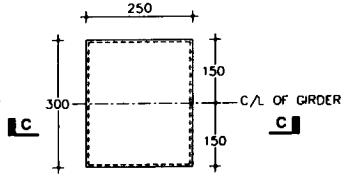


ON BRICK ABUTMENT

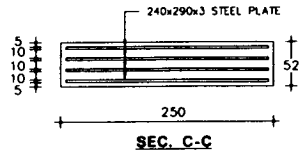
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 18.5m GIRDER & BEARING

DATE : 10/04/1997

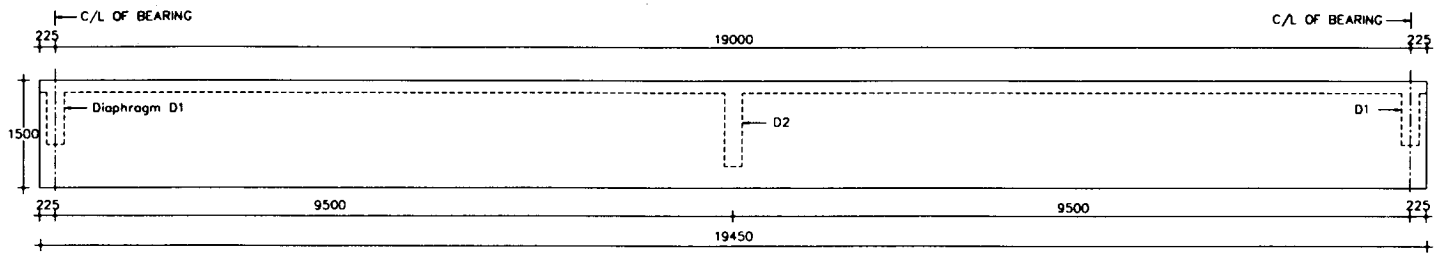
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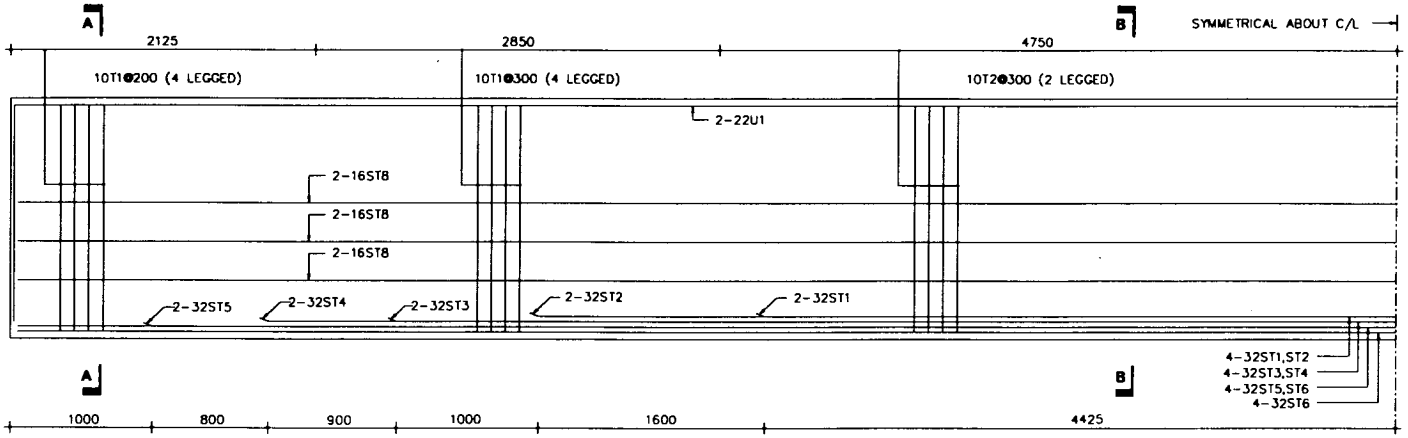
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GB-160

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



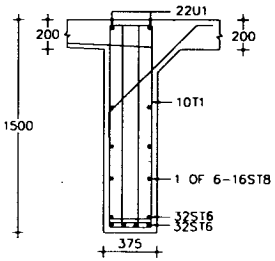
DETAILS OF GIRDER



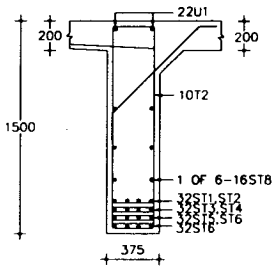
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19410				19410
	6	T2	1040	85	135			512
POST	20	L1	112	1181	120			1301
	6	T1	280	135	135			612
SIDEWALK	12	EL1	196	350	577	311	1376	2686
	12	ST3	12	19350				19370
DECK SLAB	16	ST1	98	4930				4930
	12	ST1	98	2875				2875
	16	CR1	97	1832	169	1025		5027
	12	ST2	50	19370				19370
	10	C1	132	120	818			1058
GIRDER	32	ST1	4	8850				8850
	32	ST2	4	12050				12050
	32	ST3	4	14050				14050
	32	ST4	4	15850				15850
	32	ST5	4	17450				17450
	32	ST6	12	19350				19350
	22	U1	4	1310	19350	1310		21970
	16	ST8	12	19350				19350
	10	T1	96	1404	214			3356
	10	T1	72	1404	214			3356
	10	T2	62	1404	295			3518
DIAPHRAGM	16	ST9	23	2825				2825
	12	ST10	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

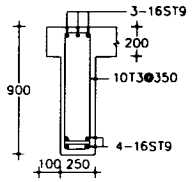
REINF. DETAILS OF GIRDER



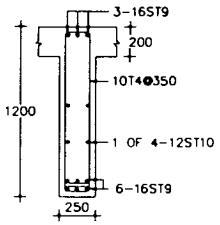
SECTION A-A



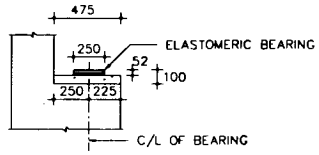
SECTION B-B



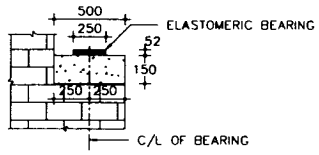
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

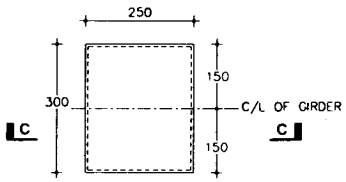


ON BRICK ABUTMENT

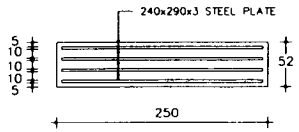
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.0m GIRDER & BEARING

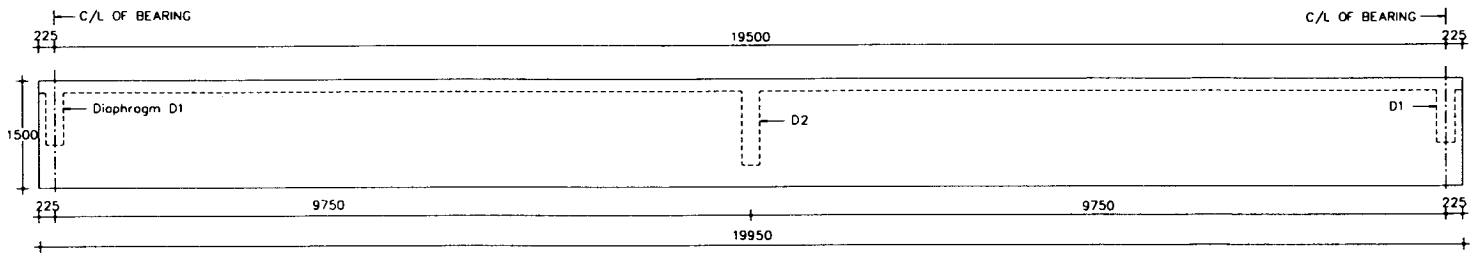
DATE : 10/04/1997 | ISSUED BY :

CAD FILE REF : BRDG\G1319001

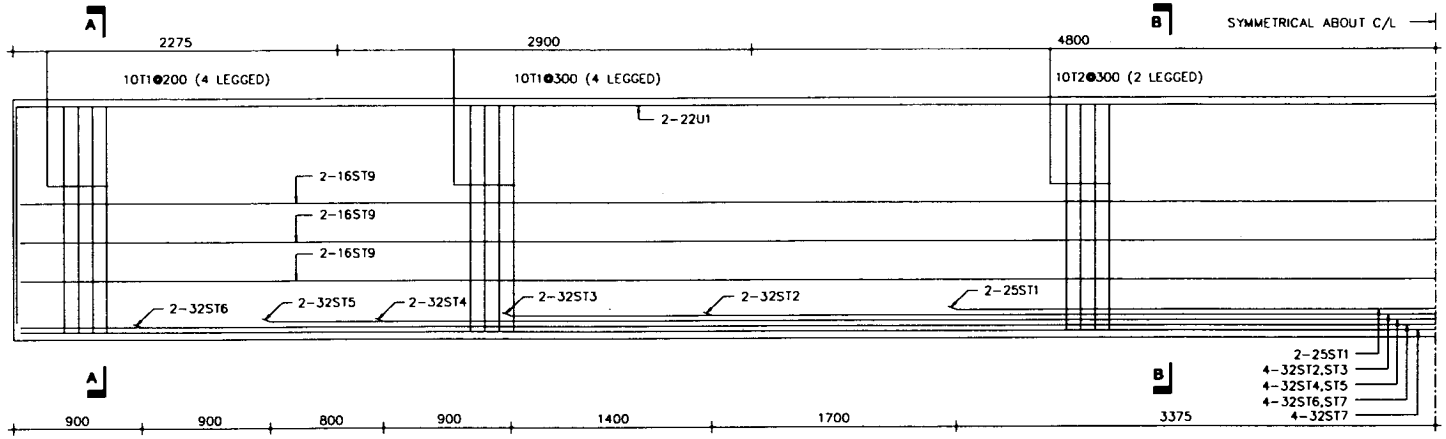
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GB-161

SHEET 1 OF 1
LOADING - AASHTO H20
SIDEWALK - YES



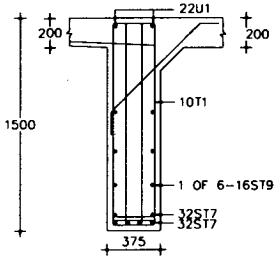
DETAILS OF GIRDER



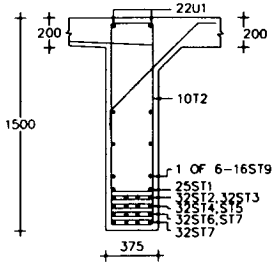
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	19910				19910
	6	T2	1064	85	135			512
POST	20	L1	120	1181	120			1301
	6	T1	300	135	135			612
SIDEWALK	12	EL1	202	350	577	311	1376	2686
	12	ST3	12	19870				19870
DECK SLAB	16	ST1	100	4930				4930
	12	ST1	100	2875				2875
	16	CR1	100	1832	169	1025		5027
	12	ST2	50	19870				19870
	10	C1	134	120	818			1058
GIRDER	25	ST1	4	6750				6750
	32	ST2	4	10150				10150
	32	ST3	4	12950				12950
	32	ST4	4	14750				14750
	32	ST5	4	16350				16350
	32	ST6	4	18150				18150
	32	ST7	12	19850				19850
	22	U1	4	1310	19850	1310		22470
	16	ST9	12	19850				19850
	10	T1	104	1404	214			3356
	10	T1	72	1404	214			3356
	10	T2	62	1404	295			3518
DIAPHRAGM	16	ST10	23	2825				2825
	12	ST11	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

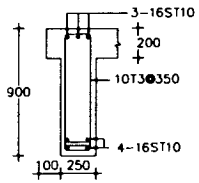
REINF. DETAILS OF GIRDER



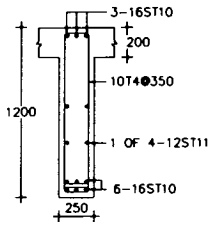
SECTION A-A



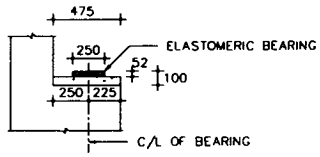
SECTION B-B



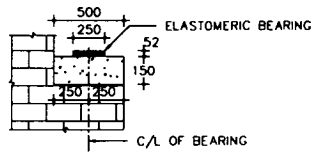
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

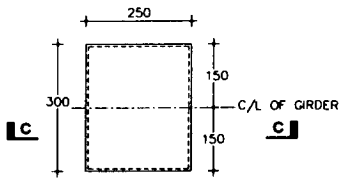


ON BRICK ABUTMENT

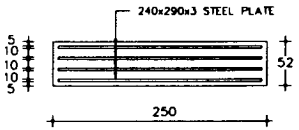
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa-ASTM C39.
3. Coorse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa - ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code; Cad File: BRDG\S0000001



PLAN OF BEARING



SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 19.5m GIRDER & BEARING

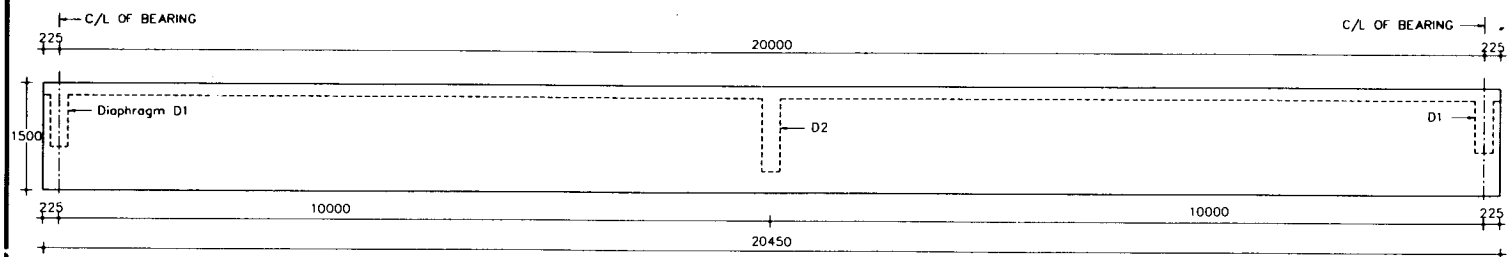
DATE : 10/04/1997 | ISSUED BY :

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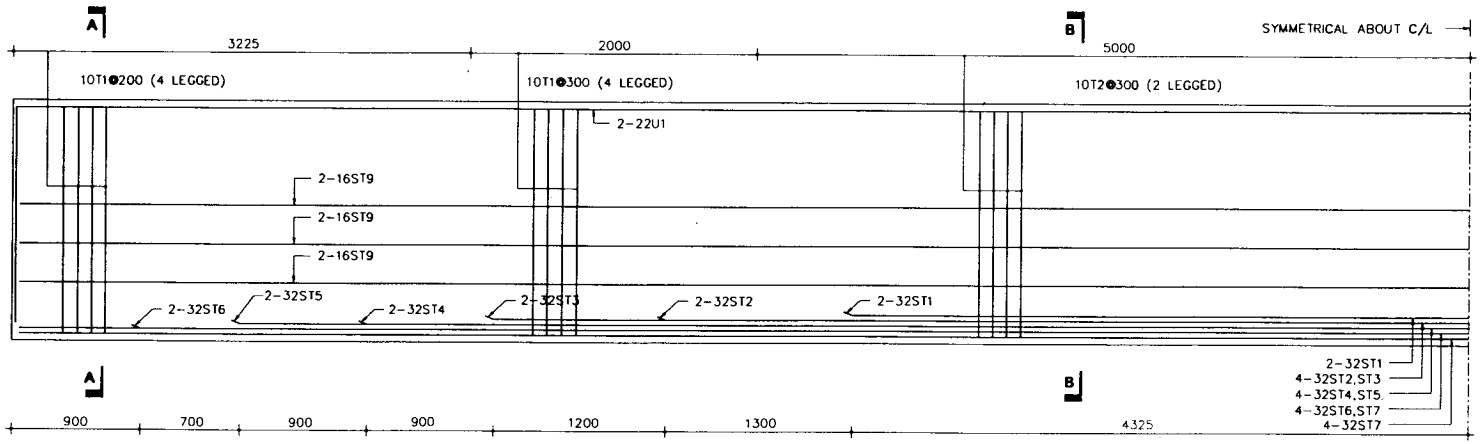
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GB-162

SHEET 1 OF 1
LOADING – AASHTO H20
SIDEWALK – YES



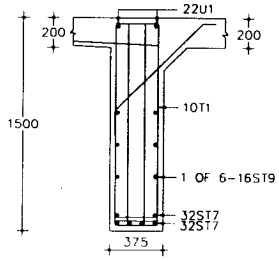
DETAILS OF GIRDER



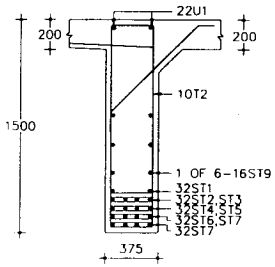
BAR BENDING SCHEDULE

MEMBER	BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
RAIL	12	ST4	16	20410				20410
	6	T2	1120	85	135			512
POST	20	L1	120	1181	120			1301
	6	T1	300	135	135			612
SIDEWALK	12	EL1	206	350	577	311	1376	2686
	12	ST3	12	20370				20370
DECK SLAB	16	ST1	103	4930				4930
	12	ST1	103	2875				2875
	16	CR1	102	1832	169	1025		5027
	12	ST2	50	20370				20370
	10	C1	138	120	818			1058
GIRDER	32	ST1	4	8650				8650
	32	ST2	4	11250				11250
	32	ST3	4	13650				13650
	32	ST4	4	15450				15450
	32	ST5	4	17250				17250
	32	ST6	4	18650				18650
	32	ST7	12	20350				20350
	22	U1	4	1310	20350	1310		23470
	16	ST9	12	20350				20350
	10	T1	136	1404	214			3356
	10	T1	48	1404	214			3356
	10	T2	68	1404	295			3518
DIAPHRAGM	16	ST10	23	2825				2825
	12	ST11	4	2825				2825
	10	T3	14	820	150			2060
	10	T4	7	1120	150			2660

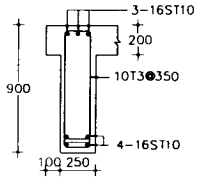
REINF. DETAILS OF GIRDER



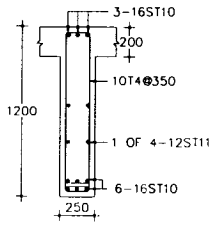
SECTION A-A



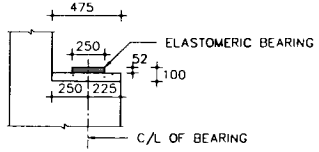
SECTION B-B



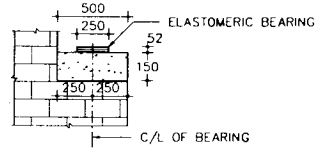
DETAILS OF D1



DETAILS OF D2



ON R.C.C. ABUTMENT

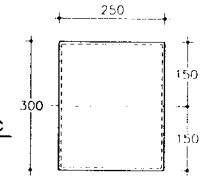


ON BRICK ABUTMENT

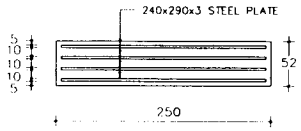
SIDE ELEVATION OF PLACEMENT OF BEARING

NOTES :

1. All dimensions are in millimeter unless otherwise specified.
2. Concrete, Cylinder strength at 28 day's : 21MPa–ASTM C39.
3. Coarse aggregate for concrete shall be 19mm down graded stone chips conforming ASTM C33.
4. Deformed Reinforcing steel, Yield strength : 276MPa – ASTM A615.
5. Clear cover over main reinforcement : 50mm & stirrup : 40mm.
6. Elastomer to be used in bearings shall be of Shore hardness of 60.
7. Steel laminates to be used in bearing shall be made of mild steel conforming ASTM A36.
8. Dia. of horizontal spacer will be 25mm, Spacing : 3500 C/C .
9. This drawing is to be read in conjunction with Shape Code, Cad File: BRDG\S0000001



PLAN OF BEARING



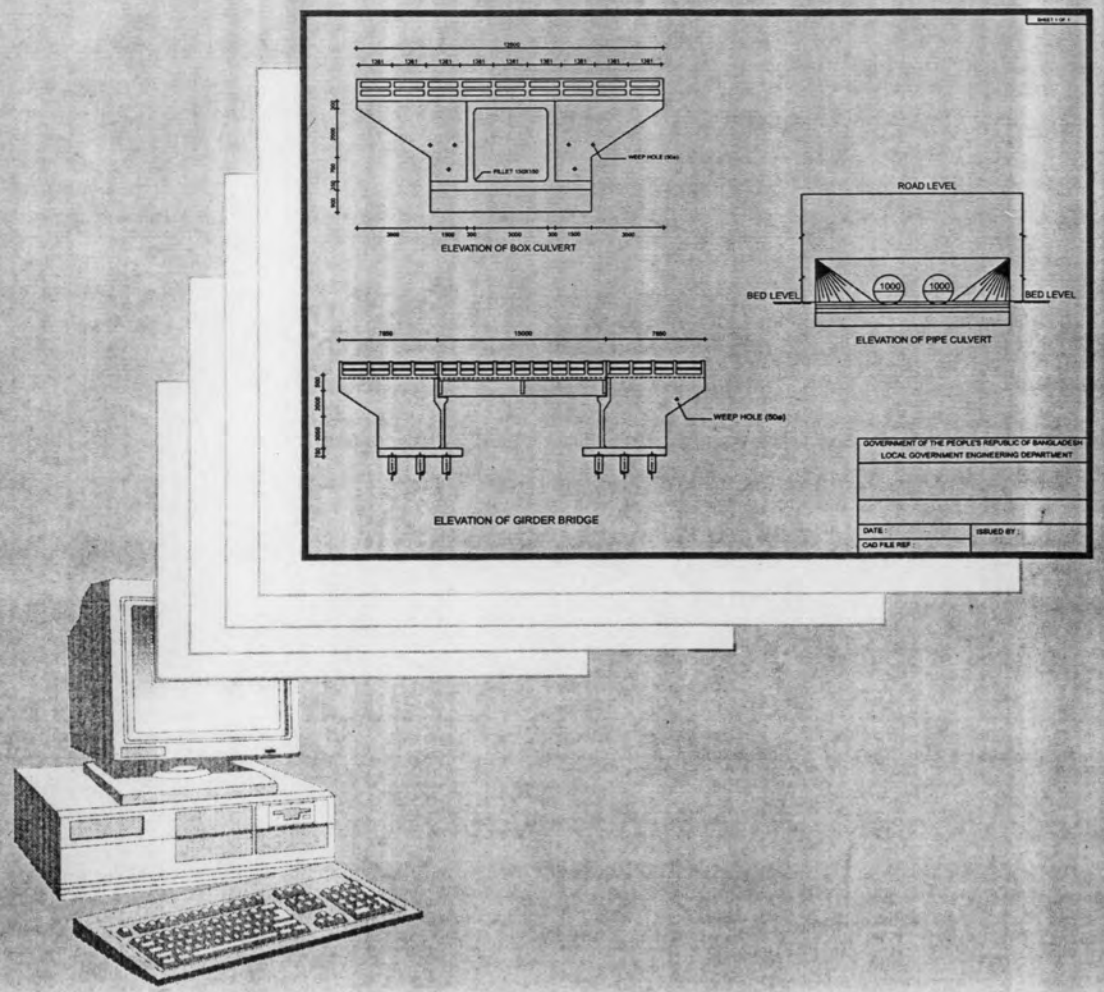
SEC. C-C

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF 20.0m GIRDER & BEARING

DATE :
ISSUED BY :
CAD FILE REF : BRDG\G1320001

Web Copy



BRICK ABUTMENT

Web Copy

SELECTION OF STANDARD DESIGN

BRICK ABUTMENTS :

Introduction

Standard design of brick and R.C.C. Abutments of various height are presented in the Manual. Height of brick abutment ranges 3.0m to 6.0m with an increment of 0.3m.Three types of R.C.C abutments, open abutment, full depth abutment and stub abutments have been provided in the Manual. Open and full depth abutment with carriageway width (cw) 3.66m with footpath and of height ranges from 3.0m to 8.0m and cw of 3.66m and 2.44m without footpath and of height ranges from 3.0m to 8.0m have been provided in the Manual. Stub abutments have been designed for a low height ranging from 2.0m to 3.0m with and without footpaths.

Procedure of Selection

Selection of an abutment along with its type (whether brick, open, full depth or stub) and height will be determined by following the flow chart given in Chapter Part A of the Manual. Standard designs with detailed drawing of the required type of structure along with bar schedule are available in this section. Brick abutment will be provided in case of open foundation only. R.C.C abutments with open foundation are also available in the manual. The height ranges from 3.0m to 6.0m with an increment of 0.3m.

Selection of a suitable structure may also be done with the assistance of structure WORKS, a computer software. See Part C of the Road Structure Manual for more information.

Quantity Estimate

The estimates of quantities involving different items of works are presented in the form of a Table in the following pages. Estimate for a particular design can be obtained from these tables.

The items of works whose quantities depend on the particular site conditions are included in the table, but their quantities are kept blank. Those are to be determined after actual field measurements.

In preparing the bill of quantities the full description of the related items should be taken from Chapter 16-Bill of Quantities.

List of all Brick Abutments are summarized below :

Structure List of Brick Abutments

Sl. No.	Reference Code	Structure Description	Page No.
1	ABUT\B0000301	Abutment Brick; H 3.0m	BA-1
2	ABUT\B0000331	Abutment Brick; H 3.3m	BA-2
3	ABUT\B0000361	Abutment Brick; H 3.6m	BA-3
4	ABUT\B0000401	Abutment Brick; H 4.0m	BA-4
5	ABUT\B0000431	Abutment Brick; H 4.3m	BA-5
6	ABUT\B0000461	Abutment Brick; H 4.6m	BA-6
7	ABUT\B0000501	Abutment Brick; H 5.0m	BA-7
8	ABUT\B0000531	Abutment Brick; H 5.3m	BA-8
9	ABUT\B0000561	Abutment Brick; H 5.6m	BA-9
10	ABUT\B0000601	Abutment Brick; H 6.0m	BA-10

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BRICK ABUTMENT

Quantity Estimate Quantity Estimate for Brick and R.C.C. Abutments: The estimates of quantities of the various items of work required in the construction of Brick abutment, RCC open abutment , RCC abutment on pre-cast & cast in-situ piles, R.C.C. stub abutments on pre-cast & cast -in-situ pile are presented below in E.Q. (Estimate of Quantities) Table nos. 6a,6a-1, 6b , 6c, 6d , 6e and 6f respectively. The estimates for a particular Design Loading can be obtained from these tables by choosing the appropriate column corresponding to respective Design Loading. The items of work whose quantities depend on the particular site conditions are included in the tables, but their quantities are left blank. These quantities are to be determined after actual field measurements. These tables contain only a brief description of the items intended for ready reference. In preparing the bill of quantities, the full description of the items should be copied from Table No. 16.1 of Road Srtructure Manual, Part - A (Chapter 16, Table No. 16.1) for the corresponding item numbers. It is to be noted that quantities shown on the table are for two abutments.

Estimate OF Quantities Of Brick Abutment

E.Q Table No. 6a

Abutment Height (m)				3.0			3.3			3.6			4.0			4.3		
Deck width, Dw (m)				3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010
Sl. No.	Item No.	Brief Description	Unit															
1.	1	Mobilization	L.S															
2.	2	Engineer's office	L.S															
3.	3/46/47	Diversion	Cu.m/L-m/L-m															
4.	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m															
5.	5	Making earthen ring/Cross bundth	Each															
6.	6	Earth work in excavation	Cu-m															
7.	7	Bailing out water	Cu-m															
8.	8	Sand filling	Cu-m															
9.	9	Brick on edge pavement	Sq-m															
10.	11	Cement concrete (1: 3: 6)	Cu-m	5.570	6.530	7.120	6.430	7.490	8.130	7.350	8.490	9.190	8.850	10.130	10.920	9.800	11.170	12.020
11.	*12	Brick work (1:3)	Cu-m	37.000	44.000	49.000	46.000	54.000	59.000	56.000	66.000	72.000	73.000	85.000	92.000	88.000	103.000	111.000
12.	15	a) Reinforcement	Kg	56.000	80.000	94.000	56.000	80.000	94.000	56.000	80.000	94.000	56.000	80.000	94.000	60.000	84.000	98.000
13.	25	R.C.C work (1:1.5:3.5) in bed block & coping	Cu-m	0.684	0.959	1.127	0.684	0.959	1.127	0.684	0.959	1.127	0.684	0.959	1.127	0.836	1.172	1.378
14.	27	a) Providing weep holes	L-m	14.000	16.000	17.000	15.000	17.000	18.000	17.000	19.000	20.000	30.000	34.000	37.000	31.000	36.000	38.000
15.	30	Back filling of abutment	Cu-m															
16.	31	Earth work in bridge approaches	Cu-m															
17.	35	Placing of gunny bagged rip/rap filled	Cu-m															
18.	36	Turfing on embankment	Sq-m															
19.	37	Hanging of sign board	L.S.															
20.	38	Name plate	Each															
21.	41	Rule pointing (1 :2)	Sq-m	63.000	70.000	74.000	74.000	81.000	86.000	86.000	94.000	99.000	101.000	110.000	116.000	124.000	134.000	140.000
22.	42	Marking the rail and post	Sq-m															
23.	48.	Demobilization.	L.S															
24.	51.	Filter material behind the weep holes	Each	22	24	26	24	26	28	24	28	30	26	30	30	28	30	32

Estimate Of Quantities Of Brick Abutment

E.Q Table No. 6a

Abutment Height (m)				4.6			5.0			5.3			5.6			6.0		
Deck width, Dw (m)				3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010	3.040	4.260	5.010
Sl. No.	Item No.	Brief Description	Unit															
1.	1	Mobilization	L.S															
2.	2	Engineer's office	L.S															
3.	3/46/47	Diversion	Cu.m/L-m/L-m															
4.	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m															
5.	5	Making earthen ring/Cross bundth	Each															
6.	6	Earth work in excavation	Cu-m															
7.	7	Bailing out water	Cu-m															
8.	8	Sand filling	Cu-m															
9.	9	Brick on edge pavement	Sq-m															
10.	11	Cement concrete (1: 3: 6)	Cu-m	11.360	12.870	13.800	12.970	14.620	15.630	14.460	16.200	17.270	15.810	17.640	18.760	18.190	20.160	21.360
11.	*12	Brick work (1:3)	Cu-m	108.000	125.000	135.000	133.000	152.000	164.000	154.000	175.000	189.000	175.000	199.000	213.000	213.000	240.000	257.000
12.	15	a) Reinforcement	Kg	60.000	84.000	98.000	60.000	84.000	98.000	60.000	84.000	98.000	60.000	84.000	98.000	60.000	84.000	98.000
13.	24	R.C.C work (1:1.5:3.5) in bed block & coping	Cu-m	0.836	1.172	1.378	0.836	1.172	1.378	0.836	1.172	1.378	0.836	1.172	1.378	0.836	1.172	1.378
14.	27	a) Providing weep holes	L-m	32.000	37.000	39.000	31.000	35.000	38.000	32.000	36.000	39.000	53.000	61.000	66.000	55.000	63.000	68.000
15.	30	Back filling of abutment	Cu-m															
16.	31	Earth work in bridge approaches	Cu-m															
17.	35	Placing of gunny bagged rip/rap filled	Cu-m															
18.	36	Turfing on embankment	Sq-m															
19.	37	Hanging of sign board	L.S.															
20.	38	Name plate	Each															
21.	41	Rule pointing (1 :2)	Sq-m	134.000	145.000	152.000	157.000	168.000	175.000	171.000	184.000	191.000	190.000	203.000	211.000	211.000	225.000	234.000
22.	42	Marking the rail and post	Sq-m															
23.	48.	Demobilization.	L.S															
24.	51.	Filter material behind the weep holes	Each	30	32	34	32	34	36	32	36	38	34	38	38	36	38	40

Remarks :

*Quantities (Qs) has shown considering girder depth = 0.250 m

For other depth quantities are to be calculated by following equation

Qa = Qs - 0.375 x (H-0.250) x Dw ,when abutment height upto 4.0 m and

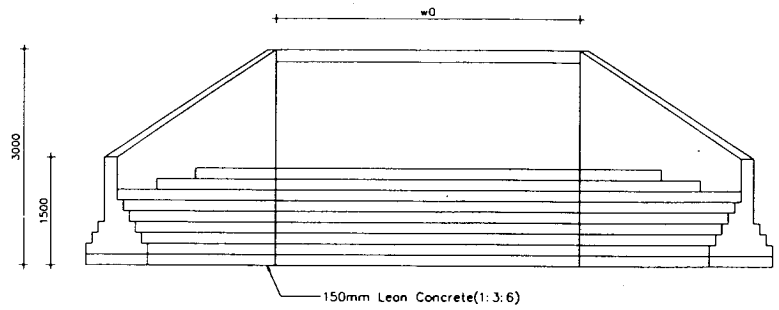
Qa = Qs - 0.500 x (H 0.250) x Dw , when abutment height above 4.0 m

Where, Qa = Actual quantities and Qs = Quantities shown on table

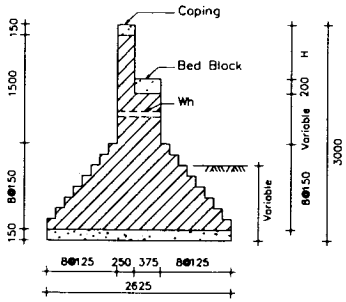
H = Depth of girder from soffit level to deck top

Dw = Deck width

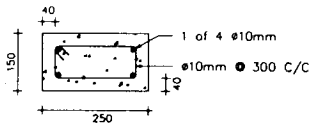
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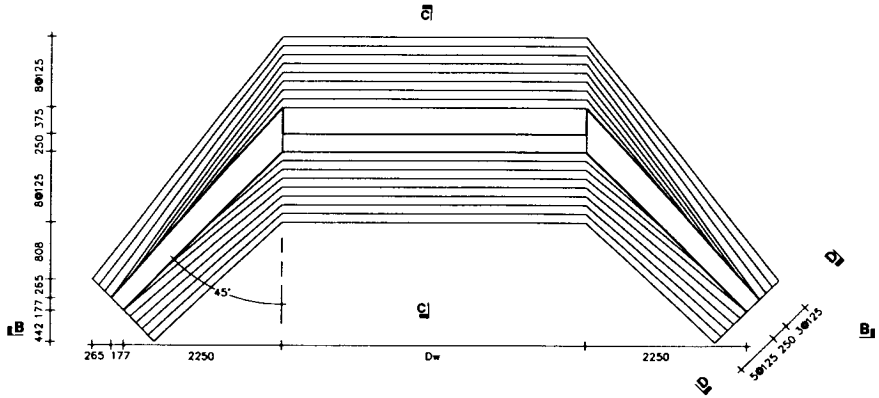
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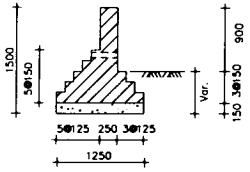
SEC. C-C



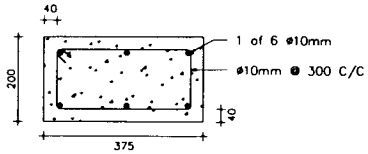
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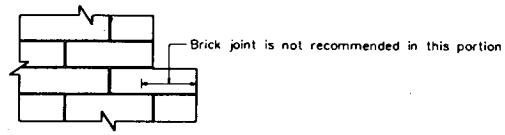
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re–bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1: 3: 6 with brick chips.
9. Reinforced concrete mix ratio shall be 1: 1.5: 3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c–c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

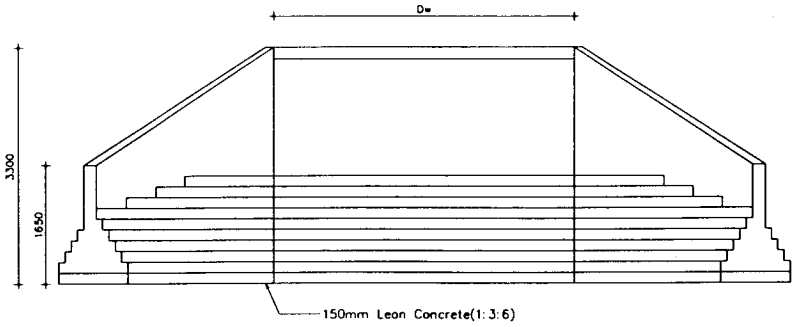
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	**120.0**

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
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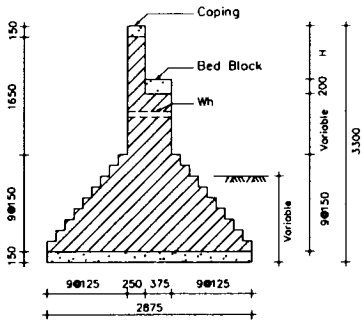
DETAILS OF BRICK ABUTMENT
HEIGHT 3.0m.

DATE :
ISSUED BY :
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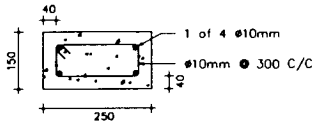
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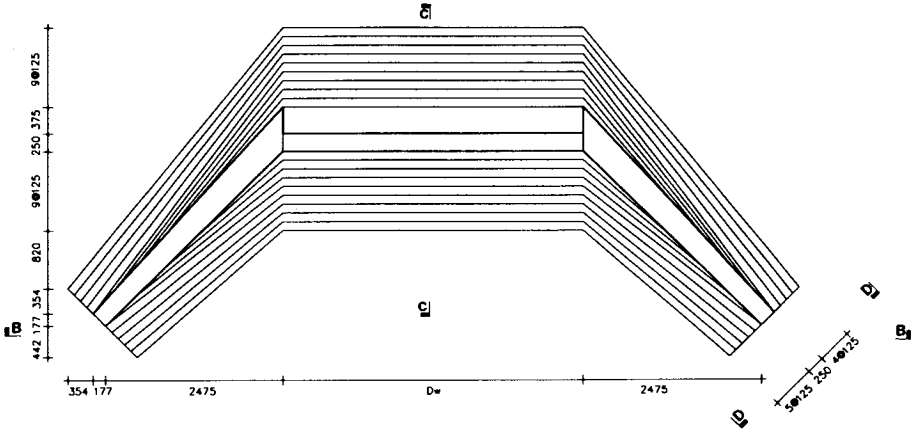
ELEVATION B-B



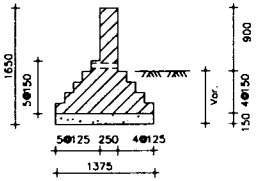
SEC. C-C



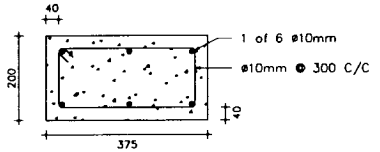
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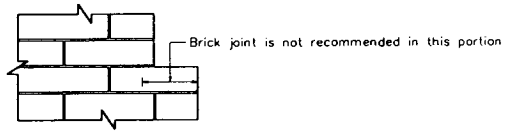
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1: 3: 6 with brick chips.
9. Reinforced concrete mix ratio shall be 1: 1.5: 3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c-c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	**120.0**

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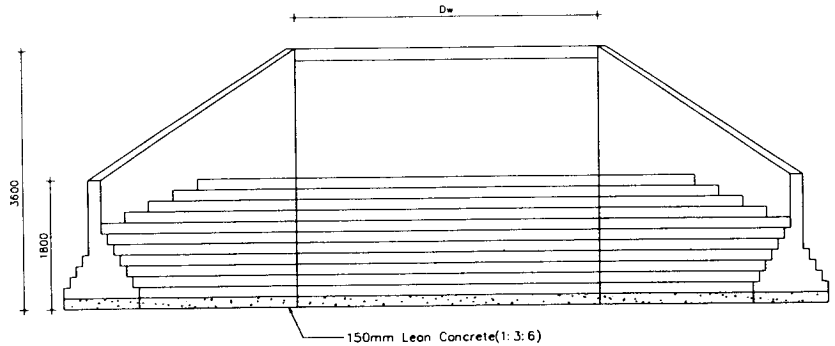
DETAILS OF BRICK ABUTMENT
HEIGHT 3.3m.

DATE :

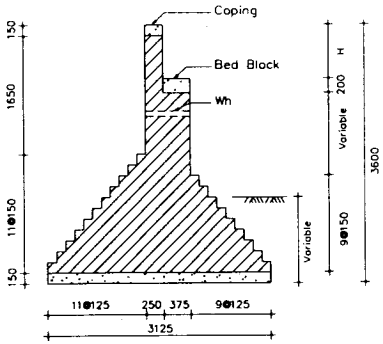
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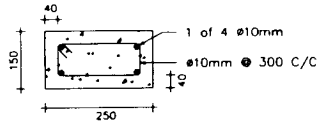
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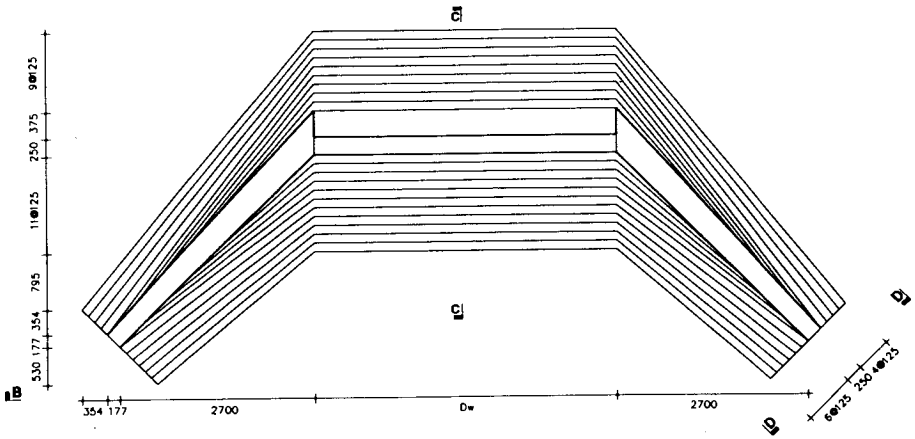
ELEVATION B-B



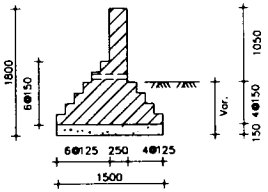
SEC. C-C



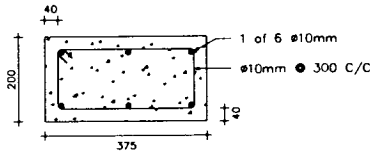
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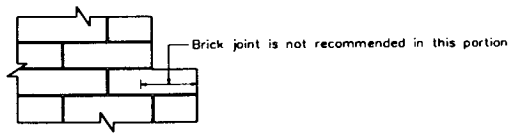
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regulor shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1: 3: 6 with brick chips.
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LEGEND

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Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

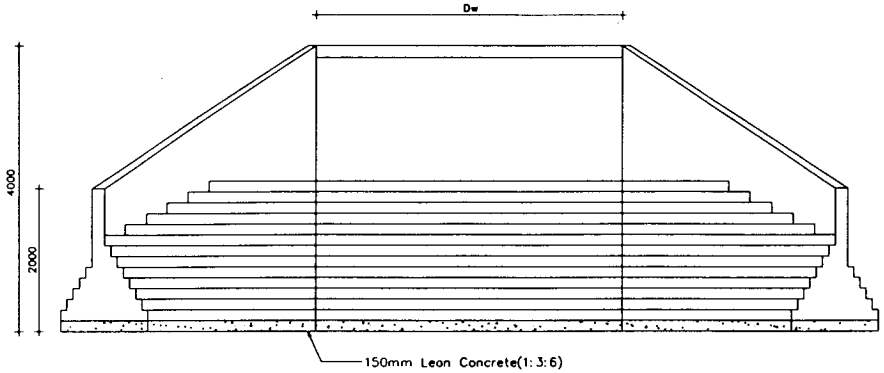
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	**120.0**

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LOCAL GOVERNMENT ENGINEERING DEPARTMENT

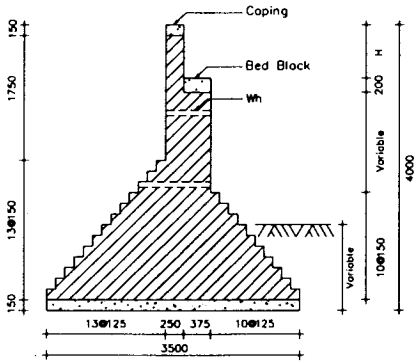
DETAILS OF BRICK ABUTMENT
HEIGHT 3.6m.

DATE :	ISSUED BY :
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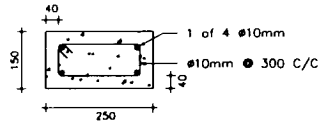
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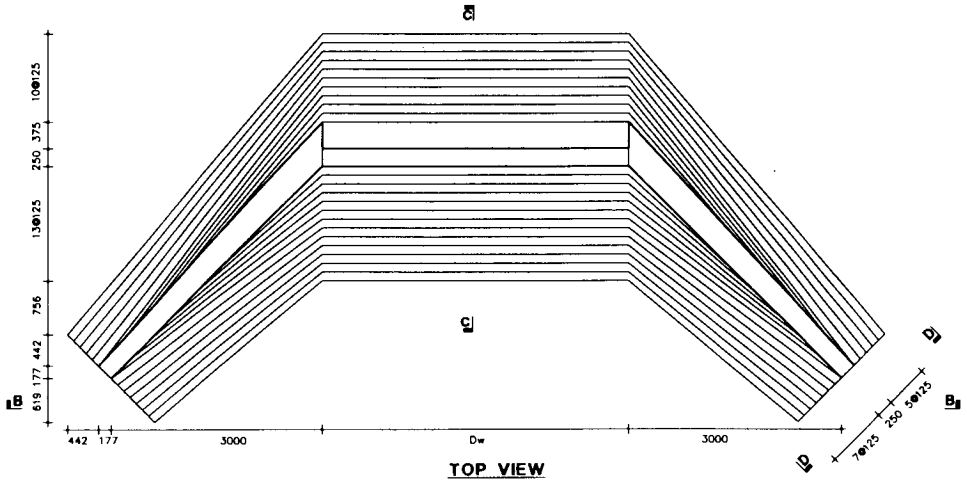
ELEVATION B-B



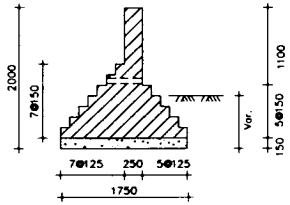
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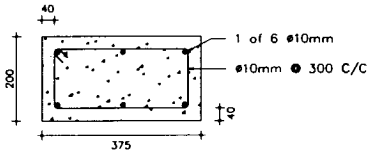
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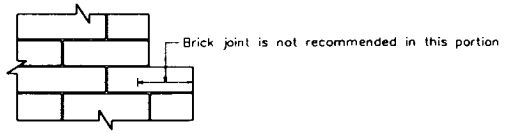
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortor shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled painting on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re–bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1: 3: 6 with brick chips.
9. Reinforced concrete mix ratio shall be 1: 1.5: 3 with brick chips.
10. Curing should be done at least for 15 days constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c–c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl see chapter 7 of the manual

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

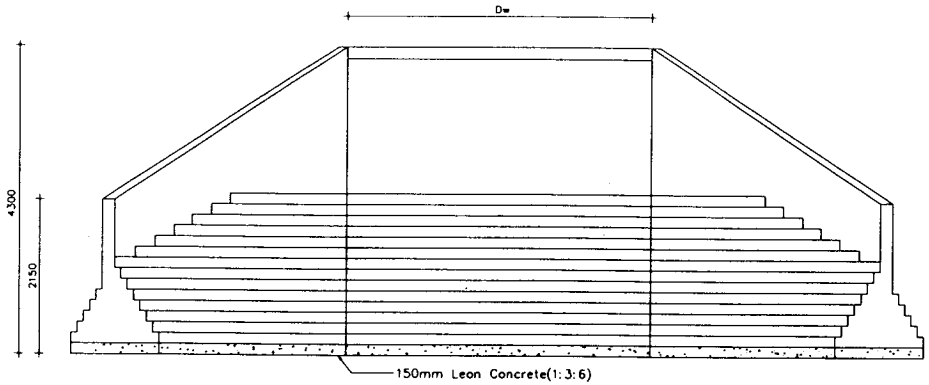
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	120.0

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

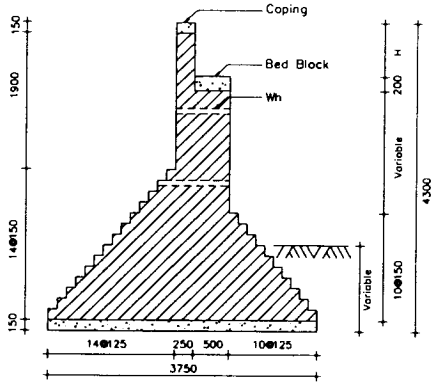
DETAILS OF BRICK ABUTMENT
HEIGHT 4.0m.

DATE :	ISSUED BY :
CAD FILE REF : ABUT\B0010401	

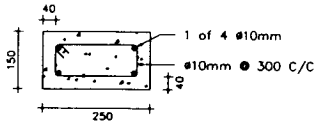
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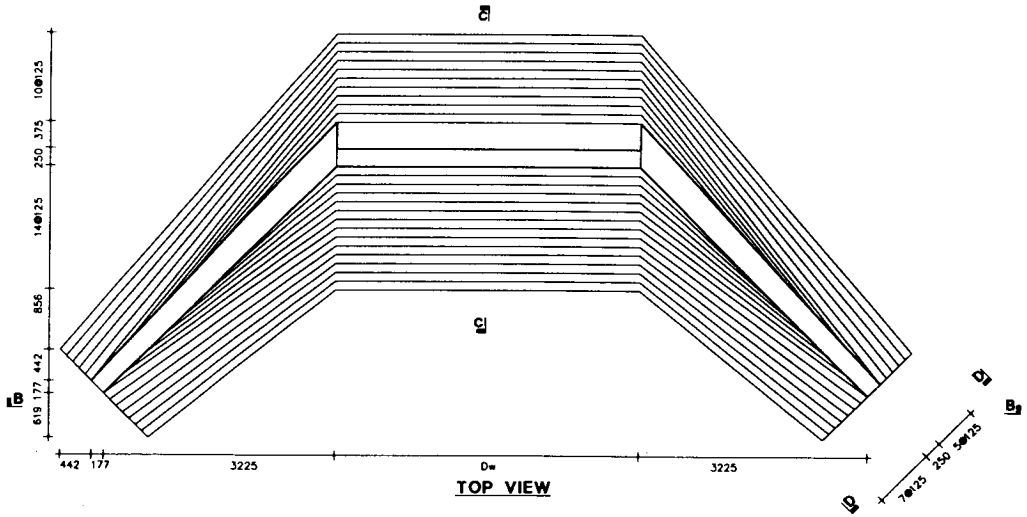
ELEVATION B-B



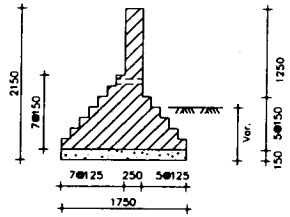
SEC. C-C



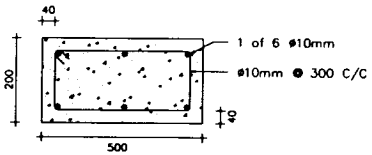
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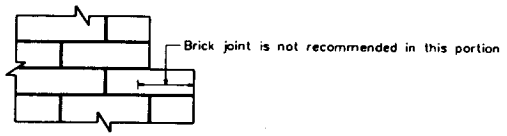
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c-c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	120.0

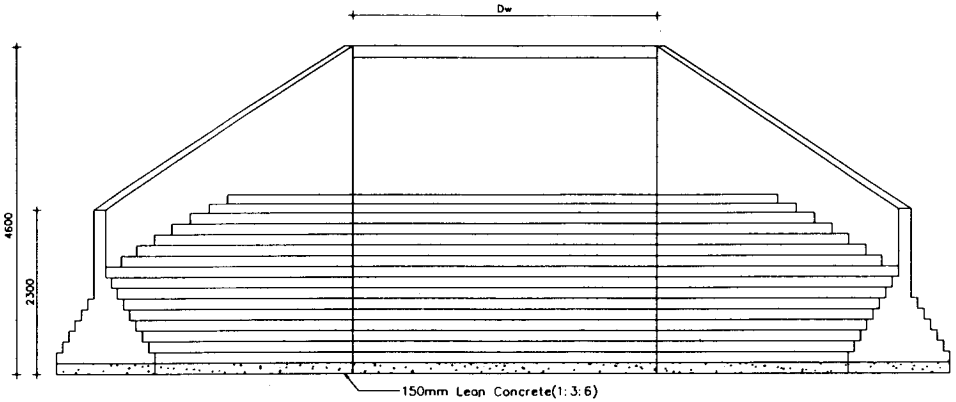
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF BRICK ABUTMENT
HEIGHT 4.3m.

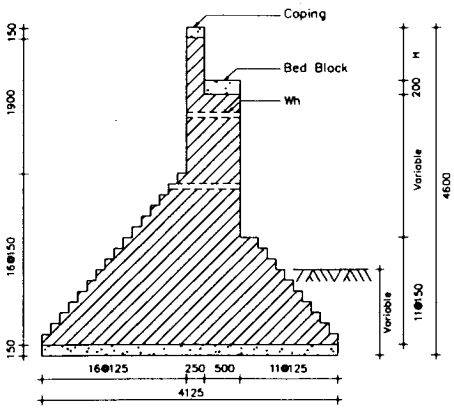
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ISSUED BY :
CAD FILE REF : ABUT\B0010431

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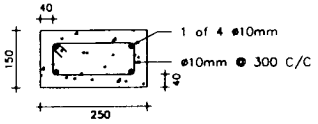
BA-6



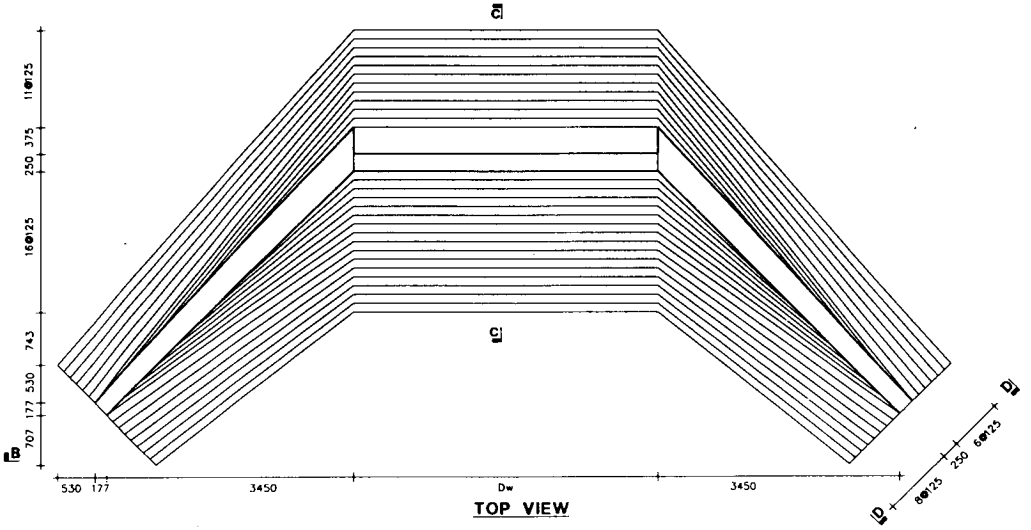
ELEVATION B-B



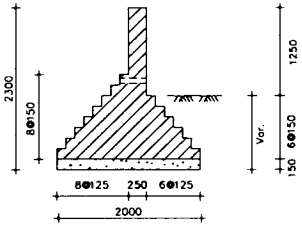
SEC. C-C



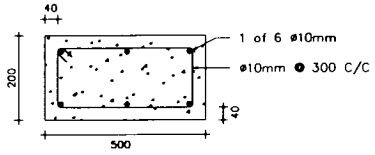
DETAILS OF COPING



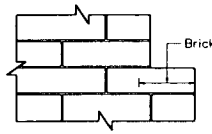
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec c–c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

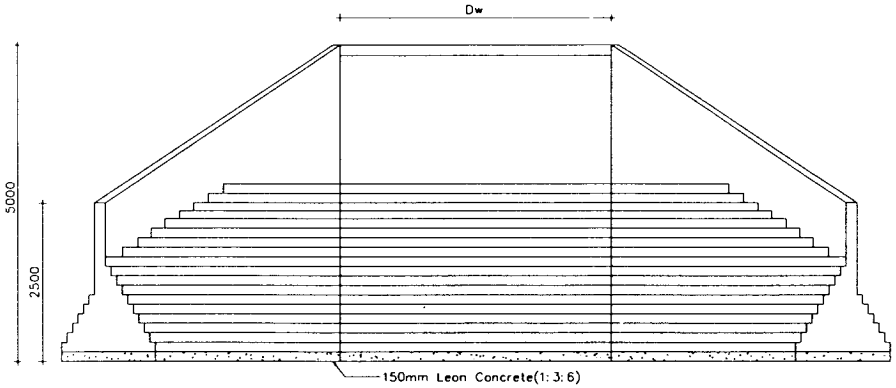
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	**120.0**

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

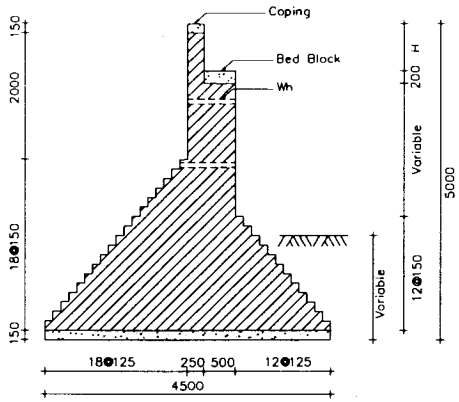
DETAILS OF BRICK ABUTMENT
HEIGHT 4.6m.

DATE :
ISSUED BY :
CAD FILE REF : ABUT\B0010461

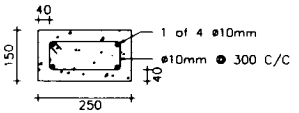
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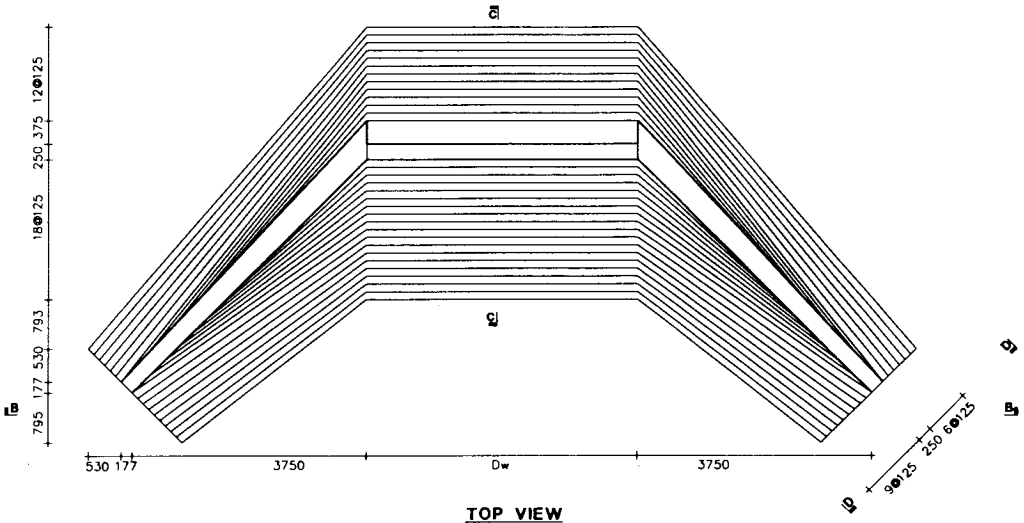
ELEVATION B-B



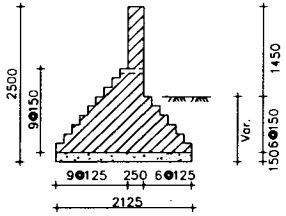
SEC. C-C



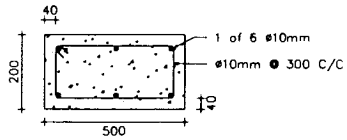
DETAILS OF COPING



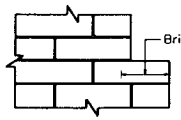
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c–c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Verticol = 75
H = Depth from soffit level to deck top.

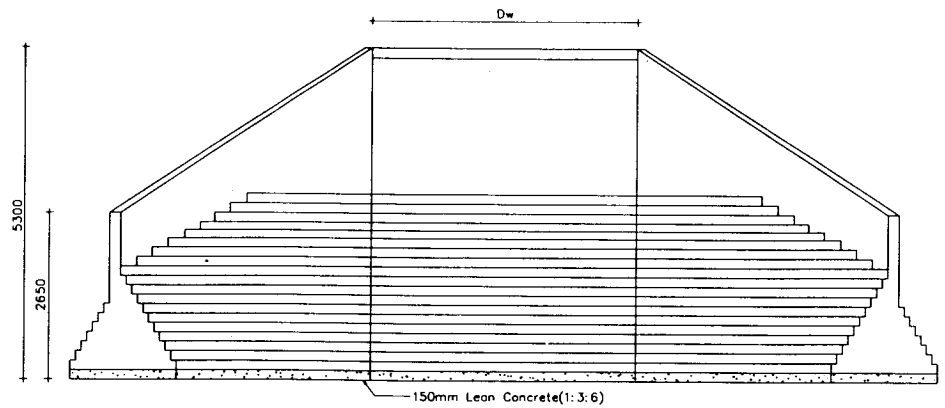
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	120.0

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

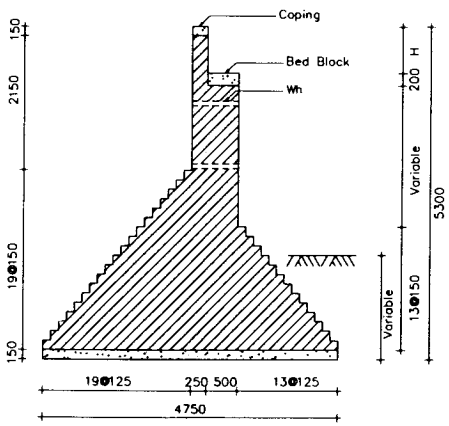
DETAILS OF BRICK ABUTMENT
HEIGHT 5.0m.

DATE :
ISSUED BY :
CAD FILE REF : ABUT\B0010501

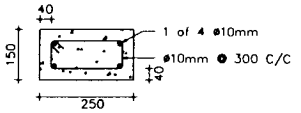
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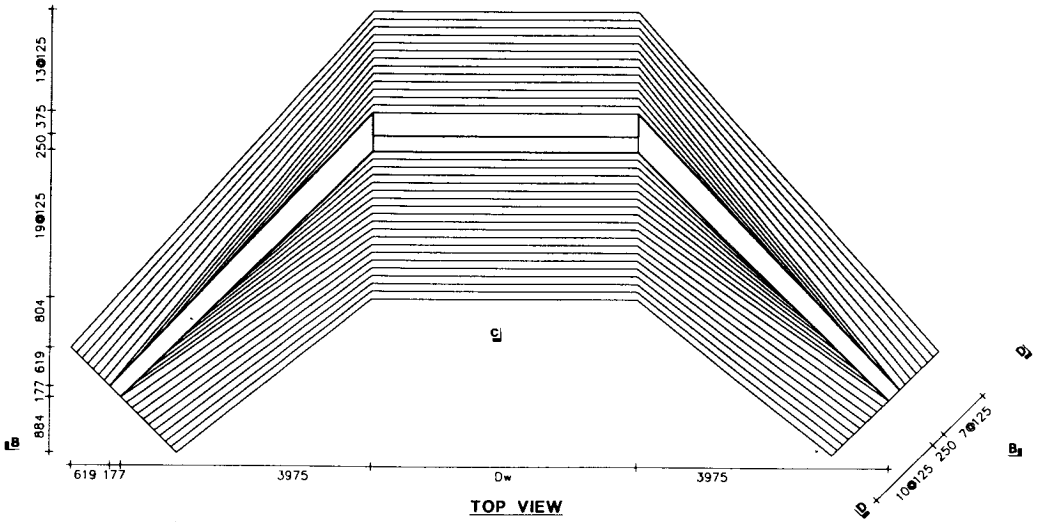
ELEVATION B-B



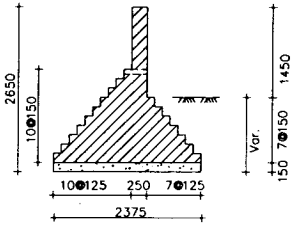
SEC. C-C



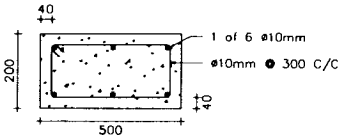
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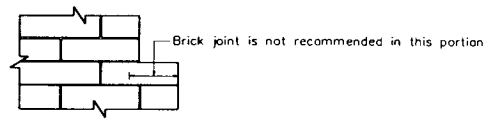
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be - Cement: Sond =1:3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1:2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at leost for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c-c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

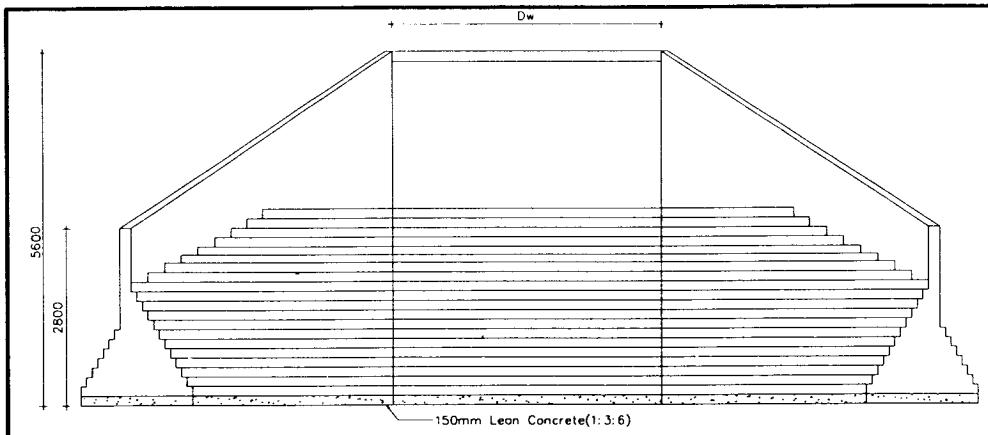
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	120.0

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

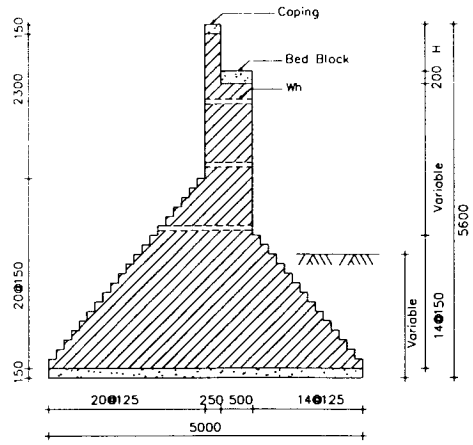
DETAILS OF BRICK ABUTMENT
HEIGHT 5.3m.

DATE :
ISSUED BY :
CAD FILE REF : ABUT\B0010531

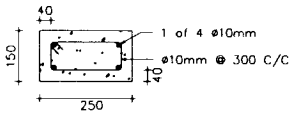
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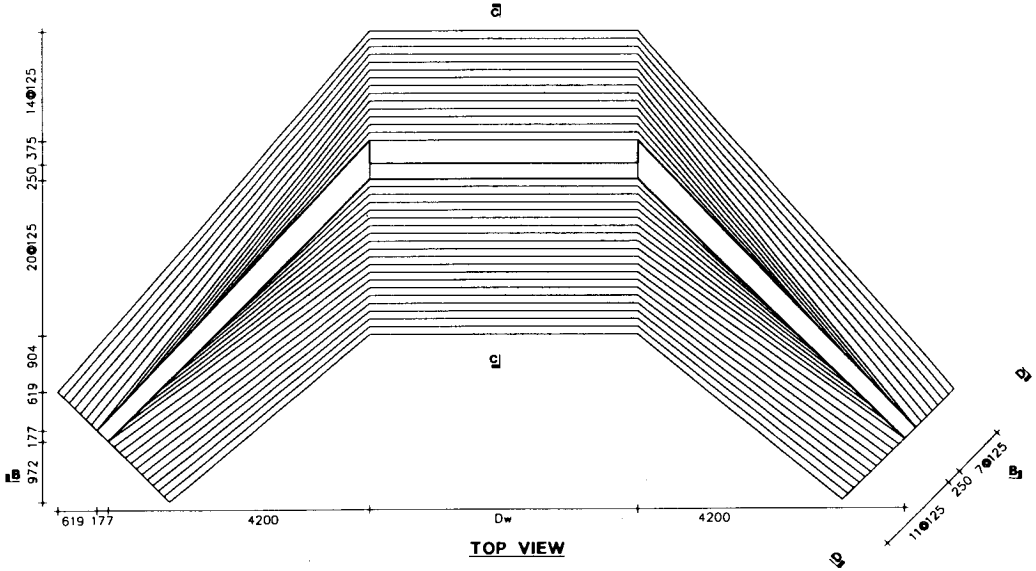
ELEVATION B-B



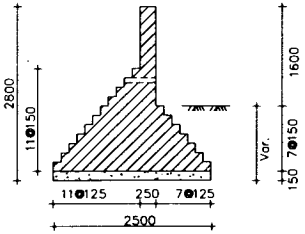
SEC. C-C



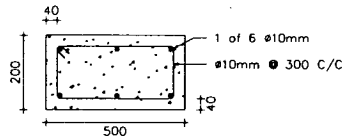
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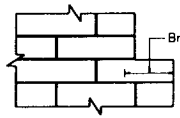
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement:Sand =1:3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar :Cement: sand=1:2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c-c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work.
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top.

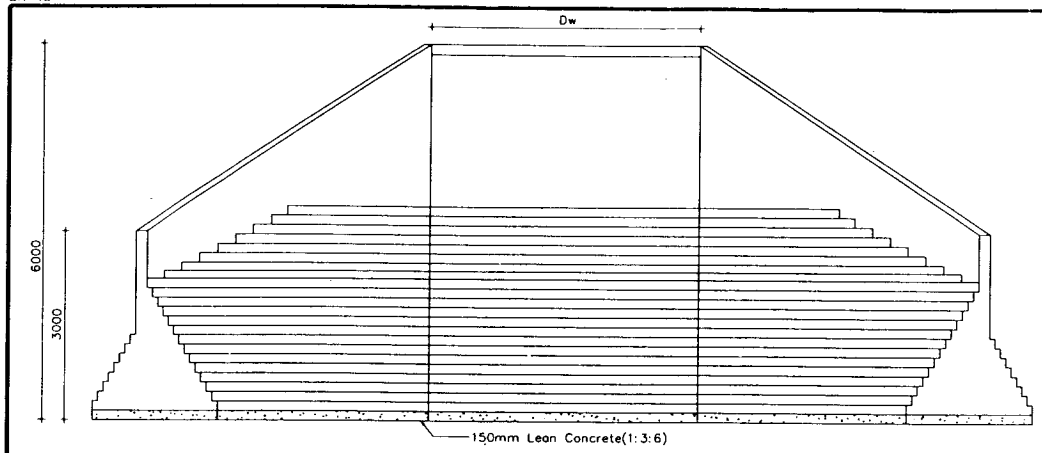
Minimum Allowable Bearing Capacity of Soil in KN/m^2	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
100.0	**120.0**

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

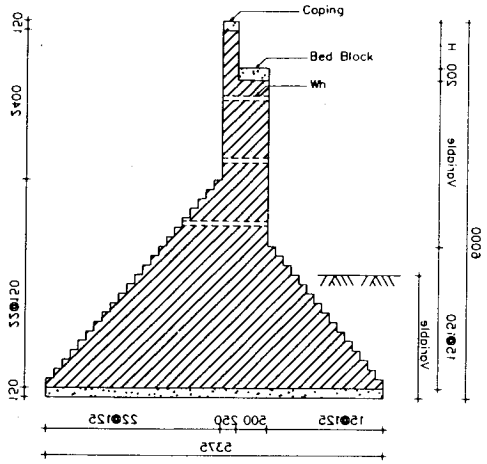
DETAILS OF BRICK ABUTMENT
HEIGHT 5.6m.

DATE :
ISSUED BY :
CAD FILE REF : ABUT\B0010561

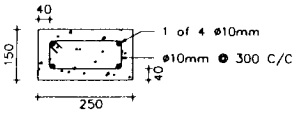
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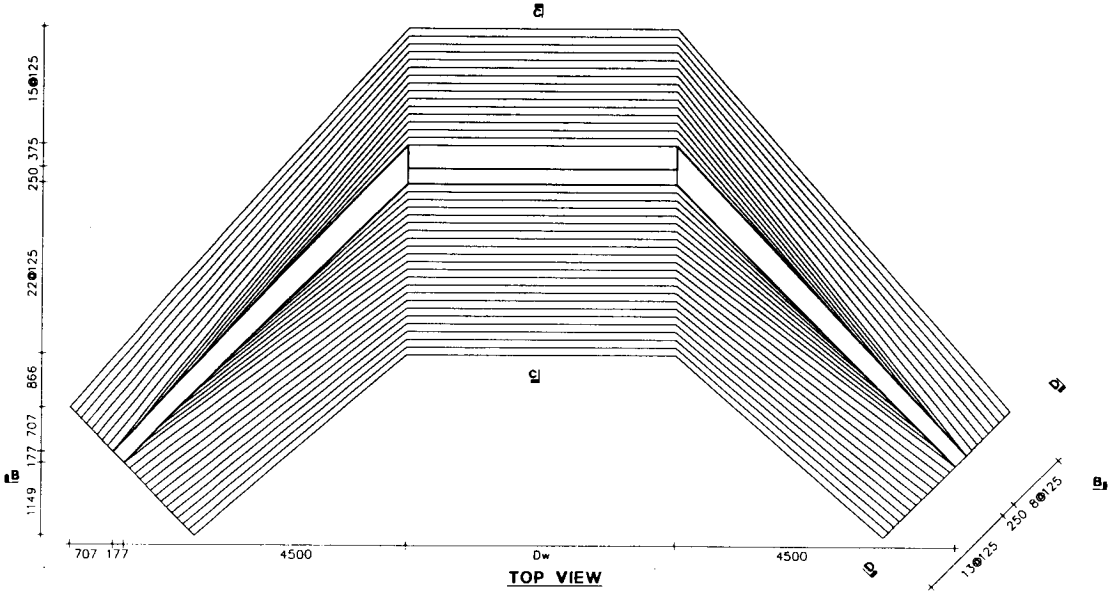
ELEVATION B-B



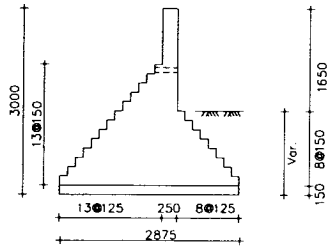
SEC. C-C



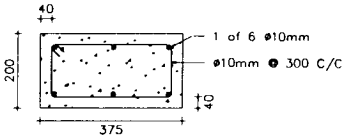
DETAILS OF COPING



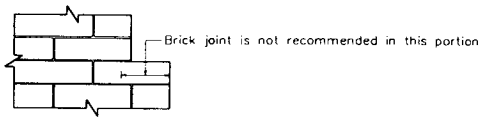
TOP VIEW



SEC. D-D



DETAILS OF BED BLOCK



BRICK LAYING DETAIL AT EDGES (GENERAL)

NOTES

1. All dimension are in milimeter except otherwise specified.
2. Brick should be of standard size and regular shape with sharp corners.
3. For masonry (brick work) mixing ratio of mortar shall be – Cement: Sand =1: 3
4. Finess modulus(F.M.) of sand shall be greater than 1.5
5. All joints shall be ruled pointing on the exposed surface with mortar : Cement: sand=1: 2
6. Coarse aggregate shall be 20mm down graded brick chips from over burnt bricks or sorted out overburnt bricks from lot of 1st class bricks or as approved by Engineer in charge.
7. Re-bar shall be deformed bar of mild steel of grade 40 (276 MPa).
8. Lean concrete mix ratio shall be 1:3:6 with brick chips.
9. Reinforced concrete mix ratio shall be 1:1.5:3 with brick chips.
10. Curing should be done at least for 15 days. constant care should be given.
11. Weep holes shall be provided at interval 900mm(av.) horizontally and vertically as shown in sec.c-c as per site condition; provide filter material as per specification.
12. Under any circumstances earth filling work in the back of Abutment can not be done before completion of the whole Bridge/Culvert work
13. For further informations regarding Masonry work pl. see chapter 7 of the manual.

LEGEND

Dw = Deck Width
Wh = Weephole : opening size : Horizontal = 50
Vertical = 75
H = Depth from soffit level to deck top

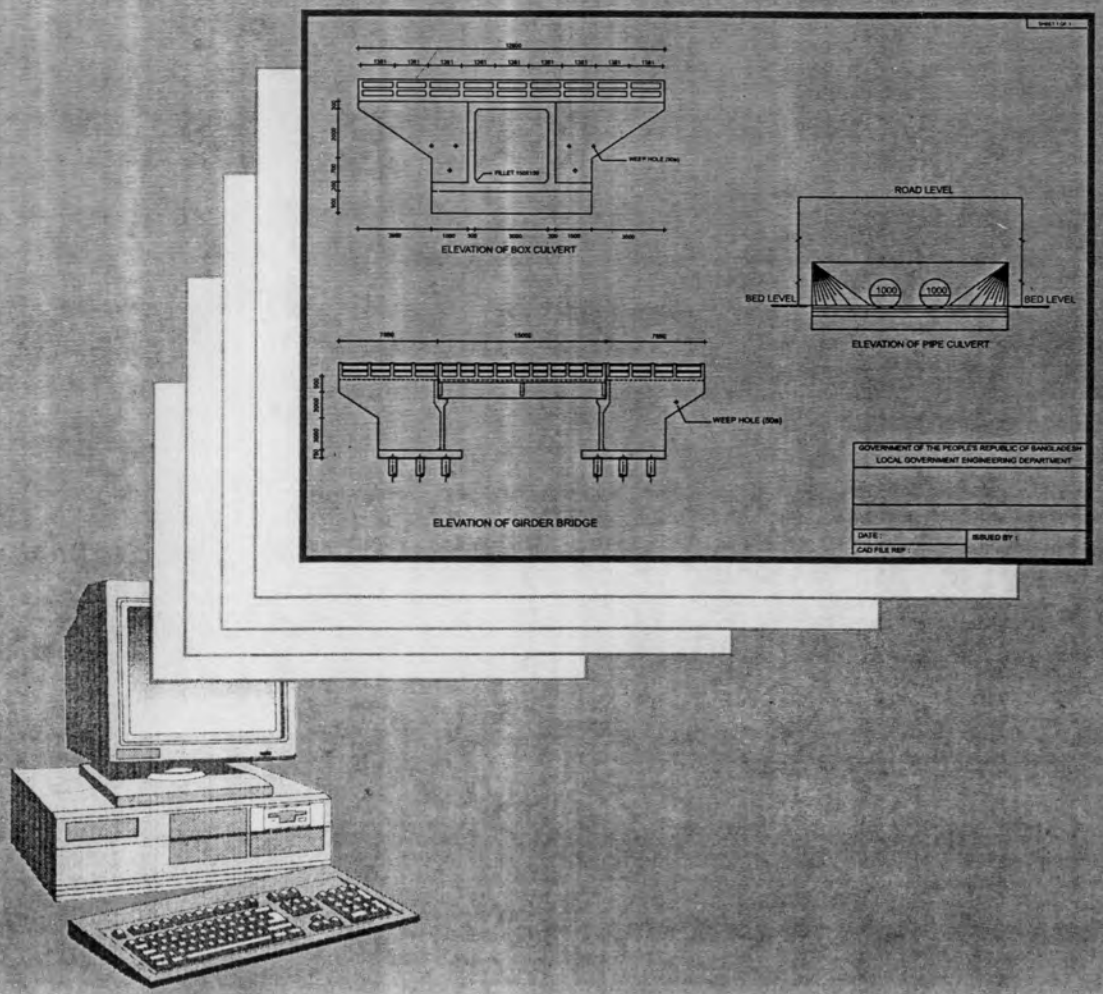
Minimum Allowable Bearing Capacity of Soil in KN/m²	
Span 3.0m to 7.0m	Span 7.5m to 12.0m
105.0	120.0

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DETAILS OF BRICK ABUTMENT
HEIGHT 6.0m.

DATE	ISSUED BY
CAD FILE REF : ABUT\H0010601	

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OPEN ABUTMENT

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SELECTION OF STANDARD DESIGN

OPEN ABUTMENTS :

Introduction

Standard design of brick and R.C.C. Abutments of various height are presented in the Manual. Height of brick abutment ranges form 3.0m to 6.0m with an increment of 0.3m.Three types of R.C.C abutments, open abutment, full depth abutment, and stub abutments have been provided in the Manual. Open and full depth abutment with carriageway width (cw) 3.66m with footpath and of height ranges from 3.0m to 8.0m and cw of 3.66m and 2.44m without footpath and of height ranges from 3.0m to 8.0m have been provided in the Manual. Stub abutments have been designed for a low height ranging from 2.0m to 3.0m with and without footpaths.

Procedure of Selection

Selection of an abutment along with its type (whether brick, open, full depth or stub) and height will be determined by following the flow chart given in Chapter 13 of Part A of the Manual. Standard designs with detailed drawing of the required type of structure along with bar schedule are available in this section. Brick abutment will be provided in case of open foundation only. R.C.C abutments with open foundation are also available in the manual. The height ranges from 3.0m to 6.0m with an increment of 0.3m.

Selection of a suitable structure may also be done with the assistance of structure WORKS, a computer software. See Part C of the Road Structure Manual for more information.

Quantity Estimate

The estimates of quantities involving different items of works are presented in the form of a Table in the following pages. Estimate for a particular design can be obtained from these tables.

The items of works whose quantities depend on the particular site conditions are included in the table, but their quantities are kept blank. Those are to be determined after actual field measurements.

In preparing the bill of quantities the full description of the related items should be taken from Chapter 16-Bill of Quantities.

List of all R.C.C Open abutments are summarized below :

Structure List of R.C.C Open Abutment

Sl. No.	Reference Code	Structure Description	Page No.
1	ABUT\O0110301	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 3.0m	OA-1
2	ABUT\O0110331	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 3.3m	OA-5
3	ABUT\O0110361	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 3.6m	OA-9
4	ABUT\O0110401	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 4.0m	OA-13
5	ABUT\O0110431	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 4.3m	OA-17
6	ABUT\O0110461	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 4.6m	OA-21
7	ABUT\O0110501	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 5.0m	OA-25
8	ABUT\O0110531	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 5.3m	OA-29
9	ABUT\O0110561	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 5.6m	OA-33
10	ABUT\O0110601	Abutment Open; Without Footpath; CW 2.44m; Range 1; H 6.0m	OA-37
11	ABUT\O0210301	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 3.0m	OA-41
12	ABUT\O0210331	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 3.3m	OA-46
13	ABUT\O0210361	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 3.6m	OA-51
14	ABUT\O0210401	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 4.0m	OA-56
15	ABUT\O0210431	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 4.3m	OA-61
16	ABUT\O0210461	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 4.6m	OA-66
17	ABUT\O0210501	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 5.0m	OA-71
18	ABUT\O0210531	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 5.3m	OA-76
19	ABUT\O0210561	Abutment Open; Without Footpath; CW 3.66m; Range 1; H 5.6m	OA-81
20	ABUT\O0210601	Abutment Open; With Footpath; CW 3.66m; Range 1; H 6.0m	OA-86
21	ABUT\O1210301	Abutment Open; With Footpath; CW 3.66m; Range 1; H 3.0m	OA-91
22	ABUT\O1210331	Abutment Open; With Footpath; CW 3.66m; Range 1; H 3.3m	OA-94
23	ABUT\O1210361	Abutment Open; With Footpath; CW 3.66m; Range 1; H 3.6m	OA-97
24	ABUT\O1210401	Abutment Open; With Footpath; CW 3.66m; Range 1; H 4.0m	OA-100
25	ABUT\O1210431	Abutment Open; With Footpath; CW 3.66m; Range 1; H 4.3m	OA-103
26	ABUT\O1210461	Abutment Open; With Footpath; CW 3.66m; Range 1; H 4.6m	OA-106
27	ABUT\O1210501	Abutment Open; With Footpath; CW 3.66m; Range 1; H 5.0m	OA-109
28	ABUT\O1210531	Abutment Open; With Footpath; CW 3.66m; Range 1; H 5.3m	OA-112
29	ABUT\O1210561	Abutment Open; With Footpath; CW 3.66m; Range 1; H 5.6m	OA-115
30	ABUT\O1210601	Abutment Open; With Footpath; CW 3.66m; Range 1; H 6.0m	OA-118
31	ABUT\O0120301	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 3.0m	OA-121
32	ABUT\O0120331	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 3.3m	OA-124
33	ABUT\O0120361	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 3.6m	OA-127
34	ABUT\O0120401	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 4.0m	OA-130
35	ABUT\O0120431	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 4.3m	OA-133
36	ABUT\O0120461	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 4.6m	OA-136
37	ABUT\O0120501	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 5.0m	OA-139
38	ABUT\O0120531	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 5.3m	OA-142
39	ABUT\O0120561	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 5.6m	OA-145

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Sl. No.	Reference Code	Structure Description	Page No.
40	ABUT\O0120601	Abutment Open; Without Footpath; CW 2.44m; Range 2; H 6.0m	OA-148
41	ABUT\O0220301	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 3.0m	OA-151
42	ABUT\O0220331	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 3.3m	OA-154
43	ABUT\O0220361	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 3.6m	OA-157
44	ABUT\O0220401	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 4.0m	OA-160
45	ABUT\O0220431	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 4.3m	OA-163
46	ABUT\O0220461	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 4.6m	OA-166
47	ABUT\O0220501	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 5.0m	OA-169
48	ABUT\O0220531	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 5.3m	OA-172
49	ABUT\O0220561	Abutment Open; Without Footpath; CW 3.66m; Range 2; H 5.6m	OA-175
50	ABUT\O0220601	Abutment Open; With Footpath; CW 3.66m; Range 2; H 6.0m	OA-178
51	ABUT\O1220301	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 3.0m	OA-181
52	ABUT\O1220331	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 3.3m	OA-184
53	ABUT\O1220361	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 3.6m	OA-187
54	ABUT\O1220401	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 4.0m	OA-190
55	ABUT\O1220431	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 4.3m	OA-193
56	ABUT\O1220461	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 4.6m	OA-196
57	ABUT\O1220501	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 5.0m	OA-199
58	ABUT\O1220531	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 5.3m	OA-202
59	ABUT\O1220561	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 5.6m	OA-205
60	ABUT\O1220601	Abutment Open; With Footpath; CW 3.66 m; Range 2; H 6.0m	OA-208

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OPEN ABUTMENT

Estimate Of Quantities For RCC Open Abutment

E .Q . Table No. 6.b

Abutment Height (m)				3						3.3						3.6					
Foot-Path				Yes		No				Yes		No				Yes		No			
Carriage way Width (m)				3.66				2.44		3.66				2.44		3.66				2.44	
Type of Loading				H20/ H15				H10		H20/ H15				H10		H20/ H15				H10	
Span Range (m)				1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20
Sl. No.	Item No.	Brief Description	Unit																		
1	1	Mobilization	L. S.																		
2	2	Engineer's office	L. S.																		
3	3/46/47	Diversion	Cu-m/L-m/L-m																		
4	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m																		
5	6	Earth work in excavation	Cu-m																		
6	7	Bailing out water	Cu-m																		
7	8	Sand filling	Cu-m																		
8	9	Brick flat soling	Sq-m																		
9	10	Brick on edge pavement	Sq-m																		
10	11	Cement concrete (1:3:6)	Cu-m	2.53	2.78	2.19	2.40	1.60	1.77	2.66	2.89	2.29	2.49	1.67	1.84	2.7	2.91	2.33	2.51	1.68	1.82
11	15	a) Reinforcement	Kg	3863	3926	3420	3365	2839	2896	4194	4306	3743	3881	3172	3231	4618	4814	4137	4334	3544	3596
12	21	Earthwork in temporary cofferdams	Nos.																		
13	24	R.C.C work (1:2:4)																			
		a) Foundation & footing	Cu-m	18.52	20.42	16.10	17.60	11.72	12.96	19.48	21.20	16.78	18.28	12.24	13.48	19.78	21.36	17.06	18.42	12.34	13.38
		g) Curb & foot-path	Cu-m	1.17	1.17	0.80	0.80	0.80	0.80	1.29	1.29	0.99	0.92	0.92	0.92	1.37	1.37	1.00	1.00	1.00	1.00
		h) Wing wall & abutment	Cu-m	15.50	15.32	14.05	13.86	11.71	11.50	17.82	17.56	16.24	15.98	13.70	13.49	21.66	21.38	19.85	19.55	16.92	16.69
		m) Railing & post	Cu-m	0.93	0.80	0.72	0.72	0.72	0.72	0.95	0.95	0.85	0.85	0.85	0.85	1.03	1.03	0.93	0.93	0.93	0.93
14	27	a) Providing weep hole	L-m	6.50	7.80	6.50	5.90	5.20	5.85	5.20	6.50	5.20	6.50	5.20	3.90	7.00	7.00	8.40	7.70	5.60	5.60
15	30	Back filling	Cu-m																		
16	31	Earth work in approaches of bridge	Cu-m																		
17	33	Nosing	L-m	10.02	10.02	8.52	8.52	6.08	6.08	10.02	10.52	8.52	8.52	6.08	6.08	10.02	10.02	8.52	8.52	6.08	6.08
18	35	Placing of gunny bagged rip-rap fille	Cu-m																		
19	36	Turfing on embankment	Sq-m																		
20	37	Hanging of sign board	L. S.																		
21	38	Name plate	Each																		
22	42	Marking the post & rail	Sq-m																		
26	48.	Demobilization.	L.S																		
27	51.	Filter material behind the weep holes	Each	20	24	20	18	16	18	16	20	16	20	20	12	20	20	20	22	24	16

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OPEN ABUTMENT

Estimate Of Quantities For RCC Open Abutment

E .Q . Table No. 6.b

Abutment Height (m)				4						4.3						4.6					
Foot-Path				Yes		No				Yes		No				Yes		No			
Carriage way Width (m)				3.66				2.44		3.66				2.44		3.66				2.44	
Type of Loading				H20/ H15				H10		H20/ H15				H10		H20/ H15				H10	
Span Range (m)				1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20
Sl. No.	Item No.	Brief Description	Unit																		
1	1	Mobilization	L. S.																		
2	2	Engineer's office	L. S.																		
3	3/46/47	Diversion	Cu-m/L-m/L-m																		
4	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m																		
5	6	Earth work in excavation	Cu-m																		
6	7	Bailing out water	Cu-m																		
7	8	Sand filling	Cu-m																		
8	9	Brick flat soling	Sq-m																		
9	10	Brick on edge pavement	Sq-m																		
10	11	Cement concrete (1:3:6)	Cu-m	2.85	3.1	2.49	2.66	1.80	1.94	3.34	3.53	2.88	3.44	2.09	2.26	3.79	3.92	3.27	3.4	2.38	2.56
11	15	a) Reinforcement	Kg	5408	5752	4956	5177	4321	4319	6508	6752	5775	6397	5095	5245	7215	7569	6610	6910	5649	5948
12	21	Earthwork in temporary cofferdams	Nos.																		
13	24	R.C.C work (1:2:4)																			
		a) Foundation & footing	Cu-m	20.88	22.76	18.28	19.50	13.16	14.20	24.50	25.90	21.14	25.24	15.32	16.56	27.80	28.74	24.00	24.96	17.48	18.72
		g) Curb & foot-path	Cu-m	1.53	1.53	1.16	1.16	1.16	1.16	1.65	1.65	1.28	1.28	1.28	1.28	1.77	1.77	1.40	1.40	1.40	1.40
		h) Wing wall & abutment	Cu-m	25.33	25.25	23.54	23.25	20.32	20.09	29.13	28.85	27.00	27.57	23.56	23.34	33.06	32.78	30.79	30.51	27.13	26.91
		m) Railing & post	Cu-m	1.14	1.14	1.03	1.02	1.03	1.01	1.29	1.29	1.16	1.16	1.16	1.16	1.37	1.37	1.24	1.24	1.22	1.24
14	27	a) Providing weep hole	L-m	9.80	13.30	10.50	10.50	9.10	8.40	13.30	11.90	10.50	13.30	9.10	9.10	14.70	16.10	13.30	14.70	10.50	10.50
15	30	Back filling	Cu-m																		
16	31	Earth work in approaches of bridge	Cu-m																		
17	33	Nosing	L-m	10.02	10.02	8.52	8.52	6.08	6.08	10.02	10.52	8.52	8.52	6.08	6.08	10.02	10.02	8.52	8.52	6.08	6.08
18	35	Placing of gunny bagged rip-rap fille	Cu-m																		
19	36	Turfing on embankment	Sq-m																		
20	37	Hanging of sign board	L. S.																		
21	38	Name plate	Each																		
22	42	Marking the post & rail	Sq-m																		
26	48.	Demobilization.	L.S																		
27	51.	Filter material behind the weep holes	Each	28	38	30	30	26	24	38	34	30	38	24	26	42	46	38	42	30	30

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OPEN ABUTMENT
Estimate Of Quantities For RCC Open Abutment
E .Q . Table No. 6.b

Abutment Height (m)				5						5.3						5.6					
Foot-Path				Yes		No				Yes		No				Yes		No			
Carriage way Width (m)				3.66				2.44		3.66				2.44		3.66				2.44	
Type of Loading				H20/ H15				H10		H20/ H15				H10		H20/ H15				H10	
Span Range (m)				1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20
Sl. No.	Item No.	Brief Description	Unit																		
1	1	Mobilization	L. S.																		
2	2	Engineer's office	L. S.																		
3	3/46/47	Diversion	Cu-m/L-m/L-m																		
4	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m																		
5	6	Earth work in excavation	Cu-m																		
6	7	Bailing out water	Cu-m																		
7	8	Sand filling	Cu-m																		
8	9	Brick flat soling	Sq-m																		
9	10	Brick on edge pavement	Sq-m																		
10	11	Cement concrete (1:3:6)	Cu-m	4.35	4.37	3.74	3.79	2.72	2.86125	4.7525	4.7525	4.13	4.13	3.02	3.02	5.2025	5.14	4.46	4.46	3.30	3.3
11	15	a) Reinforcement	Kg	9276	9458	8446	8640	7461	7696	10192	10685	9619	9802	8616	8566	12182	12399	11359	11385	10030	10171
12	21	Earthwork in temporary cofferdams	Nos.																		
13	24	R.C.C work (1:2:4)																			
		a) Foundation & footing	Cu-m	34.78	34.94	29.90	30.36	21.76	22.89	38.02	38.02	33.04	33.04	24.12	24.12	41.62	41.12	35.72	35.72	26.36	26.36
		g) Curb & foot-path	Cu-m	1.89	1.89	1.52	1.52	1.52	1.52	2.01	2.01	1.64	1.64	1.64	1.60	2.13	2.09	1.72	1.72	1.72	1.72
		h) Wing wall & abutment	Cu-m	40.83	40.52	38.24	37.93	33.53	33.29	48.97	48.62	45.22	44.89	40.80	39.38	58.78	57.88	54.10	53.74	49.14	48.86
		m) Railing & post	Cu-m	1.46	1.46	1.33	1.33	1.33	1.33	1.62	1.62	1.47	1.47	1.47	1.47	1.71	1.70	1.55	1.55	1.55	1.55
14	27	a) Providing weep hole	L-m	18.75	24.75	24.80	24.75	17.00	18.80	29.60	31.20	32.30	29.15	20.15	24.60	36.55	34.90	34.30	31.90	29.50	29.50
15	30	Back filling	Cu-m																		
16	31	Earth work in approaches of bridge	Cu-m																		
17	33	Nosing	L-m	10.02	10.02	8.52	8.52	6.08	6.08	10.02	10.52	8.52	8.52	6.08	6.08	10.02	10.02	8.52	8.52	6.08	6.08
18	35	Placing of gunny bagged rip-rap fille	Cu-m																		
19	36	Turfing on embankment	Sq-m																		
20	37	Hanging of sign board	L. S.																		
21	38	Name plate	Each																		
22	42	Marking the post & rail	Sq-m																		
26	48.	Demobilization.	L.S																		
27	51.	Filter material behind the weep holes	Each	50	66	66	66	46	50	74	78	82	74	58	62	86	82	82	76	70	70

Web Copy

OPEN ABUTMENT

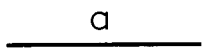
Estimate Of Quantities For RCC Open Abutment

E .Q . Table No. 6.b

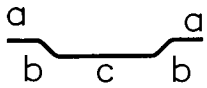
Abutment Height (m)				6					
Foot-Path				Yes				No	
Carriage way Width (m)				3.66				2.44	
Type of Loading				H20/ H15				H10	
Span Range (m)				1.5-12	12.5-20	1.5-12	12.5-20	1.5-12	12.5-20
Sl. No.	Item No.	Brief Description	Unit						
1	1	Mobilization	L. S.						
2	2	Engineer's office	L. S.						
3	3/46/47	Diversion	Cu-m/L-m/L-m						
4	4/43/44/45	Dismantling	L.S/Cu-m/ton/Cu-m						
5	6	Earth work in excavation	Cu-m						
6	7	Bailing out water	Cu-m						
7	8	Sand filling	Cu-m						
8	9	Brick flat soling	Sq-m						
9	10	Brick on edge pavement	Sq-m						
10	11	Cement concrete (1:3:6)	Cu-m	5.65	5.65	4.91	4.91	3.70	3.70
11	15	a) Reinforcement	Kg	16046	16432	14715	14855	12765	12864
12	21	Earthwork in temporary cofferdams	Nos.						
13	24	R.C.C work (1:2:4)							
	•	a) Foundation & footing	Cu-m	49.00	49.00	42.56	42.56	32.08	32.08
		g) Curb & foot-path	Cu-m	2.25	2.25	1.88	1.88	1.88	1.88
		h) Wing wall & abutment	Cu-m	64.49	63.98	58.66	58.89	53.80	53.47
		m) Railing & post	Cu-m	1.80	1.80	1.65	1.65	1.65	1.65
14	27	a) Providing weep hole	L-m	37.90	37.90	34.40	34.40	32.00	32.00
15	30	Back filling	Cu-m						
16	31	Earth work in approaches of bridge	Cu-m						
17	33	Nosing	L-m	10.02	10.02	8.52	8.52	6.08	6.08
18	35	Placing of gunny bagged rip-rap fille	Cu-m						
19	36	Turfing on embankment	Sq-m						
20	37	Hanging of sign board	L. S.						
21	38	Name plate	Each						
22	42	Marking the post & rail	Sq-m						
26	48.	Demobilization.	L.S						
27	51.	Filter material behind the weep holes	Each	102	102	96	96	90	90

Web Copy

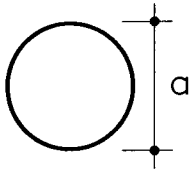
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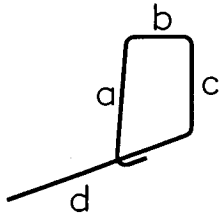
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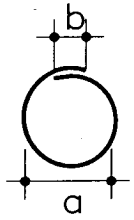
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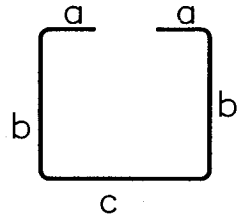
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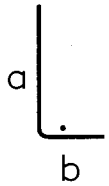
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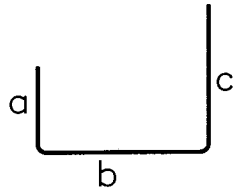
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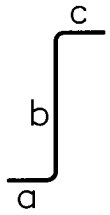
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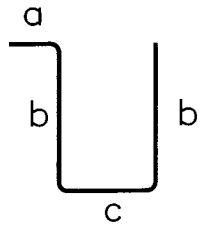
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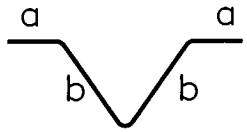
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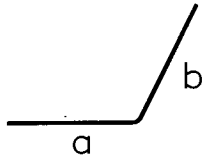
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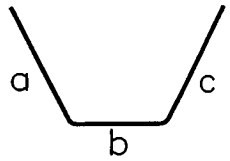
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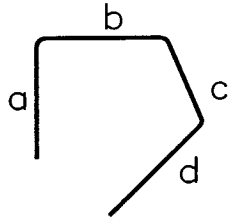
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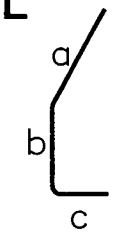
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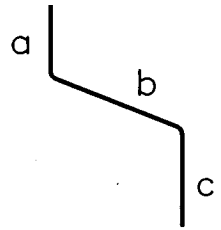
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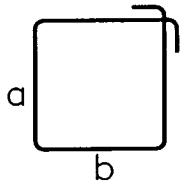
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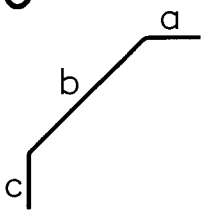
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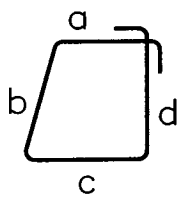
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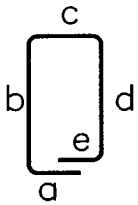
C



VL



CU



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

STANDARD BAR SHAPE & SHAPE CODE

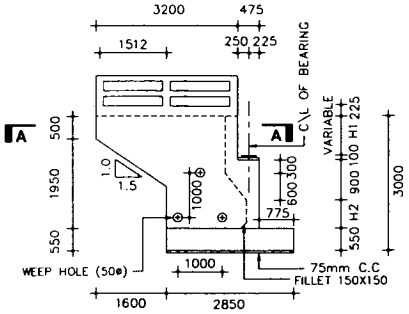
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ISSUED BY :

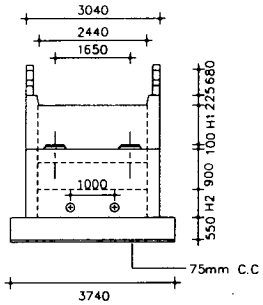
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SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



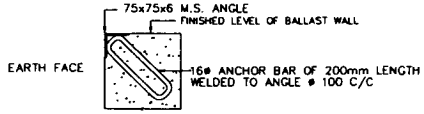
SIDE ELEVATION



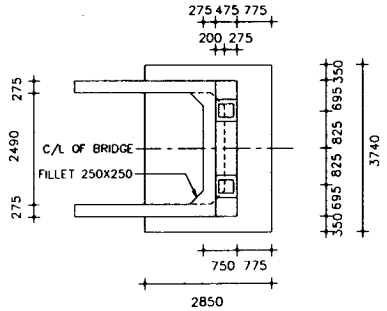
FRONT ELEVATION

TABLE-1

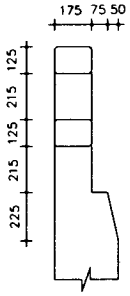
GIRDER SPAN	H1	H2
12000	950	500
11500	800	650
11000	800	650
10500	800	650
10000	800	650
9500	800	650
9000	800	650
8500	600	850
8000	600	850
7500	600	850
7000	600	850
6500	600	850
6000	600	850
5500	350	1100
5000	350	1100
4500	300	1150
4000	300	1150
3500	300	1150
3000	250	1200
2500	250	1200
2000	250	1200
1500	250	1200



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

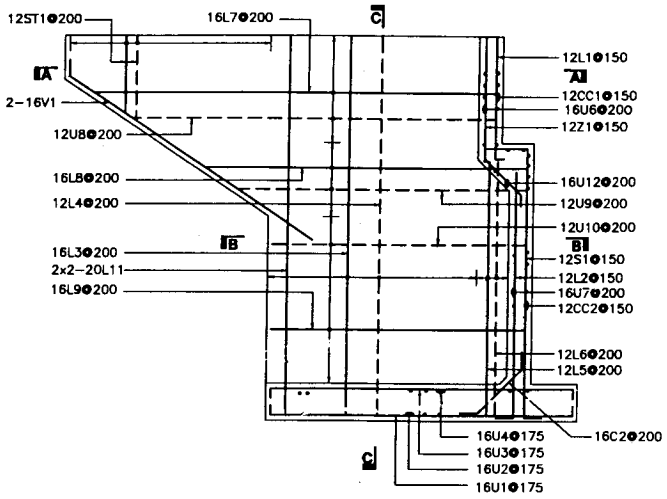
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110301	

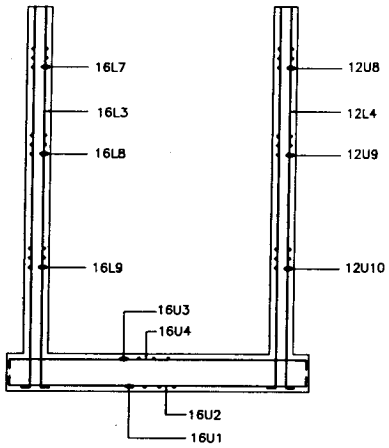
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OA-2

SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



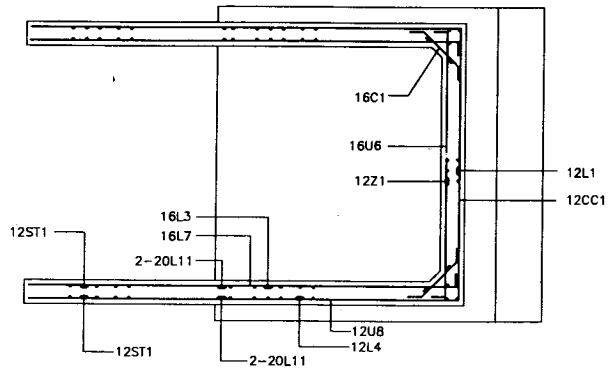
REINFORCEMENT DETAIL



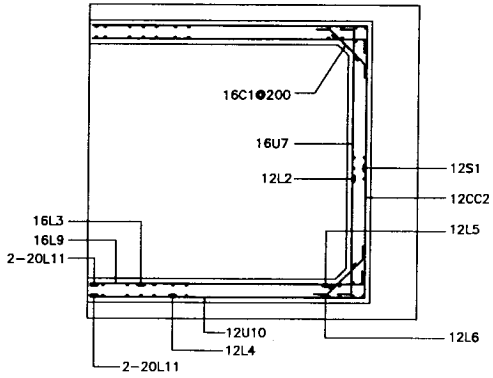
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

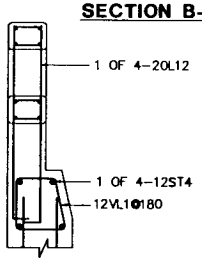
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	1300	144			1444
12	L2	21	1300	144			1444
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1000 to 1600	144			Avg. 1444
12	L6	6	Var. 1000 to 1600	144			Avg. 1444
16	L7	12	Var. 2275 to 3100	192			Avg. 3017
16	L8	8	Var. 1975 to 2275	192			Avg. 2317
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	4	192	2892	192		3276
12	U8	12	Var. 2275 to 3100	175	525		Avg. 3525
12	U9	8	Var. 1975 to 2275	175	525		Avg. 2825
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	9	1150	350	2940		4440
12	CC2	12	1150	350	2940		4440
12	Z1	21	1300	866	144		2310
12	S1	21	650	1850	240		2740
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	WL1	38	272	200	250	278	1000



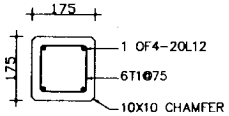
SECTION A-A



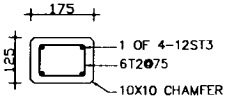
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110302	

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	1150	144			1294
12	L2	21	1450	144			1594
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1150 to 1750	144			Avg. 1594
12	L6	6	Var. 1150 to 1750	144			Avg. 1594
16	L7	10	Var. 2500 to 3100	192			Avg. 3172
16	L8	10	Var. 1975 to 2500	192			Avg. 2430
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	5	192	2892	192		3276
12	U8	10	Var. 2500 to 3100	175	525		Avg. 3680
12	U9	10	Var. 1975 to 2500	175	525		Avg. 2938
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	8	1150	350	2940		4440
12	CC2	13	1150	350	2940		4440
12	Z1	21	1150	866	144		2160
12	S1	21	650	2000	240		2890
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	950	144			1094
12	L2	21	1650	144			1794
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1350 to 1950	144			Avg. 1794
12	L6	6	Var. 1350 to 1950	144			Avg. 1794
16	L7	8	Var. 2800 to 3100	192			Avg. 3292
16	L8	12	Var. 1975 to 2800	192			Avg. 2580
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	6	192	2892	192		3276
16	U7	6	192	2892	192		3276
12	U8	8	Var. 2800 to 3100	175	525		Avg. 3800
12	U9	12	Var. 1975 to 2800	175	525		Avg. 3088
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	7	1150	350	2940		4440
12	CC2	14	1150	350	2940		4440
12	Z1	21	950	866	144		1960
12	S1	21	650	2200	240		3090
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	700	144			844
12	L2	21	1900	144			2044
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	4	Var. 3175 to 3100	192			Avg. 3217
16	L8	14	Var. 1975 to 3175	192			Avg. 2767
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	7	192	2892	192		3276
12	U8	4	Var. 3175 to 3100	175	525		Avg. 3725
12	U9	14	Var. 1975 to 3175	175	525		Avg. 3275
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	16	1150	350	2940		4440
12	Z1	21	700	866	144		1710
12	S1	21	650	2450	240		3340
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110303	

Web Copy

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	650	144			794
12	L2	21	1950	144			2094
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1650 to 2250	144			Avg. 2094
12	L6	6	Var. 1650 to 2250	144			Avg. 2094
16	L7	4	Var. 3250 to 3100	192			Avg. 3142
16	L8	14	Var. 1975 to 3250	192			Avg. 2805
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	8	192	2892	192		3276
12	U8	4	Var. 3250 to 3100	175	525		Avg. 3650
12	U9	14	Var. 1975 to 3250	175	525		Avg. 3313
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	16	1150	350	2940		4440
12	Z1	21	650	866	144		1680
12	S1	21	650	2500	240		3390
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	600	144			744
12	L2	21	2000	144			2144
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1700 to 2300	144			Avg. 2144
12	L6	6	Var. 1700 to 2300	144			Avg. 2144
16	L7	4	Var. 3325 to 3100	192			Avg. 3067
16	L8	16	Var. 1975 to 3325	192			Avg. 2842
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	2750	192		3134
16	U2	17	192	3640	192		4024
16	U3	22	192	2750	192		3134
16	U4	16	192	3640	192		4024
16	U6	4	192	2892	192		3276
16	U7	8	192	2892	192		3276
12	U8	4	Var. 3325 to 3100	175	525		Avg. 3575
12	U9	16	Var. 1975 to 3325	175	525		Avg. 3350
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	17	1150	350	2940		4440
12	Z1	21	600	866	144		1610
12	S1	21	650	2550	240		3440
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

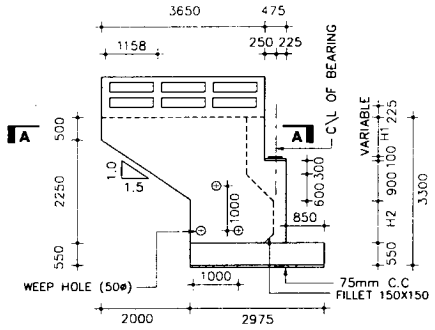
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 3.04m)

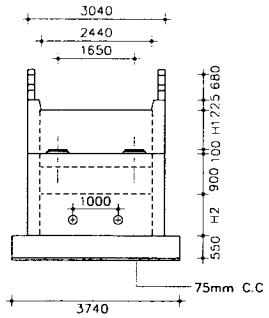
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110304	

Web Copy

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



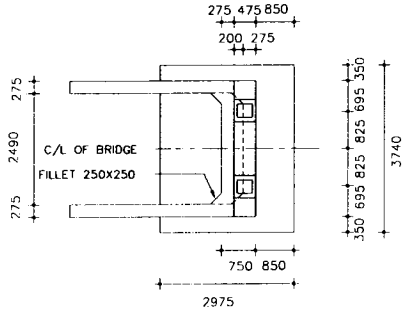
SIDE ELEVATION



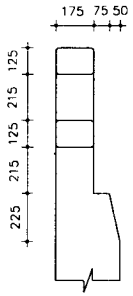
FRONT ELEVATION

TABLE-1

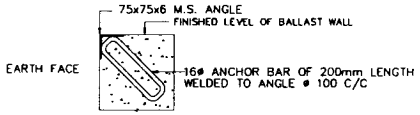
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12000	950	800
11500	800	950
11000	800	950
10500	800	950
10000	800	950
9500	800	950
9000	800	950
8500	600	1150
8000	600	1150
7500	600	1150
7000	600	1150
6500	600	1150
6000	600	1150
5500	350	1400
5000	350	1400
4500	300	1450
4000	300	1450
3500	300	1450
3000	250	1500
2500	250	1500
2000	250	1500
1500	250	1500



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

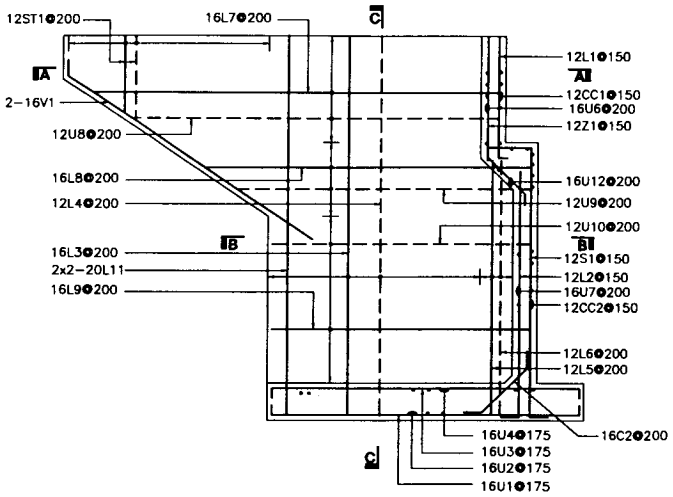
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be $\geq$ 100 kN/m^2
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter meterial shall be provided as per specification.

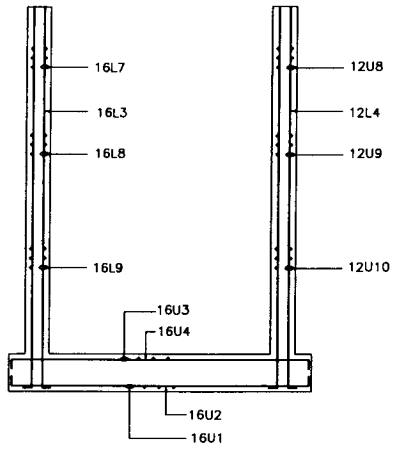
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 3.3m , DECK WIDTH 3.04m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\00110331

Web Copy

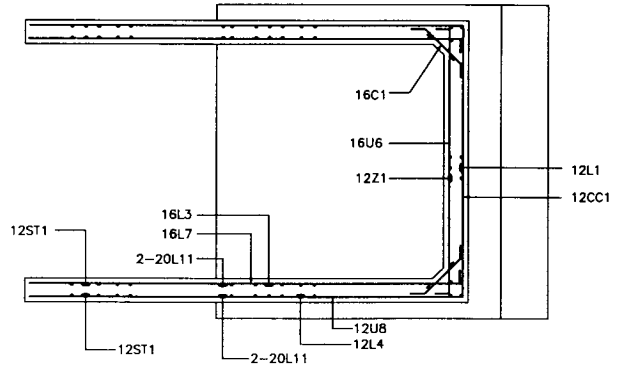
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



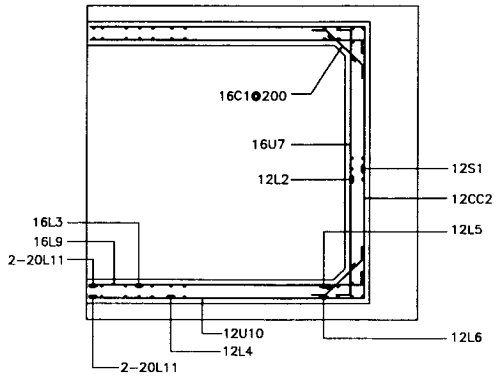
REINFORCEMENT DETAIL



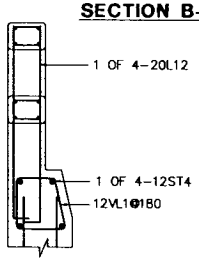
SECTION C-C



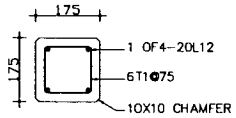
SECTION A-A



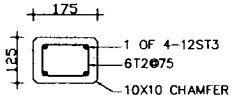
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	1300	144			1444
12	L2	21	1600	144			1744
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1300 to 1900	144			Avg. 1744
12	L6	6	Var. 1300 to 1900	144			Avg. 1744
16	L7	12	Var. 2725 to 3550	192			Avg. 3467
16	L8	10	Var. 2025 to 2725	192			Avg. 2567
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	6	192	2892	192		3276
12	U8	12	Var. 2725 to 3550	175	525		Avg. 3975
12	U9	10	Var. 2025 to 2725	175	525		Avg. 3075
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	9	1150	350	2940		4440
12	CC2	14	1150	350	2940		4440
12	Z1	21	1300	866	144		2310
12	S1	21	650	2150	240		3040
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coorse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.3m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110332

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	1150	144			1294
12	L2	21	1750	144			1894
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1450 to 2050	144			Avg. 1894
12	L6	6	Var. 1450 to 2050	144			Avg. 1894
16	L7	10	Var. 2950 to 3550	192			Avg. 3622
16	L8	12	Var. 2025 to 2950	192			Avg. 2680
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	7	192	2892	192		3276
12	U8	10	Var. 2950 to 3550	175	525		Avg. 4130
12	U9	12	Var. 2025 to 2950	175	525		Avg. 3188
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	8	1150	350	2940		4440
12	CC2	15	1150	350	2940		4440
12	Z1	21	1150	866	144		2160
12	S1	21	650	2300	240		3190
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =600)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	950	144			1094
12	L2	21	1950	144			2094
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1650 to 2250	144			Avg. 2094
12	L6	6	Var. 1650 to 2250	144			Avg. 2094
16	L7	8	Var. 3250 to 3550	192			Avg. 3742
16	L8	14	Var. 2025 to 3250	192			Avg. 2830
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	6	192	2892	192		3276
16	U7	8	192	2892	192		3276
12	U8	8	Var. 3250 to 3550	175	525		Avg. 4250
12	U9	14	Var. 2025 to 3250	175	525		Avg. 3338
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	7	1150	350	2940		4440
12	CC2	16	1150	350	2940		4440
12	Z1	21	950	866	144		1960
12	S1	21	650	2500	240		3390
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	700	144			844
12	L2	21	2200	144			2344
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1900 to 2500	144			Avg. 2344
12	L6	6	Var. 1900 to 2500	144			Avg. 2344
16	L7	4	Var. 3625 to 3550	192			Avg. 3657
16	L8	16	Var. 2025 to 3625	192			Avg. 3017
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	4	Var. 3625 to 3550	175	525		Avg. 4175
12	U9	16	Var. 2025 to 3625	175	525		Avg. 3525
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	18	1150	350	2940		4440
12	Z1	21	700	866	144		1710
12	S1	21	650	2750	240		3640
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **278** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110333

Web Copy

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =300)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	650	144			794
12	L2	21	2250	144			2394
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	4	Var. 3700 to 3550	192			Avg. 3592
16	L8	18	Var. 2025 to 3700	192			Avg. 3055
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	4	Var. 3700 to 3550	175	525		Avg. 4100
12	U9	18	Var. 2025 to 3700	175	525		Avg. 3563
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	18	1150	350	2940		4440
12	Z1	21	650	866	144		1660
12	S1	21	650	2800	240		3690
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	600	144			744
12	L2	21	2300	144			2444
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 2000 to 2600	144			Avg. 2444
12	L6	6	Var. 2000 to 2800	144			Avg. 2444
16	L7	4	Var. 3775 to 3550	192			Avg. 3517
16	L8	18	Var. 2025 to 3775	192			Avg. 3092
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	4	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	4	Var. 3775 to 3550	175	525		Avg. 4025
12	U8	18	Var. 2025 to 3775	175	525		Avg. 3800
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	5	1150	350	2940		4440
12	CC2	19	1150	350	2940		4440
12	Z1	21	600	866	144		1610
12	S1	21	650	2850	240		3740
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

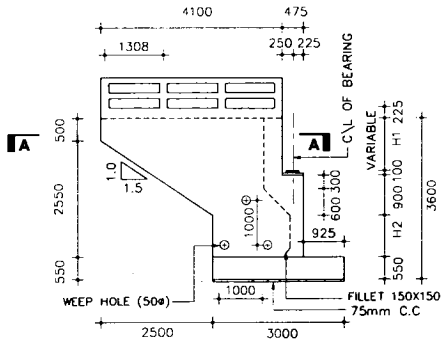
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 3.04m)

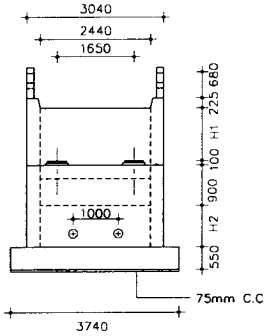
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110334

Web Copy

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



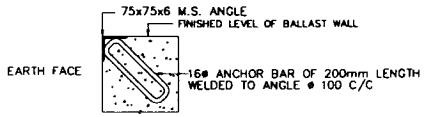
SIDE ELEVATION



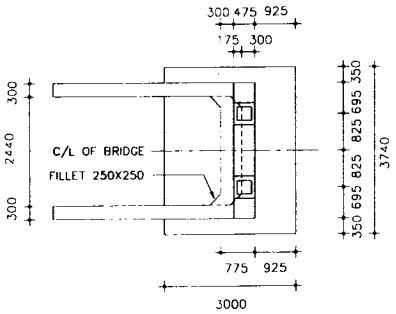
FRONT ELEVATION

TABLE-1

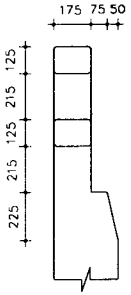
GIRDER SPAN	H1	H2
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11500	800	1250
11000	800	1250
10500	800	1250
10000	800	1250
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9000	800	1250
8500	600	1450
8000	600	1450
7500	600	1450
7000	600	1450
6500	600	1450
6000	600	1450
5500	350	1700
5000	350	1700
4500	300	1750
4000	300	1750
3500	300	1750
3000	250	1800
2500	250	1800
2000	250	1800
1500	250	1800



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

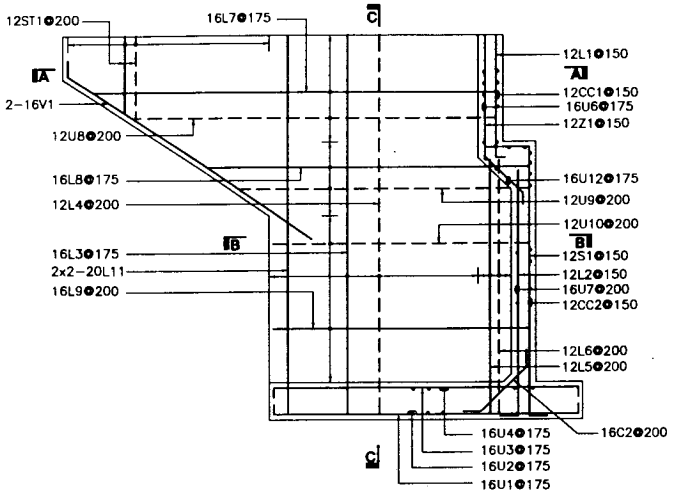
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.6m , DECK WIDTH 3.04m)

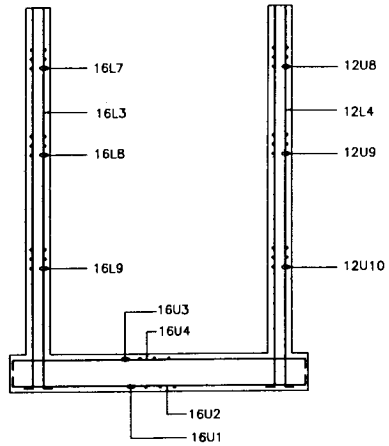
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110361

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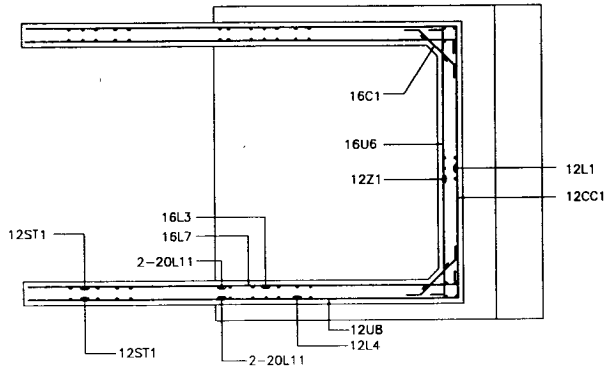
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



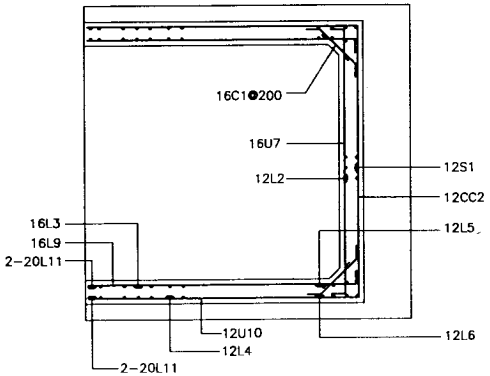
REINFORCEMENT DETAIL



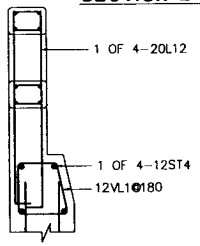
SECTION C-C



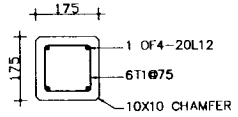
SECTION A-A



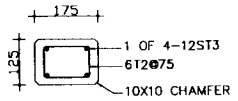
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	1300	144			1444
12	L2	21	1900	144			2044
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	14	Var. 3175 to 4000	192			Avg. 3838
16	L8	16	Var. 1975 to 3175	192			Avg. 2767
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3640	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3640	192		4024
16	U5	9	192	2892	192		3276
16	U7	7	192	2892	192		3276
12	U8	12	Var. 3175 to 4000	200	550		Avg. 4475
12	U9	14	Var. 1975 to 3175	200	550		Avg. 3325
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	16	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	2450	240		3365
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110362	

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	1150	144			1294
12	L2	21	2050	144			2194
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1750 to 2350	144			Avg. 2194
12	L6	6	Var. 1750 to 2350	144			Avg. 2194
16	L7	12	Var. 3400 to 4000	192			Avg. 3992
16	L8	18	Var. 1975 to 3400	192			Avg. 2880
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3640	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	8	192	2892	192		3276
12	U8	10	Var. 3400 to 4000	200	550		Avg. 4630
12	U9	16	Var. 1975 to 3400	200	550		Avg. 3438
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	8	1200	400	2940		4540
12	CC2	17	1200	400	2940		4540
12	Z1	21	1150	866	144		2160
12	S1	21	675	2800	240		3515
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	950	144			1094
12	L2	21	2250	144			2394
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	10	Var. 3700 to 4000	192			Avg. 4132
16	L8	20	Var. 1975 to 3700	192			Avg. 3030
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3640	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	8	Var. 3700 to 4000	200	550		Avg. 4750
12	U9	18	Var. 1975 to 3700	200	550		Avg. 3588
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	7	1200	400	2940		4540
12	CC2	18	1200	400	2940		4540
12	Z1	21	950	866	144		1960
12	S1	21	675	2800	240		3715
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	600	144			744
12	L2	21	2600	144			2744
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2300 to 2900	144			Avg. 2744
12	L6	6	Var. 2300 to 2900	144			Avg. 2744
16	L7	4	Var. 4225 to 4000	192			Avg. 3967
16	L8	24	Var. 1975 to 4225	192			Avg. 3292
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3640	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	4	Var. 4225 to 4000	200	550		Avg. 4525
12	U9	22	Var. 1975 to 4225	200	550		Avg. 3850
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	600	866	144		1610
12	S1	21	675	3150	240		4065
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 278 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110363	

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QA-12

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4080				4080
12	ST4	8	4050				4050
12	L1	21	650	144			794
12	L2	21	2550	144			2694
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2250 to 2850	144			Avg. 2694
12	L6	6	Var. 2250 to 2850	144			Avg. 2694
16	L7	4	Var. 4150 to 4000	192			Avg. 4042
16	L8	24	Var. 1975 to 4150	192			Avg. 3255
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3840	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3840	192		4024
16	U5	5	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	4	Var. 4150 to 4000	200	550		Avg. 4600
12	U9	20	Var. 1975 to 4150	200	550		Avg. 3813
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	20	1200	400	2940		4540
12	Z1	21	650	866	144		1660
12	S1	21	675	3100	240		4015
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4080				4080
12	ST4	8	4050				4050
12	L1	21	600	144			744
12	L2	21	2800	144			2744
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2300 to 2900	144			Avg. 2744
12	L6	6	Var. 2300 to 2900	144			Avg. 2744
16	L7	4	Var. 4225 to 4000	192			Avg. 3967
16	L8	24	Var. 1975 to 4225	192			Avg. 3292
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	22	192	2900	192		3284
16	U2	18	192	3640	192		4024
16	U3	22	192	2900	192		3284
16	U4	18	192	3640	192		4024
16	U6	5	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	4	Var. 4225 to 4000	200	550		Avg. 4525
12	U9	22	Var. 1975 to 4225	200	550		Avg. 3850
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	600	866	144		1610
12	S1	21	675	3150	240		4065
16	C1	34	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

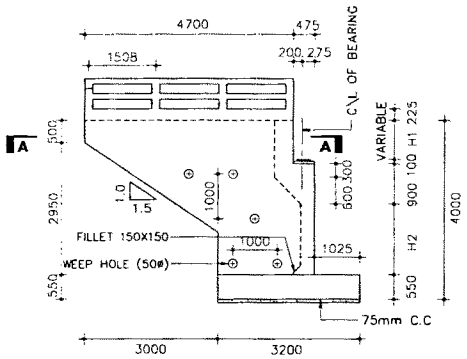
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 3.04m)

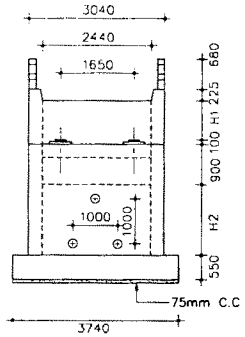
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110364	

Web Copy

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



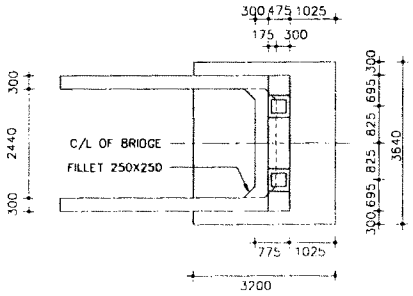
SIDE ELEVATION



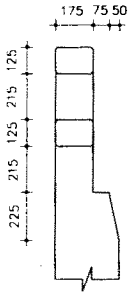
FRONT ELEVATION

TABLE-1

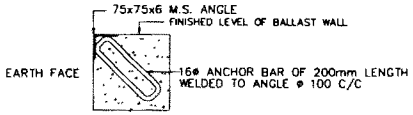
GIRDER SPAN	H1	H2
12000	950	1500
11500	800	1650
11000	800	1650
10500	800	1650
10000	800	1650
9500	800	1650
9000	800	1650
8500	600	1850
8000	600	1850
7500	600	1850
7000	600	1850
6500	600	1850
6000	600	1850
5500	350	2100
5000	350	2100
4500	300	2150
4000	300	2150
3500	300	2150
3000	250	2200
2500	250	2200
2000	250	2200
1500	250	2200



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

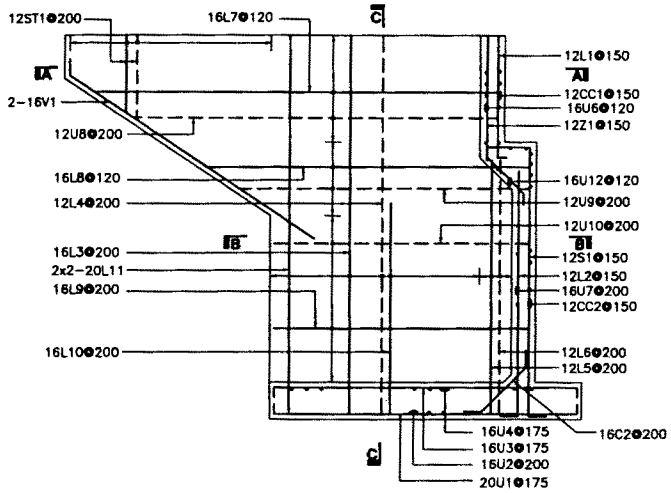
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

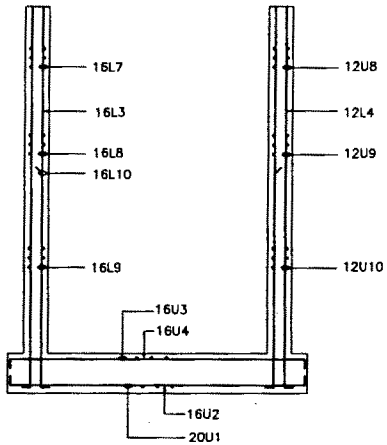
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH **LOCAL GOVERNMENT ENGINEERING DEPARTMENT**
GENERAL ARRANGEMENT OF ABUTMENT **(HEIGHT = 4.0m , DECK WIDTH 3.04m)**
DATE : ISSUED BY :
CAD FILE REF : ABUT\00110401

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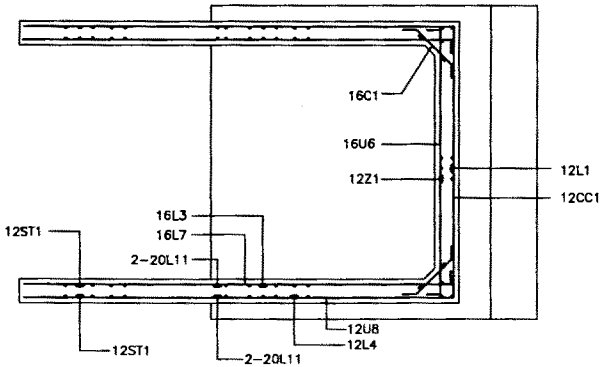
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



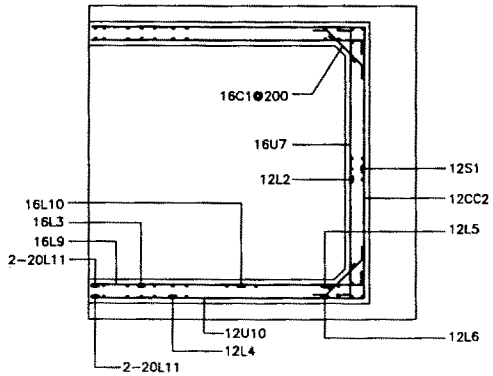
REINFORCEMENT DETAIL



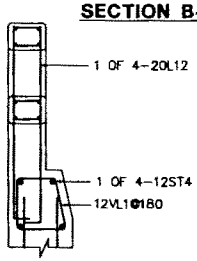
SECTION C-C



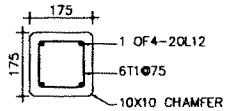
SECTION A-A



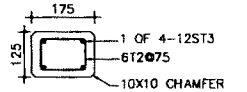
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	1300	144			1444
12	L2	21	2300	144			2444
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2000 to 2600	144			Avg. 2444
12	L6	6	Var. 2000 to 2600	144			Avg. 2444
16	L7	20	Var. 3775 to 4600	192			Avg. 4462
16	L8	28	Var. 2075 to 3775	192			Avg. 3117
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	12	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	12	Var. 3775 to 4600	200	550		Avg. 5075
12	U9	18	Var. 2075 to 3775	200	550		Avg. 3675
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	19	1200	400	2940		4540
12	Z1	21	1300	868	144		2310
12	S1	21	675	2850	240		3765
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110402

Web Copy

SHEET 3 OF 4
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	1150	144			1294
12	L2	21	2450	144			2594
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2150 to 2750	144			Avg. 2594
12	L6	6	Var. 2150 to 2750	144			Avg. 2594
16	L7	18	Var. 4000 to 4600	192			Avg. 4592
16	L8	30	Var. 2075 to 4000	192			Avg. 3230
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	11	192	2892	192		3276
16	U7	10	192	2892	192		3276
12	U8	10	Var. 4000 to 4600	200	550		Avg. 5230
12	U9	18	Var. 2075 to 4000	200	550		Avg. 3788
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	8	1200	400	2940		4540
12	CC2	20	1200	400	2940		4540
12	Z1	21	1150	866	144		2160
12	S1	21	675	3000	240		3915
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	950	144			1094
12	L2	21	2650	144			2794
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2350 to 2950	144			Avg. 2794
12	L6	6	Var. 2350 to 2950	144			Avg. 2794
16	L7	14	Var. 4300 to 4600	192			Avg. 4749
16	L8	32	Var. 2075 to 4300	192			Avg. 3380
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	9	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	8	Var. 4300 to 4600	200	550		Avg. 5350
12	U9	20	Var. 2075 to 4300	200	550		Avg. 3938
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	7	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	950	866	144		1960
12	S1	21	675	3200	240		4115
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	700	144			844
12	L2	21	2900	144			3044
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	8	Var. 4675 to 4600	192			Avg. 4755
16	L8	38	Var. 2075 to 4675	192			Avg. 3567
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	12	192	2892	192		3276
12	U8	4	Var. 4675 to 4600	200	550		Avg. 5275
12	U9	24	Var. 2075 to 4675	200	550		Avg. 4125
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	700	866	144		1710
12	S1	21	675	3450	240		4365
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110403	

Web Copy

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	650	144			794
12	L2	21	2950	144			3094
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2650 to 3250	144			Avg. 3094
12	L6	6	Var. 2650 to 3250	144			Avg. 3094
16	L7	8	Var. 4750 to 4600	192			Avg. 4717
16	L8	38	Var. 2075 to 4750	192			Avg. 3605
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	13	192	2892	192		3276
12	U8	4	Var. 4750 to 4600	200	550		Avg. 5200
12	U9	24	Var. 2075 to 4750	200	550		Avg. 4163
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	650	866	144		1660
12	S1	21	675	3500	240		4415
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	600	144			744
12	L2	21	3000	144			3144
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2700 to 3300	144			Avg. 3144
12	L6	6	Var. 2700 to 3300	144			Avg. 3144
16	L7	6	Var. 4825 to 4600	192			Avg. 4567
16	L8	38	Var. 2075 to 4825	192			Avg. 3642
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	22	240	3100	240		3580
16	U2	17	192	3640	192		4024
16	U3	22	192	3100	192		3484
16	U4	19	192	3640	192		4024
16	U6	6	192	2892	192		3276
16	U7	13	192	2892	192		3276
12	U8	4	Var. 4825 to 4600	200	550		Avg. 5125
12	U9	24	Var. 2075 to 4825	200	550		Avg. 4200
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	600	866	144		1610
12	S1	21	675	3550	240		4465
16	C1	38	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

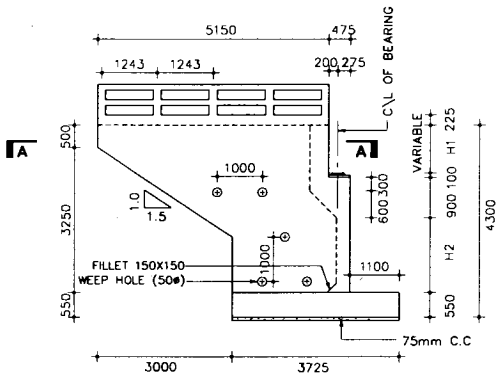
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 3.04m)

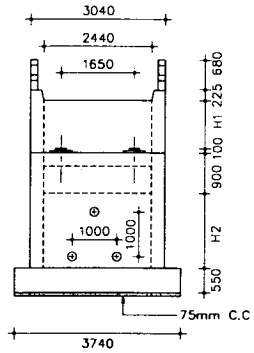
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110404	

Web Copy

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



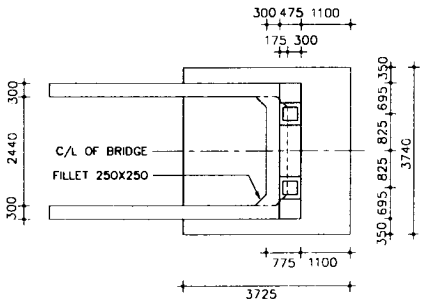
SIDE ELEVATION



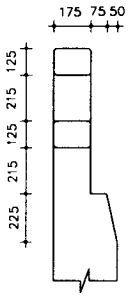
FRONT ELEVATION

TABLE-1

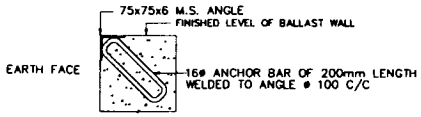
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12000	950	1800
11500	800	1950
11000	800	1950
10500	800	1950
10000	800	1950
9500	800	1950
9000	800	1950
8500	600	2150
8000	600	2150
7500	600	2150
7000	600	2150
6500	600	2150
6000	600	2150
5500	350	2400
5000	350	2400
4500	300	2450
4000	300	2450
3500	300	2450
3000	250	2500
2500	250	2500
2000	250	2500
1500	250	2500



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ 100 kN/m²
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

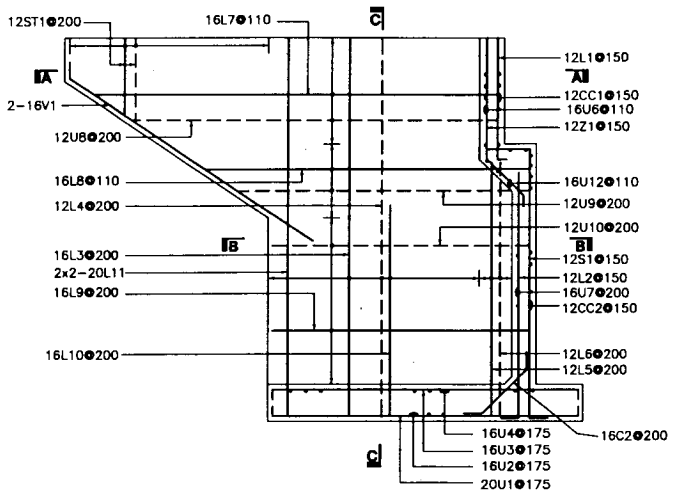
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.3m , DECK WIDTH 3.04m)

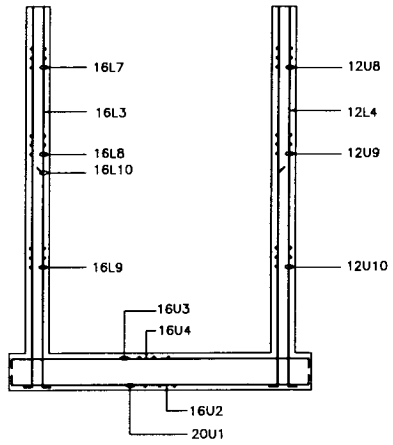
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ISSUED BY :
CAD FILE REF : ABUT\00110431

Web Copy

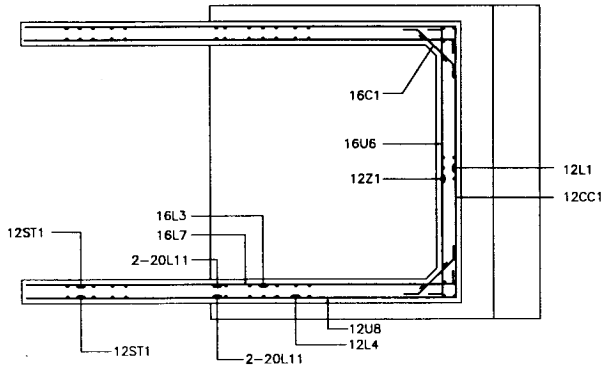
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



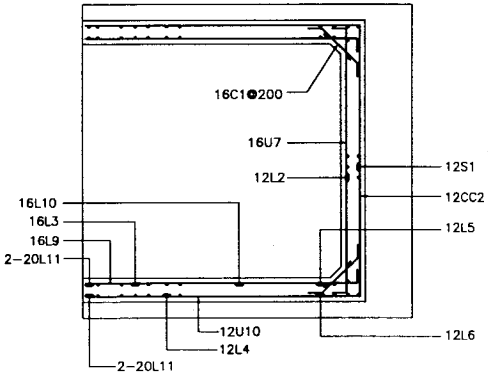
REINFORCEMENT DETAIL



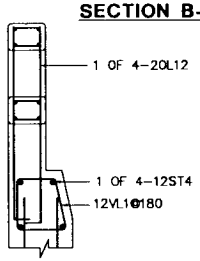
SECTION C-C



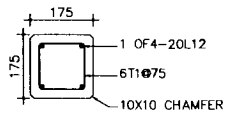
SECTION A-A



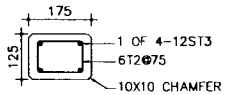
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	1300	144			1444
12	L2	21	2600	144			2744
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2300 to 2900	144			Avg. 2744
12	L6	6	Var. 2300 to 2900	144			Avg. 2744
16	L7	20	Var. 4225 to 5050	192			Avg. 4912
16	L8	30	Var. 2525 to 4225	192			Avg. 3567
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U5	13	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	12	Var. 4225 to 5050	200	550		Avg. 5525
12	U9	18	Var. 2525 to 4225	200	550		Avg. 4550
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	3150	240		4065
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110432	

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SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	1150	144			1294
12	L2	21	2750	144			2894
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2450 to 3050	144			Avg. 2894
12	L6	6	Var 2450 to 3050	144			Avg. 2894
16	L7	8	Var. 4450 to 5050	192			Avg. 5042
16	L8	32	Var. 2525 to 4450	192			Avg. 3680
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U6	12	192	2892	192		3276
16	U7	12	192	2892	192		3276
12	U8	10	Var. 4450 to 5050	200	550		Avg. 5680
12	U9	18	Var. 2525 to 4450	200	550		Avg. 4719
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	8	1200	400	2940		4540
12	CC2	22	1200	400	2940		4540
12	Z1	21	1150	866	144		2160
12	S1	21	675	3300	240		4215
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	950	144			1094
12	L2	21	2950	144			3094
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2650 to 3250	144			Avg. 3094
12	L6	6	Var. 2650 to 3250	144			Avg. 3094
16	L7	14	Var. 4750 to 5050	192			Avg. 5199
16	L8	36	Var. 2525 to 4750	192			Avg. 3830
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U6	10	192	2892	192		3276
16	U7	13	192	2892	192		3276
12	U8	8	Var. 4750 to 5050	200	550		Avg. 5800
12	U9	20	Var. 2525 to 4750	200	550		Avg. 4944
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	7	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	950	866	144		1960
12	S1	21	675	3500	240		4415
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	700	144			844
12	L2	21	3200	144			3344
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2900 to 3500	144			Avg. 3344
12	L6	6	Var. 2900 to 3500	144			Avg. 3344
16	L7	8	Var. 5125 to 5050	192			Avg. 5205
16	L8	40	Var. 2525 to 5125	192			Avg. 4017
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	4	Var. 5125 to 5050	200	550		Avg. 5725
12	U9	24	Var. 2525 to 5125	200	550		Avg. 5225
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	25	1200	400	2940		4540
12	Z1	21	700	866	144		1710
12	S1	21	675	3750	240		4665
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110433	

Web Copy

SHEET 4 OF 4
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	650	144			794
12	L2	21	3250	144			3394
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	8	Var. 5200 to 5050	192			Avg. 5167
16	L8	42	Var. 2525 to 5200	192			Avg. 4055
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U5	7	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	4	Var. 5200 to 5050	200	550		Avg. 5650
12	U9	24	Var. 2525 to 5200	200	550		Avg. 5282
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	25	1200	400	2940		4540
12	Z1	21	650	866	144		1660
12	S1	21	675	3800	240		4715
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	308	308			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	600	144			744
12	L2	21	3300	144			3444
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 3000 to 3600	144			Avg. 3444
12	L6	6	Var. 3000 to 3600	144			Avg. 3444
16	L7	6	Var. 5275 to 5050	192			Avg. 5017
16	L8	42	Var. 2525 to 5275	192			Avg. 4092
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	22	240	3625	240		4105
16	U2	22	192	3640	192		4024
16	U3	22	192	3625	192		4009
16	U4	22	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	4	Var. 5275 to 5050	200	550		Avg. 5575
12	U9	24	Var. 2525 to 5275	200	550		Avg. 5338
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	25	1200	400	2940		4540
12	Z1	21	600	866	144		1610
12	S1	21	675	3850	240		4765
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessorily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

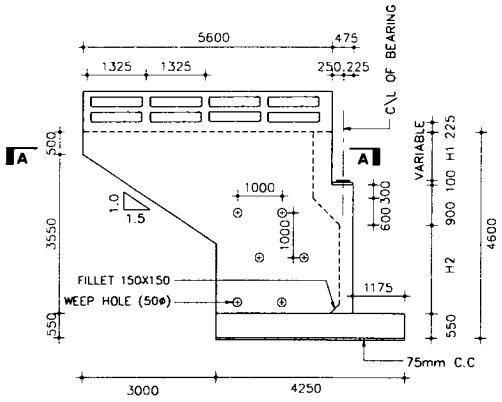
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 3.04m)

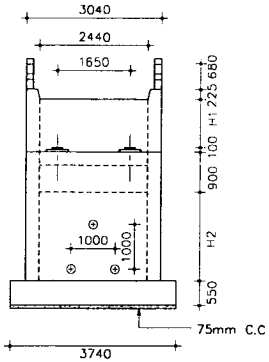
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110434	

Web Copy

SHEET 1 OF 4
SPAN RANGE : 12.0m TO 1.5m
SIDE WALK : NO



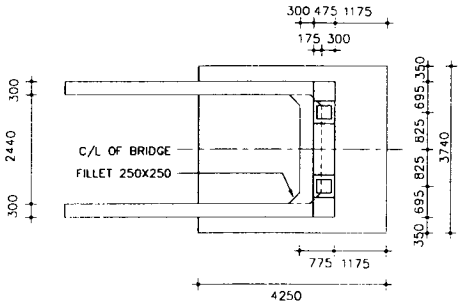
SIDE ELEVATION



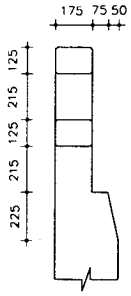
FRONT ELEVATION

TABLE-1

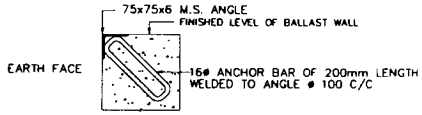
GIRDER SPAN	H1	H2
12000	950	2100
11500	800	2250
11000	800	2250
10500	800	2250
10000	800	2250
9500	800	2250
9000	800	2250
8500	600	2450
8000	600	2450
7500	600	2450
7000	600	2450
6500	600	2450
6000	600	2450
5500	350	2700
5000	350	2700
4500	300	2750
4000	300	2750
3500	300	2750
3000	250	2800
2500	250	2800
2000	250	2800
1500	250	2800



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

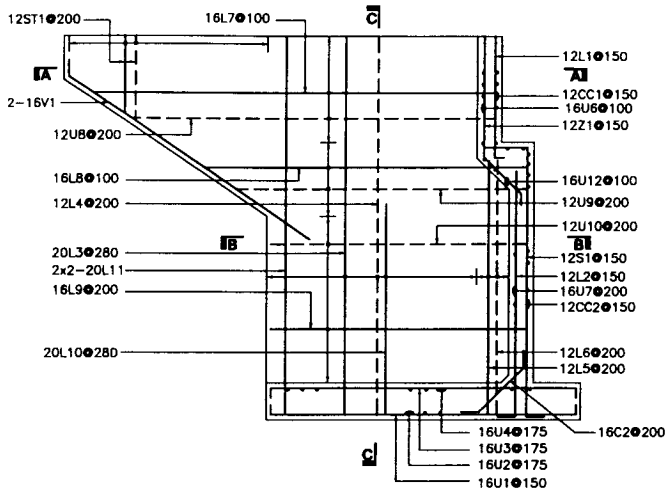
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.6m , DECK WIDTH 3.04m)

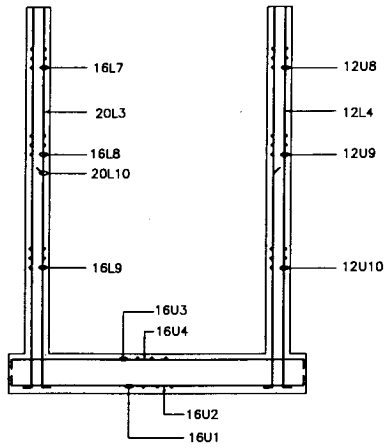
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ISSUED BY :
CAD FILE REF : ABUT\00110461

Web Copy

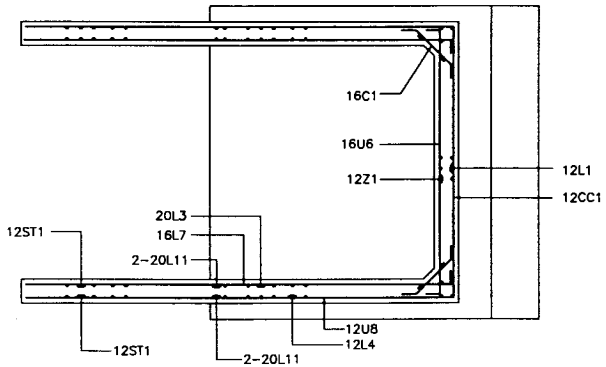
SHEET 2 OF 4
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO



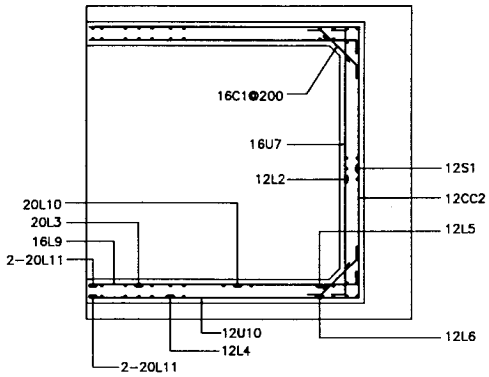
REINFORCEMENT DETAIL



SECTION C-C



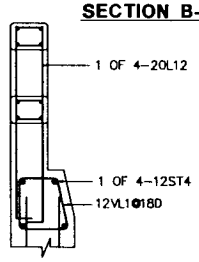
SECTION A-A



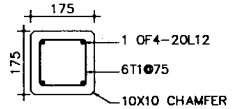
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

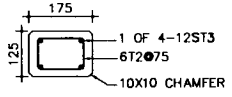
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	1300	144			1444
12	L2	21	2900	144			3044
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	22	Var. 4675 to 5500	192			Avg. 5317
16	L8	32	Var. 2975 to 4675	192			Avg. 4017
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3840	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3840	192		4024
16	U5	14	192	2892	192		3276
16	U7	12	192	2892	192		3276
12	U8	12	Var. 4675 to 5500	200	550		Avg. 5975
12	U9	18	Var. 2975 to 4675	200	550		Avg. 4575
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	3450	240		4365
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00110462

Web Copy

SHEET 3 OF 4

SPAN RANGE : 1.5m TO 12.0m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	1150	144			1294
12	L2	21	3050	144			3194
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2750 to 3350	144			Avg. 3194
12	L6	6	Var. 2750 to 3350	144			Avg. 3194
16	L7	18	Var. 4900 to 5500	192			Avg. 5492
16	L8	34	Var. 2975 to 4900	192			Avg. 4130
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3640	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3640	192		4024
16	U6	13	192	2892	192		3276
16	U7	13	192	2892	192		3276
12	U8	10	Var. 4900 to 5500	200	550		Avg. 6130
12	U9	18	Var. 2975 to 4900	200	550		Avg. 4688
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	8	1200	400	2940		4540
12	CC2	24	1200	400	2940		4540
12	Z1	21	1150	866	144		2160
12	S1	21	675	3600	240		4515
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	950	144			1094
12	L2	21	3250	144			3394
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	14	Var. 5200 to 5500	192			Avg. 5649
16	L8	38	Var. 2575 to 5200	192			Avg. 4280
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3640	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3640	192		4024
16	U6	11	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	8	Var. 5200 to 5500	200	550		Avg. 6250
12	U9	20	Var. 2975 to 5200	200	550		Avg. 4838
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	7	1200	400	2940		4540
12	CC2	25	1200	400	2940		4540
12	Z1	21	950	866	144		1980
12	S1	21	675	3800	240		4715
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	700	144			844
12	L2	21	3500	144			3644
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	8	Var. 5575 to 5500	192			Avg. 5655
16	L8	44	Var. 2975 to 5575	192			Avg. 4467
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3640	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	15	192	2892	192		3276
12	U8	4	Var. 5575 to 5500	200	550		Avg. 6175
12	U9	24	Var. 2975 to 5575	200	550		Avg. 5025
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	27	1200	400	2940		4540
12	Z1	21	700	866	144		1710
12	S1	21	675	4050	240		4965
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 3.04m)

DATE :

ISSUED BY :

CAD FILE REF : ABUT\00110463

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SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	650	144			794
12	L2	21	3550	144			3694
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3250 to 3850	144			Avg. 3694
12	L6	6	Var. 3250 to 3850	144			Avg. 3694
16	L7	8	Var. 5650 to 5500	192			Avg. 5617
16	L8	44	Var. 2975 to 5650	192			Avg. 4505
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3640	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	4	Var. 5650 to 5500	200	550		Avg. 6100
12	U9	24	Var. 2975 to 5650	200	550		Avg. 5063
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	27	1200	400	2940		4540
12	Z1	21	650	866	144		1680
12	S1	21	675	4100	240		5015
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	800	144			744
12	L2	21	3800	144			3744
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3300 to 3900	144			Avg. 3744
12	L6	6	Var. 3300 to 3900	144			Avg. 3744
16	L7	6	Var. 5725 to 5500	192			Avg. 5467
16	L8	46	Var. 2975 to 5725	192			Avg. 4542
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
16	U1	26	192	4150	192		4534
16	U2	25	192	3640	192		4024
16	U3	22	192	4150	192		4534
16	U4	25	192	3640	192		4024
16	U6	7	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	4	Var. 5725 to 5500	200	550		Avg. 6025
12	U9	24	Var. 2975 to 5725	200	550		Avg. 5100
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	27	1200	400	2940		4540
12	Z1	21	800	866	144		1610
12	S1	21	675	4150	240		5065
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

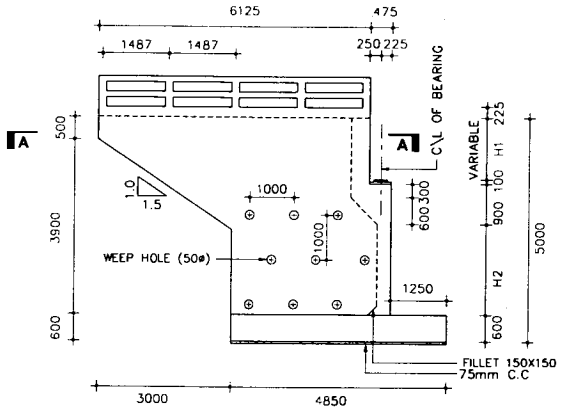
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 3.04m)

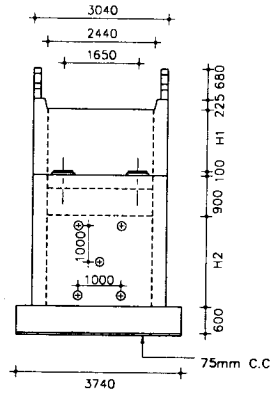
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110464	

Web Copy

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



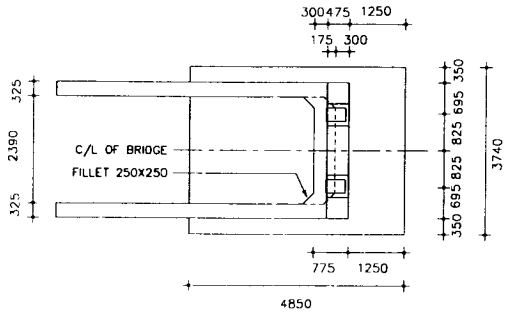
SIDE ELEVATION



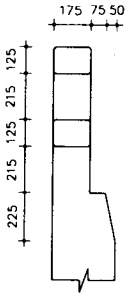
FRONT ELEVATION

TABLE-1

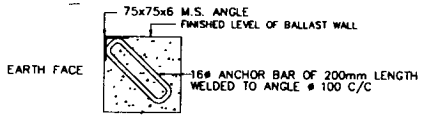
GIRDER SPAN	H1	H2
12000	950	2450
11500	800	2600
11000	800	2600
10500	800	2600
10000	800	2600
9500	800	2600
9000	800	2600
8500	600	2800
8000	600	2800
7500	600	2800
7000	600	2800
6500	600	2800
6000	600	2800
5500	350	3050
5000	350	3050
4500	300	3100
4000	300	3100
3500	300	3100
3000	250	3150
2500	250	3150
2000	250	3150
1500	250	3150



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ 101 kN/m²
4) Weep hole shall be provided at 1000mm horozontally and verticolly as shown in drawings; filter metariol shall be provided as per specification.

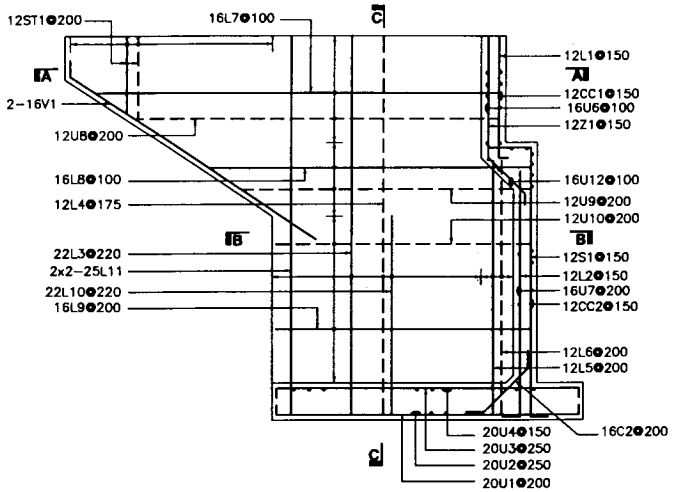
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.0m , DECK WIDTH 3.04m)

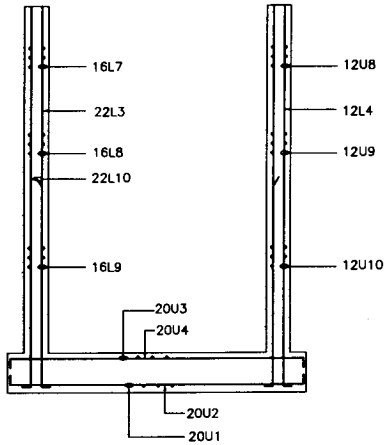
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ISSUED BY :
CAD FILE REF : ABUT\00110501

Web Copy

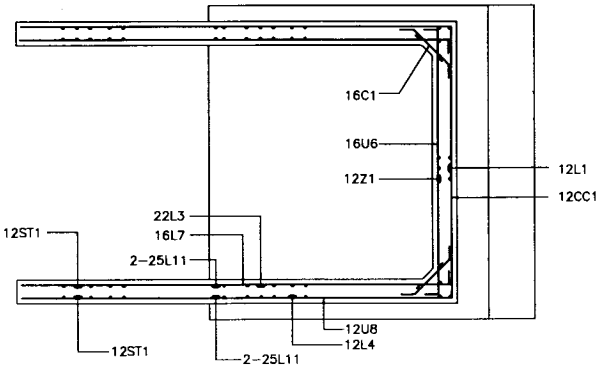
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



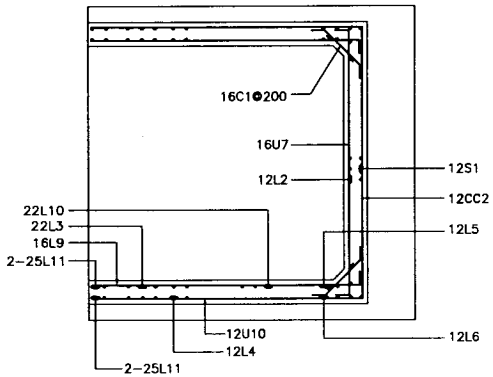
REINFORCEMENT DETAIL



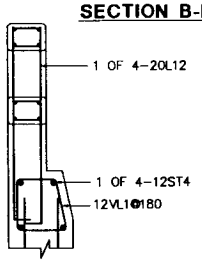
SECTION C-C



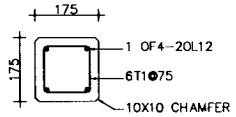
SECTION A-A



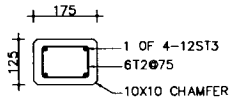
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	1300	144			1444
12	L2	21	3300	144			3444
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3000 to 3600	144			Avg. 3444
12	L6	6	Var. 3000 to 3600	144			Avg. 3444
16	L7	22	Var. 5200 to 6025	192			Avg. 5842
16	L8	32	Var. 3500 to 5200	192			Avg. 4542
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	14	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	12	Var. 5200 to 6025	225	550		Avg. 6525
12	U9	18	Var. 3500 to 5200	225	550		Avg. 5125
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	9	1250	400	2940		4590
12	CC2	25	1250	400	2940		4590
12	Z1	21	1300	866	144		2310
12	S1	21	675	3850	240		4765
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Cleor cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/a0110502

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	1150	144			1294
12	L2	21	3450	144			3594
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3150 to 3750	144			Avg. 3594
12	L6	6	Var. 3150 to 3750	144			Avg. 3594
16	L7	18	Var. 5425 to 6025	192			Avg. 6017
16	L8	34	Var. 3500 to 5425	192			Avg. 4655
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	13	192	2892	192		3276
16	U7	15	192	2892	192		3276
12	U8	10	Var. 5425 to 6025	225	550		Avg. 6680
12	U9	18	Var. 3500 to 5425	225	550		Avg. 5238
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	8	1250	400	2940		4590
12	CC2	26	1250	400	2940		4590
12	Z1	21	1150	866	144		2160
12	S1	21	675	4000	240		4915
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	950	144			1094
12	L2	21	3650	144			3794
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3350 to 3950	144			Avg. 3794
12	L6	6	Var. 3350 to 3950	144			Avg. 3794
16	L7	14	Var. 5725 to 6025	192			Avg. 6174
16	L8	38	Var. 3500 to 5725	192			Avg. 4805
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	11	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	8	Var. 5725 to 6025	225	550		Avg. 6800
12	U9	20	Var. 3500 to 5725	225	550		Avg. 5388
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	7	1250	400	2940		4590
12	CC2	27	1250	400	2940		4590
12	Z1	21	950	866	144		1960
12	S1	21	675	4200	240		5115
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	700	144			844
12	L2	21	3900	144			4044
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	8	Var. 6100 to 6025	192			Avg. 6180
16	L8	44	Var. 3500 to 6100	192			Avg. 4992
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	8	192	2892	192		3276
16	U7	17	192	2892	192		3276
12	U8	4	Var. 6100 to 6025	225	550		Avg. 6725
12	U9	24	Var. 3500 to 6100	225	550		Avg. 5675
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	5	1250	400	2940		4590
12	CC2	29	1250	400	2940		4590
12	Z1	21	700	866	144		1710
12	S1	21	675	4450	240		5365
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **278** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/a011050303

Web Copy

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	650	144			794
12	L2	21	3950	144			4094
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3650 to 4250	144			Avg. 4094
12	L6	6	Var. 3650 to 4250	144			Avg. 4094
16	L7	8	Var. 6175 to 6025	192			Avg. 6142
16	L8	44	Var. 3500 to 6175	192			Avg. 5030
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	8	192	2892	192		3276
16	U7	17	192	2892	192		3276
12	U8	4	Var. 6175 to 6025	225	550		Avg. 6650
12	U9	24	Var. 3500 to 6175	225	550		Avg. 5613
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	5	1250	400	2940		4590
12	CC2	29	1250	400	2940		4590
12	Z1	21	650	866	144		1660
12	S1	21	675	4500	240		5415
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	600	144			744
12	L2	21	4000	144			4144
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3700 to 4300	144			Avg. 4144
12	L6	6	Var. 3700 to 4300	144			Avg. 4144
16	L7	6	Var. 6250 to 6025	192			Avg. 5992
16	L8	46	Var. 3500 to 6250	192			Avg. 5067
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	20	240	4750	240		5230
20	U2	20	240	3640	240		4120
20	U3	16	240	4750	240		5230
20	U4	33	240	3640	240		4120
16	U6	7	192	2892	192		3276
16	U7	18	192	2892	192		3276
12	U8	4	Var. 6250 to 6025	225	550		Avg. 6575
12	U9	24	Var. 3500 to 6250	225	550		Avg. 5650
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	5	1250	400	2940		4590
12	CC2	30	1250	400	2940		4590
12	Z1	21	600	866	144		1610
12	S1	21	675	4550	240		5465
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

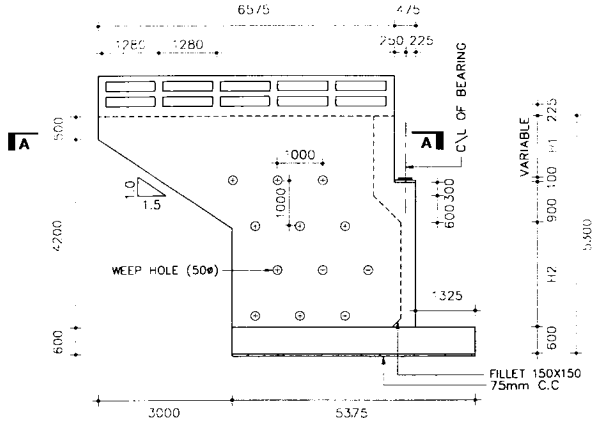
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 3.04m)

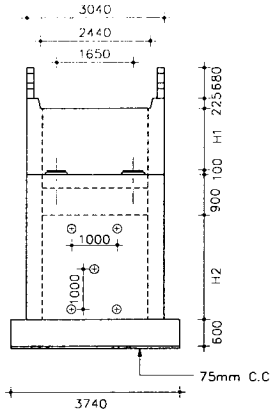
DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0110504	

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SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



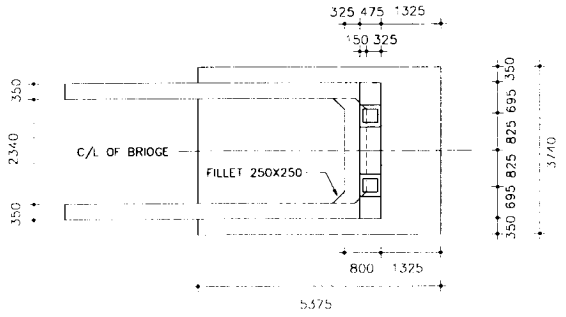
SIDE ELEVATION



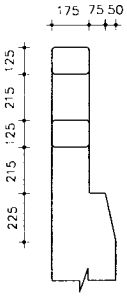
FRONT ELEVATION

TABLE-1

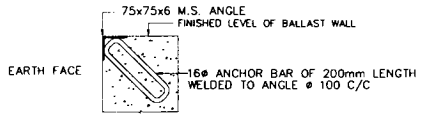
GIRDER SPAN	H1	H2
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11500	800	2900
11000	800	2900
10500	800	2900
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9500	800	2900
9000	800	2900
8500	600	3100
8000	600	3100
7500	600	3100
7000	600	3100
6500	600	3100
6000	600	3100
5500	350	3350
5000	350	3350
4500	300	3400
4000	300	3400
3500	300	3400
3000	250	3450
2500	250	3450
2000	250	3450
1500	250	3450



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ **103** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

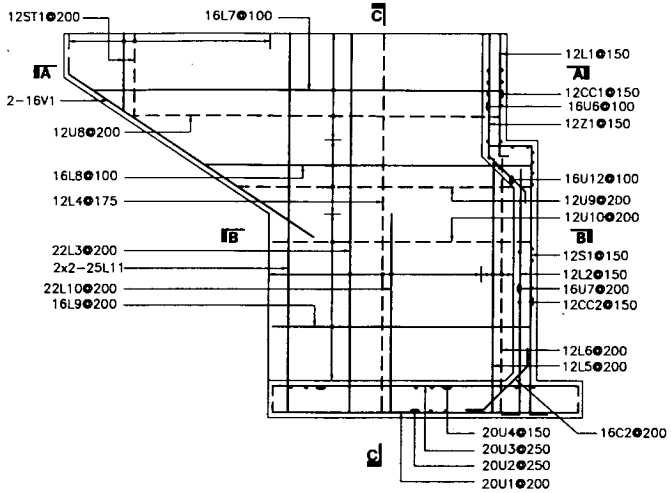
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.3m , DECK WIDTH 3.04m)

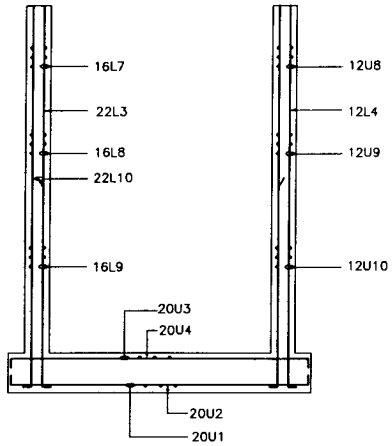
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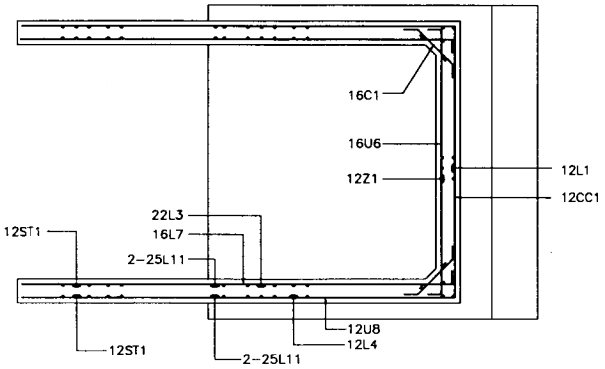
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



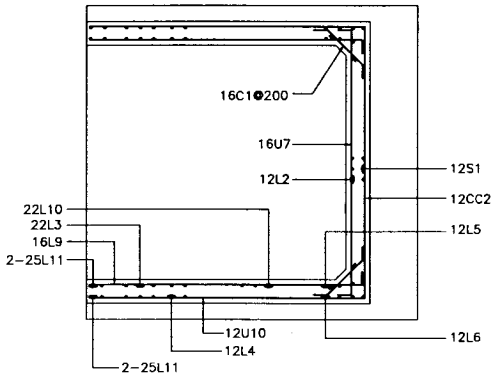
REINFORCEMENT DETAIL



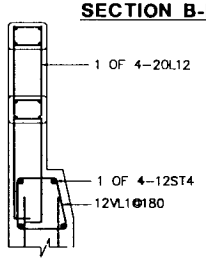
SECTION C-C



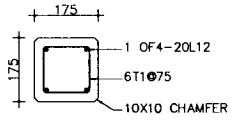
SECTION A-A



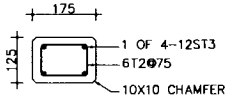
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	1300	144			1444
12	L2	21	3600	144			3744
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3300 to 3900	144			Avg. 3744
12	L6	6	Var. 3300 to 3900	144			Avg. 3744
16	L7	22	Var. 5650 to 6475	192			Avg. 6292
16	L8	32	Var. 3950 to 5650	192			Avg. 4992
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U5	14	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	12	Var. 5650 to 6475	250	575		Avg. 7025
12	U9	18	Var. 3950 to 5650	250	575		Avg. 5625
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	9	1300	450	2940		4690
12	CC2	27	1300	450	2940		4690
12	Z1	21	1300	866	144		2310
12	S1	21	700	4150	240		5090
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0110532	

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	1150	144			1294
12	L2	21	3750	144			3894
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3450 to 4050	144			Avg. 3894
12	L6	6	Var. 3450 to 4050	144			Avg. 3894
16	L7	18	Var. 5875 to 6475	192			Avg. 6467
16	L8	34	Var. 3950 to 5875	192			Avg. 5105
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	13	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	10	Var. 5875 to 6475	250	575		Avg. 7180
12	U9	18	Var. 3950 to 5875	250	575		Avg. 5738
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	8	1300	450	2940		4690
12	CC2	28	1300	450	2940		4690
12	Z1	21	1150	866	144		2160
12	S1	21	700	4300	240		5240
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	950	144			1094
12	L2	21	3950	144			4094
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3650 to 4250	144			Avg. 4094
12	L6	6	Var. 3650 to 4250	144			Avg. 4094
16	L7	14	Var. 6175 to 6475	192			Avg. 6624
16	L8	38	Var. 3950 to 6175	192			Avg. 5255
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	11	192	2892	192		3276
16	U7	17	192	2892	192		3276
12	U8	8	Var. 6175 to 6475	250	575		Avg. 7300
12	U9	20	Var. 3950 to 6175	250	575		Avg. 5888
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	7	1300	450	2940		4690
12	CC2	29	1300	450	2940		4690
12	Z1	21	950	866	144		1960
12	S1	21	700	4500	240		5440
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	700	144			844
12	L2	21	4200	144			4344
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3900 to 4500	144			Avg. 4344
12	L6	6	Var. 3900 to 4500	144			Avg. 4344
16	L7	8	Var. 6550 to 6475	192			Avg. 6630
16	L8	44	Var. 3950 to 6550	192			Avg. 5442
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	8	192	2892	192		3276
16	U7	19	192	2892	192		3276
12	U8	4	Var. 6550 to 6475	250	575		Avg. 7225
12	U9	24	Var. 3950 to 6550	250	575		Avg. 6075
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	5	1300	450	2940		4690
12	CC2	31	1300	450	2940		4690
12	Z1	21	700	866	144		1710
12	S1	21	700	4750	240		5690
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0110533	

Web Copy

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	650	144			794
12	L2	21	4250	144			4394
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	8	Var. 6625 to 6475	192			Avg. 6592
16	L8	44	Var. 3950 to 6625	192			Avg. 5480
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	8	192	2892	192		3276
16	U7	19	192	2892	192		3276
12	U8	4	Var. 6625 to 6475	250	575		Avg. 7150
12	U9	24	Var. 3950 to 6625	250	575		Avg. 6113
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	5	1300	450	2940		4690
12	CC2	31	1300	450	2940		4690
12	Z1	21	650	866	144		1660
12	S1	21	700	4800	240		5740
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	21	600	144			744
12	L2	21	4300	144			4444
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 4000 to 4600	144			Avg. 4444
12	L6	6	Var. 4000 to 4600	144			Avg. 4444
16	L7	6	Var. 6700 to 6475	192			Avg. 6442
16	L8	46	Var. 3950 to 6700	192			Avg. 5517
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	20	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	7	192	2892	192		3276
16	U7	19	192	2892	192		3276
12	U8	4	Var. 6700 to 6475	250	575		Avg. 7075
12	U9	24	Var. 3950 to 6700	250	575		Avg. 6150
12	U10	20	3950	250	600		4800
16	U12	11	192	2940	192		3324
12	CC1	5	1300	450	2940		4690
12	CC2	32	1300	450	2940		4690
12	Z1	21	600	866	144		1610
12	S1	21	700	4850	240		5790
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 doys cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

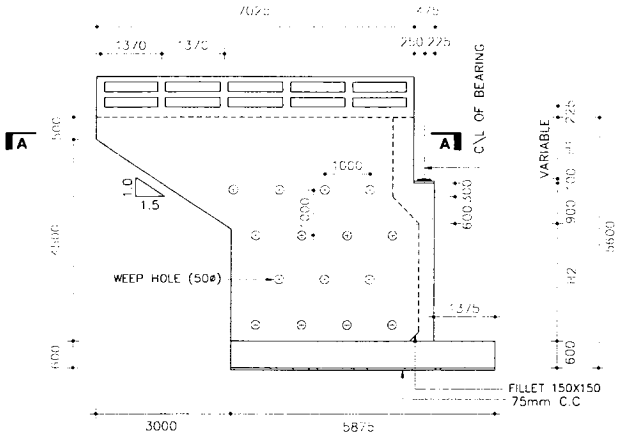
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0110534	

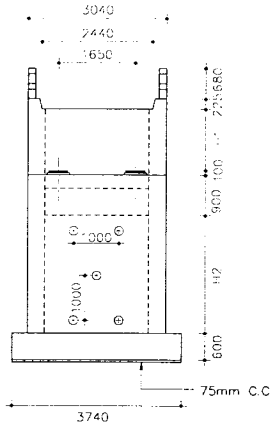
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OA-33

SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



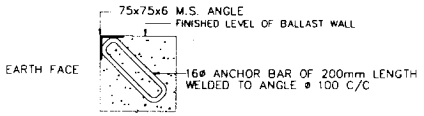
SIDE ELEVATION



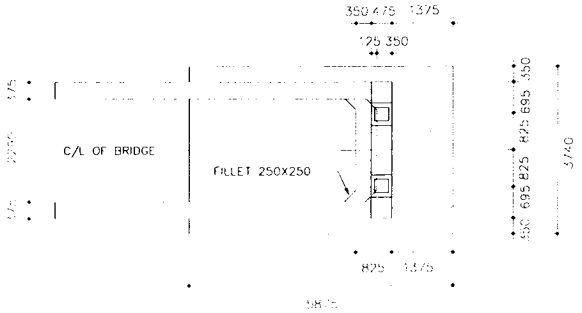
FRONT ELEVATION

TABLE-1

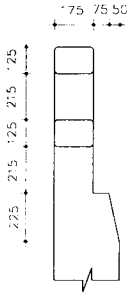
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11500	800	3200
11000	800	3200
10500	800	3200
10000	800	3200
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9000	800	3200
8500	600	3400
8000	600	3400
7500	600	3400
7000	600	3400
6500	600	3400
6000	600	3400
5500	350	3650
5000	350	3650
4500	300	3700
4000	300	3700
3500	300	3700
3000	250	3750
2500	250	3750
2000	250	3750
1500	250	3750



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be > **103** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

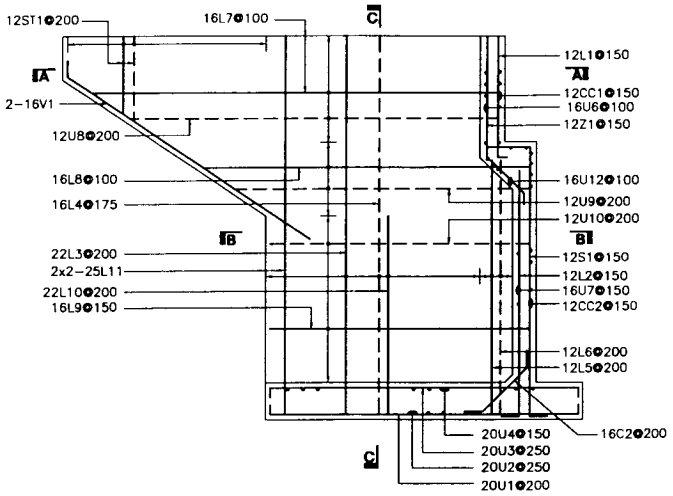
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.6m , DECK WIDTH 3.04m)

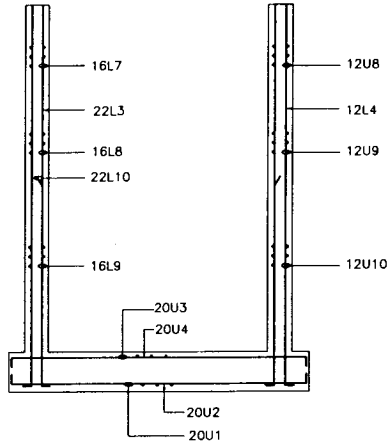
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110561	

Web Copy

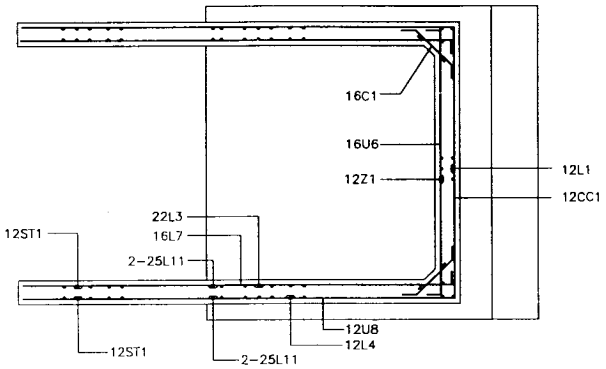
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO



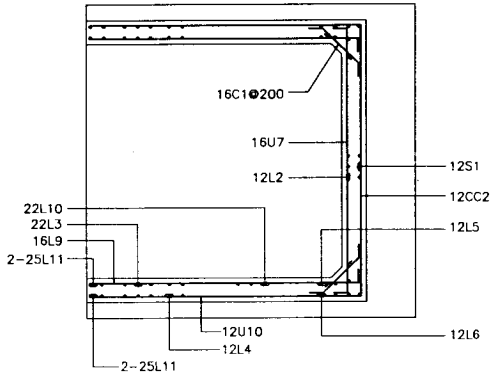
REINFORCEMENT DETAIL



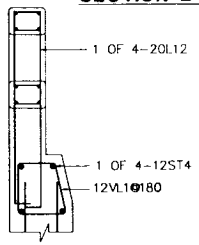
SECTION C-C



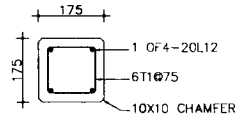
SECTION A-A



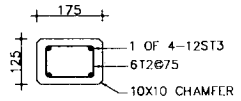
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	1300	144			1444
12	L2	21	3900	144			4044
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	22	Var. 6100 to 6925	192			Avg. 6742
16	L8	32	Var. 4400 to 6100	192			Avg. 5442
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	14	192	2884	192		3268
16	U7	23	192	2892	192		3276
12	U8	12	Var. 6100 to 6925	275	600		Avg. 7525
12	U9	18	Var. 4400 to 6100	275	600		Avg. 6125
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	9	1350	500	2940		4790
12	CC2	29	1350	500	2940		4790
12	Z1	21	1300	866	144		2310
12	S1	21	725	4450	240		5415
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/o0110562

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	1150	144			1294
12	L2	21	4050	144			4194
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3750 to 4350	144			Avg. 4194
12	L6	6	Var. 3750 to 4350	144			Avg. 4194
16	L7	18	Var. 6325 to 6925	192			Avg. 6917
16	L8	34	Var. 4400 to 6325	192			Avg. 5555
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	13	192	2884	192		3268
16	U7	24	192	2892	192		3276
12	U8	10	Var. 6325 to 6925	275	600		Avg. 7680
12	U9	18	Var. 4400 to 6325	275	600		Avg. 6238
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	8	1350	500	2940		4790
12	CC2	30	1350	500	2940		4790
12	Z1	21	1150	866	144		2160
12	S1	21	725	4600	240		5565
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	950	144			1094
12	L2	21	4250	144			4394
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	14	Var. 6625 to 6925	192			Avg. 7074
16	L8	38	Var. 4400 to 6625	192			Avg. 5705
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	11	192	2884	192		3268
16	U7	25	192	2892	192		3276
12	U8	8	Var. 6625 to 6925	275	600		Avg. 7800
12	U9	20	Var. 4400 to 6625	275	600		Avg. 6388
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	7	1350	500	2940		4790
12	CC2	31	1350	500	2940		4790
12	Z1	21	950	866	144		1960
12	S1	21	725	4800	240		5765
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	700	144			844
12	L2	21	4500	144			4644
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4200 to 4800	144			Avg. 4644
12	L6	6	Var. 4200 to 4800	144			Avg. 4644
16	L7	8	Var. 7000 to 6925	192			Avg. 7080
16	L8	44	Var. 4400 to 7000	192			Avg. 5892
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	8	192	2884	192		3268
16	U7	27	192	2892	192		3276
12	U8	4	Var. 7000 to 6925	275	600		Avg. 7725
12	U9	24	Var. 4400 to 7000	275	600		Avg. 6575
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	5	1350	500	2940		4790
12	CC2	33	1350	500	2940		4790
12	Z1	21	700	866	144		1710
12	S1	21	725	5050	240		6015
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 278 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/a0110563

Web Copy

SHEET 4 OF 4
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 300)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	650	144			794
12	L2	21	4550	144			4694
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4250 to 4850	144			Avg. 4694
12	L6	6	Var. 4250 to 4850	144			Avg. 4694
16	L7	8	Var. 7075 to 6925	192			Avg. 7042
16	L8	44	Var. 4400 to 7075	192			Avg. 5930
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	8	192	2884	192		3268
16	U7	27	192	2892	192		3276
12	U8	4	Var. 7075 to 6925	275	600		Avg. 7650
12	U9	24	Var. 4400 to 7075	275	600		Avg. 6613
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	5	1350	500	2940		4790
12	CC2	33	1350	500	2940		4790
12	Z1	21	650	866	144		1660
12	S1	21	725	5100	240		6065
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	600	144			744
12	L2	21	4600	144			4744
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4300 to 4900	144			Avg. 4744
12	L6	6	Var. 4300 to 4900	144			Avg. 4744
16	L7	6	Var. 7150 to 6925	192			Avg. 6892
16	L8	46	Var. 4400 to 7150	192			Avg. 5967
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	20	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	7	192	2884	192		3268
16	U7	27	192	2892	192		3276
12	U8	4	Var. 7150 to 6825	275	600		Avg. 7575
12	U9	24	Var. 4400 to 7150	275	600		Avg. 6650
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	5	1350	500	2940		4790
12	CC2	34	1350	500	2940		4790
12	Z1	21	600	866	144		1610
12	S1	21	725	5150	240		6115
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coorse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm. e) Base-50mm

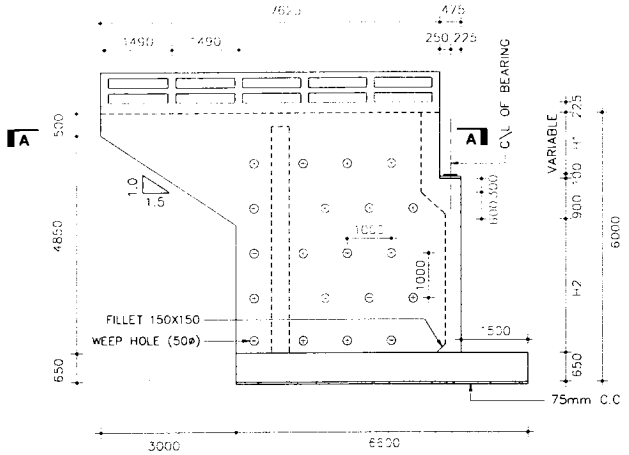
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 3.04m)

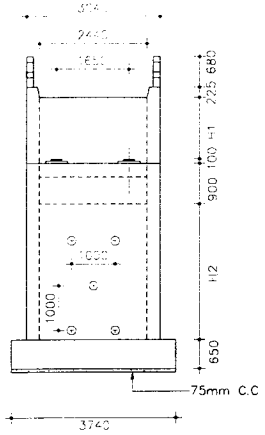
DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0110564	

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SHEET 1 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



SIDE ELEVATION



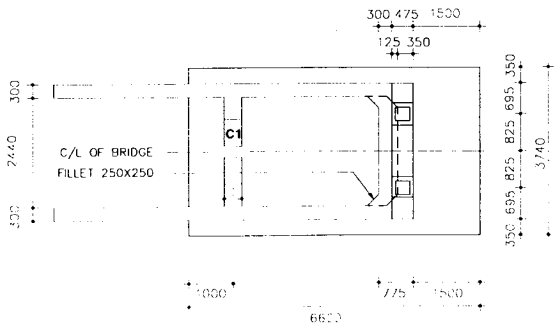
FRONT ELEVATION

TABLE-1

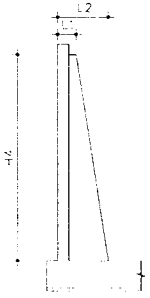
GIRDER SPAN	H1	H2
12000	950	3400
11500	800	3550
11000	800	3550
10500	800	3550
10000	800	3550
9500	800	3550
9000	800	3550
8500	600	3750
8000	600	3750
7500	600	3750
7000	600	3750
6500	600	3750
6000	600	3750
5500	350	4000
5000	350	4000
4500	300	4050
4000	300	4050
3500	300	4050
3000	250	4100
2500	250	4100
2000	250	4100
1500	250	4100

TABLE-2

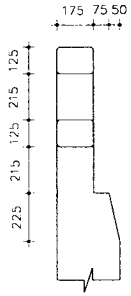
L1	L2	H4	T
700	1400	5050	400



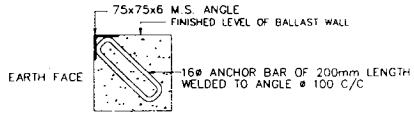
SECTION A-A



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required
3) Bering capacity of soil should be ≥ **103** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metorial shall be provided as per specification.

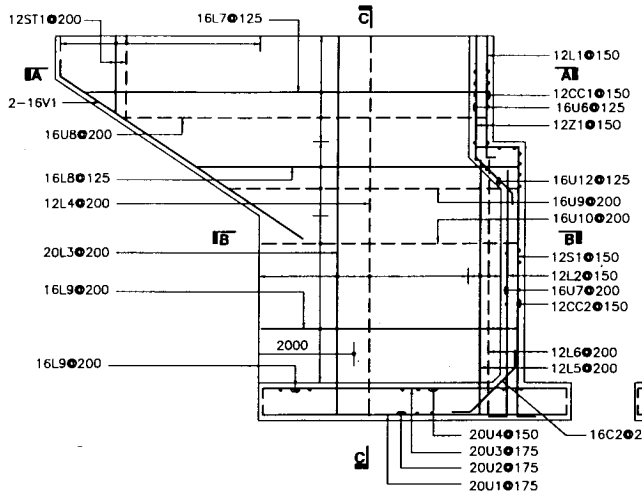
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 6.0m , DECK WIDTH 3.04m)

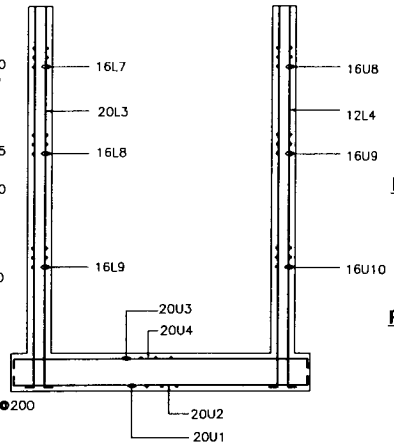
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110601	

Web Copy

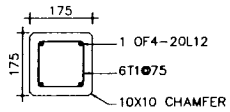
SHEET 2 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK: NO



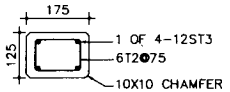
REINFORCEMENT DETAIL



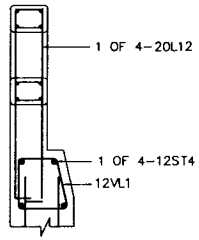
SECTION C-C



REINF. DETAIL OF POST



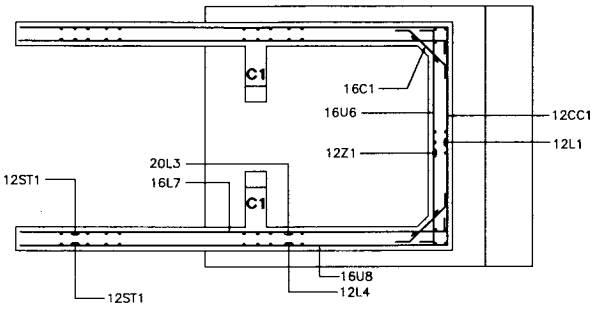
REINF. DETAIL OF RAILING



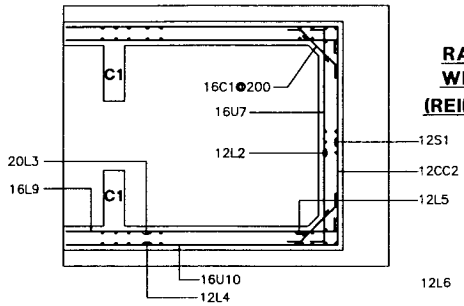
RAILING ON WING WALL (REINF. DETAIL)

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

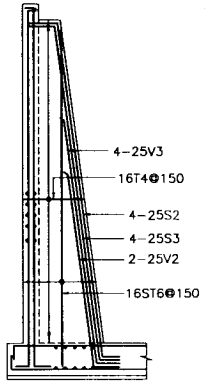
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	1300	144			1444
12	L2	21	4300	144			4444
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4000 to 4600	144			Avg. 4444
12	L6	6	Var. 4000 to 4600	144			Avg. 4444
16	L7	18	Var. 6700 to 7525	192			Avg. 7350
16	L8	26	Var. 5000 to 6700	192			Avg. 6042
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	12	192	2884	192		3268
16	U7	19	192	2884	192		3268
16	U8	12	Var. 6700 to 7525	200	550		Avg. 8000
16	U9	18	Var. 5000 to 6700	200	600		Avg. 6650
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	31	1200	500	2940		4640
12	Z1	21	1300	836	144		2280
12	S1	21	675	4850	240		5765
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032
12	W1	2	325	535	329		1189



SECTION A-A



SECTION B-B



REINFORCEMENT DETAIL OF COUNTERFORT C1

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\O0110602	

Web Copy

SHEET 3 OF 4
SPAN RANGE : 1.5m TO 12m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 800)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	1150	144			1294
12	L2	21	4450	144			4594
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4150 to 4750	144			Avg. 4594
12	L6	6	Var. 4150 to 4750	144			Avg. 4594
16	L7	16	Var. 6925 to 7525	192			Avg. 7492
16	L8	28	Var. 5000 to 6925	192			Avg. 6155
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	11	192	2884	192		3268
16	U7	20	192	2884	192		3268
16	U8	10	Var. 6925 to 7525	200	550		Avg. 8155
16	U9	18	Var. 5000 to 6925	200	600		Avg. 6763
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	8	1200	400	2940		4540
12	CC2	32	1200	500	2940		4640
12	Z1	21	1150	836	144		2130
12	S1	21	675	5000	240		5915
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 600)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	950	144			1094
12	L2	21	4650	144			4794
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4350 to 4950	144			Avg. 4794
12	L6	6	Var. 4350 to 4950	144			Avg. 4794
16	L7	12	Var. 7225 to 7525	192			Avg. 7667
16	L8	32	Var. 5000 to 7225	192			Avg. 6305
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	9	192	2884	192		3268
16	U7	21	192	2884	192		3268
16	U8	8	Var. 7225 to 7525	200	550		Avg. 8275
16	U9	20	Var. 5000 to 7225	200	600		Avg. 6913
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	7	1200	400	2940		4540
12	CC2	34	1200	500	2940		4640
12	Z1	21	950	836	144		1930
12	S1	21	675	5200	240		6115
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	700	144			844
12	L2	21	4900	144			5044
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4600 to 5200	144			Avg. 5044
12	L6	6	Var. 4600 to 5200	144			Avg. 5044
16	L7	6	Var. 7600 to 7525	192			Avg. 7667
16	L8	36	Var. 5000 to 7600	192			Avg. 6492
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	7	192	2884	192		3268
16	U7	22	192	2884	192		3268
16	U8	4	Var. 7600 to 7525	200	550		Avg. 8200
16	U9	24	Var. 5000 to 7600	200	600		Avg. 7100
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	35	1200	500	2940		4640
12	Z1	21	700	836	144		1680
12	S1	21	675	5450	240		6365
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00110603	

Web Copy

SPAN RANGE : 1.5m TO 12m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =300)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	650	144			794
12	L2	21	4950	144			5094
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4650 to 5250	144			Avg. 5094
12	L6	6	Var. 4650 to 5250	144			Avg. 5094
16	L7	6	Var. 7675 to 7525	192			Avg. 7617
16	L8	36	Var. 5000 to 7675	192			Avg. 6530
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	7	192	2884	192		3268
16	U7	22	192	2884	192		3268
16	U8	4	Var. 7675 to 7525	200	550		Avg. 8125
16	U9	24	Var. 5000 to 7675	200	600		Avg. 7138
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	36	1200	500	2940		4640
12	Z1	21	650	836	144		1630
12	S1	21	675	5500	240		6415
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	600	144			744
12	L2	21	5000	144			5144
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4700 to 5300	144			Avg. 5144
12	L6	6	Var. 4700 to 5300	144			Avg. 5144
16	L7	4	Var. 7750 to 7525	192			Avg. 7380
16	L8	38	Var. 5000 to 7750	192			Avg. 6567
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	6	192	2884	192		3268
16	U7	22	192	2884	192		3268
16	U8	4	Var. 7750 to 7525	200	550		Avg. 8050
16	U9	24	Var. 5000 to 7750	200	600		Avg. 7175
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	5	1200	400	2940		4540
12	CC2	36	1200	500	2940		4640
12	Z1	21	600	836	144		1580
12	S1	21	675	5550	240		6465
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 3.04m)

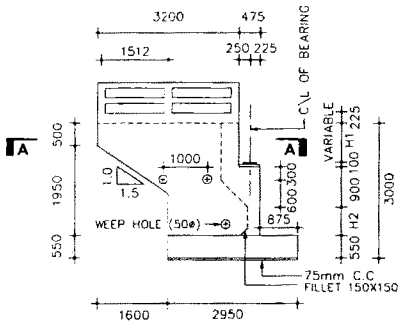
DATE :

ISSUED BY :

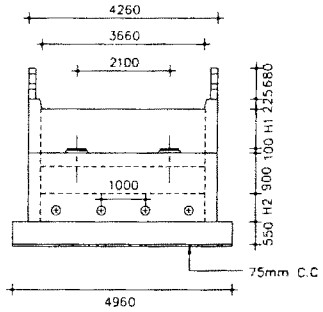
CAD FILE REF : ABUT\00110604

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SHEET 1 OF 5	
SPAN RANGE :	1.5m TO 12m
SIDE WALK :	NO



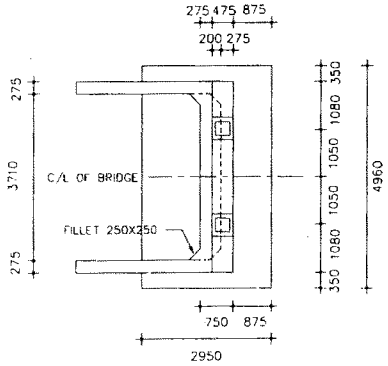
SIDE ELEVATION



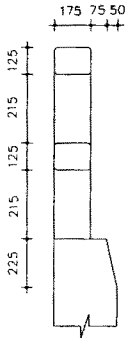
FRONT ELEVATION

TABLE-1

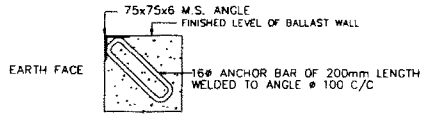
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11500	1000	450
11000	1000	450
10500	1000	450
10000	1000	450
9500	900	550
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8500	900	550
8000	900	550
7500	750	700
7000	750	700
6500	750	700
6000	750	700
5500	400	1050
5000	400	1050
4500	350	1100
4000	350	1100
3500	325	1125
3000	325	1125
2500	275	1175
2000	250	1200
1500	250	1200



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

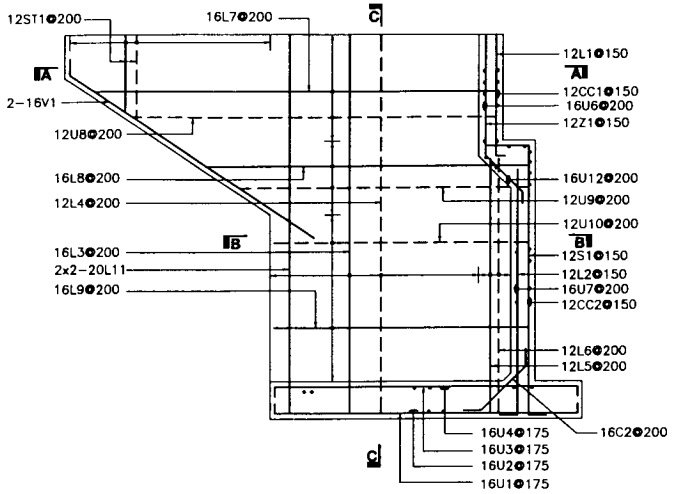
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.0m , DECK WIDTH 4.26m)

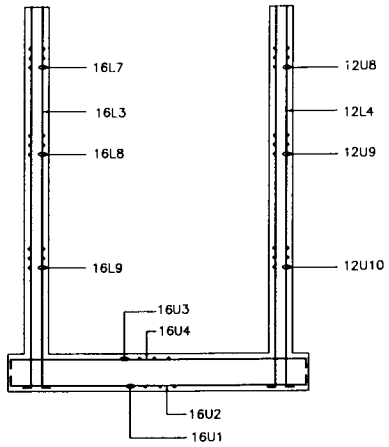
DATE :	ISSUED BY :
CAD FILE REF : ABUT\OA-10301	

Web Copy

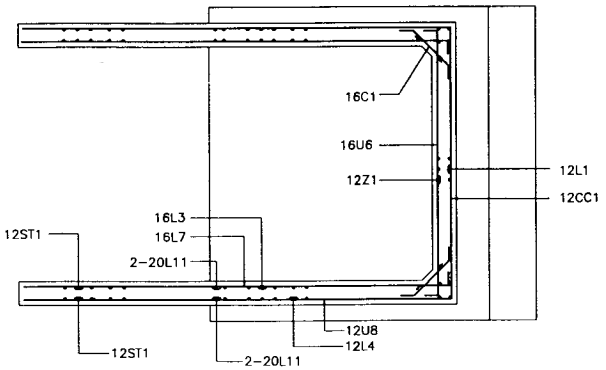
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



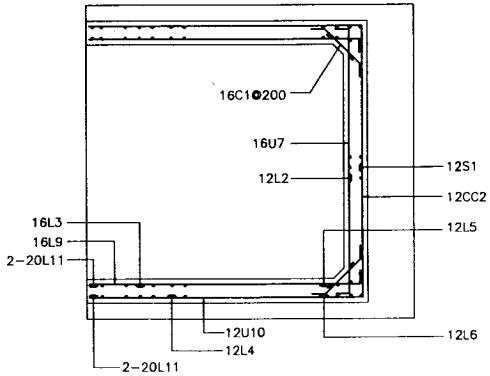
REINFORCEMENT DETAIL



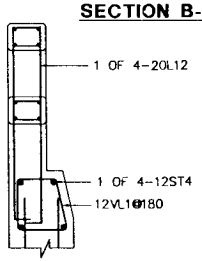
SECTION C-C



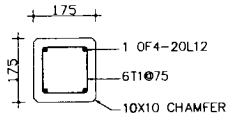
SECTION A-A



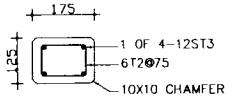
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1350	144			1494
12	L2	29	1250	144			1394
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 950 to 1550	144			Avg. 1394
12	L6	6	Var. 950 to 1550	144			Avg. 1394
16	L7	12	Var. 2200 to 3100	192			Avg. 2992
16	L8	8	Var. 1975 to 2200	192			Avg. 2280
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U5	8	192	4112	192		4496
16	U7	4	192	4112	192		4496
12	U8	12	Var. 2200 to 3100	175	525		Avg. 3500
12	U9	8	Var. 1975 to 2200	175	525		Avg. 2844
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	12	1150	350	4160		5660
12	Z1	29	1350	866	144		2360
12	S1	29	650	1800	240		2690
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210302	

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SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1250	144			1394
12	L2	29	1350	144			1494
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1050 to 1650	144			Avg. 1494
12	L6	6	Var. 1050 to 1650	144			Avg. 1494
16	L7	12	Var. 2350 to 3100	192			Avg. 3042
16	L8	8	Var. 1975 to 2350	192			Avg. 2355
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	5	192	4112	192		4496
12	U8	12	Var. 2350 to 3100	175	525		Avg. 3550
12	U9	8	Var. 1975 to 2350	175	525		Avg. 2957
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	9	1150	350	4160		5660
12	CC2	12	1150	350	4160		5660
12	Z1	29	1250	866	144		2260
12	S1	29	650	1900	240		2790
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1100	144			1244
12	L2	29	1500	144			1644
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1200 to 1800	144			Avg. 1644
12	L6	6	Var. 1200 to 1800	144			Avg. 1644
16	L7	10	Var. 2575 to 3100	192			Avg. 3187
16	L8	10	Var. 1975 to 2575	192			Avg. 2467
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	5	192	4112	192		4496
12	U8	10	Var. 2575 to 3100	175	525		Avg. 3695
12	U9	10	Var. 1975 to 2575	175	525		Avg. 3125
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	8	1150	350	4160		5660
12	CC2	13	1150	350	4160		5660
12	Z1	29	1100	866	144		2110
12	S1	29	650	2050	240		2940
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	750	144			894
12	L2	29	1850	144			1994
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1550 to 2150	144			Avg. 1994
12	L6	6	Var. 1550 to 2150	144			Avg. 1994
16	L7	6	Var. 3100 to 3100	192			Avg. 3292
16	L8	14	Var. 1975 to 3100	192			Avg. 2730
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	6	Var. 3100 to 3100	175	525		Avg. 3800
12	U9	14	Var. 1975 to 3100	175	525		Avg. 3519
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	6	1150	350	4160		5660
12	CC2	16	1150	350	4160		5660
12	Z1	29	750	866	144		1760
12	S1	29	650	2400	240		3290
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210303	

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SHEET 4 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	700	144			844
12	L2	29	1900	144			2044
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	4	Var. 3175 to 3100	192			Avg. 3217
16	L8	14	Var. 1975 to 3175	192			Avg. 2767
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	4	Var. 3175 to 3100	175	525		Avg. 3725
12	U9	14	Var. 1975 to 3175	175	525		Avg. 3575
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	16	1150	350	4160		5660
12	Z1	29	700	866	144		1710
12	S1	29	650	2450	240		3340
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	675	144			819
12	L2	29	1925	144			2069
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1625 to 2225	144			Avg. 2069
12	L6	6	Var. 1625 to 2225	144			Avg. 2069
16	L7	4	Var. 3213 to 3100	192			Avg. 3179
16	L8	14	Var. 1975 to 3213	192			Avg. 2786
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	4	Var. 3213 to 3100	175	525		Avg. 3687
12	U9	14	Var. 1975 to 3213	175	525		Avg. 3604
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	16	1150	350	4160		5660
12	Z1	29	675	866	144		1695
12	S1	29	650	2475	240		3365
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210304	

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SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	625	144			769
12	L2	29	1975	144			2119
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1675 to 2275	144			Avg. 2119
12	L6	6	Var. 1675 to 2275	144			Avg. 2119
16	L7	4	Var. 3288 to 3100	192			Avg. 3104
16	L8	14	Var. 1975 to 3288	192			Avg. 2824
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U5	5	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	4	Var. 3288 to 3100	175	525		Avg. 3612
12	U9	14	Var. 1975 to 3288	175	525		Avg. 3660
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	16	1150	350	4160		5660
12	Z1	29	625	866	144		1635
12	S1	29	650	2525	240		3415
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	600	144			744
12	L2	29	2000	144			2144
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1700 to 2300	144			Avg. 2144
12	L6	6	Var. 1700 to 2300	144			Avg. 2144
16	L7	4	Var. 3325 to 3100	192			Avg. 3067
16	L8	16	Var. 1975 to 3325	192			Avg. 2842
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U5	4	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	4	Var. 3325 to 3100	175	525,		Avg. 3575
12	U9	16	Var. 1975 to 3325	175	525		Avg. 3688
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	17	1150	350	4160		5660
12	Z1	29	600	866	144		1610
12	S1	29	650	2550	240		3440
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

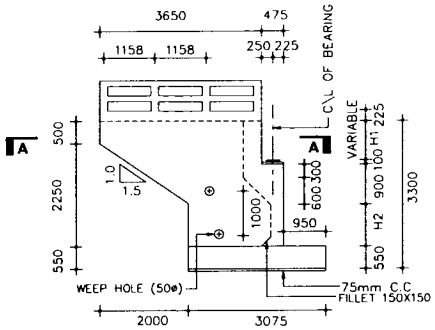
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 4.26m)

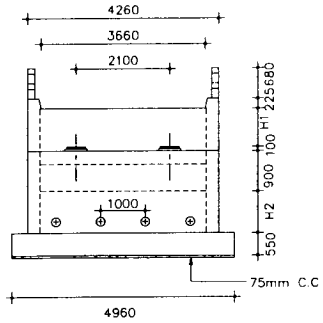
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ISSUED BY :
CAD FILE REF : ABUT\00210305

Web Copy

SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



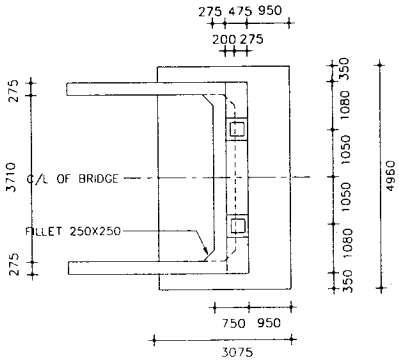
SIDE ELEVATION



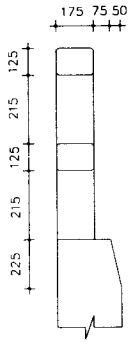
FRONT ELEVATION

TABLE-1

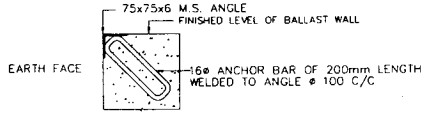
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11500	1000	750
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10500	1000	750
10000	1000	750
9500	900	850
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8500	900	850
8000	900	850
7500	750	1000
7000	750	1000
6500	750	1000
6000	750	1000
5500	400	1350
5000	400	1350
4500	350	1400
4000	350	1400
3500	325	1425
3000	325	1425
2500	275	1475
2000	250	1500
1500	250	1500



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m²
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

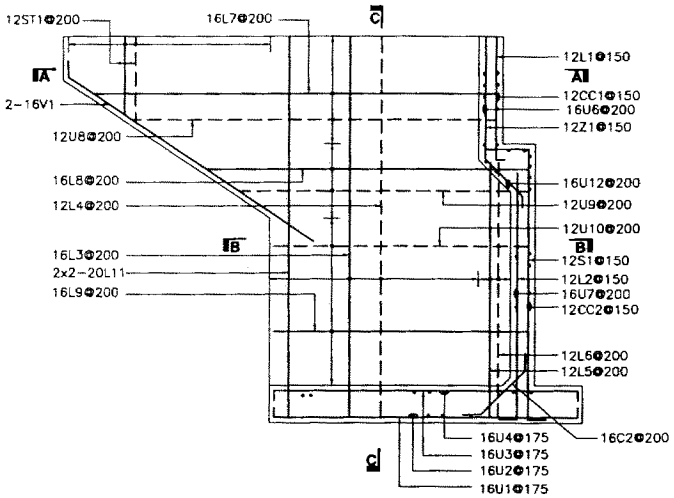
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 3.3m , DECK WIDTH 4.26m)

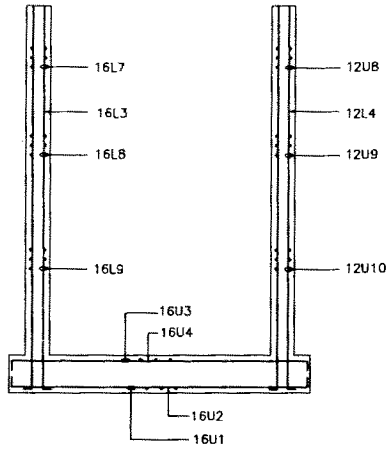
DATE :	ISSUED BY :
CAD FILE REF : ABUT\OD210331	

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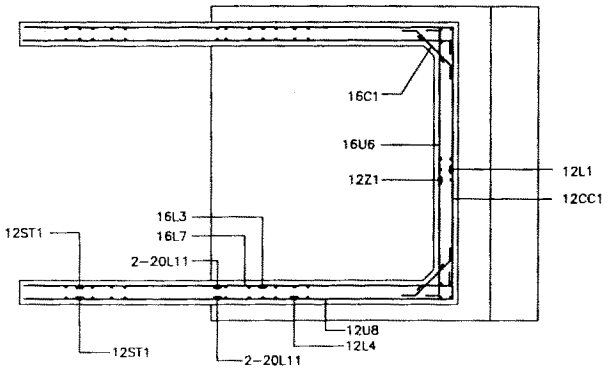
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



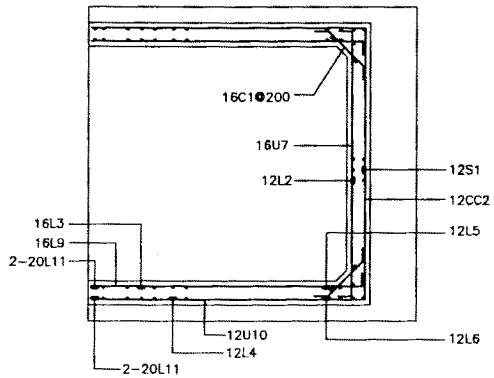
REINFORCEMENT DETAIL



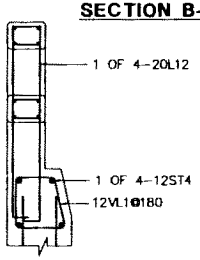
SECTION C-C



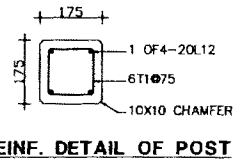
SECTION A-A



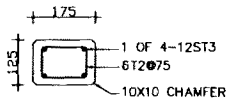
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1350	144			1494
12	L2	29	1550	144			1694
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1250 to 1850	144			Avg. 1694
12	L6	6	Var. 1250 to 1850	144			Avg. 1694
16	L7	12	Var. 2650 to 3550	192			Avg. 3442
16	L8	10	Var. 2025 to 2650	192			Avg. 2530
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U5	8	192	4112	192		4496
16	U7	6	192	4112	192		4496
12	U8	12	Var. 2650 to 3550	175	525		Avg. 3950
12	U9	10	Var. 2025 to 2650	175	525		Avg. 3194
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	14	1150	350	4160		5660
12	Z1	29	1350	888	144		2380
12	S1	29	650	2100	240		2990
16	C1	30	320	851	320		1491
16	C2	22	320	1089	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210332	

Web Copy

SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1250	144			1394
12	L2	29	1650	144			1794
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1350 to 1950	144			Avg. 1794
12	L6	6	Var. 1350 to 1950	144			Avg. 1794
16	L7	12	Var. 2800 to 3550	192			Avg. 3492
16	L8	12	Var. 2025 to 2800	192			Avg. 2605
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	6	192	4112	192		4496
12	U8	12	Var. 2800 to 3550	175	525		Avg. 4000
12	U9	12	Var. 2025 to 2800	175	525		Avg. 3307
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	©C1	9	1150	350	4160		5660
12	CC2	14	1150	350	4160		5660
12	Z1	29	1250	866	144		2260
12	S1	29	650	2200	240		3090
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1100	144			1244
12	L2	29	1800	144			1944
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1500 to 2100	144			Avg. 1944
12	L6	6	Var. 1500 to 2100	144			Avg. 1944
16	L7	10	Var. 3025 to 3550	192			Avg. 3637
16	L8	12	Var. 2025 to 3025	192			Avg. 2717
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	10	Var. 3025 to 3550	175	525		Avg. 4145
12	U9	12	Var. 2025 to 3025	175	525		Avg. 3475
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	8	1150	350	4160		5660
12	CC2	15	1150	350	4160		5660
12	Z1	29	1100	866	144		2110
12	S1	29	650	2350	240		3240
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	750	144			894
12	L2	29	2150	144			2294
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1850 to 2450	144			Avg. 2294
12	L6	6	Var. 1850 to 2450	144			Avg. 2294
16	L7	6	Var. 3550 to 3550	192			Avg. 3742
16	L8	16	Var. 2025 to 3550	192			Avg. 2980
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	6	Var. 3550 to 3550	175	525		Avg. 4250
12	U9	16	Var. 2025 to 3550	175	525		Avg. 3869
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	6	1150	350	4160		5660
12	CC2	18	1150	350	4160		5660
12	Z1	29	750	866	144		1760
12	S1	29	650	2700	240		3590
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210333	

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SHEET 4 OF 5

SPAN RANGE : 1.5m TO 12.0m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	700	144			844
12	L2	29	2200	144			2344
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1900 to 2500	144			Avg. 2344
12	L6	6	Var. 1900 to 2500	144			Avg. 2344
16	L7	4	Var. 3625 to 3550	192			Avg. 3667
16	L8	16	Var. 2025 to 3625	192			Avg. 3017
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	4	Var. 3625 to 3550	175	525		Avg. 4175
12	U9	16	Var. 2025 to 3625	175	525		Avg. 3925
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	18	1150	350	4160		5660
12	Z1	29	700	866	144		1710
12	S1	29	650	2750	240		3640
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	675	144			819
12	L2	29	2225	144			2369
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1925 to 2525	144			Avg. 2369
12	L6	6	Var. 1925 to 2525	144			Avg. 2369
16	L7	4	Var. 3663 to 3550	192			Avg. 3629
16	L8	18	Var. 2025 to 3663	192			Avg. 3036
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	4	Var. 3663 to 3550	175	525		Avg. 4137
12	U9	18	Var. 2025 to 3663	175	525		Avg. 3954
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	18	1150	350	4160		5660
12	Z1	29	675	866	144		1685
12	S1	29	650	2775	240		3665
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 4.26m)

DATE :

ISSUED BY :

CAD FILE REF : ABUT\00210334

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SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	625	144			769
12	L2	29	2275	144			2419
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1975 to 2575	144			Avg. 2419
12	L6	6	Var. 1975 to 2575	144			Avg. 2419
16	L7	4	Var. 3738 to 3550	192			Avg. 3554
16	L8	18	Var. 2025 to 3738	192			Avg. 3074
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	4	Var. 3738 to 3550	175	525		Avg. 4062
12	U9	18	Var. 2025 to 3738	175	525		Avg. 4010
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	18	1150	350	4160		5660
12	Z1	29	625	866	144		1635
12	S1	29	650	2825	240		3715
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	600	144			744
12	L2	29	2300	144			2444
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 2000 to 2600	144			Avg. 2444
12	L6	6	Var. 2000 to 2600	144			Avg. 2444
16	L7	4	Var. 3775 to 3650	192			Avg. 3517
16	L8	18	Var. 2025 to 3775	192			Avg. 3092
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	29	192	2975	192		3359
16	U2	18	192	4860	192		5244
16	U3	29	192	2975	192		3359
16	U4	17	192	4860	192		5244
16	U6	4	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	4	Var. 3775 to 3650	175	525		Avg. 4025
12	U9	18	Var. 2025 to 3775	175	525		Avg. 4038
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	5	1150	350	4160		5660
12	CC2	19	1150	350	4160		5660
12	Z1	29	600	866	144		1610
12	S1	29	650	2850	240		3740
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

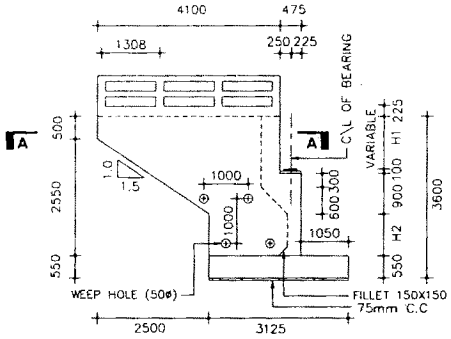
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 4.26m)

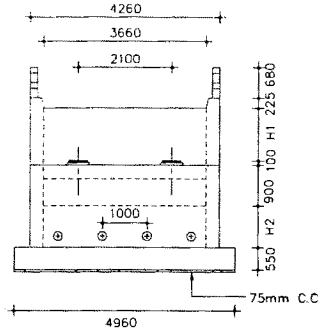
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CAD FILE REF : ABUT\00210335	

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SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



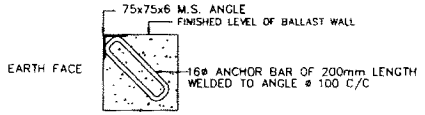
SIDE ELEVATION



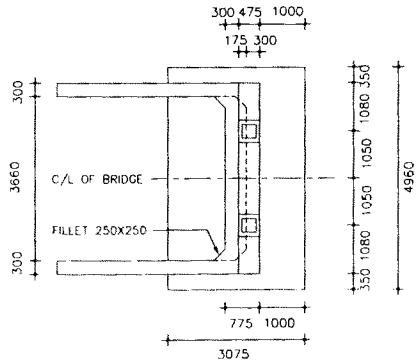
FRONT ELEVATION

TABLE-1

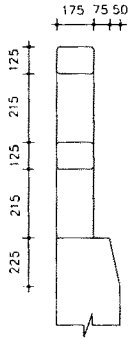
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11500	1000	1050
11000	1000	1050
10500	1000	1050
10000	1000	1050
9500	900	1150
9000	900	1150
8500	900	1150
8000	900	1150
7500	750	1300
7000	750	1300
6500	750	1300
6000	750	1300
5500	400	1650
5000	400	1650
4500	350	1700
4000	350	1700
3500	325	1725
3000	325	1725
2500	275	1775
2000	250	1800
1500	250	1800



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

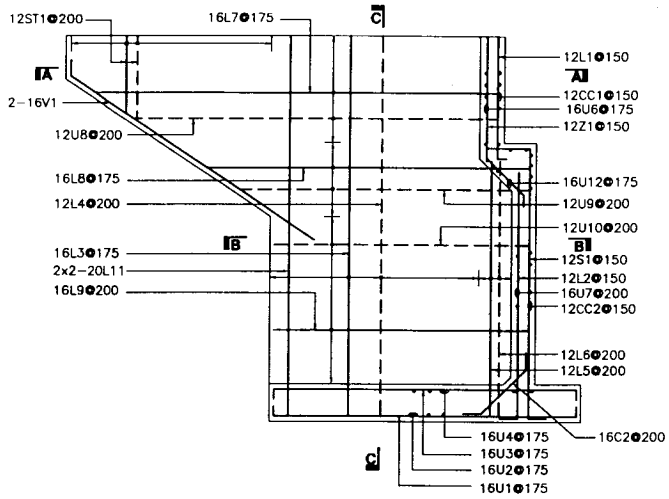
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.6m , DECK WIDTH 4.26m)

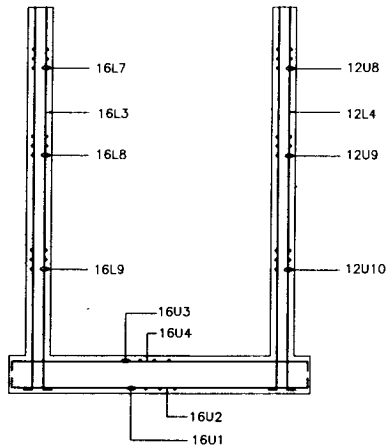
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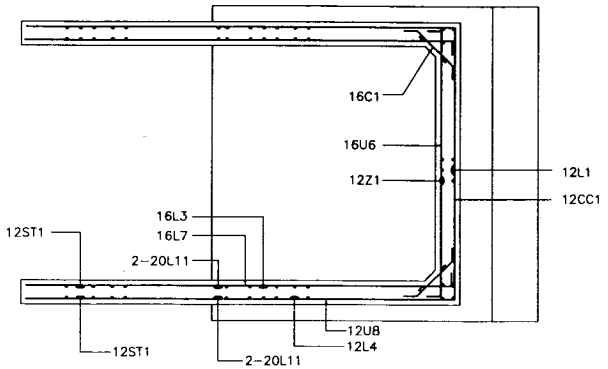
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



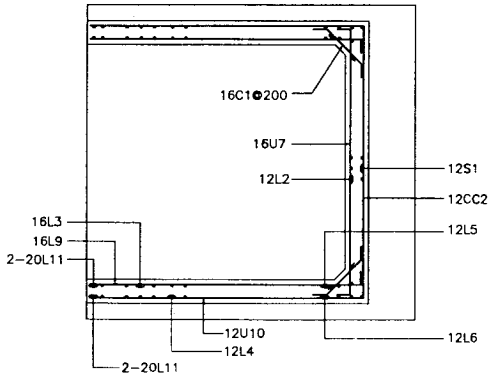
REINFORCEMENT DETAIL



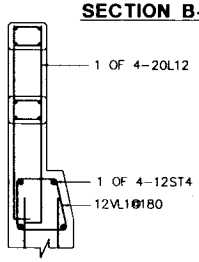
SECTION C-C



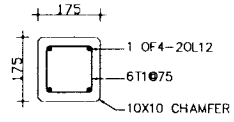
SECTION A-A



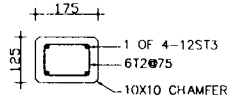
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1350	144			1494
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1550 to 2150	144			Avg. 1994
12	L6	6	Var. 1550 to 2150	144			Avg. 1994
16	L7	14	Var. 3100 to 4000	192			Avg. 3806
16	L8	16	Var. 1975 to 3100	192			Avg. 2730
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	12	Var. 3100 to 4000	200	550		Avg. 4450
12	U9	14	Var. 1975 to 3100	200	550		Avg. 3569
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	16	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	2400	240		3315
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210362

Web Copy

SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1250	144			1394
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1650 to 2250	144			Avg. 2094
12	L6	6	Var. 1650 to 2250	144			Avg. 2094
16	L7	12	Var. 3250 to 4000	192			Avg. 3942
16	L8	16	Var. 1975 to 3250	192			Avg. 2805
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	12	Var. 3250 to 4000	200	550		Avg. 4500
12	U9	14	Var. 1975 to 3250	200	550		Avg. 3682
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	9	1200	400	4160		5760
12	CC2	16	1200	400	4160		5760
12	Z1	29	1250	866	144		2260
12	S1	29	675	2500	240		3415
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1100	144			1244
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1800 to 2400	144			Avg. 2244
12	L6	6	Var. 1800 to 2400	144			Avg. 2244
16	L7	10	Var. 3475 to 4000	192			Avg. 4087
16	L8	18	Var. 1975 to 3475	192			Avg. 2917
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	10	Var. 3475 to 4000	200	550		Avg. 4645
12	U9	16	Var. 1975 to 3475	200	550		Avg. 3850
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	8	1200	400	4160		5760
12	CC2	17	1200	400	4160		5760
12	Z1	29	1100	866	144		2110
12	S1	29	675	2650	240		3565
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	750	144			894
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2150 to 2750	144			Avg. 2594
12	L6	6	Var. 2150 to 2750	144			Avg. 2594
16	L7	6	Var. 4000 to 4000	192			Avg. 4192
16	L8	22	Var. 1975 to 4000	192			Avg. 3180
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	6	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	6	Var. 4000 to 4000	200	550		Avg. 4750
12	U9	20	Var. 1975 to 4000	200	550		Avg. 4244
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	6	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	750	866	144		1760
12	S1	29	675	3000	240		3915
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.6m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210363

Web Copy

SHEET 4 OF 5
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	700	144			844
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	4	Var. 4075 to 4000	192			Avg. 4117
16	L8	22	Var. 1975 to 4075	192			Avg. 3217
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	4	Var. 4075 to 4000	200	550		Avg. 4675
12	U9	20	Var. 1975 to 4075	200	550		Avg. 4300
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	700	866	144		1710
12	S1	29	675	3050	240		3965
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	675	144			819
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2225 to 2825	144			Avg. 2669
12	L6	6	Var. 2225 to 2825	144			Avg. 2669
16	L7	4	Var. 4113 to 4000	192			Avg. 4079
16	L8	22	Var. 1975 to 4113	192			Avg. 3236
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	4	Var. 4113 to 4000	200	550		Avg. 4637
12	U9	20	Var. 1975 to 4113	200	550		Avg. 4329
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	675	866	144		1685
12	S1	29	675	3075	240		3990
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210364	

Web Copy

SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	625	144			769
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2275 to 2875	144			Avg. 2719
12	L6	6	Var. 2275 to 2875	144			Avg. 2719
16	L7	4	Var. 4188 to 4000	192			Avg. 4004
16	L8	24	Var. 1975 to 4188	192			Avg. 3274
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	4	Var. 4188 to 4000	200	550		Avg. 4562
12	U9	20	Var. 1975 to 4188	200	550		Avg. 4385
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	625	866	144		1635
12	S1	29	675	3125	240		4040
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	600	144			744
12	L2	29	971	144			1115
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 2300 to 2900	144			Avg. 2744
12	L6	6	Var. 2300 to 2900	144			Avg. 2744
16	L7	4	Var. 4225 to 4000	192			Avg. 3967
16	L8	24	Var. 1975 to 4225	192			Avg. 3292
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	29	192	3025	192		3409
16	U2	19	192	4860	192		5244
16	U3	29	192	3025	192		3409
16	U4	18	192	4860	192		5244
16	U6	5	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	4	Var. 4225 to 4000	200	550		Avg. 4525
12	U9	22	Var. 1975 to 4225	200	550		Avg. 4413
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	21	1200	400	4160		5760
12	Z1	29	600	866	144		1610
12	S1	29	675	3150	240		4065
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

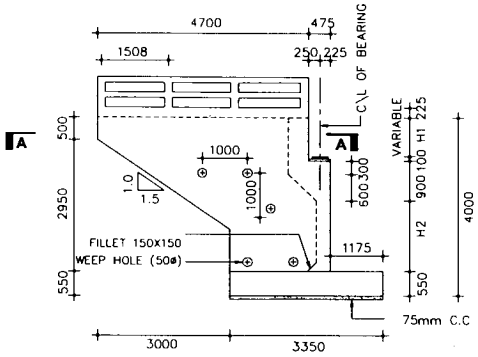
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 4.26m)

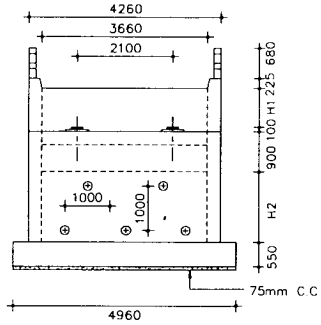
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210365	

Web Copy

SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO



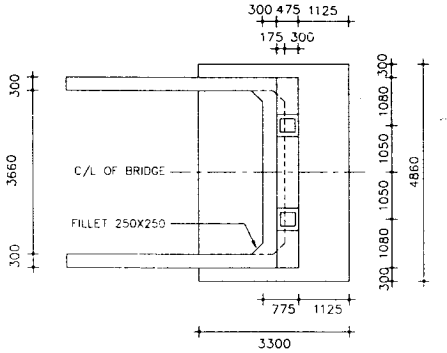
SIDE ELEVATION



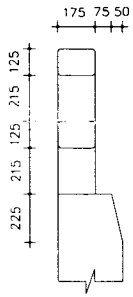
FRONT ELEVATION

TABLE-1

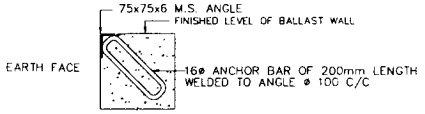
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9000	900	1550
8500	900	1550
8000	900	1550
7500	750	1700
7000	750	1700
6500	750	1700
6000	750	1700
5500	400	2050
5000	400	2050
4500	350	2100
4000	350	2100
3500	325	2125
3000	325	2125
2500	275	2175
2000	250	2200
1500	250	2200



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

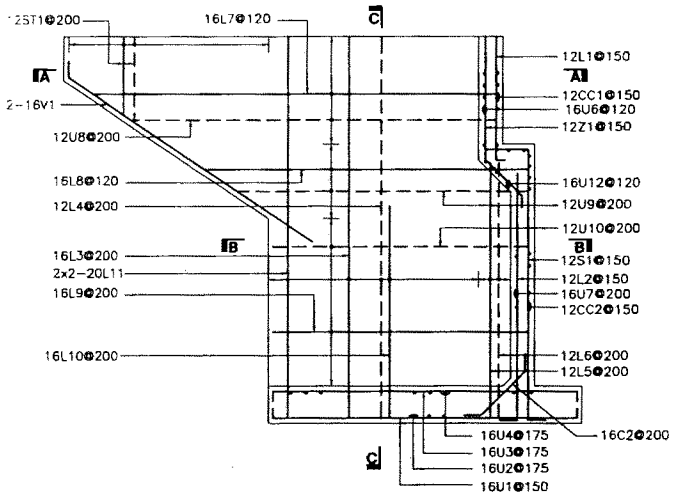
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 4.0m , DECK WIDTH 4.26m)

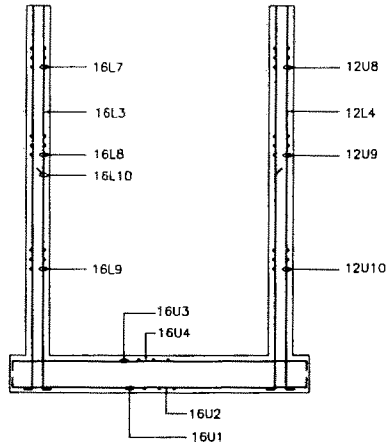
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210401	

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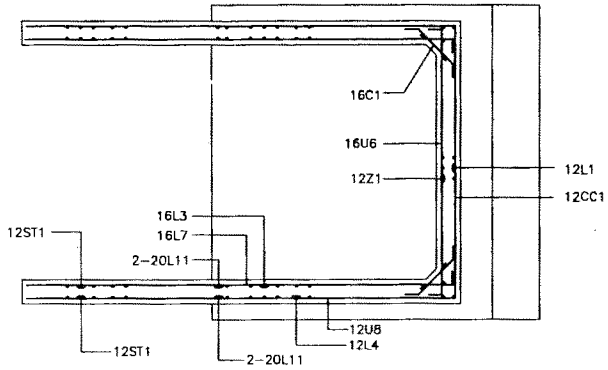
SHEET 2 OF 5
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO



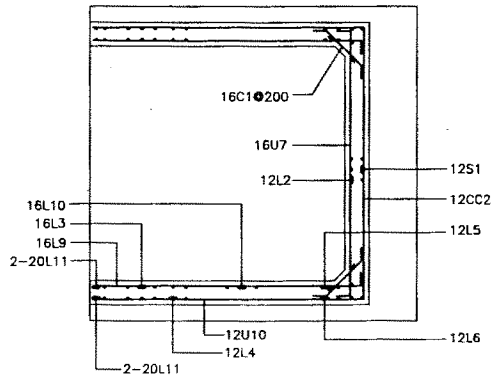
REINFORCEMENT DETAIL



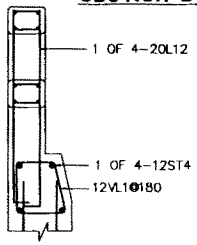
SECTION C-C



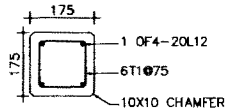
SECTION A-A



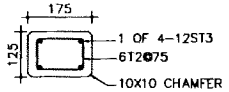
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1350	144			1494
12	L2	29	2250	144			2394
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	20	Var. 3700 to 4600	192			Avg. 4432
16	L8	26	Var. 2075 to 3700	192			Avg. 3080
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U5	13	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	12	Var. 3700 to 4600	200	550		Avg. 5050
12	U9	16	Var. 2075 to 3700	200	550		Avg. 4044
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	18	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	2800	240		3715
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 4.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210402

Web Copy

SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1250	144			1394
12	L2	29	2350	144			2494
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2050 to 2650	144			Avg. 2494
12	L6	6	Var. 2050 to 2650	144			Avg. 2494
16	L7	20	Var. 3850 to 4600	192			Avg. 4492
16	L8	28	Var. 2075 to 3850	192			Avg. 3155
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	12	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	12	Var. 3850 to 4600	200	550		Avg. 5100
12	U9	18	Var. 2075 to 3850	200	550		Avg. 4157
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	9	1200	400	4160		5760
12	CC2	19	1200	400	4160		5760
12	Z1	29	1250	866	144		2260
12	S1	29	675	2900	240		3815
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1100	144			1244
12	L2	29	2500	144			2644
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	16	Var. 4075 to 4600	192			Avg. 4661
16	L8	30	Var. 2075 to 4075	192			Avg. 3267
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	11	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	10	Var. 4075 to 4600	200	550		Avg. 5245
12	U9	20	Var. 2075 to 4075	200	550		Avg. 4325
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	8	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	1100	866	144		2110
12	S1	29	675	3050	240		3965
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	750	144			894
12	L2	29	2850	144			2994
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2550 to 3150	144			Avg. 2994
12	L6	6	Var. 2550 to 3150	144			Avg. 2994
16	L7	10	Var. 4600 to 4600	192			Avg. 4792
16	L8	36	Var. 2075 to 4600	192			Avg. 3530
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	6	Var. 4600 to 4600	200	550		Avg. 5350
12	U9	22	Var. 2075 to 4600	200	550		Avg. 4719
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	6	1200	400	4160		5760
12	CC2	22	1200	400	4160		5760
12	Z1	29	750	866	144		1760
12	S1	29	675	3400	240		4315
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210403

Web Copy

SHEET4 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	700	144			844
12	L2	29	2900	144			3044
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	8	Var. 4675 to 4600	192			Avg. 4755
16	L8	38	Var. 2075 to 4675	192			Avg. 3567
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	4	Var. 4675 to 4600	200	550		Avg. 5275
12	U9	24	Var. 2075 to 4675	200	550		Avg. 4775
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	23	1200	400	4160		5760
12	Z1	29	700	866	144		1710
12	S1	29	675	3450	240		4365
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	675	144			819
12	L2	29	2925	144			3069
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2625 to 3225	144			Avg. 3069
12	L6	6	Var. 2625 to 3225	144			Avg. 3069
16	L7	8	Var. 4713 to 4600	192			Avg. 4736
16	L8	38	Var. 2075 to 4713	192			Avg. 3586
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	4	Var. 4713 to 4600	200	550		Avg. 5237
12	U9	24	Var. 2075 to 4713	200	550		Avg. 4804
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	23	1200	400	4160		5760
12	Z1	29	675	866	144		1685
12	S1	29	675	3475	240		4390
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210404

Web Copy

SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	625	144			769
12	L2	29	2975	144			3119
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2675 to 3275	144			Avg. 3119
12	L6	6	Var. 2675 to 3275	144			Avg. 3119
16	L7	6	Var. 4788 to 4600	192			Avg. 4604
16	L8	38	Var. 2075 to 4788	192			Avg. 3624
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	4	Var. 4788 to 4600	200	550		Avg. 5162
12	U9	24	Var. 2075 to 4788	200	550		Avg. 4860
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	23	1200	400	4160		5760
12	Z1	29	625	866	144		1635
12	S1	29	675	3525	240		4440
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	600	144			744
12	L2	29	3000	144			3144
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2700 to 3300	144			Avg. 3144
12	L6	6	Var. 2700 to 3300	144			Avg. 3144
16	L7	6	Var. 4825 to 4600	192			Avg. 4567
16	L8	38	Var. 2075 to 4825	192			Avg. 3642
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	20	192	4860	192		5244
16	U6	6	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	4	Var. 4825 to 4600	200	550		Avg. 5125
12	U9	24	Var. 2075 to 4825	200	550		Avg. 4888
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	23	1200	400	4160		5760
12	Z1	29	600	866	144		1610
12	S1	29	675	3550	240		4465
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

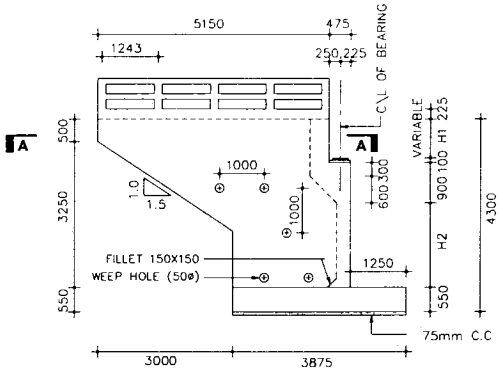
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 4.26m)

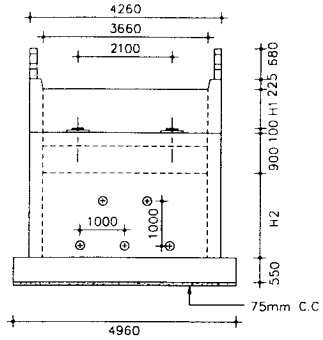
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210405	

Web Copy

SHEET 1 OF 5
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



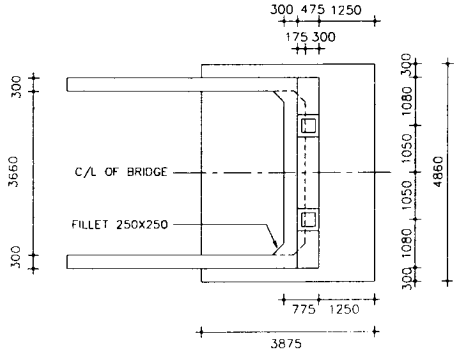
SIDE ELEVATION



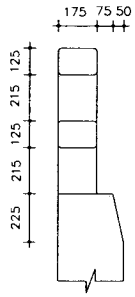
FRONT ELEVATION

TABLE

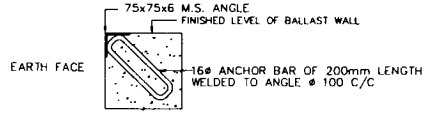
GIRDER SPAN	H1	H2
12000	1000	1750
11500	1000	1750
11000	1000	1750
10500	1000	1750
10000	1000	1750
9500	900	1850
9000	900	1850
8500	900	1850
8000	900	1850
7500	750	2000
7000	750	2000
6500	750	2000
6000	750	2000
5500	400	2350
5000	400	2350
4500	350	2400
4000	350	2400
3500	325	2425
3000	325	2425
2500	275	2475
2000	250	2500
1500	250	2500



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter material shall be provided as per specification.

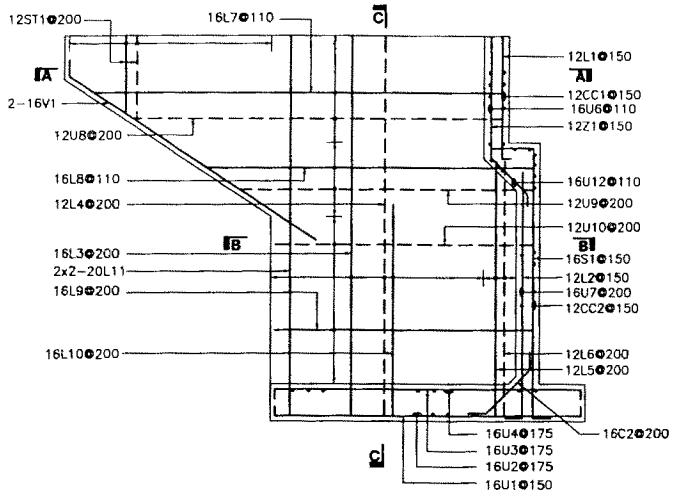
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.3m , DECK WIDTH 4.26m)

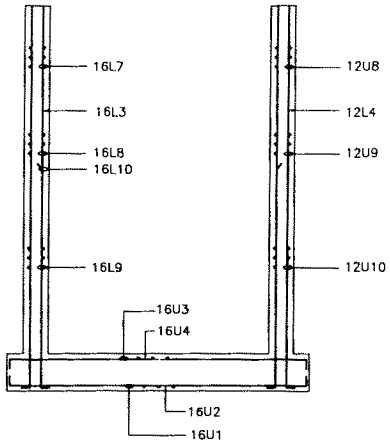
DATE :	ISSUED BY :
CAD FILE REF : ABUT\002104.31	

Web Copy

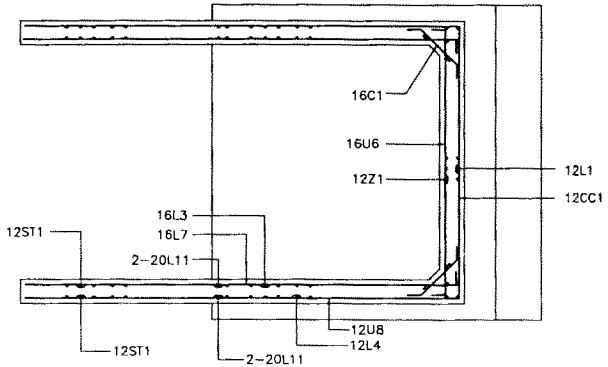
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



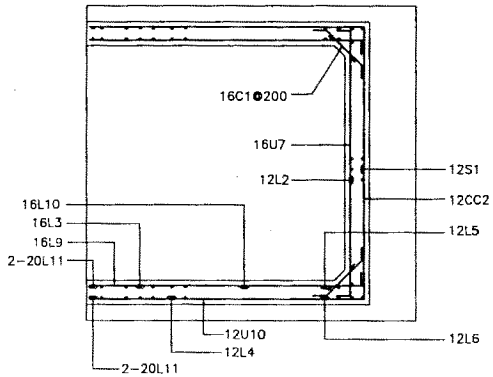
REINFORCEMENT DETAIL



SECTION C-C



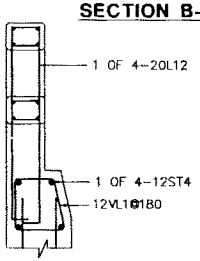
SECTION A-A



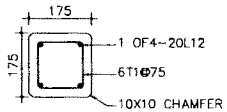
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

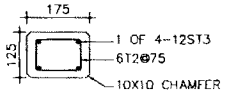
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1350	144			1494
12	L2	29	2550	144			2694
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2250 to 2850	144			Avg. 2694
12	L6	6	Var. 2250 to 2850	144			Avg. 2694
16	L7	22	Var. 4150 to 5050	192			Avg. 4833
16	L8	28	Var. 2525 to 4150	192			Avg. 3530
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	14	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	12	Var. 4150 to 5050	200	550		Avg. 5500
12	U9	16	Var. 2525 to 4150	200	550		Avg. 4496
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	3100	240		4015
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210432

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SHEET 3 OF 5

SPAN RANGE : 1.5m TO 12.0m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1250	144			1394
12	L2	29	2650	144			2794
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2350 to 2950	144			Avg. 2794
12	L6	6	Var. 2350 to 2950	144			Avg. 2794
16	L7	20	Var. 4300 to 5050	192			Avg. 4942
16	L8	30	Var. 2525 to 4300	192			Avg. 3605
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	13	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	12	Var. 4300 to 5050	200	550		Avg. 5550
12	U9	18	Var. 2525 to 4300	200	550		Avg. 4607
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	9	1200	400	4160		5760
12	CC2	21	1200	400	4160		5760
12	Z1	29	1250	866	144		2260
12	S1	29	675	3200	240		4115
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1100	144			1244
12	L2	29	2800	144			2944
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2500 to 3100	144			Avg. 2944
12	L6	6	Var. 2500 to 3100	144			Avg. 2944
16	L7	18	Var. 4525 to 5050	192			Avg. 5067
16	L8	32	Var. 2525 to 4525	192			Avg. 3717
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	11	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	10	Var. 4525 to 5050	200	550		Avg. 5695
12	U9	20	Var. 2525 to 4525	200	550		Avg. 4775
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	8	1200	400	4160		5760
12	CC2	22	1200	400	4160		5760
12	Z1	29	1100	866	144		2110
12	S1	29	675	3350	240		4265
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	750	144			894
12	L2	29	3150	144			3294
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2850 to 3450	144			Avg. 3294
12	L6	6	Var. 2850 to 3450	144			Avg. 3294
16	L7	10	Var. 5050 to 5050	192			Avg. 5242
16	L8	40	Var. 2525 to 5050	192			Avg. 3980
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	6	Var. 5050 to 5050	200	550		Avg. 5800
12	U9	22	Var. 2525 to 5050	200	550		Avg. 5169
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	6	1200	400	4160		5760
12	CC2	24	1200	400	4160		5760
12	Z1	29	750	866	144		1760
12	S1	29	675	3700	240		4615
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :

ISSUED BY :

CAD FILE REF : ABUT\00210433

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SHEET 4 OF 5
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	700	144			844
12	L2	29	3200	144			3344
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2900 to 3500	144			Avg. 3344
12	L6	6	Var. 2900 to 3500	144			Avg. 3344
16	L7	8	Var. 5125 to 5050	192			Avg. 5205
16	L8	40	Var. 2525 to 5125	192			Avg. 4017
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	4	Var. 5125 to 5050	200	550		Avg. 5725
12	U9	24	Var. 2525 to 5125	200	550		Avg. 5225
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	25	1200	400	4160		5760
12	Z1	29	700	866	144		1710
12	S1	29	675	3750	240		4665
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	675	144			819
12	L2	29	3225	144			3369
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2925 to 3525	144			Avg. 3369
12	L6	6	Var. 2925 to 3525	144			Avg. 3369
16	L7	8	Var. 5163 to 5050	192			Avg. 5186
16	L8	40	Var. 2525 to 5163	192			Avg. 4036
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	4	Var. 5163 to 5050	200	550		Avg. 5687
12	U9	24	Var. 2525 to 5163	200	550		Avg. 5254
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	25	1200	400	4160		5760
12	Z1	29	675	866	144		1685
12	S1	29	675	3775	240		4690
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Cleor cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY:
CAD FILE REF : ABUT\00210434	

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SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	625	144			769
12	L2	29	3275	144			3419
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2975 to 3575	144			Avg. 3419
12	L6	6	Var. 2975 to 3575	144			Avg. 3419
16	L7	6	Var. 5238 to 5050	192			Avg. 5054
16	L8	42	Var. 2525 to 5238	192			Avg. 4074
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	4	Var. 5238 to 5050	200	550		Avg. 5612
12	U9	24	Var. 2525 to 5238	200	550		Avg. 5310
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	25	1200	400	4160		5760
12	Z1	29	625	866	144		1635
12	S1	29	675	3825	240		4740
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	600	144			744
12	L2	29	3300	144			3444
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 3000 to 3600	144			Avg. 3444
12	L6	6	Var. 3000 to 3600	144			Avg. 3444
16	L7	6	Var. 5275 to 5050	192			Avg. 5017
16	L8	42	Var. 2525 to 5275	192			Avg. 4092
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
16	U1	34	192	3775	192		4159
16	U2	23	192	4860	192		5244
16	U3	29	192	3775	192		4159
16	U4	23	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	4	Var. 5275 to 5050	200	550		Avg. 5575
12	U9	24	Var. 2525 to 5275	200	550		Avg. 5338
12	U10	12	2525	200	550		3275
16	U12	10	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	25	1200	400	4160		5760
12	Z1	29	600	866	144		1610
12	S1	29	675	3850	240		4765
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail–20mm, b) Post–20mm, c) Curb–25mm, d) Wall–50mm, e) Base–50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

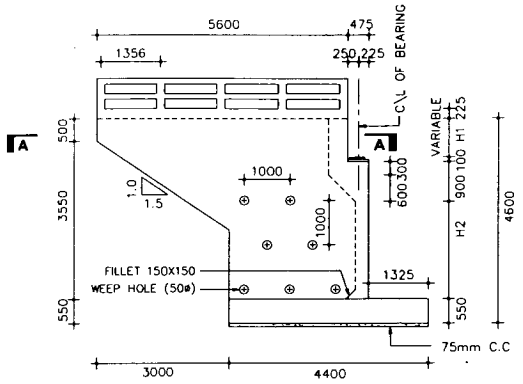
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210435	

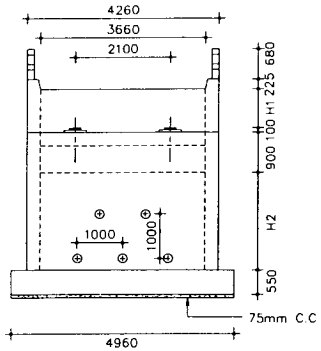
Web Copy

OA-66

SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO



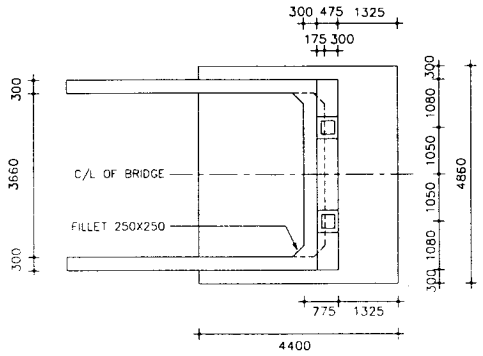
SIDE ELEVATION



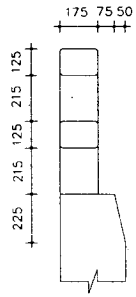
FRONT ELEVATION

TABLE-1

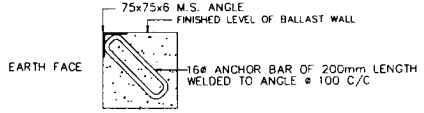
GIRDER SPAN	H1	H2
12000	1000	2050
11500	1000	2050
11000	1000	2050
10500	1000	2050
10000	1000	2050
9500	900	2150
9000	900	2150
8500	900	2150
8000	900	2150
7500	750	2300
7000	750	2300
6500	750	2300
6000	750	2300
5500	400	2650
5000	400	2650
4500	350	2700
4000	350	2700
3500	325	2725
3000	325	2725
2500	275	2775
2000	250	2800
1500	250	2800



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required
3) Bering capacity of soil should be ≥ **100** kN/m²
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

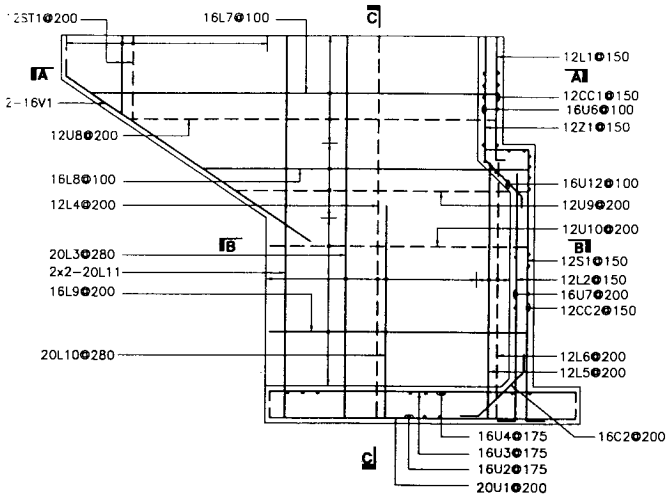
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.6m , DECK WIDTH 4.26m)

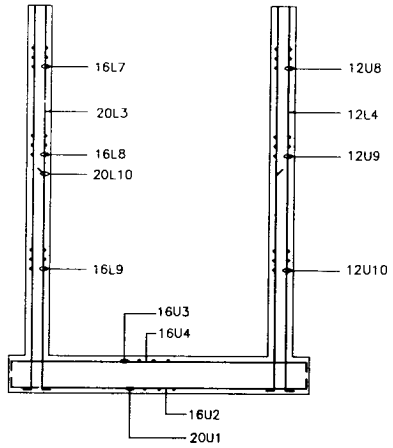
DATE	ISSUED BY :
CAD FILE REF : ABUT\00210461	

Web Copy

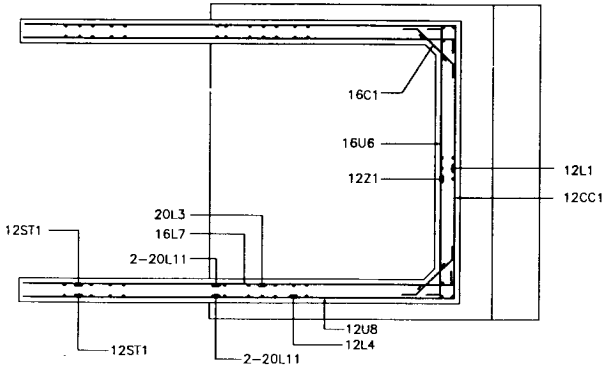
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO



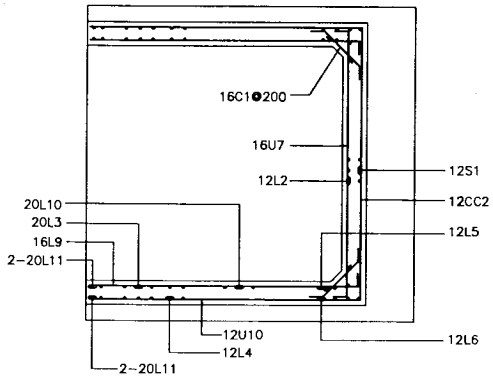
REINFORCEMENT DETAIL



SECTION C-C



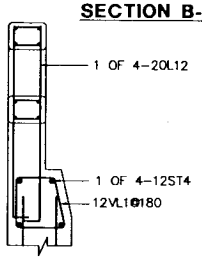
SECTION A-A



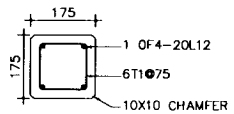
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

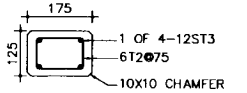
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1350	144			1494
12	L2	29	2850	144			2994
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5,	6	Var. 2550 to 3150	144			Avg. 2994
12	L6	6	Var. 2550 to 3150	144			Avg. 2994
16	L7	22	Var. 4600 to 5500	192			Avg. 5283
16	L8	30	Var. 2975 to 4600	192			Avg. 3980
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4880	192		5244
16	U5	15	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	12	Var. 4600 to 5500	200	550		Avg. 5950
12	U9	16	Var. 2975 to 4600	200	550		Avg. 4944
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	22	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	3400	240		4315
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210462	

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SHEET 3 OF 5
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1250	144			1394
12	L2	29	2950	144			3094
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2650 to 3250	144			Avg. 3094
12	L6	6	Var. 2650 to 3250	144			Avg. 3094
16	L7	20	Var. 4750 to 5500	192			Avg. 5392
16	L8	32	Var. 2975 to 4750	192			Avg. 4055
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U6	14	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	12	Var. 4750 to 5500	200	550		Avg. 6000
12	U9	18	Var. 2975 to 4750	200	550		Avg. 5057
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	9	1200	400	4160		5760
12	CC2	23	1200	400	4160		5760
12	Z1	29	1250	866	144		2260
12	S1	29	675	3500	240		4415
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1100	144			1244
12	L2	29	3100	144			3244
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2800 to 3400	144			Avg. 3244
12	L6	6	Var. 2800 to 3400	144			Avg. 3244
16	L7	18	Var. 4975 to 5500	192			Avg. 5517
16	L8	36	Var. 2975 to 4975	192			Avg. 4167
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U6	12	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	10	Var. 4975 to 5500	200	550		Avg. 6145
12	U9	20	Var. 2975 to 4975	200	550		Avg. 5225
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	8	1200	400	4160		5760
12	CC2	24	1200	400	4160		5760
12	Z1	29	1100	866	144		2110
12	S1	29	675	3650	240		4565
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	750	144			894
12	L2	29	3450	144			3594
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3150 to 3750	144			Avg. 3594
12	L6	6	Var. 3150 to 3750	144			Avg. 3594
16	L7	10	Var. 5500 to 5500	192			Avg. 5692
16	L8	42	Var. 2975 to 5500	192			Avg. 4430
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	6	Var. 5500 to 5500	200	550		Avg. 6250
12	U9	22	Var. 2975 to 5500	200	550		Avg. 5619
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	6	1200	400	4160		5760
12	CC2	26	1200	400	4160		5760
12	Z1	29	750	866	144		1760
12	S1	29	675	4000	240		4915
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\0021046.5	

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SHEET 4 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	700	144			844
12	L2	29	3500	144			3644
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	8	Var. 5575 to 5500	192			Avg. 5655
16	L8	44	Var. 2975 to 5575	192			Avg. 4467
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U5	8	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	4	Var. 5575 to 5500	200	550		Avg. 6175
12	U9	24	Var. 2975 to 5575	200	550		Avg. 5675
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	27	1200	400	4160		5760
12	Z1	29	700	866	144		1710
12	S1	29	675	4050	240		4965
16	C1	44	320	922	320		1582
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	308	308			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	675	144			819
12	L2	29	3525	144			3669
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3225 to 3825	144			Avg. 3669
12	L6	6	Var. 3225 to 3825	144			Avg. 3669
16	L7	8	Var. 5613 to 5500	192			Avg. 5636
16	L8	44	Var. 2975 to 5613	192			Avg. 4486
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U5	8	192	4112	192		4496
16	U7	16	192	4112	192		4496
12	U8	4	Var. 5613 to 5500	200	550		Avg. 6137
12	U9	24	Var. 2975 to 5613	200	550		Avg. 5704
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	27	1200	400	4160		5760
12	Z1	29	675	866	144		1685
12	S1	29	675	4075	240		4990
16	C1	44	320	922	320		1582
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	308	308			612
6	T2	272	206	308			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m & DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210464	

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SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	625	144			769
12	L2	29	3575	144			3719
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3275 to 3875	144			Avg. 3719
12	L6	6	Var. 3275 to 3875	144			Avg. 3719
16	L7	6	Var. 5688 to 5500	192			Avg. 5504
16	L8	46	Var. 2975 to 5688	192			Avg. 4524
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	16	192	4112	192		4496
12	U8	4	Var. 5688 to 5500	200	550		Avg. 6062
12	U9	24	Var. 2975 to 5688	200	550		Avg. 5760
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	27	1200	400	4160		5760
12	Z1	29	625	866	144		1635
12	S1	29	675	4125	240		5040
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	600	144			744
12	L2	29	3600	144			3744
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 3300 to 3900	144			Avg. 3744
12	L6	6	Var. 3300 to 3900	144			Avg. 3744
16	L7	6	Var. 5725 to 5500	192			Avg. 5467
16	L8	46	Var. 2975 to 5725	192			Avg. 4542
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4300	240		4780
16	U2	26	192	4860	192		5244
16	U3	29	192	4300	192		4684
16	U4	26	192	4860	192		5244
16	U6	7	192	4112	192		4496
16	U7	16	192	4112	192		4496
12	U8	4	Var. 5725 to 5500	200	550		Avg. 6025
12	U9	24	Var. 2975 to 5725	200	550		Avg. 5788
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	5	1200	400	4160		5760
12	CC2	27	1200	400	4160		5760
12	Z1	29	600	866	144		1610
12	S1	29	675	4150	240		5065
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

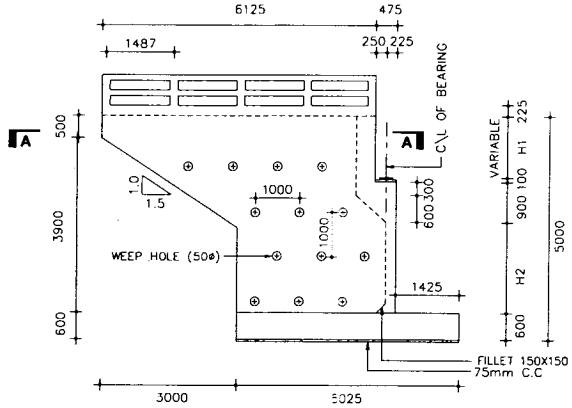
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 4.26m)

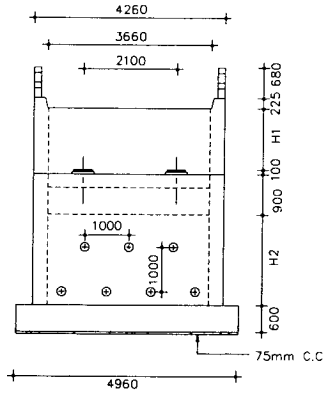
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210465	

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SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



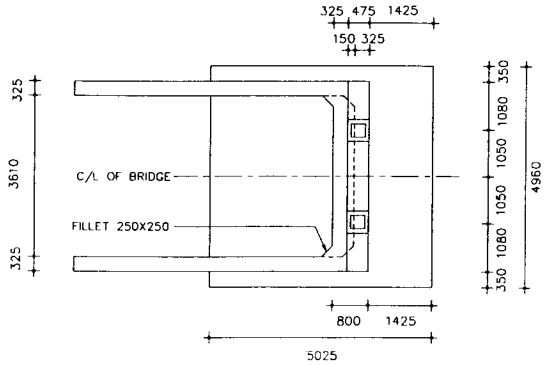
SIDE ELEVATION



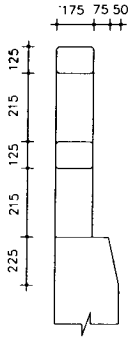
FRONT ELEVATION

TABLE-1

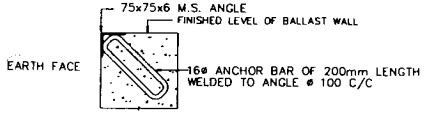
GIRDER SPAN	H1	H2
12000	1000	2400
11500	1000	2400
11000	1000	2400
10500	1000	2400
10000	1000	2400
9500	900	2500
9000	900	2500
8500	900	2500
8000	900	2500
7500	750	2650
7000	750	2650
6500	750	2650
6000	750	2650
5500	400	3000
5000	400	3000
4500	350	3050
4000	350	3050
3500	325	3075
3000	325	3075
2500	275	3125
2000	250	3150
1500	250	3150



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

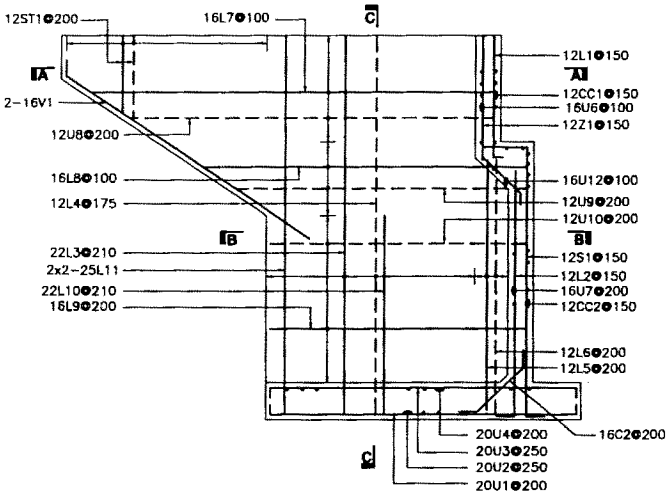
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ⩾ **100** kN/m²
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metorial shall be provided as per specification.

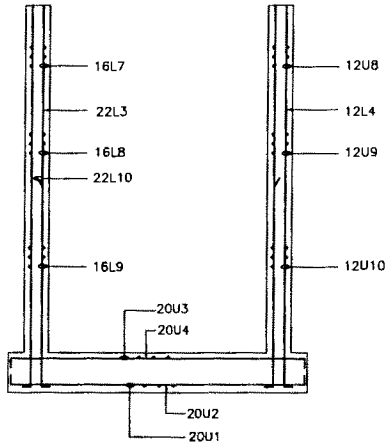
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 5.0m , DECK WIDTH 4.26m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\00210501

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SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



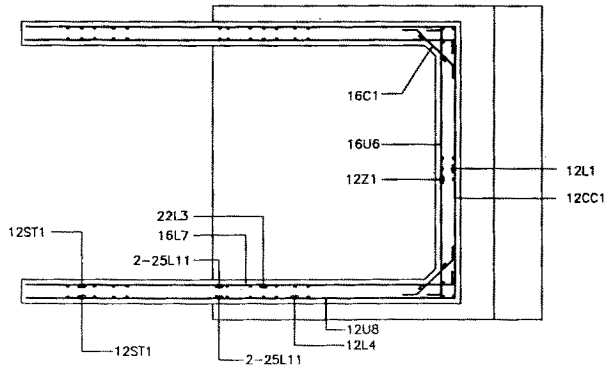
REINFORCEMENT DETAIL



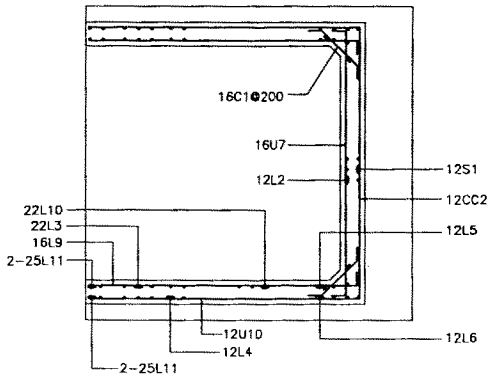
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

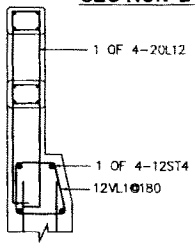
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1350	144			1494
12	L2	29	3250	144			3394
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	22	Var. 5125 to 6025	192			Avg. 5808
16	L8	30	Var. 3500 to 5125	192			Avg. 4505
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	15	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	12	Var. 5125 to 6025	225	575		Avg. 6525
12	U9	16	Var. 3500 to 5125	225	575		Avg. 5519
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	10	1250	450	4160		5860
12	CC2	25	1250	450	4160		5860
12	Z1	29	1350	866	144		2360
12	S1	29	700	3800	240		4740
16	C1	46	320	993	320		1683
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000



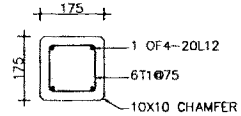
SECTION A-A



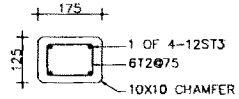
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0210502	

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SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1250	144			1394
12	L2	29	3350	144			3494
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3050 to 3650	144			Avg. 3494
12	L6	6	Var. 3050 to 3650	144			Avg. 3494
16	L7	20	Var. 5275 to 6025	192			Avg. 5917
16	L8	32	Var. 3500 to 5275	192			Avg. 4580
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	14	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	12	Var. 5275 to 6025	225	575		Avg. 6575
12	U9	18	Var. 3500 to 5275	225	575		Avg. 5632
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	9	1250	450	4160		5860
12	CC2	25	1250	450	4160		5860
12	Z1	29	1250	866	144		2260
12	S1	29	700	3900	240		4840
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1100	144			1244
12	L2	29	3500	144			3644
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	18	Var. 5500 to 6025	192			Avg. 6042
16	L8	36	Var. 3500 to 5500	192			Avg. 4692
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	12	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	10	Var. 5500 to 6025	225	575		Avg. 6720
12	U9	20	Var. 3500 to 5500	225	575		Avg. 5800
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	8	1250	450	4160		5860
12	CC2	26	1250	450	4160		5860
12	Z1	29	1100	866	144		2110
12	S1	29	700	4050	240		4990
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	750	144			894
12	L2	29	3850	144			3994
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3550 to 4150	144			Avg. 3994
12	L6	6	Var. 3550 to 4150	144			Avg. 3994
16	L7	10	Var. 6025 to 6025	192			Avg. 6217
16	L8	42	Var. 3500 to 6025	192			Avg. 4955
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	9	192	4112	192		4496
16	U7	17	192	4112	192		4496
12	U8	6	Var. 6025 to 6025	225	575		Avg. 6825
12	U9	22	Var. 3500 to 6025	225	575		Avg. 6194
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	6	1250	450	4160		5860
12	CC2	29	1250	450	4160		5860
12	Z1	29	750	866	144		1760
12	S1	29	700	4400	240		5340
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210503	

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BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	700	144			844
12	L2	29	3900	144			4044
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	8	Var. 6100 to 6025	192			Avg. 6180
16	L8	44	Var. 3500 to 6100	192			Avg. 4992
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	17	192	4112	192		4496
12	U8	4	Var. 6100 to 6025	225	575		Avg. 6750
12	U9	24	Var. 3500 to 6100	225	575		Avg. 6250
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	5	1250	450	4160		5860
12	CC2	29	1250	450	4160		5860
12	Z1	29	700	866	144		1710
12	S1	29	700	4450	240		5390
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	675	144			819
12	L2	29	3925	144			4089
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3625 to 4225	144			Avg. 4089
12	L6	6	Var. 3625 to 4225	144			Avg. 4089
16	L7	8	Var. 6138 to 6025	192			Avg. 6161
16	L8	44	Var. 3500 to 6138	192			Avg. 5011
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	17	192	4112	192		4496
12	U8	4	Var. 6138 to 6025	225	575		Avg. 6712
12	U9	24	Var. 3500 to 6138	225	575		Avg. 6279
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	5	1250	450	4160		5860
12	CC2	29	1250	450	4160		5860
12	Z1	29	675	866	144		1685
12	S1	29	700	4475	240		5415
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/a0210504

Web Copy

SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	625	144			769
12	L2	29	3975	144			4119
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3675 to 4275	144			Avg. 4119
12	L6	6	Var. 3675 to 4275	144			Avg. 4119
16	L7	6	Var. 6213 to 6025	192			Avg. 6029
16	L8	46	Var. 3500 to 6213	192			Avg. 5049
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	18	192	4112	192		4496
12	U8	4	Var. 6213 to 6025	225	575		Avg. 6637
12	U9	24	Var. 3500 to 6213	225	575		Avg. 6335
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	5	1250	450	4160		5860
12	CC2	29	1250	450	4160		5860
12	Z1	29	625	866	144		1635
12	S1	29	700	4525	240		5465
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	600	144			744
12	L2	29	4000	144			4144
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3700 to 4300	144			Avg. 4144
12	L6	6	Var. 3700 to 4300	144			Avg. 4144
16	L7	6	Var. 6250 to 6025	192			Avg. 5992
16	L8	46	Var. 3500 to 6250	192			Avg. 5067
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	4925	240		5405
20	U2	21	240	4860	240		5340
20	U3	21	240	4925	240		5405
20	U4	26	240	4860	240		5340
16	U6	7	192	4112	192		4496
16	U7	18	192	4112	192		4496
12	U8	4	Var. 6250 to 6025	225	575		Avg. 6600
12	U9	24	Var. 3500 to 6250	225	575		Avg. 6363
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	5	1250	450	4160		5860
12	CC2	30	1250	450	4160		5860
12	Z1	29	600	866	144		1610
12	S1	29	700	4550	240		5490
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

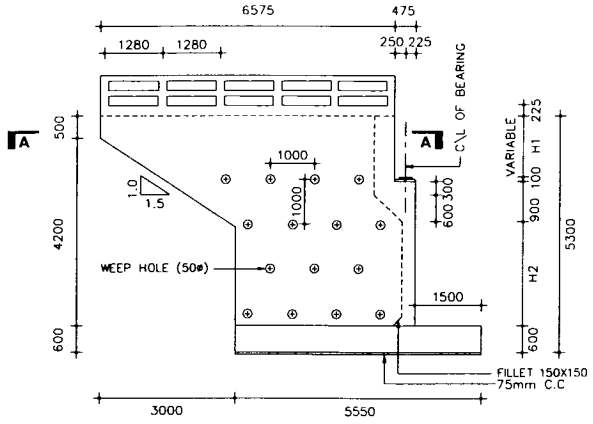
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0210505	

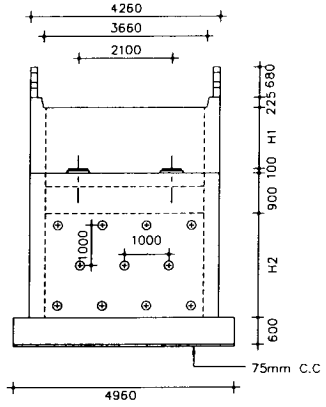
Web Copy

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SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



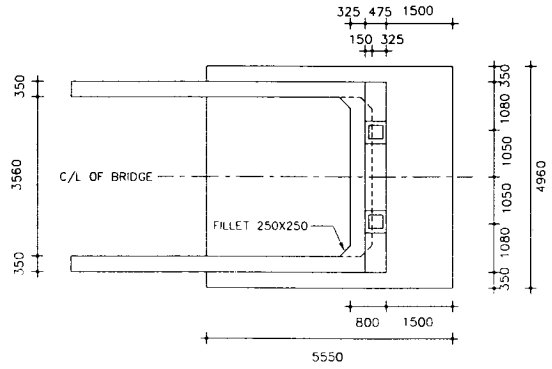
SIDE ELEVATION



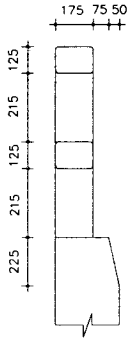
FRONT ELEVATION

TABLE-1

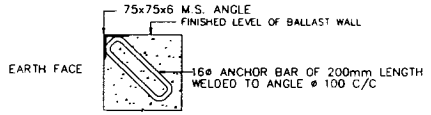
GIRDER SPAN	H1	H2
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11500	1000	2700
11000	1000	2700
10500	1000	2700
10000	1000	2700
9500	900	2800
9000	900	2800
8500	900	2800
8000	900	2800
7500	750	2950
7000	750	2950
6500	750	2950
6000	750	2950
5500	400	3300
5000	400	3300
4500	350	3350
4000	350	3350
3500	325	3375
3000	325	3375
2500	275	3425
2000	250	3450
1500	250	3450



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **100** kN/m^2
4) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metorial shall be provided as per specification.

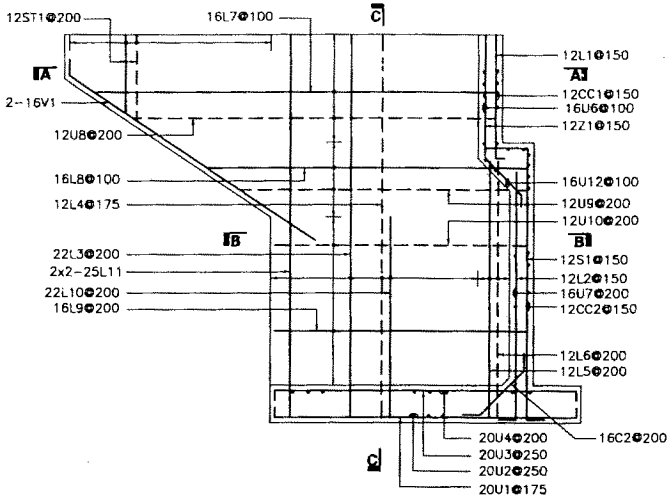
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.3m , DECK WIDTH 4.26m)

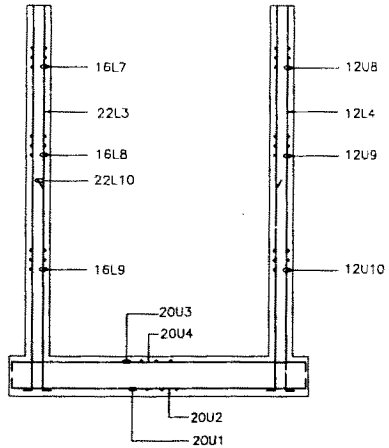
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210531	

Web Copy

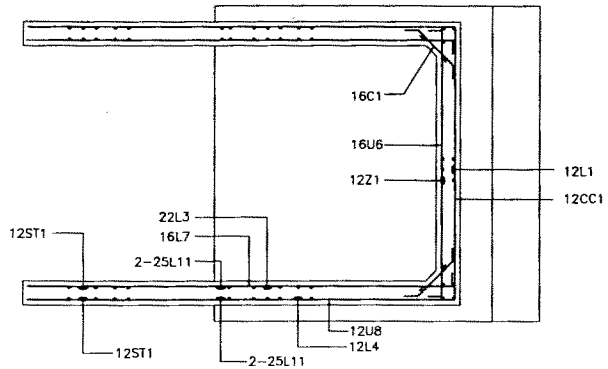
SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



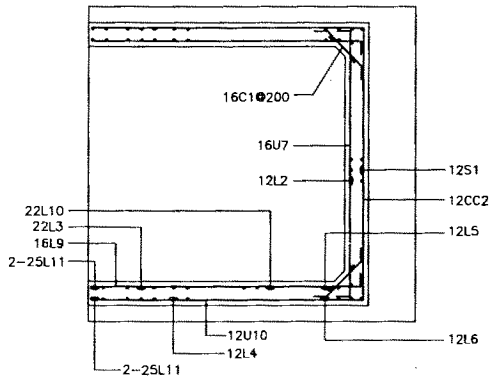
REINFORCEMENT DETAIL



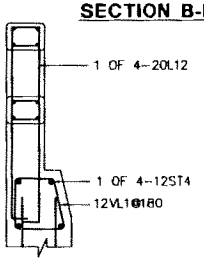
SECTION C-C



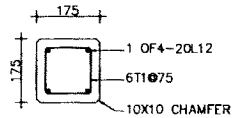
SECTION A-A



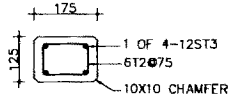
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1350	144			1494
12	L2	29	3550	144			3694
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3250 to 3850	144			Avg. 3694
12	L6	6	Var. 3250 to 3850	144			Avg. 3694
16	L7	22	Var. 5575 to 6475	192			Avg. 6258
16	L8	30	Var. 3950 to 5575	192			Avg. 4955
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U5	15	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	12	Var. 5575 to 6475	250	575		Avg. 7000
12	U9	16	Var. 3950 to 5575	250	575		Avg. 5994
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	10	1300	450	4160		5910
12	CC2	27	1300	450	4160		5910
12	Z1	29	1350	866	144		2360
12	S1	29	700	4100	240		5040
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	WL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/a0210532

Web Copy

SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1250	144			1394
12	L2	29	3650	144			3794
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3350 to 3950	144			Avg. 3794
12	L6	6	Var. 3350 to 3950	144			Avg. 3794
16	L7	20	Var. 5725 to 6475	192			Avg. 6367
16	L8	32	Var. 3950 to 5725	192			Avg. 5030
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	14	192	4112	192		4496
16	U7	16	192	4112	192		4496
12	U8	12	Var. 5725 to 6475	250	575		Avg. 7050
12	U9	18	Var. 3950 to 5725	250	575		Avg. 6107
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	9	1300	450	4160		5910
12	CC2	27	1300	450	4160		5910
12	Z1	29	1250	866	144		2260
12	S1	29	700	4200	240		5140
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1100	144			1244
12	L2	29	3800	144			3944
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3500 to 4100	144			Avg. 3944
12	L6	6	Var. 3500 to 4100	144			Avg. 3944
16	L7	18	Var. 5950 to 6475	192			Avg. 6492
16	L8	36	Var. 3950 to 5950	192			Avg. 5142
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	12	192	4112	192		4496
16	U7	17	192	4112	192		4496
12	U8	10	Var. 5950 to 6475	250	575		Avg. 7195
12	U9	20	Var. 3950 to 5950	250	575		Avg. 6275
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	8	1300	450	4160		5910
12	CC2	28	1300	450	4160		5910
12	Z1	29	1100	866	144		2110
12	S1	29	700	4350	240		5290
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	750	144			894
12	L2	29	4150	144			4294
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3850 to 4450	144			Avg. 4294
12	L6	6	Var. 3850 to 4450	144			Avg. 4294
16	L7	10	Var. 6475 to 6475	192			Avg. 6667
16	L8	42	Var. 3950 to 6475	192			Avg. 5405
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	9	192	4112	192		4496
16	U7	18	192	4112	192		4496
12	U8	6	Var. 6475 to 6475	250	575		Avg. 7300
12	U9	22	Var. 3950 to 6475	250	575		Avg. 6669
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	6	1300	450	4160		5910
12	CC2	31	1300	450	4160		5910
12	Z1	29	750	866	144		1760
12	S1	29	700	4700	240		5640
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210533	

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SHEET 4 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	700	144			844
12	L2	29	4200	144			4344
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3900 to 4500	144			Avg. 4344
12	L6	6	Var. 3900 to 4500	144			Avg. 4344
16	L7	8	Var. 6550 to 6475	192			Avg. 6630
16	L8	44	Var. 3950 to 6550	192			Avg. 5442
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	19	192	4112	192		4496
12	U8	4	Var. 6550 to 6475	250	575		Avg. 7225
12	U9	24	Var. 3950 to 6550	250	575		Avg. 6725
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	5	1300	450	4160		5910
12	CC2	31	1300	450	4160		5910
12	Z1	29	700	866	144		1710
12	S1	29	700	4750	240		5690
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	675	144			819
12	L2	29	4225	144			4369
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3925 to 4525	144			Avg. 4369
12	L6	6	Var. 3925 to 4525	144			Avg. 4369
16	L7	8	Var. 6588 to 6475	192			Avg. 6611
16	L8	44	Var. 3950 to 6588	192			Avg. 5461
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	19	192	4112	192		4496
12	U8	4	Var. 6588 to 6475	250	575		Avg. 7187
12	U9	24	Var. 3950 to 6588	250	575		Avg. 6754
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	5	1300	450	4160		5910
12	CC2	31	1300	450	4160		5910
12	Z1	29	675	866	144		1685
12	S1	29	700	4775	240		5715
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210534	

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SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	625	144			769
12	L2	29	4275	144			4419
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3975 to 4575	144			Avg. 4419
12	L6	6	Var. 3975 to 4575	144			Avg. 4419
16	L7	6	Var. 6663 to 6475	192			Avg. 6479
16	L8	46	Var. 3950 to 6663	192			Avg. 5499
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	8	192	4112	192		4496
16	U7	19	192	4112	192		4496
12	U8	4	Var. 6663 to 6475	250	575		Avg. 7112
12	U9	24	Var. 3950 to 6663	250	575		Avg. 6810
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	5	1300	450	4160		5910
12	CC2	31	1300	450	4160		5910
12	Z1	29	625	866	144		1635
12	S1	29	700	4825	240		5765
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	600	144			744
12	L2	29	4300	144			4444
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 4000 to 4600	144			Avg. 4444
12	L6	6	Var. 4000 to 4600	144			Avg. 4444
16	L7	6	Var. 6700 to 6475	192			Avg. 6442
16	L8	46	Var. 3950 to 6700	192			Avg. 5517
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	29	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	7	192	4112	192		4496
16	U7	19	192	4112	192		4496
12	U8	4	Var. 6700 to 6475	250	575		Avg. 7075
12	U9	24	Var. 3950 to 6700	250	575		Avg. 6838
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	5	1300	450	4160		5910
12	CC2	32	1300	450	4160		5910
12	Z1	29	600	866	144		1610
12	S1	29	700	4850	240		5790
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

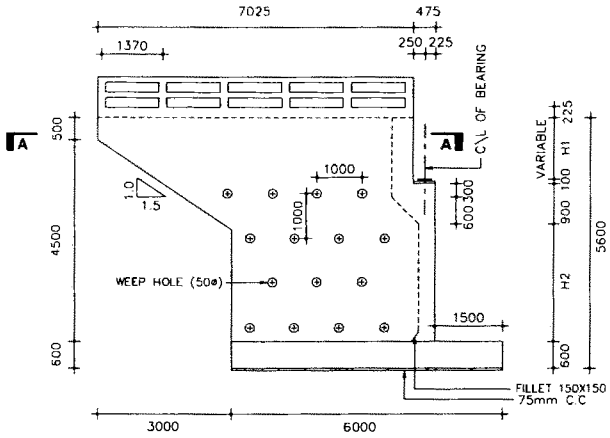
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

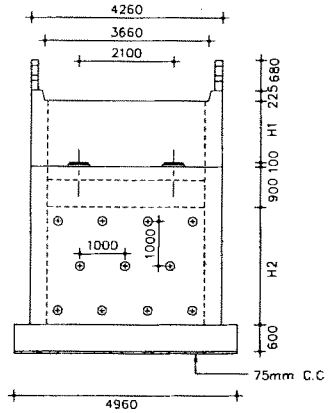
DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210535	

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SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



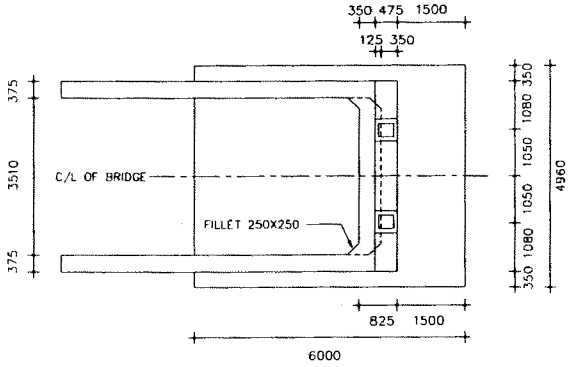
SIDE ELEVATION



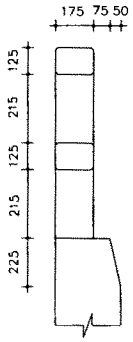
FRONT ELEVATION

TABLE-1

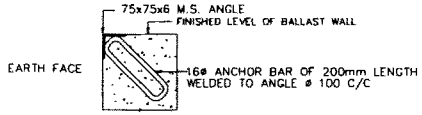
GIRDER SPAN	H1	H2
12000	1000	3000
11500	1000	3000
11000	1000	3000
10500	1000	3000
10000	1000	3000
9500	900	3100
9000	900	3100
8500	900	3100
8000	900	3100
7500	750	3250
7000	750	3250
6500	750	3250
6000	750	3250
5500	400	3600
5000	400	3600
4500	350	3650
4000	350	3650
3500	325	3675
3000	325	3675
2500	275	3725
2000	250	3750
1500	250	3750



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **104** kN/m²
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

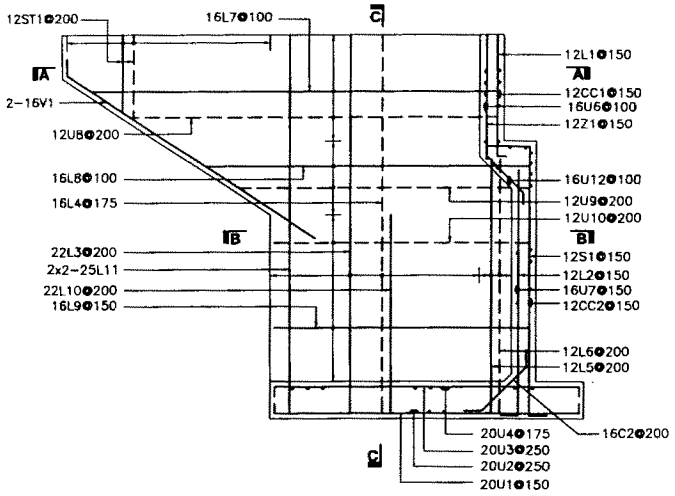
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210561	

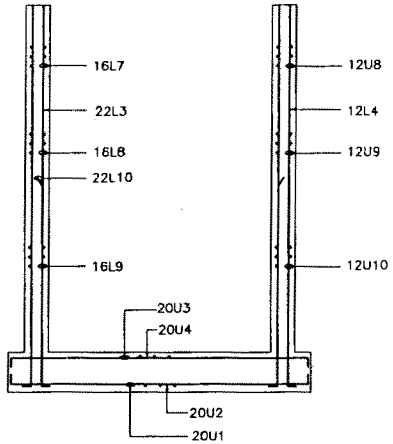
Web Copy

OA-B2

SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO



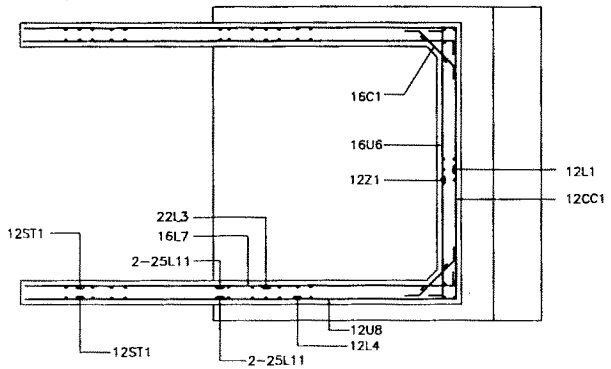
REINFORCEMENT DETAIL



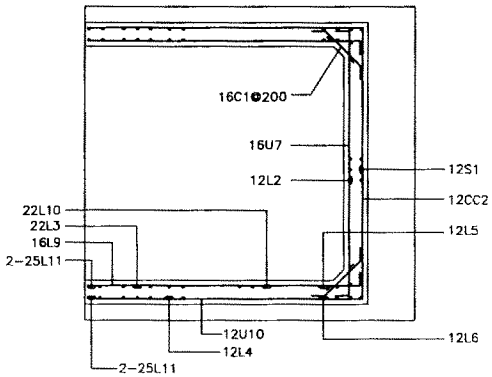
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

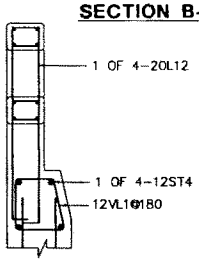
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1350	144			1494
12	L2	29	3850	144			3994
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3550 to 4150	144			Avg. 3994
12	L6	6	Var. 3550 to 4150	144			Avg. 3994
16	L7	22	Var. 6025 to 6925	192			Avg. 6708
16	L8	30	Var. 4400 to 6025	192			Avg. 5405
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	15	192	4104	192		4488
16	U7	22	192	4112	192		4496
12	U8	12	Var. 6025 to 6925	275	600		Avg. 7500
12	U9	16	Var. 4400 to 6025	275	600		Avg. 6494
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	10	1350	500	4160		6010
12	CC2	29	1350	500	4160		6010
12	Z1	29	1350	866	144		2360
12	S1	29	725	4400	240		5365
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000



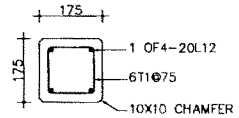
SECTION A-A



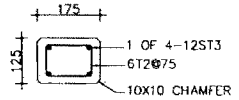
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210562	

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SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1250	144			1394
12	L2	29	3950	144			4094
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3650 to 4250	144			Avg. 4094
12	L6	6	Var. 3650 to 4250	144			Avg. 4094
16	L7	20	Var. 6175 to 6925	192			Avg. 6817
16	L8	32	Var. 4400 to 6175	192			Avg. 5480
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	14	192	4104	192		4488
16	U7	23	192	4112	192		4496
12	U8	12	Var. 6175 to 6925	275	600		Avg. 7550
12	U9	18	Var. 4400 to 6175	275	600		Avg. 6607
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	9	1350	500	4160		6010
12	CC2	29	1350	500	4160		6010
12	Z1	29	1250	866	144		2260
12	S1	29	725	4500	240		5465
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1100	144			1244
12	L2	29	4100	144			4244
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3800 to 4400	144			Avg. 4244
12	L6	6	Var. 3800 to 4400	144			Avg. 4244
16	L7	18	Var. 6400 to 6925	192			Avg. 6942
16	L8	36	Var. 4400 to 6400	192			Avg. 5592
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	12	192	4104	192		4488
16	U7	24	192	4112	192		4496
12	U8	10	Var. 6400 to 6925	275	600		Avg. 7695
12	U9	20	Var. 4400 to 6400	275	600		Avg. 6775
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	8	1350	500	4160		6010
12	CC2	30	1350	500	4160		6010
12	Z1	29	1100	866	144		2110
12	S1	29	725	4650	240		5615
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	750	144			894
12	L2	29	4450	144			4594
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4150 to 4750	144			Avg. 4594
12	L6	6	Var. 4150 to 4750	144			Avg. 4594
16	L7	10	Var. 6925 to 6925	192			Avg. 7117
16	L8	42	Var. 4400 to 6925	192			Avg. 5855
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	9	192	4104	192		4488
16	U7	26	192	4112	192		4496
12	U8	6	Var. 6925 to 6925	275	600		Avg. 7800
12	U9	22	Var. 4400 to 6925	275	600		Avg. 7169
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	6	1350	500	4160		6010
12	CC2	33	1350	500	4160		6010
12	Z1	29	750	866	144		1760
12	S1	29	725	5000	240		5965
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0210563	

Web Copy

OA-84

SHEET 4 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	700	144			844
12	L2	29	4500	144			4644
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4200 to 4800	144			Avg. 4644
12	L6	6	Var. 4200 to 4800	144			Avg. 4644
16	L7	8	Var. 7000 to 6925	192			Avg. 7080
16	L8	44	Var. 4400 to 7000	192			Avg. 5892
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	8	192	4104	192		4488
16	U7	27	192	4112	192		4496
12	U8	4	Var. 7000 to 6925	275	600		Avg. 7725
12	U9	24	Var. 4400 to 7000	275	600		Avg. 7225
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	5	1350	500	4160		6010
12	CC2	33	1350	500	4160		6010
12	Z1	29	700	866	144		1710
12	S1	29	725	5050	240		6015
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	675	144			819
12	L2	29	4525	144			4669
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4225 to 4825	144			Avg. 4669
12	L6	6	Var. 4225 to 4825	144			Avg. 4669
16	L7	8	Var. 7038 to 6925	192			Avg. 7061
16	L8	44	Var. 4400 to 7038	192			Avg. 5911
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	8	192	4104	192		4488
16	U7	27	192	4112	192		4496
12	U8	4	Var. 7038 to 6925	275	600		Avg. 7687
12	U9	24	Var. 4400 to 7038	275	600		Avg. 7254
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	5	1350	500	4160		6010
12	CC2	33	1350	500	4160		6010
12	Z1	29	675	866	144		1685
12	S1	29	725	5075	240		6040
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0210564	

Web Copy

SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 275)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	625	144			769
12	L2	29	4575	144			4719
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4275 to 4875	144			Avg. 4719
12	L6	6	Var. 4275 to 4875	144			Avg. 4719
16	L7	6	Var. 7113 to 6925	192			Avg. 6929
16	L8	46	Var. 4400 to 7113	192			Avg. 5949
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	8	192	4104	192		4488
16	U7	27	192	4112	192		4496
12	U8	4	Var. 7113 to 6925	275	600		Avg. 7612
12	U9	24	Var. 4400 to 7113	275	600		Avg. 7310
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	5	1350	500	4160		6010
12	CC2	33	1350	500	4160		6010
12	Z1	29	625	866	144		1635
12	S1	29	725	5125	240		6090
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 250)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	600	144			744
12	L2	29	4600	144			4744
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 4300 to 4900	144			Avg. 4744
12	L6	6	Var. 4300 to 4900	144			Avg. 4744
16	L7	6	Var. 7150 to 6925	192			Avg. 6892
16	L8	46	Var. 4400 to 7150	192			Avg. 5967
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	34	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	7	192	4104	192		4488
16	U7	27	192	4112	192		4496
12	U8	4	Var. 7150 to 6925	275	600		Avg. 7575
12	U9	24	Var. 4400 to 7150	275	600		Avg. 7338
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	5	1350	500	4160		6010
12	CC2	34	1350	500	4160		6010
12	Z1	29	600	866	144		1610
12	S1	29	725	5150	240		6115
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

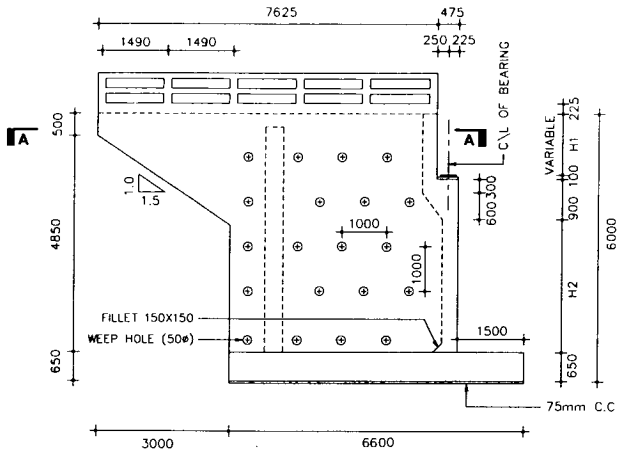
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/a0210565	

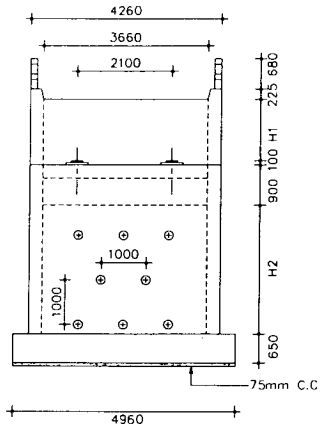
Web Copy

OA-86

SHEET 1 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK : NO



SIDE ELEVATION



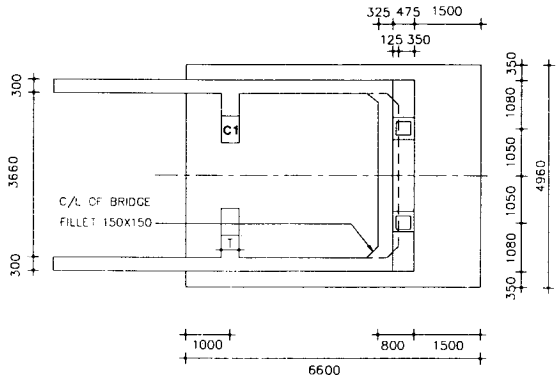
FRONT ELEVATION

TABLE-1

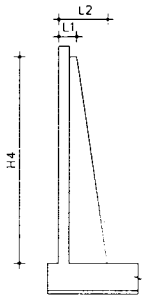
GIRDER SPAN	H1	H2
12000	1000	3350
11500	1000	3350
11000	1000	3350
10500	1000	3350
10000	1000	3350
9500	900	3450
9000	900	3450
8500	900	3450
8000	900	3450
7500	750	3600
7000	750	3600
6500	750	3600
6000	750	3600
5500	400	3950
5000	400	3950
4500	350	4050
4000	350	4000
3500	325	4025
3000	325	4025
2500	275	4075
2000	250	4100
1500	250	4100

TABLE-2

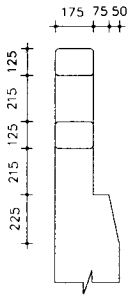
L1	L2	H4	T
700	1400	5050	400



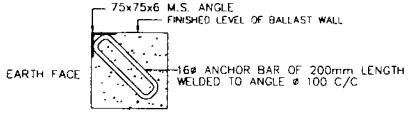
SECTION A-A



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) For Slab Culverts, the Slab will rest right on the Abutment Cap, hence Bearing Pad will not be required.
3) Bering capacity of soil should be ≥ **114** kN/m²
4) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

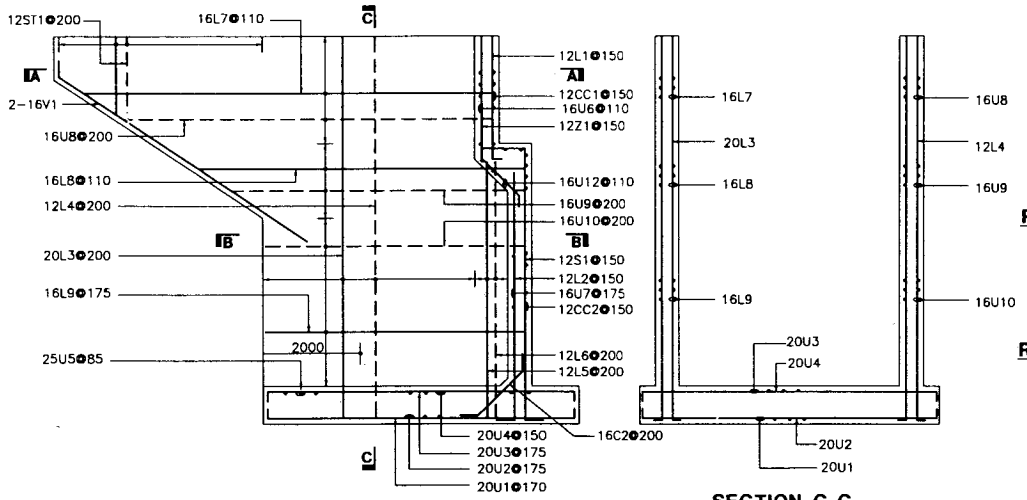
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 6.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00210601	

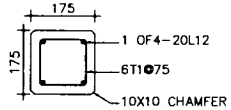
Web Copy

SHEET 2 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK: NO

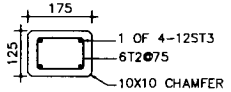


REINFORCEMENT DETAIL

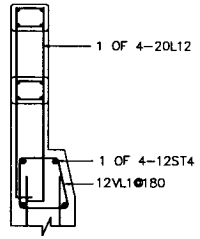
SECTION C-C



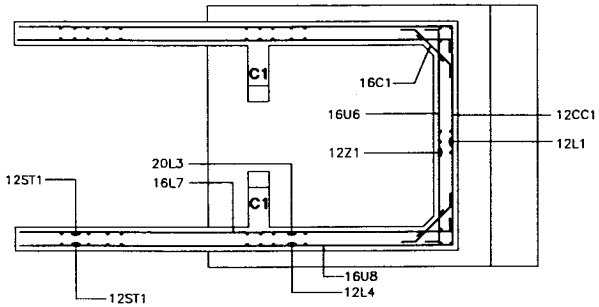
REINF. DETAIL OF POST



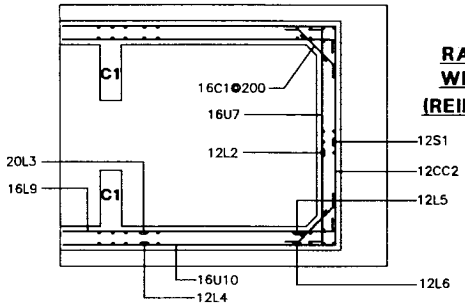
REINF. DETAIL OF RAILING



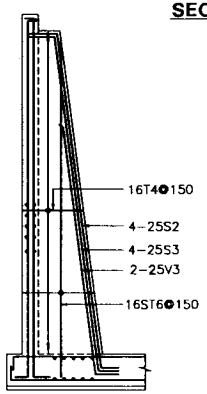
RAILING ON WING WALL (REINF. DETAIL)



SECTION A-A



SECTION B-B



REINFORCEMENT DETAIL OF COUNTERFORT C1

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1350	144			1494
12	L2	29	4250	144			4394
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	22	Var. 6625 to 7525	192			Avg. 7308
16	L8	28	Var. 5000 to 6625	192			Avg. 6005
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	14	192	4104	192		4488
16	U7	21	192	4104	192		4488
16	U8	12	Var. 6625 to 7525	200	575		Avg. 8000
16	U9	16	Var. 5000 to 6625	200	600		Avg. 7019
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	10	1200	450	4160		5810
12	CC2	31	1200	500	4160		5860
12	Z1	29	1350	850	144		2344
12	S1	29	700	4800	240		5740
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drowing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210602

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SHEET 3 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1250	144			1394
12	L2	29	4350	144			4494
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4050 to 4650	144			Avg. 4494
12	L6	6	Var. 4050 to 4650	144			Avg. 4494
16	L7	20	Var. 6775 to 7525	192			Avg. 7417
16	L8	30	Var. 5000 to 6775	192			Avg. 6080
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	13	192	4104	192		4488
16	U7	22	192	4104	192		4488
16	U8	12	Var. 6775 to 7525	200	575		Avg. 8050
16	U9	18	Var. 5000 to 6775	200	600		Avg. 7132
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	9	1200	450	4160		5810
12	CC2	32	1200	500	4160		5860
12	Z1	29	1250	850	144		2244
12	S1	29	700	4900	240		5840
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1100	144			1244
12	L2	29	4500	144			4644
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4200 to 4800	144			Avg. 4644
12	L6	6	Var. 4200 to 4800	144			Avg. 4644
16	L7	18	Var. 7000 to 7525	192			Avg. 7542
16	L8	32	Var. 5000 to 7000	192			Avg. 6192
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	11	192	4104	192		4488
16	U7	23	192	4104	192		4488
16	U8	10	Var. 7000 to 7525	200	575		Avg. 8195
16	U9	20	Var. 5000 to 7000	200	600		Avg. 7300
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	8	1200	450	4160		5810
12	CC2	33	1200	500	4160		5860
12	Z1	29	1100	850	144		2094
12	S1	29	700	5050	240		5990
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =400)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	750	144			894
12	L2	29	4850	144			4994
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4550 to 5150	144			Avg. 4994
12	L6	6	Var. 4550 to 5150	144			Avg. 4994
16	L7	10	Var. 7525 to 7525	192			Avg. 7717
16	L8	40	Var. 5000 to 7525	192			Avg. 6455
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	8	192	4104	192		4488
16	U7	25	192	4104	192		4488
16	U8	6	Var. 7525 to 7525	200	575		Avg. 8300
16	U9	22	Var. 5000 to 7525	200	600		Avg. 7694
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	6	1200	450	4160		5810
12	CC2	35	1200	500	4160		5860
12	Z1	29	750	850	144		1744
12	S1	29	700	5400	240		6340
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 4.26m)

DATE :

ISSUED BY :

CAD FILE REF : ABUT\00210603

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SHEET 4 OF 5

SPAN RANGE :1.5m TO 12m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	700	144			844
12	L2	29	4900	144			5044
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4600 to 5200	144			Avg. 5044
12	L6	6	Var. 4600 to 5200	144			Avg. 5044
16	L7	8	Var. 7600 to 7525	192			Avg. 7680
16	L8	40	Var. 5000 to 7600	192			Avg. 6492
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	8	192	4104	192		4488
16	U7	25	192	4104	192		4488
16	U8	4	Var. 7600 to 7525	200	575		Avg. 8225
16	U9	24	Var. 5000 to 7600	200	600		Avg. 7750
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	5	1200	450	4160		5810
12	CC2	35	1200	500	4160		5860
12	Z1	29	700	850	144		1694
12	S1	29	700	5450	240		6390
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =325)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	675	144			819
12	L2	29	4925	144			5069
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4625 to 5225	144			Avg. 5069
12	L6	6	Var. 4625 to 5225	144			Avg. 5069
16	L7	8	Var. 7638 to 7525	192			Avg. 7661
16	L8	40	Var. 5000 to 7638	192			Avg. 6511
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	8	192	4104	192		4488
16	U7	25	192	4104	192		4488
16	U8	4	Var. 7638 to 7525	200	575		Avg. 8187
16	U9	24	Var. 5000 to 7638	200	600		Avg. 7779
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	5	1200	450	4160		5810
12	CC2	35	1200	500	4160		5860
12	Z1	29	675	850	144		1669
12	S1	29	700	5475	240		6415
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 4.26m)

DATE :

ISSUED BY :

CAD FILE REF : ABUT\00210604

Web Copy

SHEET 5 OF 5
SPAN RANGE : 1.5m TO 12m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =275)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	625	144			769
12	L2	29	4975	144			5119
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4675 to 5275	144			Avg. 5119
12	L6	6	Var. 4675 to 5275	144			Avg. 5119
16	L7	6	Var. 7713 to 7525	192			Avg. 7529
16	L8	42	Var. 5000 to 7713	192			Avg. 6549
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	7	192	4104	192		4488
16	U7	25	192	4104	192		4488
16	U8	4	Var. 7713 to 7525	200	575		Avg. 8112
16	U9	24	Var. 5000 to 7713	200	600		Avg. 7835
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	5	1200	450	4160		5810
12	CC2	36	1200	500	4160		5860
12	Z1	29	625	850	144		1619
12	S1	29	700	5525	240		6465
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =250)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	600	144			744
12	L2	29	5000	144			5144
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4700 to 5300	144			Avg. 5144
12	L6	6	Var. 4700 to 5300	144			Avg. 5144
16	L7	6	Var. 7750 to 7525	192			Avg. 7492
16	L8	42	Var. 5000 to 7750	192			Avg. 6567
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	30	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	7	192	4104	192		4488
16	U7	26	192	4104	192		4488
16	U8	4	Var. 7750 to 7525	200	575		Avg. 8075
16	U9	24	Var. 5000 to 7750	200	600		Avg. 7863
16	U10	28	5000	200	550		5750
16	U12	10	192	4160	192		4544
12	CC1	5	1200	450	4160		5810
12	CC2	36	1200	500	4160		5860
12	Z1	29	600	850	144		1594
12	S1	29	700	5550	240		6490
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

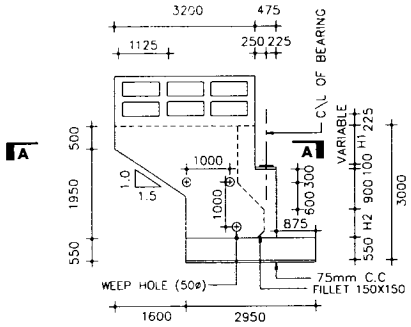
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 4.26m)

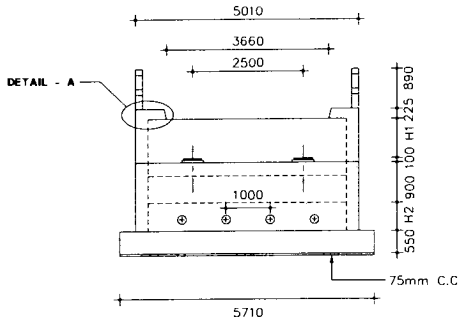
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00210605

Web Copy

SHEET 1 OF 3	
SPAN RANGE : 1.5m TO 12m	
SIDE WALK : YES	



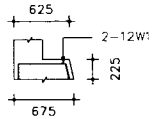
SIDE ELEVATION



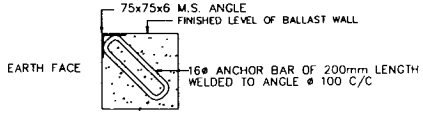
FRONT ELEVATION

TABLE-1

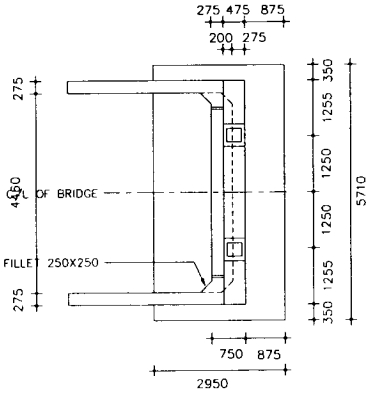
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11500	1000	450
11000	1000	450
10500	1000	450
10000	1000	450
9500	900	550
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8500	900	550
8000	900	550
7500	750	700
7000	750	700
6500	750	700
6000	750	700
5500	400	1050
5000	400	1050
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4000	350	1100
3500	325	1125
3000	325	1125
2500	275	1175
2000	250	1200
1500	250	1200



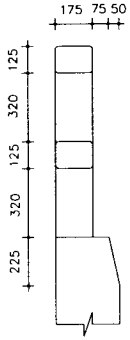
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metariol shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

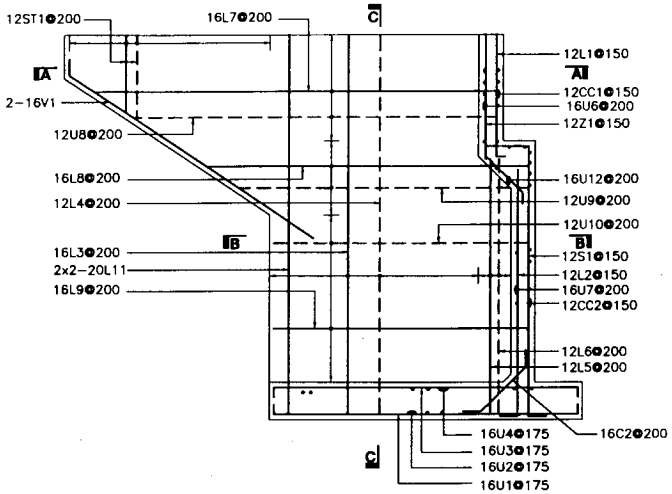
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210301	

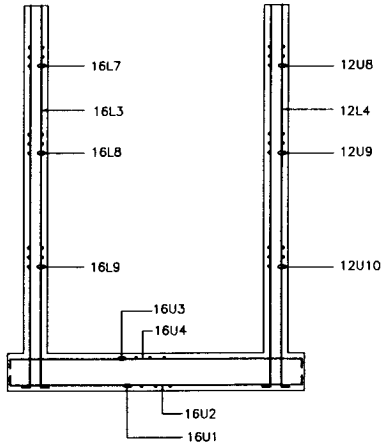
Web Copy

OA-92

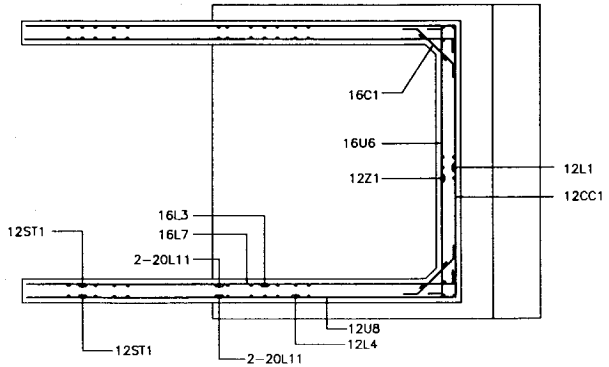
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



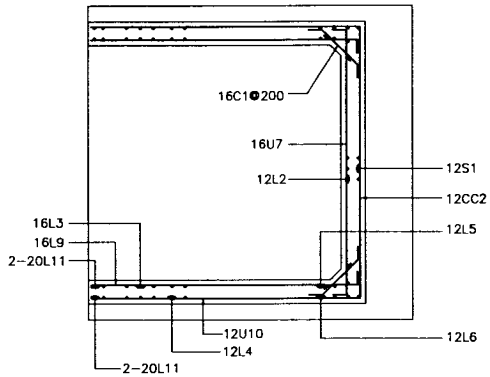
REINFORCEMENT DETAIL



SECTION C-C



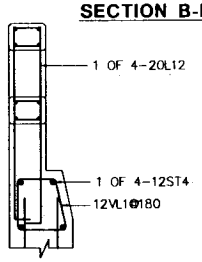
SECTION A-A



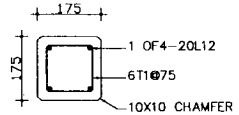
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

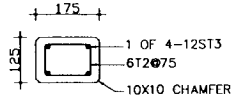
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1350	144			1494
12	L2	34	1250	144			1394
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 950 to 1550	144			Avg. 1394
12	L6	6	Var. 950 to 1550	144			Avg. 1394
16	L7	12	Var. 2200 to 3100	192			Avg. 2992
16	L8	8	Var. 1975 to 2200	192			Avg. 2280
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	32	1181	120			1301
16	U1	34	192	2850	192		3234
16	U2	18	192	5610	192		5994
16	U3	34	192	2850	192		3234
16	U4	17	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	4	192	4862	192		5246
12	U8	12	Var. 2200 to 3100	175	525		Avg. 3500
12	U9	8	Var. 1975 to 2200	175	525		Avg. 2844
12	U10	8	1975	175	525		2675
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	12	1150	350	4910		6410
12	Z1	34	1350	866	144		2360
12	S1	34	650	1800	240		2690
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	96	306	306			612
6	T2	168	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in ony view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210302	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1250	144			1394
12	L2	34	1350	144			1494
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1050 to 1650	144			Avg. 1494
12	L6	6	Var. 1050 to 1650	144			Avg. 1494
16	L7	12	Var. 2350 to 3100	192			Avg. 3042
16	L8	8	Var. 1975 to 2350	192			Avg. 2355
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	32	1181	120			1301
16	U1	34	192	2850	192		3234
16	U2	18	192	5610	192		5994
16	U3	34	192	2850	192		3234
16	U4	17	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	5	192	4862	192		5246
12	U8	12	Var. 2350 to 3100	175	525		Avg. 3550
12	U9	8	Var. 1975 to 2350	175	525		Avg. 2957
12	U10	8	1975	175	525		2675
16	U12	5	192	4910	192		5294
12	CC1	9	1150	350	4910		6410
12	CC2	12	1150	350	4910		6410
12	Z1	34	1250	866	144		2260
12	S1	34	650	1900	240		2790
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	96	306	306			612
6	T2	168	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1100	144			1244
12	L2	34	1500	144			1644
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1200 to 1800	144			Avg. 1644
12	L6	6	Var. 1200 to 1800	144			Avg. 1644
16	L7	10	Var. 2575 to 3100	192			Avg. 3187
16	L8	10	Var. 1975 to 2575	192			Avg. 2467
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	32	1181	120			1301
16	U1	34	192	2850	192		3234
16	U2	18	192	5610	192		5994
16	U3	34	192	2850	192		3234
16	U4	17	192	5610	192		5994
16	U6	7	192	4862	192		5246
16	U7	5	192	4862	192		5246
12	U8	10	Var. 2575 to 3100	175	525		Avg. 3695
12	U9	10	Var. 1975 to 2575	175	525		Avg. 3125
12	U10	8	1975	175	525		2675
16	U12	5	192	4910	192		5294
12	CC1	8	1150	350	4910		6410
12	CC2	13	1150	350	4910		6410
12	Z1	34	1100	866	144		2110
12	S1	34	650	2050	240		2940
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	96	306	306			612
6	T2	168	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

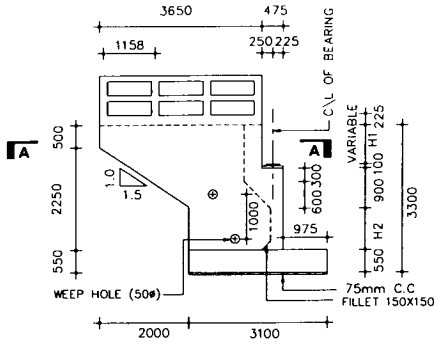
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 5.01m)

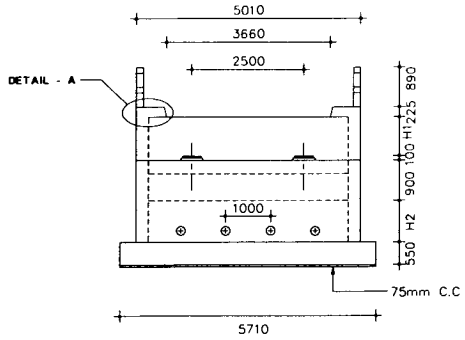
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210303	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



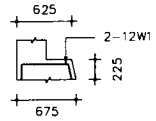
SIDE ELEVATION



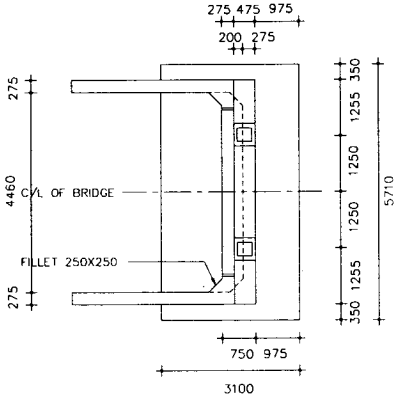
FRONT ELEVATION

TABLE-1

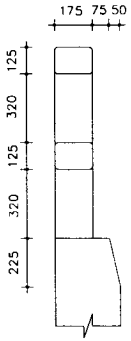
GIRDER SPAN	H1	H2
12000	1000	750
11500	1000	750
11000	1000	750
10500	1000	750
10000	1000	750
9500	900	850
9000	900	850
8500	900	850
8000	900	850
7500	750	1000
7000	750	1000
6500	750	1000
6000	750	1000
5500	400	1350
5000	400	1350
4500	350	1400
4000	350	1400
3500	325	1425
3000	325	1425
2500	275	1475
2000	250	1500
1500	250	1500



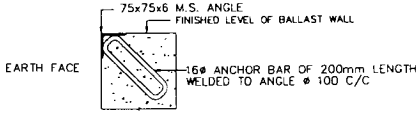
REINF. DETAIL 'A'



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

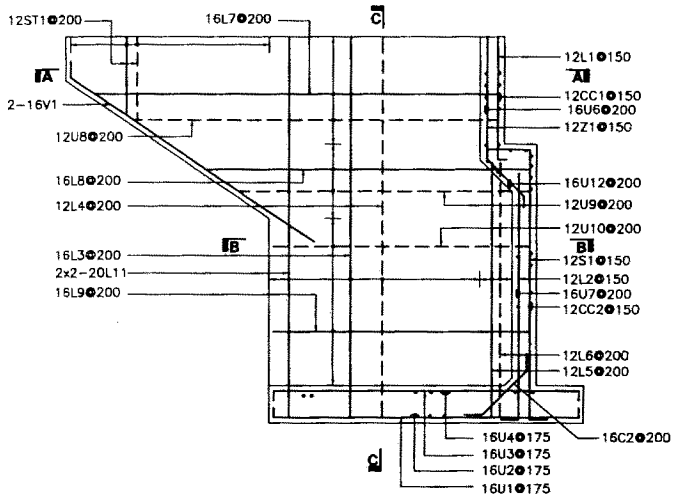
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 3.3m , DECK WIDTH 5.01m)

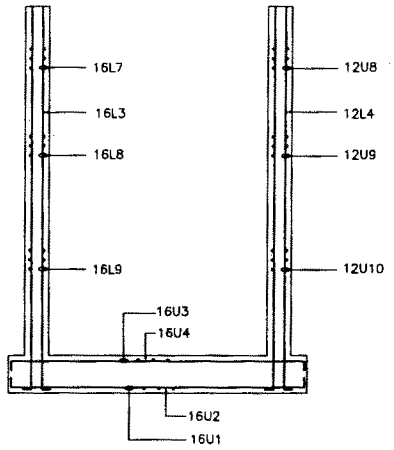
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210331	

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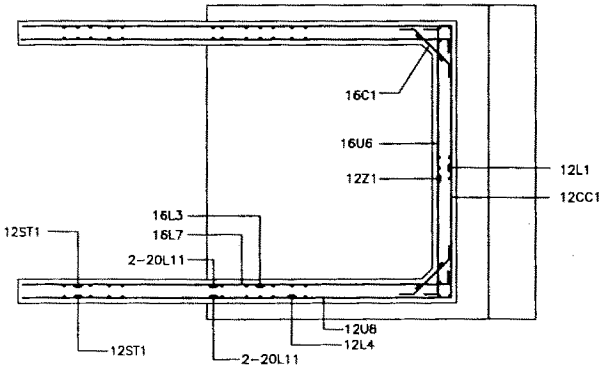
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



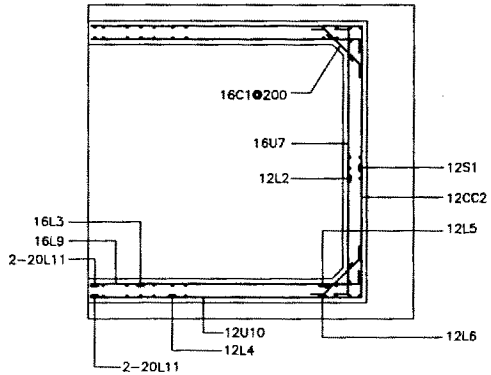
REINFORCEMENT DETAIL



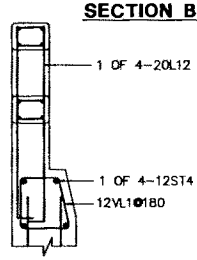
SECTION C-C



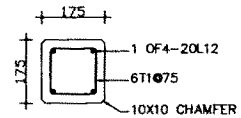
SECTION A-A



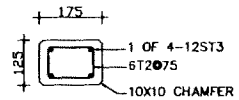
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1350	144			1494
12	L2	34	1550	144			1694
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1250 to 1850	144			Avg. 1694
12	L6	6	Var. 1250 to 1850	144			Avg. 1694
16	L7	12	Var. 2650 to 3550	192			Avg. 3442
16	L8	10	Var. 2025 to 2650	192			Avg. 2530
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	34	192	3000	192		3384
16	U2	19	192	5610	192		5994
16	U3	34	192	3000	192		3384
16	U4	18	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	6	192	4862	192		5246
12	U8	12	Var. 2650 to 3550	175	525		Avg. 3950
12	U9	10	Var. 2025 to 2650	175	525		Avg. 3194
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	14	1150	350	4910		6410
12	Z1	34	1350	888	144		2360
12	S1	34	650	2100	240		2990
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210332

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1250	144			1394
12	L2	34	1650	144			1794
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1350 to 1950	144			Avg. 1794
12	L6	6	Var. 1350 to 1950	144			Avg. 1794
16	L7	12	Var. 2800 to 3550	192			Avg. 3492
16	L8	12	Var. 2025 to 2800	192			Avg. 2805
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	34	192	3000	192		3384
16	U2	19	192	5610	192		5994
16	U3	34	192	3000	192		3384
16	U4	18	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	6	192	4862	192		5246
12	U8	12	Var. 2800 to 3550	175	525		Avg. 4000
12	U9	12	Var. 2025 to 2800	175	525		Avg. 3307
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	9	1150	350	4910		6410
12	CC2	14	1150	350	4910		6410
12	Z1	34	1250	866	144		2260
12	S1	34	650	2200	240		3090
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1100	144			1244
12	L2	34	1800	144			1944
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1500 to 2100	144			Avg. 1944
12	L6	6	Var. 1500 to 2100	144			Avg. 1944
16	L7	10	Var. 3025 to 3550	192			Avg. 3637
16	L8	12	Var. 2025 to 3025	192			Avg. 2717
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	34	192	3000	192		3384
16	U2	19	192	5610	192		5994
16	U3	34	192	3000	192		3384
16	U4	18	192	5610	192		5994
16	U6	7	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	10	Var. 3025 to 3550	175	525		Avg. 4145
12	U9	12	Var. 2025 to 3025	175	525		Avg. 3475
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	8	1150	350	4910		6410
12	CC2	15	1150	350	4910		6410
12	Z1	34	1100	866	144		2110
12	S1	34	650	2350	240		3240
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

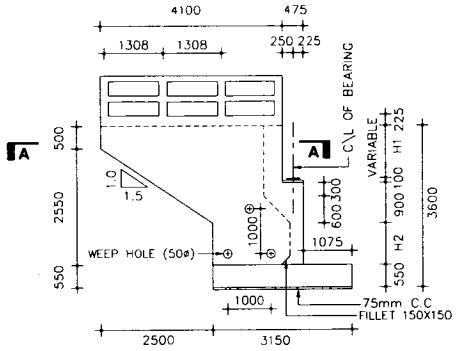
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 5.01m)

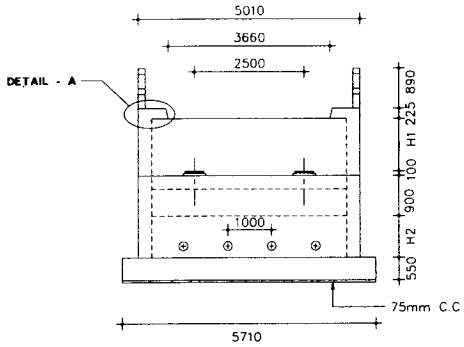
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Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



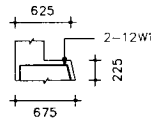
SIDE ELEVATION



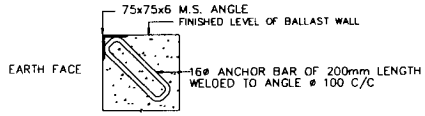
FRONT ELEVATION

TABLE-1

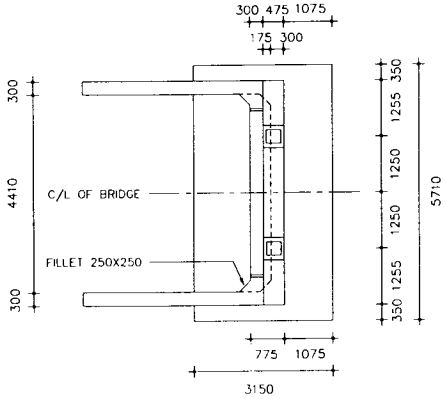
GIRDER SPAN	H1	H2
12000	1000	1050
11500	1000	1050
11000	1000	1050
10500	1000	1050
10000	1000	1050
9500	900	1150
9000	900	1150
8500	900	1150
8000	900	1150
7500	750	1300
7000	750	1300
6500	750	1300
6000	750	1300
5500	400	1650
5000	400	1650
4500	350	1700
4000	350	1700
3500	325	1725
3000	325	1725
2500	275	1775
2000	250	1800
1500	250	1800



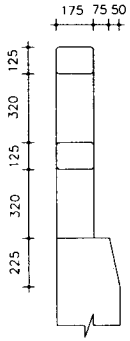
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification

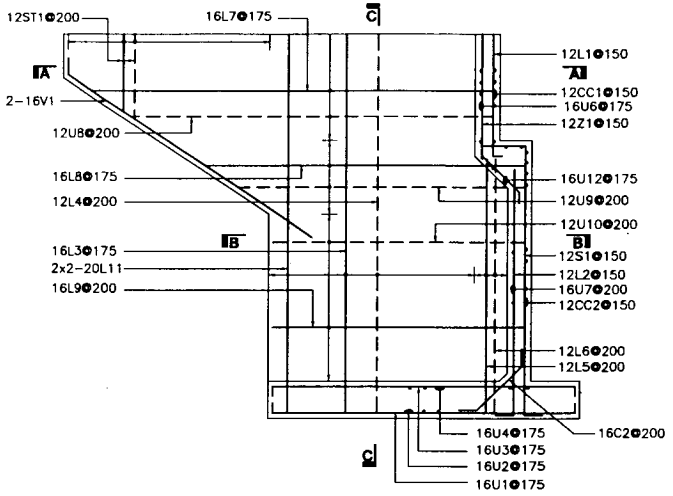
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.6m , DECK WIDTH 5.01m)

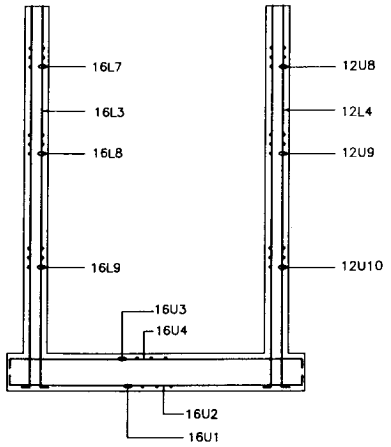
DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210361

Web Copy

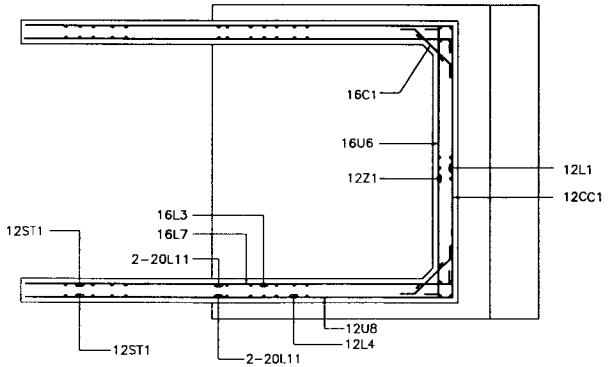
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



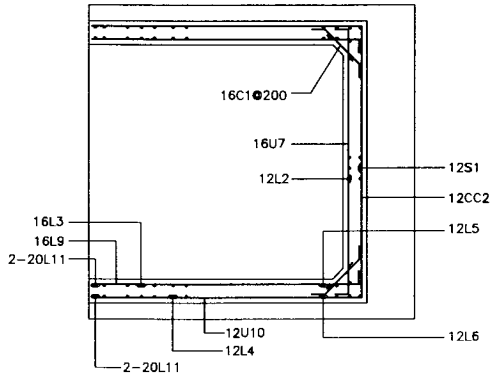
REINFORCEMENT DETAIL



SECTION C-C



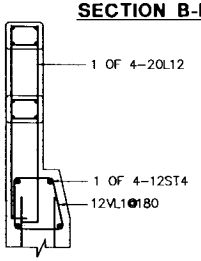
SECTION A-A



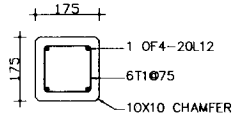
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

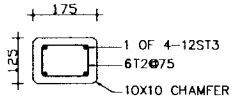
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1350	144			1494
12	L2	34	1850	144			1994
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1550 to 2150	144			Avg. 1994
12	L6	6	Var. 1550 to 2150	144			Avg. 1994
16	L7	14	Var. 3100 to 4000	192			Avg. 3806
16	L8	16	Var. 1975 to 3100	192			Avg. 2730
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
16	U1	34	192	3050	192		3434
16	U2	19	192	5610	192		5994
16	U3	34	192	3050	192		3434
16	U4	18	192	5610	192		5994
16	U6	9	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	12	Var. 3100 to 4000	200	550		Avg. 4450
12	U9	14	Var. 1975 to 3100	200	550		Avg. 3569
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	16	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	2400	240		3315
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shope Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210362	

Web Copy

SHEET 3 OF 3
SPAN RANGE :1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1250	144			1394
12	L2	34	1950	144			2094
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1650 to 2250	144			Avg. 2094
12	L6	6	Var. 1650 to 2250	144			Avg. 2094
16	L7	12	Var. 3250 to 4000	192			Avg. 3942
16	L8	16	Var. 1975 to 3250	192			Avg. 2805
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
16	U1	34	192	3050	192		3434
16	U2	19	192	5610	192		5994
16	U3	34	192	3050	192		3434
16	U4	18	192	5610	192		5994
16	U6	9	192	4862	192		5246
16	U7	8	192	4862	192		5246
12	U8	12	Var. 3250 to 4000	200	550		Avg. 4500
12	U9	14	Var. 1975 to 3250	200	550		Avg. 3682
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	9	1200	400	4910		6510
12	CC2	16	1200	400	4910		6510
12	Z1	34	1250	866	144		2260
12	S1	34	675	2500	240		3415
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1100	144			1244
12	L2	34	2100	144			2244
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1800 to 2400	144			Avg. 2244
12	L6	6	Var. 1800 to 2400	144			Avg. 2244
16	L7	10	Var. 3475 to 4000	192			Avg. 4087
16	L8	18	Var. 1975 to 3475	192			Avg. 2917
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
16	U1	34	192	3050	192		3434
16	U2	19	192	5610	192		5994
16	U3	34	192	3050	192		3434
16	U4	18	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	8	192	4862	192		5246
12	U8	10	Var. 3475 to 4000	200	550		Avg. 4645
12	U9	16	Var. 1975 to 3475	200	550		Avg. 3850
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	8	1200	400	4910		6510
12	CC2	17	1200	400	4910		6510
12	Z1	34	1100	866	144		2110
12	S1	34	675	2650	240		3565
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

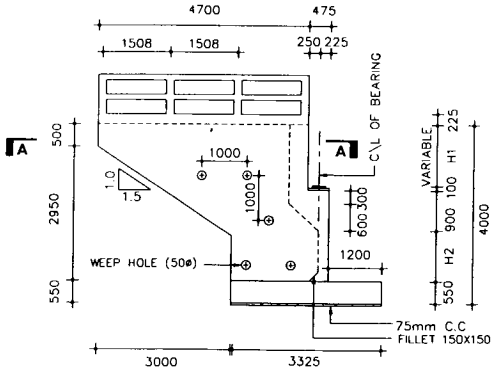
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 5.01m)

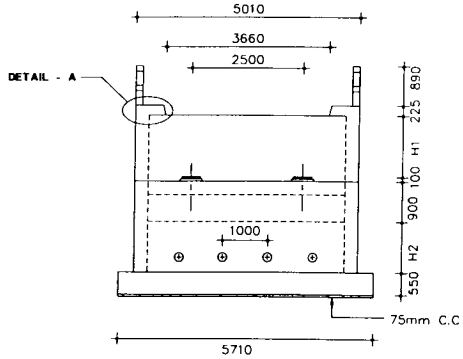
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210363	

Web Copy

SHEET 1 OF 3	
SPAN RANGE :	1.5m TO 12m
SIDE WALK :	YES



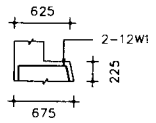
SIDE ELEVATION



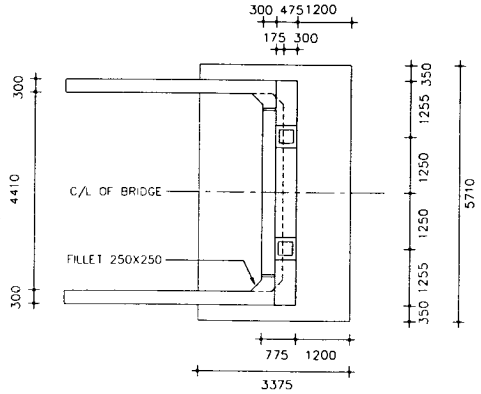
FRONT ELEVATION

TABLE-1

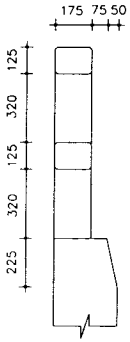
GIRDER SPAN	H1	H2
12000	1000	1450
11500	1000	1450
11000	1000	1450
10500	1000	1450
10000	1000	1450
9500	900	1550
9000	900	1550
8500	900	1550
8000	900	1550
7500	750	1700
7000	750	1700
6500	750	1700
6000	750	1700
5500	400	2050
5000	400	2050
4500	350	2100
4000	350	2100
3500	325	2125
3000	325	2125
2500	275	2175
2000	250	2200
1500	250	2200



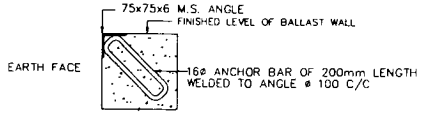
REINF. DETAIL 'A'



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

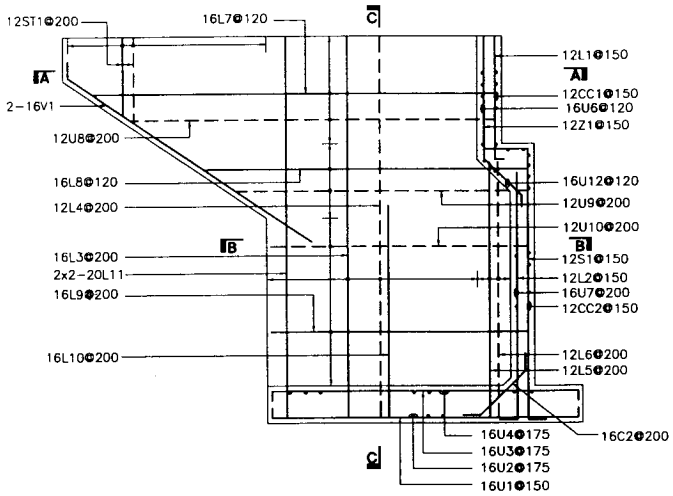
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 4.0m , DECK WIDTH 5.01m)

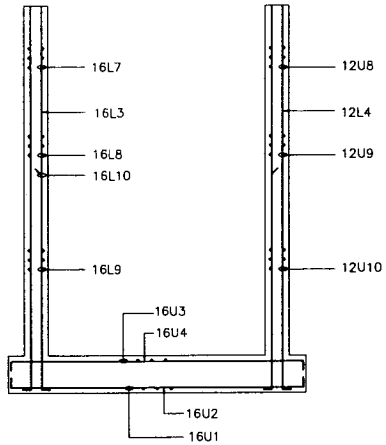
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210401	

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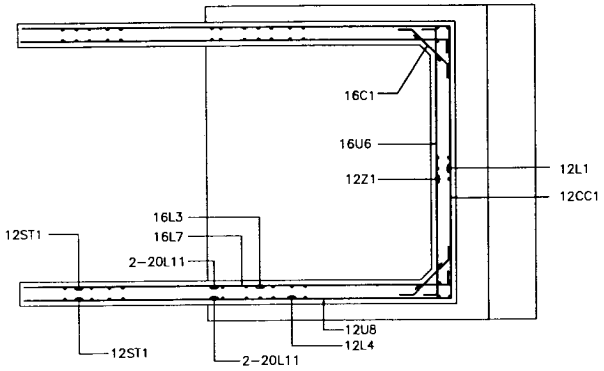
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



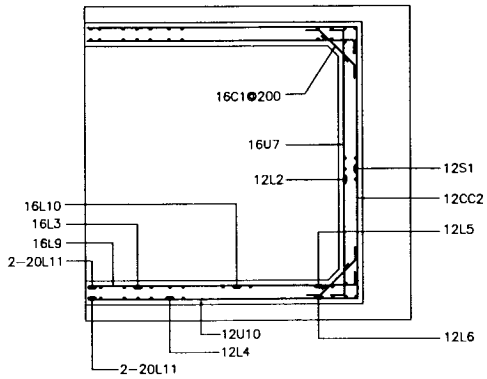
REINFORCEMENT DETAIL



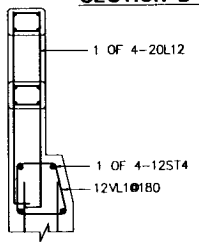
SECTION C-C



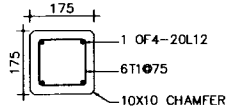
SECTION A-A



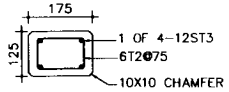
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4610				4610
12	ST4	8	4600				4600
12	L1	34	1350	144			1494
12	L2	34	2250	144			2394
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	20	Var. 3650 to 4550	192			Avg. 4382
16	L8	26	Var. 2025 to 3650	192			Avg. 3030
16	L9	8	2025	192			2217
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
16	U1	39	192	3225	192		3609
16	U2	20	192	5610	192		5994
16	U3	34	192	3225	192		3609
16	U4	20	192	5610	192		5994
16	U6	13	192	4862	192		5246
16	U7	9	192	4862	192		5246
12	U8	12	Var. 3650 to 4550	200	550		Avg. 5000
12	U9	16	Var. 2025 to 3650	200	550		Avg. 3994
12	U10	8	2025	200	550		2775
16	U12	9	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	18	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	2800	240		3715
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	54	272	200	250	278	1000
12	w1	4	200	575	206		981

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 4.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210402

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. [illegible] to 2400				Avg. 1400
12	ST3	16	4610				4610
12	ST4	8	4600				4600
12	L1	34	1250	144			1394
12	L2	34	2350	144			2494
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2050 to 2650	144			Avg. 2494
12	L6	6	Var. 2050 to 2650	144			Avg. 2494
16	L7	20	Var. 3800 to 4550	192			Avg. 4442
16	L8	28	Var. 2025 to 3800	192			Avg. 3105
16	L9	8	2025	192			2217
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
16	U1	39	[illegible]	192	3225	192	3609
16	U2	20		192	5610	192	5994
16	U3	34		192	3225	192	3609
16	U4	20		192	5610	192	5994
16	U6	12		192	4862	192	5246
16	U7	10		192	4862	192	5246
12	U8	12	Var. 3800 to 4550	200	550		Avg. 5050
12	U9	18	Var. 2025 to 3800	200	550		Avg. 4107
12	U10	8	2025	200	550		2775
16	U12	9	192	4910	192		5294
12	CC1	9	1200	400	4910		6510
12	CC2	19	1200	400	4910		6510
12	Z1	34	1250	866	144		2260
12	S1	34	675	2900	240		3815
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	54	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4610				4610
12	ST4	8	4600				4600
12	L1	34	1100	144			1244
12	L2	34	2500	144			2644
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	16	Var. 4025 to 4550	192			Avg. 4611
16	L8	30	Var. 2025 to 4025	192			Avg. 3217
16	L9	8	2025	192			2217
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
16	U1	39	192	3225	192		3609
16	U2	20	192	5610	192		5994
16	U3	34	192	3225	192		3609
16	U4	20	192	5610	192		5994
16	U5	11	192	4862	192		5246
16	U7	10	192	4862	192		5246
12	U8	10	Var. 4025 to 4550	200	550		Avg. 5195
12	U9	20	Var. 2025 to 4025	200	550		Avg. 4275
12	U10	8	2025	200	550		2775
16	U12	9	192	4910	192		5294
12	CC1	8	1200	400	4910		6510
12	CC2	20	1200	400	4910		6510
12	Z1	34	1100	866	144		2110
12	S1	34	675	3050	240		3965
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	54	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

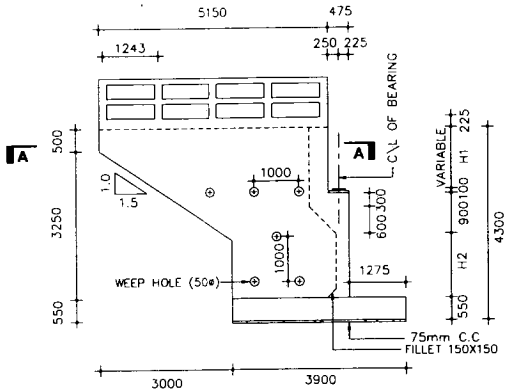
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 5.01m)

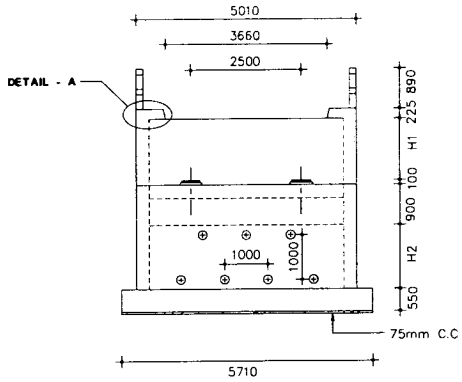
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210403	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



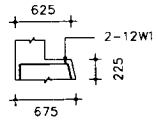
SIDE ELEVATION



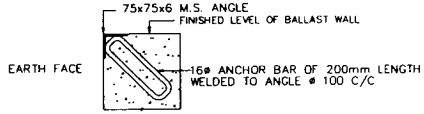
FRONT ELEVATION

TABLE-1

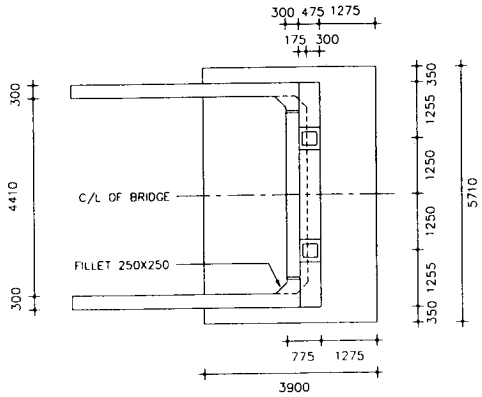
GIRDER SPAN	H1	H2
12000	1000	1750
11500	1000	1750
11000	1000	1750
10500	1000	1750
10000	1000	1750
9500	900	1850
9000	900	1850
8500	900	1850
8000	900	1850
7500	750	2000
7000	750	2000
6500	750	2000
6000	750	2000
5500	400	2350
5000	400	2350
4500	350	2400
4000	350	2400
3500	325	2425
3000	325	2425
2500	275	2475
2000	250	2500
1500	250	2500



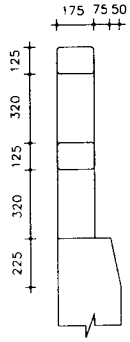
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

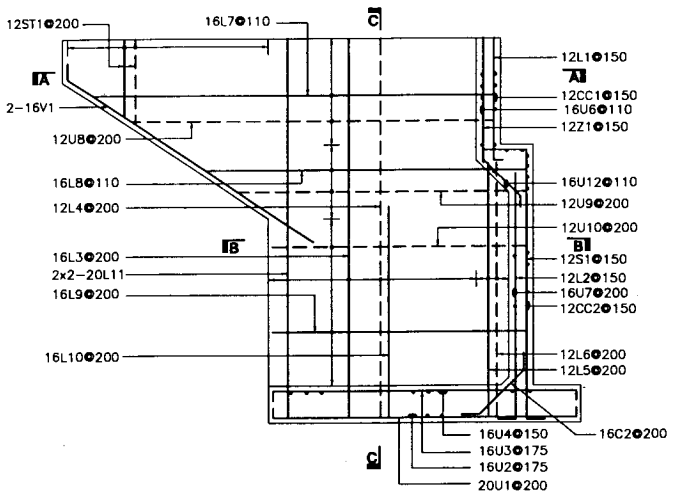
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

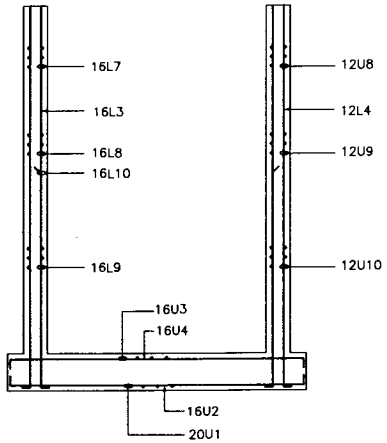
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 4.3m , DECK WIDTH 5.01m)
DATE : ISSUED BY :
CAD FILE REF : ABU1\01210431

Web Copy

SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



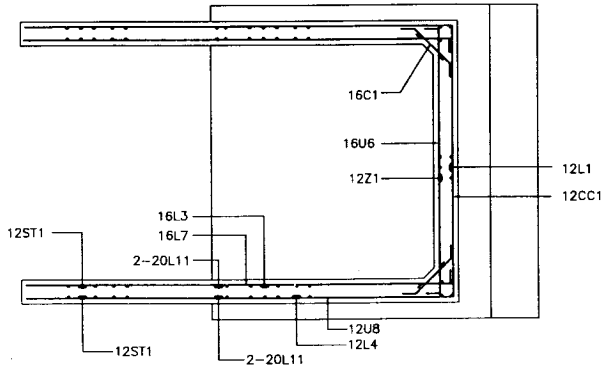
REINFORCEMENT DETAIL



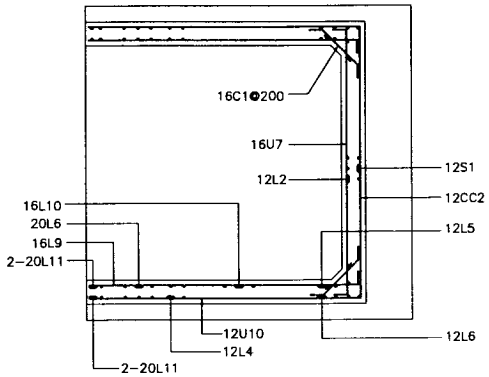
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

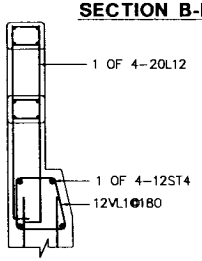
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1350	144			1494
12	L2	34	2550	144			2694
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2250 to 2850	144			Avg. 2694
12	L6	6	Var. 2250 to 2850	144			Avg. 2694
16	L7	22	Var. 4150 to 5050	192			Avg. 4833
16	L8	28	Var. 2525 to 4150	192			Avg. 3530
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	30	240	3800	240		- 4280
16	U2	23	192	5610	192		5994
16	U3	34	192	3800	192		4184
16	U4	27	192	5610	192		5994
16	U6	14	192	4862	192		5246
16	U7	11	192	4862	192		5246
12	U8	12	Var. 4150 to 5050	200	550		Avg. 5500
12	U9	16	Var. 2525 to 4150	200	550		Avg. 4494
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	20	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	3100	240		4015
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981



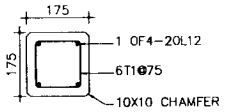
SECTION A-A



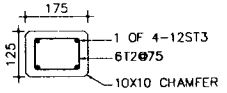
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210432	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1250	144			1394
12	L2	34	2650	144			2794
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2350 to 2950	144			Avg. 2794
12	L6	6	Var. 2350 to 2950	144			Avg. 2794
16	L7	20	Var. 4300 to 5050	192			Avg. 4942
16	L8	30	Var. 2525 to 4300	192			Avg. 3605
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	30	240	3800	240		4280
16	U2	23	192	5610	192		5994
16	U3	34	192	3800	192		4184
16	U4	27	192	5610	192		5994
16	U6	13	192	4862	192		5246
16	U7	11	192	4862	192		5246
12	U8	12	Var. 4300 to 5050	200	550		Avg. 5550
12	U9	18	Var. 2525 to 4300	200	550		Avg. 4607
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	9	1200	400	4910		6510
12	CC2	21	1200	400	4910		6510
12	Z1	34	1250	866	144		2260
12	S1	34	675	3200	240		4115
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1100	144			1244
12	L2	34	2800	144			2944
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2500 to 3100	144			Avg. 2944
12	L6	6	Var. 2500 to 3100	144			Avg. 2944
16	L7	18	Var. 4525 to 5050	192			Avg. 5057
16	L8	32	Var. 2525 to 4525	192			Avg. 3717
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	30	240	3800	240		4280
16	U2	23	192	5610	192		5994
16	U3	34	192	3800	192		4184
16	U4	27	192	5610	192		5994
16	U6	11	192	4862	192		5246
16	U7	12	192	4862	192		5246
12	U8	10	Var. 4525 to 5050	200	550		Avg. 5695
12	U9	20	Var. 2525 to 4525	200	550		Avg. 4775
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	8	1200	400	4910		6510
12	CC2	22	1200	400	4910		6510
12	Z1	34	1100	866	144		2110
12	S1	34	675	3350	240		4265
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 278 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

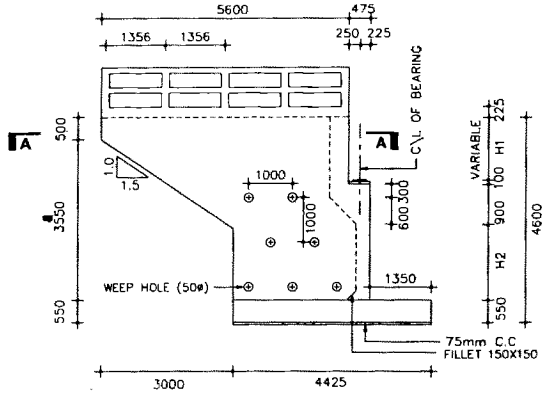
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210433	

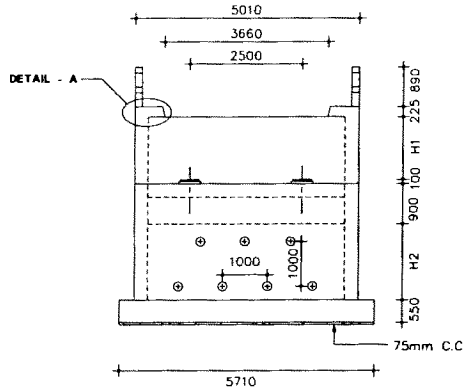
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OA-106

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



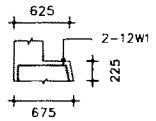
SIDE ELEVATION



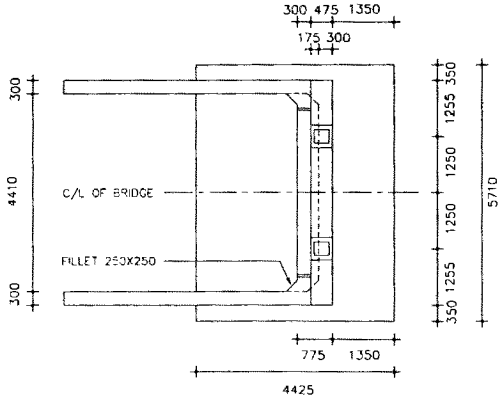
FRONT ELEVATION

TABLE-1

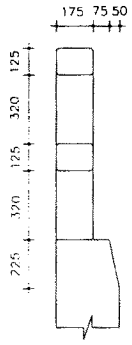
GIRDER SPAN	H1	H2
12000	1000	2050
11500	1000	2050
11000	1000	2050
10500	1000	2050
10000	1000	2050
9500	900	2150
9000	900	2150
8500	900	2150
8000	900	2150
7500	750	2300
7000	750	2300
6500	750	2300
6000	750	2300
5500	400	2650
5000	400	2650
4500	350	2700
4000	350	2700
3500	325	2725
3000	325	2725
2500	275	2775
2000	250	2800
1500	250	2800



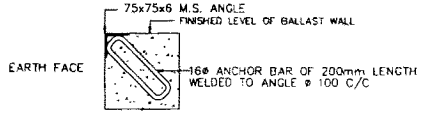
REINF. DETAIL 'A'



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metariol shall be provided as per specification.

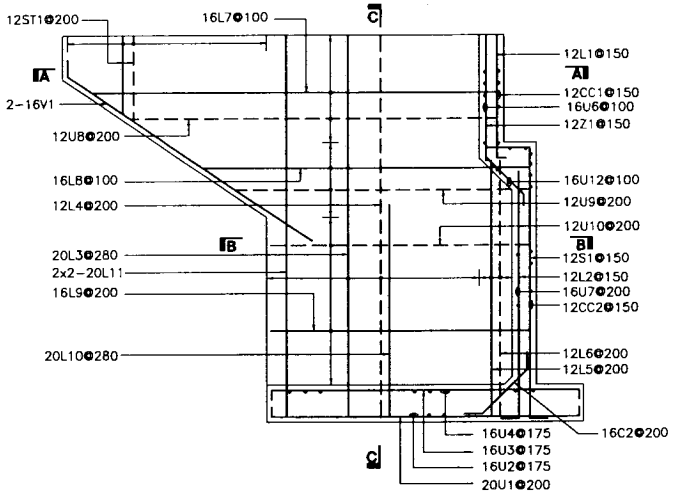
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 4.6m , DECK WIDTH 5.01m)

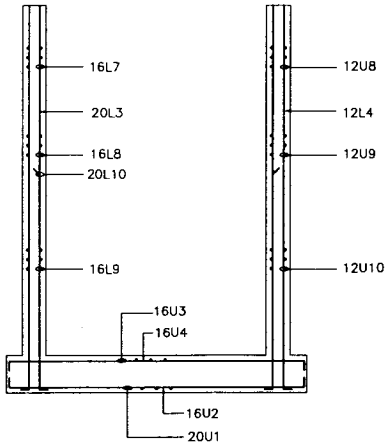
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210461	

Web Copy

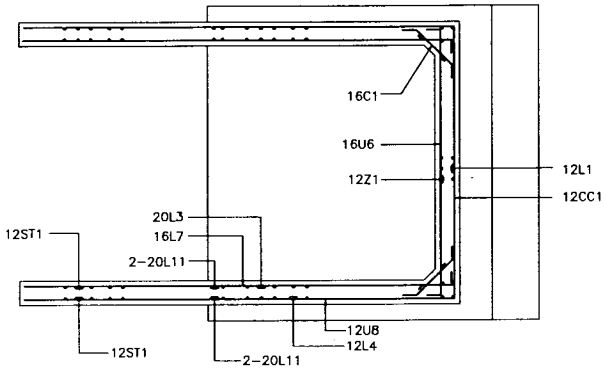
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES



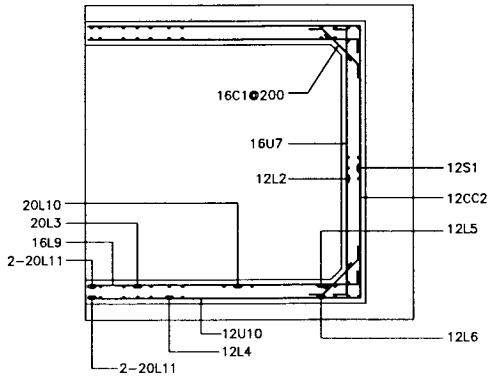
REINFORCEMENT DETAIL



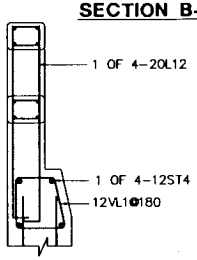
SECTION C-C



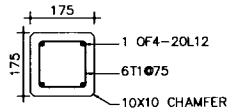
SECTION A-A



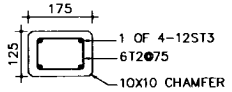
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	34	1350	144			1494
12	L2	34	2850	144			2994
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2550 to 3150	144			Avg. 2994
12	L6	6	Var. 2550 to 3150	144			Avg. 2994
16	L7	22	Var. 4600 to 5500	192			Avg. 5283
16	L8	30	Var. 2975 to 4600	192			Avg. 3980
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U5	15	192	4862	192		5246
16	U7	12	192	4862	192		5246
12	U8	12	Var. 4600 to 5500	200	550		Avg. 5950
12	U9	16	Var. 2975 to 4600	200	550		Avg. 4944
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	22	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	3400	240		4315
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210462

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	34	1250	144			1394
12	L2	34	2950	144			3094
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2650 to 3250	144			Avg. 3094
12	L6	6	Var. 2650 to 3250	144			Avg. 3094
16	L7	20	Var. 4750 to 5500	192			Avg. 5392
16	L8	32	Var. 2975 to 4750	192			Avg. 4055
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U6	14	192	4862	192		5246
16	U7	13	192	4862	192		5246
12	U8	12	Var. 4750 to 5500	200	550		Avg. 6000
12	U9	18	Var. 2975 to 4750	200	550		Avg. 5057
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	9	1200	400	4910		6510
12	CC2	23	1200	400	4910		6510
12	Z1	34	1250	866	144		2260
12	S1	34	675	3500	240		4415
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	34	1100	144			1244
12	L2	34	3100	144			3244
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2800 to 3400	144			Avg. 3244
12	L6	6	Var. 2800 to 3400	144			Avg. 3244
16	L7	18	Var. 4975 to 5500	192			Avg. 5517
16	L8	36	Var. 2975 to 4975	192			Avg. 4167
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U6	12	192	4862	192		5246
16	U7	13	192	4862	192		5246
12	U8	10	Var. 4975 to 5500	200	550		Avg. 6145
12	U9	20	Var. 2975 to 4975	200	550		Avg. 5225
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	8	1200	400	4910		6510
12	CC2	24	1200	400	4910		6510
12	Z1	34	1100	866	144		2110
12	S1	34	675	3650	240		4565
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

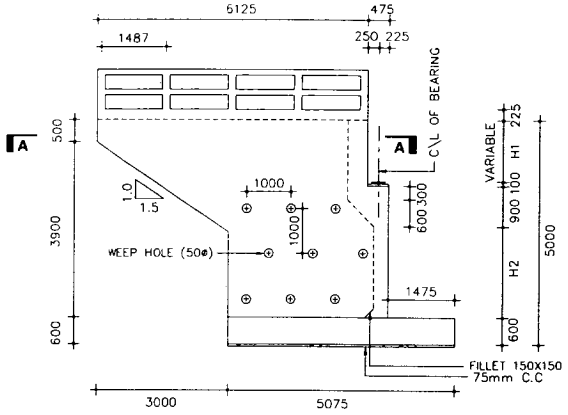
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 5.01m)

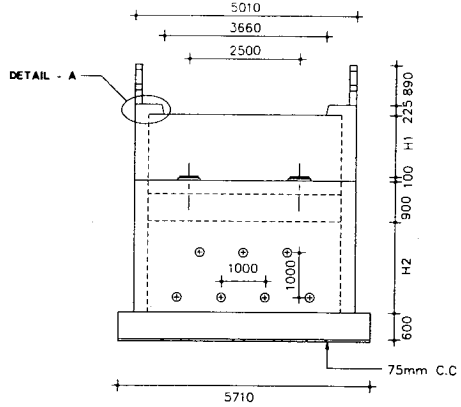
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210463	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



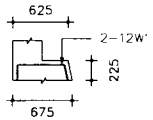
SIDE ELEVATION



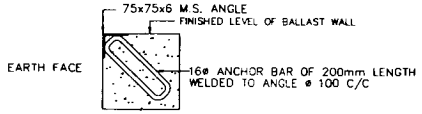
FRONT ELEVATION

TABLE-1

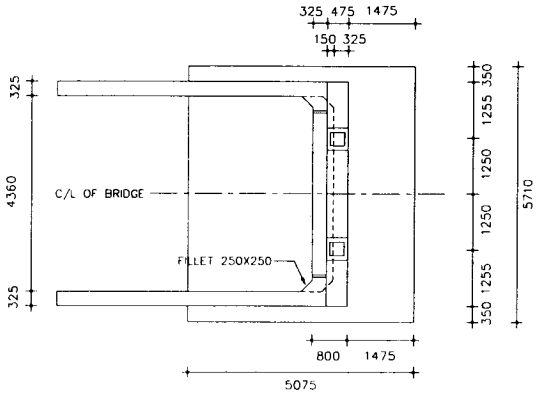
GIRDER SPAN	H1	H2
12000	1000	2400
11500	1000	2400
11000	1000	2400
10500	1000	2400
10000	1000	2400
9500	900	2500
9000	900	2500
8500	900	2500
8000	900	2500
7500	750	2650
7000	750	2650
6500	750	2650
6000	750	2650
5500	400	3000
5000	400	3000
4500	350	3050
4000	350	3050
3500	325	3075
3000	325	3075
2500	275	3125
2000	250	3150
1500	250	3150



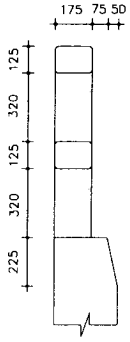
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

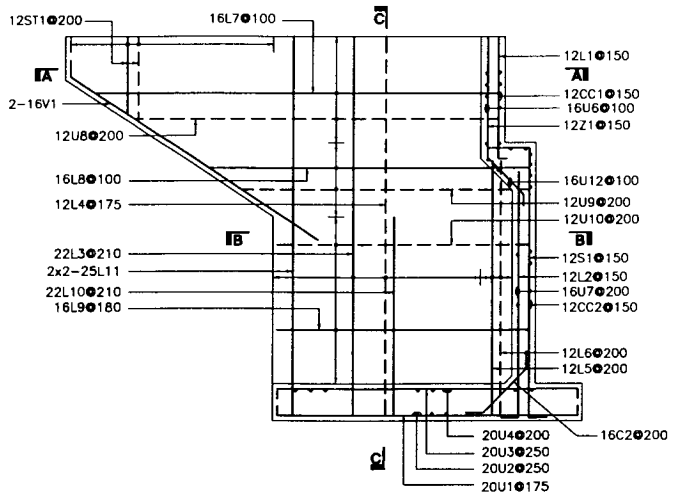
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.0m , DECK WIDTH 5.01m)

DATE	ISSUED BY :
CAD FILE REF : ABUT\01210501	

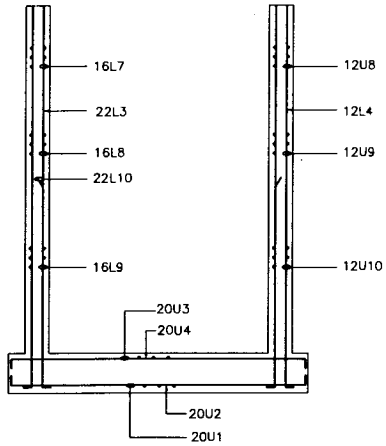
Web Copy

OA-110

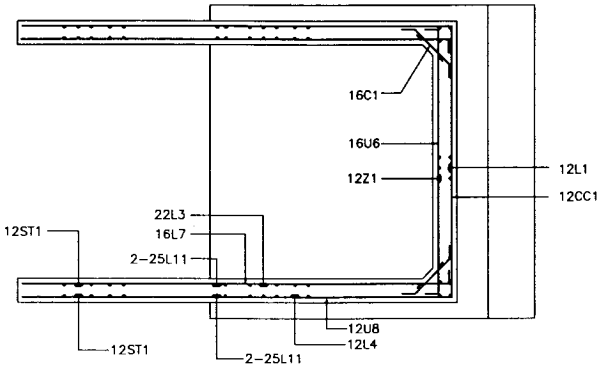
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



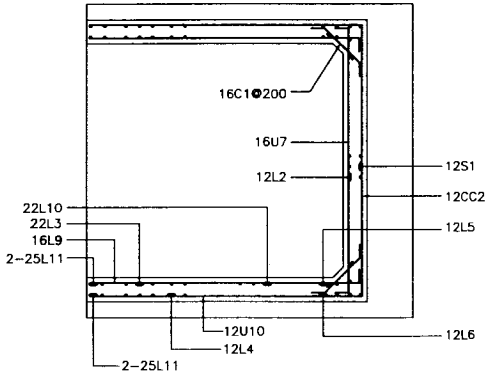
REINFORCEMENT DETAIL



SECTION C-C



SECTION A-A



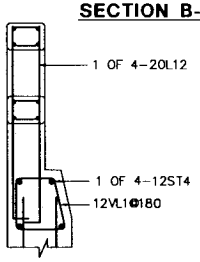
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

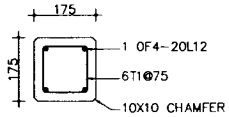
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1350	144			1494
12	L2	34	3250	144			3394
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	22	Var. 5125 to 6025	192			Avg. 5808
16	L8	30	Var. 3500 to 5125	192			Avg. 4505
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	34	240	4975	240		5455
20	U2	21	240	5610	240		6090
20	U3	24	240	4975	240		5455
20	U4	26	240	5610	240		6090
16	U6	15	192	4862	192		5246
16	U7	14	192	4862	192		5246
12	U8	12	Var. 5125 to 6025	225	575		Avg. 6525
12	U9	16	Var. 3500 to 5125	225	575		Avg. 5519
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	10	1250	450	4910		6610
12	CC2	25	1250	450	4910		6610
12	Z1	34	1350	866	144		2360
12	S1	34	700	3800	240		4740
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

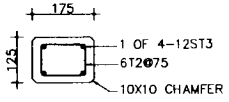
1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 5.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o1210502	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1250	144			1394
12	L2	34	3350	144			3494
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3050 to 3650	144			Avg. 3494
12	L6	6	Var. 3050 to 3650	144			Avg. 3494
16	L7	20	Var. 5275 to 6025	192			Avg. 5917
16	L8	32	Var 3500 to 5275	192			Avg. 4580
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	34	240	4975	240		5455
20	U2	21	240	5610	240		6090
20	U3	24	240	4975	240		5455
20	U4	26	240	5610	240		6090
16	U6	14	192	4862	192		5246
16	U7	14	192	4862	192		5246
12	U8	12	Var. 5275 to 6025	225	575		Avg. 6575
12	U9	18	Var. 3500 to 5275	225	575		Avg. 5632
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	9	1250	450	4910		6610
12	CC2	25	1250	450	4910		6610
12	Z1	34	1250	866	144		2260
12	S1	34	700	3900	240		4840
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1100	144			1244
12	L2	34	3500	144			3644
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	18	Var. 5500 to 6025	192			Avg. 6042
16	L8	36	Var. 3500 to 5500	192			Avg. 4692
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	34	240	4975	240		5455
20	U2	21	240	5610	240		6090
20	U3	24	240	4975	240		5455
20	U4	26	240	5610	240		6090
16	U6	12	192	4862	192		5246
16	U7	15	192	4862	192		5246
12	U8	10	Var. 5500 to 6025	225	575		Avg. 6720
12	U9	20	Var. 3500 to 5500	225	575		Avg. 5800
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	8	1250	450	4910		6610
12	CC2	26	1250	450	4910		6610
12	Z1	34	1100	866	144		2110
12	S1	34	700	4050	240		4990
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

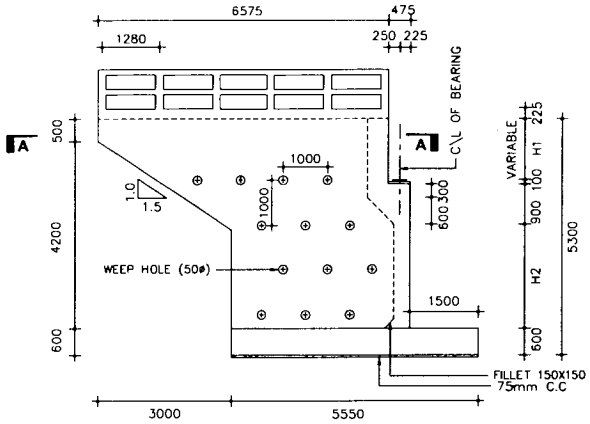
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 5.01m)

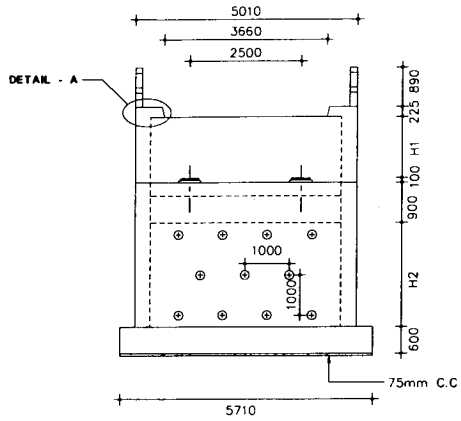
DATE :	ISSUED BY :
CAD FILE REF : ABUT/a1210503	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



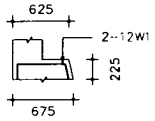
SIDE ELEVATION



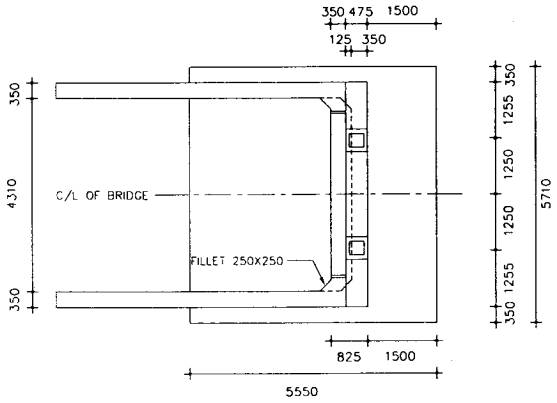
FRONT ELEVATION

TABLE-1

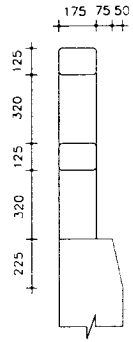
GIRDER SPAN	H1	H2
12000	1000	2700
11500	1000	2700
11000	1000	2700
10500	1000	2700
10000	1000	2700
9500	900	2800
9000	900	2800
8500	900	2800
8000	900	2800
7500	750	2950
7000	750	2950
6500	750	2950
6000	750	2950
5500	400	3300
5000	400	3300
4500	350	3350
4000	350	3350
3500	325	3375
3000	325	3375
2500	275	3425
2000	250	3450
1500	250	3450



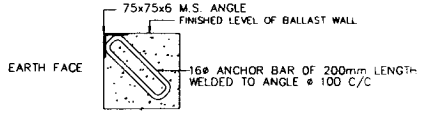
REINF. DETAIL 'A'



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 103 kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter meterial shall be provided as per specification.

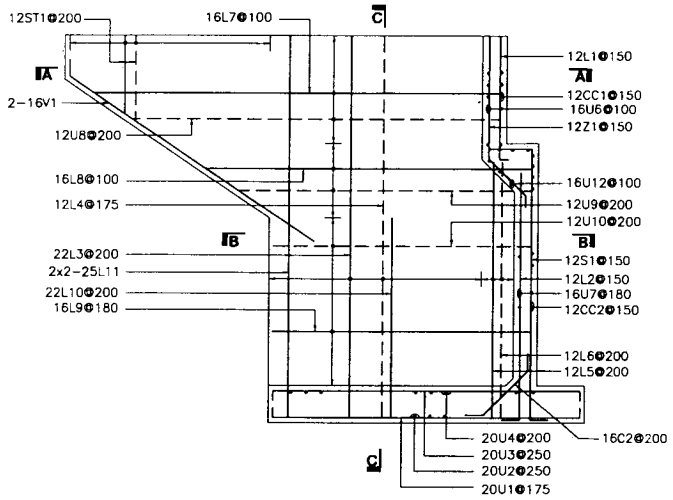
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 5.3m , DECK WIDTH 5.01m)

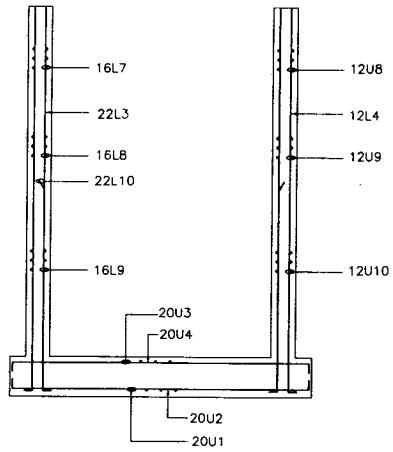
DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210531

Web Copy

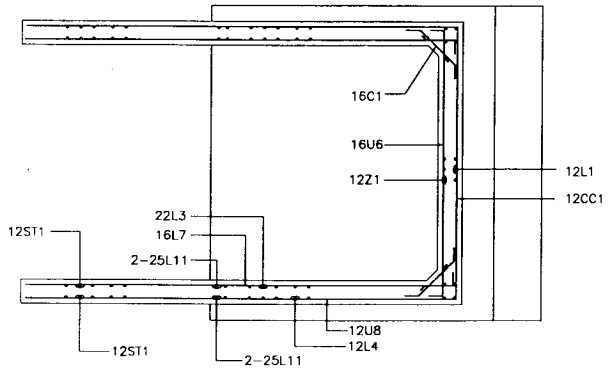
SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



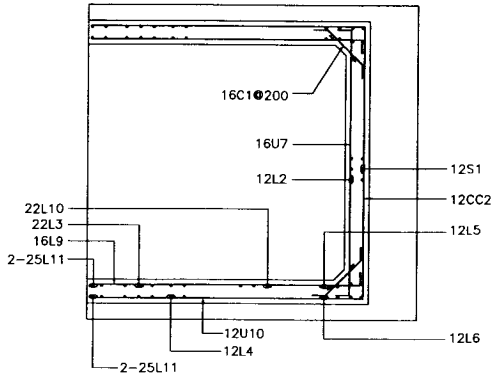
REINFORCEMENT DETAIL



SECTION C-C



SECTION A-A



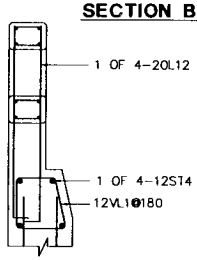
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

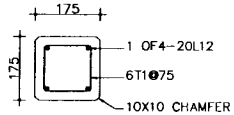
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1350	144			1494
12	L2	34	3550	144			3694
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3250 to 3850	144			Avg. 3694
12	L6	6	Var. 3250 to 3850	144			Avg. 3694
16	L7	22	Var. 5575 to 6475	192			Avg. 6258
16	L8	30	Var. 3950 to 5575	192			Avg. 4955
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	34	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	15	192	4862	192		5246
16	U7	17	192	4862	192		5246
12	U8	12	Var. 5575 to 6475	250	600		Avg. 7025
12	U9	16	Var. 3950 to 5575	250	600		Avg. 6019
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	10	1300	500	4910		6710
12	CC2	27	1300	500	4910		6710
12	Z1	34	1350	866	144		2360
12	S1	34	725	4100	240		5065
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

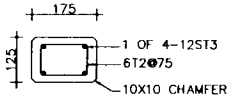
1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/o1210532	

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DA-114

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1250	144			1394
12	L2	34	3650	144			3794
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3350 to 3950	144			Avg. 3794
12	L6	6	Var. 3350 to 3950	144			Avg. 3794
16	L7	20	Var. 5725 to 6475	192			Avg. 6367
16	L8	32	Var. 3950 to 5725	192			Avg. 5030
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	34	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	14	192	4862	192		5246
16	U7	18	192	4862	192		5246
12	U8	12	Var. 5725 to 6475	250	600		Avg. 7075
12	U9	18	Var. 3950 to 5725	250	600		Avg. 6132
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	9	1300	500	4910		6710
12	CC2	27	1300	500	4910		6710
12	Z1	34	1250	866	144		2260
12	S1	34	725	4200	240		5165
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1100	144			1244
12	L2	34	3800	144			3944
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3500 to 4100	144			Avg. 3944
12	L6	6	Var. 3500 to 4100	144			Avg. 3944
16	L7	18	Var. 5950 to 6475	192			Avg. 6492
16	L8	36	Var. 3950 to 5950	192			Avg. 5142
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	34	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	12	192	4862	192		5246
16	U7	19	192	4862	192		5246
12	U8	10	Var. 5950 to 6475	250	600		Avg. 7220
12	U9	20	Var. 3950 to 5950	250	600		Avg. 6300
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	8	1300	500	4910		6710
12	CC2	28	1300	500	4910		6710
12	Z1	34	1100	866	144		2110
12	S1	34	725	4350	240		5315
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		981

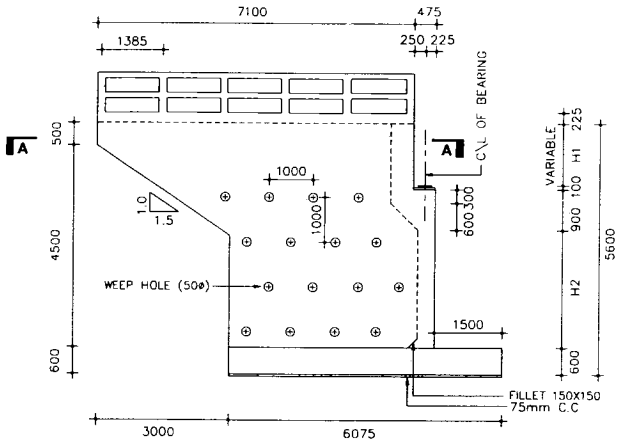
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 5.01m)

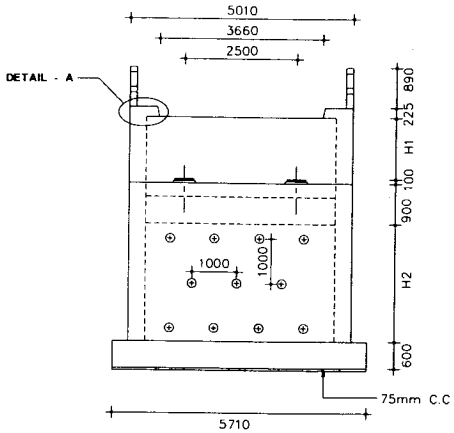
DATE :	ISSUED BY :
CAD FILE REF : ABUT/o1210533	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



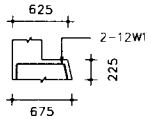
SIDE ELEVATION



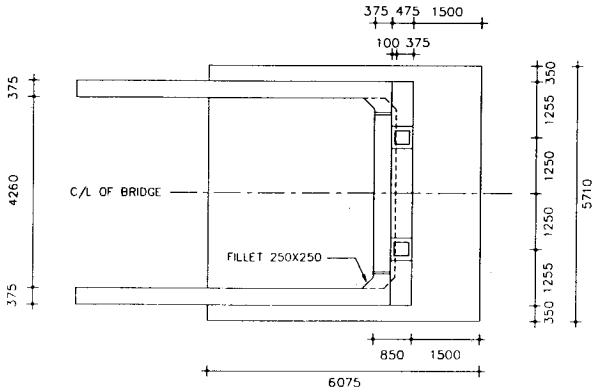
FRONT ELEVATION

TABLE-1

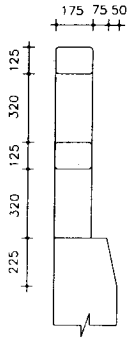
GIRDER SPAN	H1	H2
12000	1000	3000
11500	1000	3000
11000	1000	3000
10500	1000	3000
10000	1000	3000
9500	900	3100
9000	900	3100
8500	900	3100
8000	900	3100
7500	750	3250
7000	750	3250
6500	750	3250
6000	750	3250
5500	400	3600
5000	400	3600
4500	350	3650
4000	350	3650
3500	325	3675
3000	325	3675
2500	275	3725
2000	250	3750
1500	250	3750



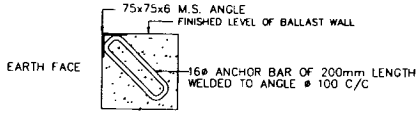
REINF. DETAIL 'A'



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **103** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metariol shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

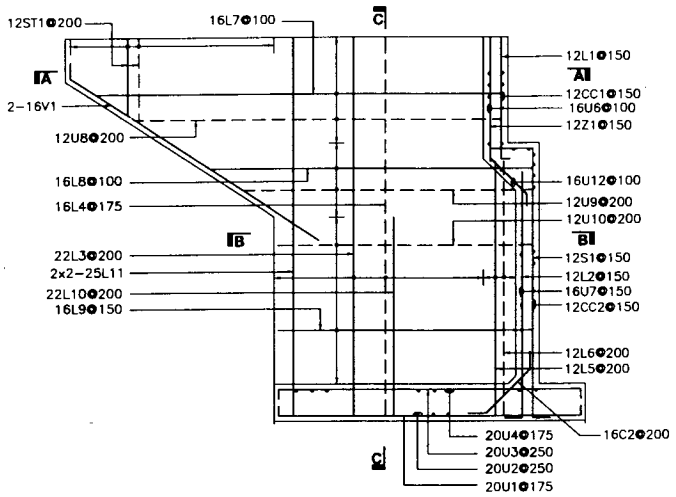
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.6m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\O1210561	

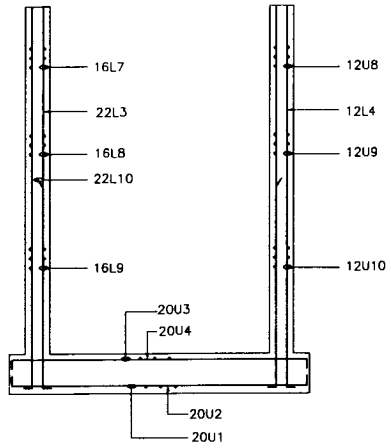
Web Copy

OA-116

SHEET 2 OF 3
SPAN RANGE : 1.5M TO 12.0M
SIDE WALK : YES



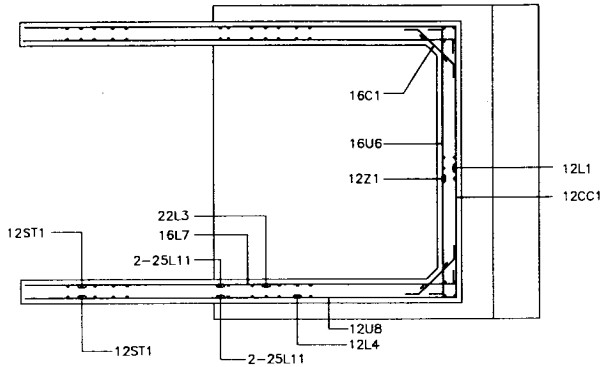
REINFORCEMENT DETAIL



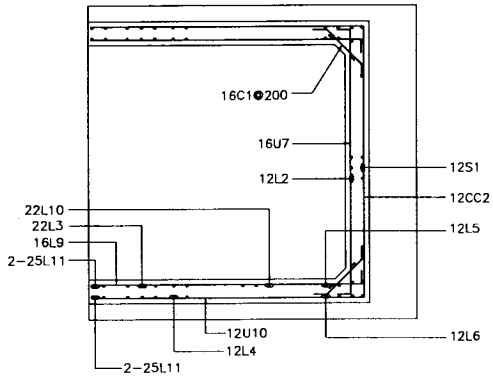
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

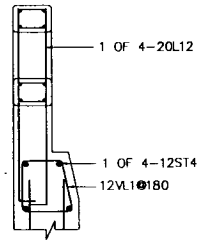
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7060				7060
12	ST4	8	7050				7050
12	L1	34	1350	144			1494
12	L2	34	3850	144			3994
22	L3	32	5500	264			5764
16	L4	38	5500	192			5692
12	L5	6	Var. 3550 to 4150	144			Avg. 3994
12	L6	6	Var. 3550 to 4150	144			Avg. 3994
16	L7	22	Var. 6100 to 7000	192			Avg. 6783
16	L8	30	Var. 4475 to 6100	192			Avg. 5480
16	L9	32	4475	192			4667
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	34	240	5975	240		6455
20	U2	25	240	5610	240		6090
20	U3	24	240	5975	240		6455
20	U4	36	240	5610	240		6090
16	U6	15	192	4854	192		5238
16	U7	22	192	4862	192		5246
12	U8	12	Var. 6100 to 7000	275	625		Avg. 7600
12	U9	16	Var. 4475 to 6100	275	625		Avg. 6594
12	U10	24	4475	275	625		5375
16	U12	11	192	4910	192		5294
12	CC1	10	1350	550	4910		6810
12	CC2	29	1350	550	4910		6810
12	Z1	34	1350	866	144		2360
12	S1	34	750	4400	240		5390
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	360	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981



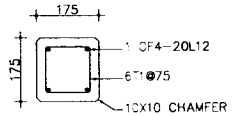
SECTION A-A



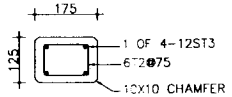
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/01210562	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7060				7060
12	ST4	8	7050				7050
12	L1	34	1250	144			1394
12	L2	34	3950	144			4094
22	L3	32	5500	264			5764
16	L4	38	5500	192			5692
12	L5	6	Var. 3650 to 4250	144			Avg. 4094
12	L6	6	Var. 3650 to 4250	144			Avg. 4094
16	L7	20	Var. 6250 to 7000	192			Avg. 6892
16	L8	32	Var. 4475 to 6250	192			Avg. 5555
16	L9	32	4475	192			4667
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	34	240	5975	240		6455
20	U2	25	240	5610	240		6090
20	U3	24	240	5975	240		6455
20	U4	36	240	5610	240		6090
16	U6	14	192	4854	192		5238
16	U7	23	192	4862	192		5246
12	U8	12	Var. 6250 to 7000	275	625		Avg. 7650
12	U9	18	Var. 4475 to 6250	275	625		Avg. 6707
12	U10	24	4475	275	625		5375
16	U12	11	192	4910	192		5294
12	CC1	9	1350	550	4910		6810
12	CC2	29	1350	550	4910		6810
12	Z1	34	1250	866	144		2260
12	S1	34	750	4500	240		5490
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	360	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7060				7060
12	ST4	8	7050				7050
12	L1	34	1100	144			1244
12	L2	34	4100	144			4244
22	L3	32	5500	264			5764
16	L4	38	5500	192			5692
12	L5	6	Var. 3800 to 4400	144			Avg. 4244
12	L6	6	Var. 3800 to 4400	144			Avg. 4244
16	L7	18	Var. 6475 to 7000	192			Avg. 7017
16	L8	36	Var. 4475 to 6475	192			Avg. 5667
16	L9	32	4475	192			4667
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	34	240	5975	240		6455
20	U2	25	240	5610	240		6090
20	U3	24	240	5975	240		6455
20	U4	36	240	5610	240		6090
16	U6	12	192	4854	192		5238
16	U7	24	192	4862	192		5246
12	U8	10	Var. 6475 to 7000	275	625		Avg. 7795
12	U9	20	Var. 4475 to 6475	275	625		Avg. 6875
12	U10	24	4475	275	625		5375
16	U12	11	192	4910	192		5294
12	CC1	8	1350	550	4910		6810
12	CC2	30	1350	550	4910		6810
12	Z1	34	1100	866	144		2110
12	S1	34	750	4650	240		5640
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	360	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail- 20mm, b) Post-20mm, c) Curb--25mm, d) Wall-50mm, e) Base-50mm

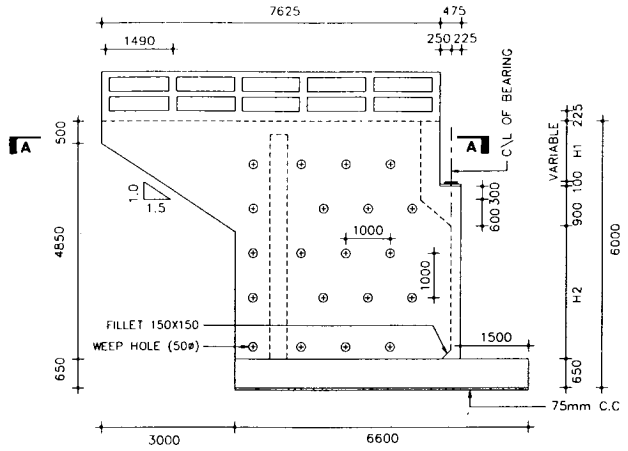
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 5.01m)

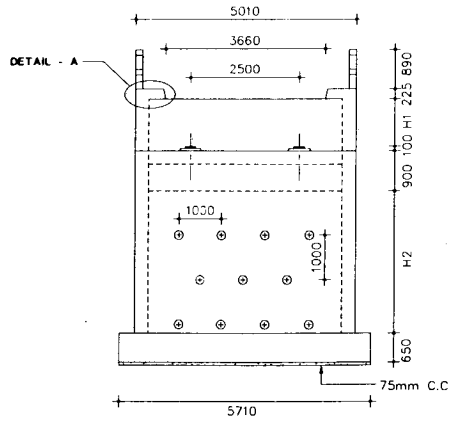
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01210563	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK : YES



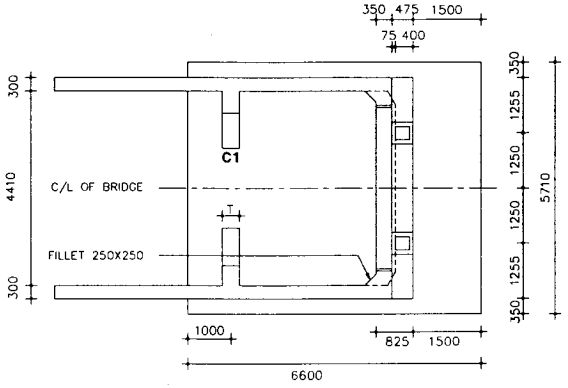
SIDE ELEVATION



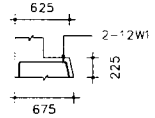
FRONT ELEVATION

TABLE-1

GIRDER SPAN	H1	H2
12000	1000	3400
11500	1000	3400
11000	1000	3400
10500	1000	3400
10000	1000	3400
9500	900	3500
9000	900	3500
8500	900	3500
8000	900	3500
7500	750	3650
7000	750	3650
6500	750	3650
6000	750	3650
5500	400	4000
5000	400	4000
4500	350	4050
4000	350	4050
3500	325	4075
3000	325	4075
2500	275	4125
2000	250	4150
1500	250	4150



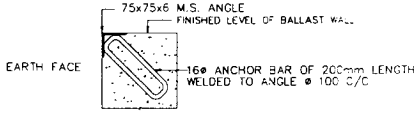
SECTION A-A



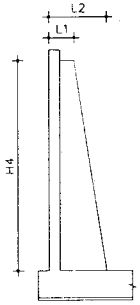
REINF. DETAIL 'A'

TABLE-2

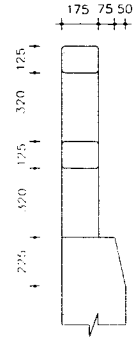
L1	L2	H4	T
700	1400	4950	400



NOSING AT ABUTMENT



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 112 kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

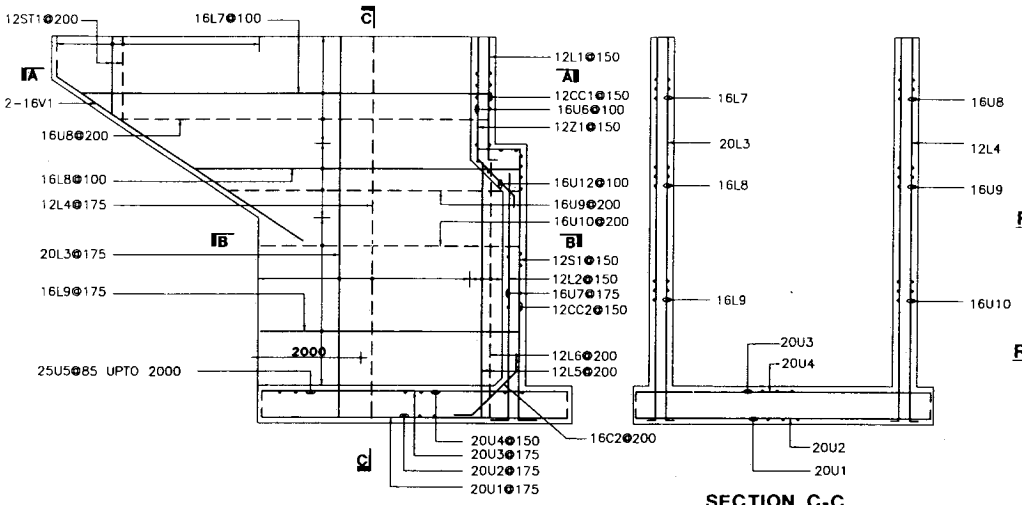
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 6.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY
CAD FILE REF : ABUT/C-210601

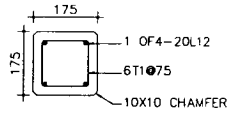
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SHEET 2 OF 3
SPAN RANGE : 1.5m TO 12m
SIDE WALK: YES

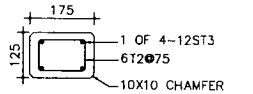


REINFORCEMENT DETAIL

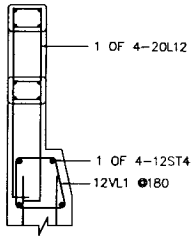
SECTION C-C



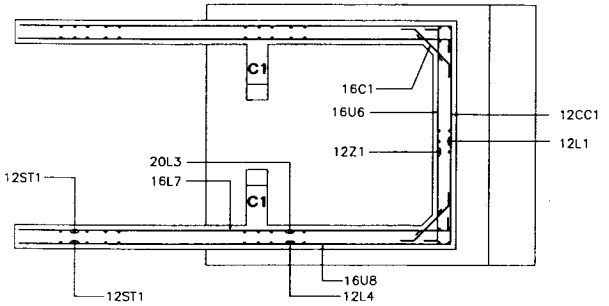
REINF. DETAIL OF POST



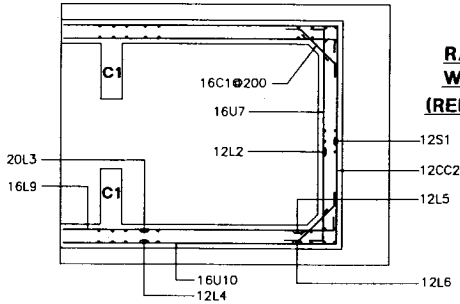
REINF. DETAIL OF RAILING



RAILING ON WING WALL (REINF. DETAIL)



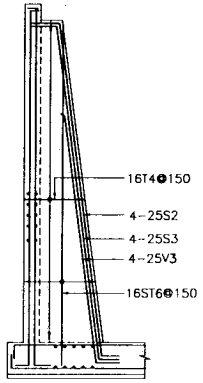
SECTION A-A



SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1350	144			1494
12	L2	34	4250	144			4394
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	22	Var. 6625 to 7525	192			Avg. 7308
16	L8	30	Var. 5000 to 6625	192			Avg. 6005
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	34	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	15	192	4854	192		5238
16	U7	21	192	4854	192		5238
16	U8	12	Var. 6625 to 7525	200	600		Avg. 8025
16	U9	16	Var. 5000 to 6625	200	650		Avg. 7069
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	10	1200	500	4910		6610
12	CC2	31	1200	600	4910		6710
12	Z1	34	1350	836	144		2330
12	S1	34	725	4800	240		5765
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	W1	2	325	535	329		1189



REINFORCEMENT DETAIL OF COUNTERFORT C1

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01210602

Web Copy

SPAN RANGE : 1.5m TO 12m

SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 900)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1250	144			1394
12	L2	34	4350	144			4494
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 4050 to 4650	144			Avg. 4494
12	L6	6	Var. 4050 to 4650	144			Avg. 4494
16	L7	20	Var. 6775 to 7525	192			Avg. 7417
16	L8	32	Var. 5000 to 6775	192			Avg. 6080
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	34	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	14	192	4854	192		5238
16	U7	22	192	4854	192		5238
16	U8	12	Var. 6775 to 7525	200	600		Avg. 8075
16	U9	18	Var. 5000 to 6775	200	650		Avg. 7182
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	9	1200	500	4910		6610
12	CC2	32	1200	600	4910		6710
12	Z1	34	1250	836	144		2230
12	S1	34	725	4900	240		5865
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	W1	2	325	535	329		1189

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 750)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1100	144			1244
12	L2	34	4500	144			4644
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 4200 to 4800	144			Avg. 4644
12	L6	6	Var. 4200 to 4800	144			Avg. 4644
16	L7	18	Var. 7000 to 7525	192			Avg. 7542
16	L8	36	Var. 5000 to 7000	192			Avg. 6192
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	34	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	12	192	4854	192		5238
16	U7	23	192	4854	192		5238
16	U8	10	Var. 7000 to 7525	200	600		Avg. 8220
16	U9	20	Var. 5000 to 7000	200	650		Avg. 7350
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	8	1200	500	4910		6610
12	CC2	33	1200	600	4910		6710
12	Z1	34	1100	836	144		2080
12	S1	34	725	5050	240		6015
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	W1	2	325	535	329		1189

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 5.01m)

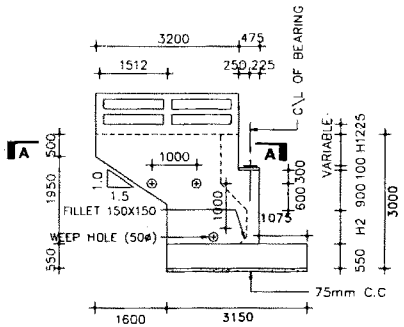
DATE :

ISSUED BY :

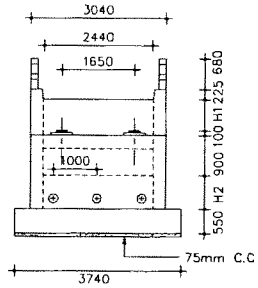
CAD FILE REF : ABUT\01210603

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



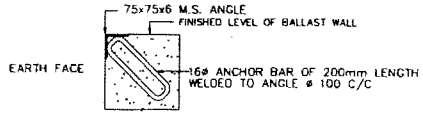
SIDE ELEVATION



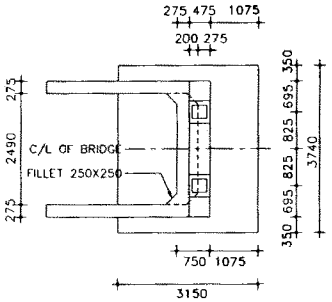
FRONT ELEVATION

TABLE-1

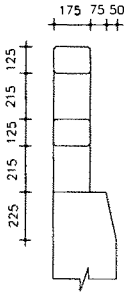
GIRDER SPAN	H1	H2
20000	1350	100
19500	1350	100
19000	1350	100
18500	1350	100
18000	1200	250
17500	1200	250
17000	1200	250
16500	1200	250
16000	1200	250
15500	1200	250
15000	950	500
14500	950	500
14000	950	500
13500	950	500
13000	950	500
12500	950	500



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

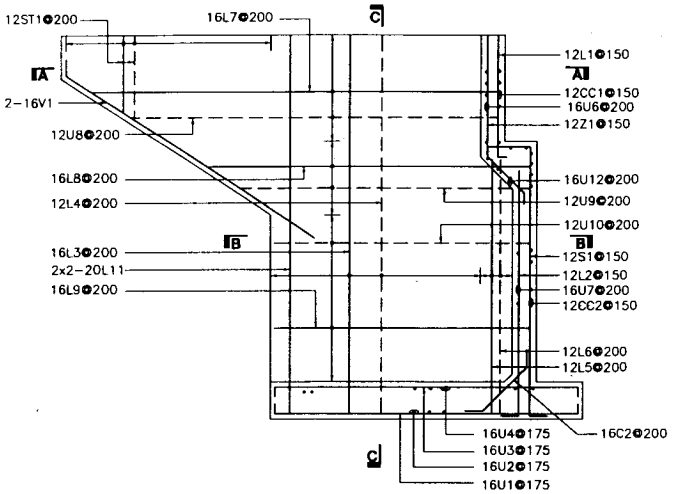
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

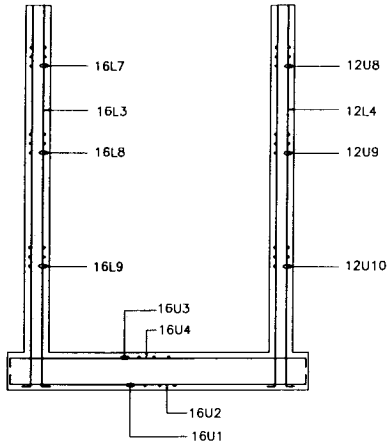
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 3.0m , DECK WIDTH 3.04m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\00120301

Web Copy

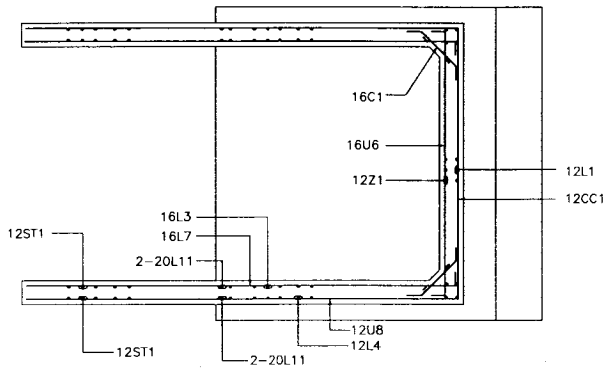
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO



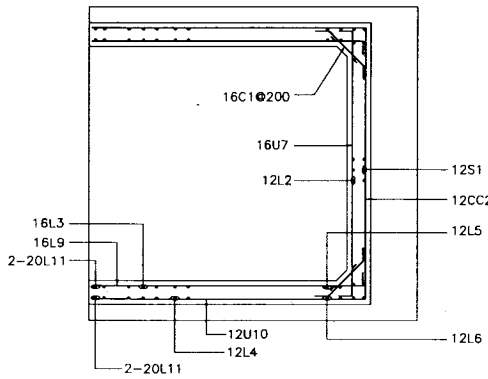
REINFORCEMENT DETAIL



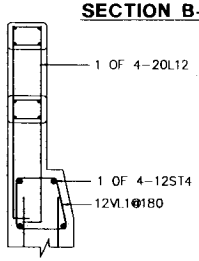
SECTION C-C



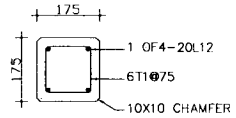
SECTION A-A



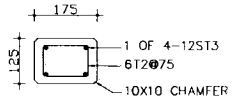
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1350	144			1494
12	L2	29	1250	144			1394
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 950 to 1550	144			Avg. 1394
12	L6	6	Var. 950 to 1550	144			Avg. 1394
16	L7	12	Var. 2200 to 3100	192			Avg. 2992
16	L8	8	Var. 1975 to 2200	192			Avg. 2280
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	2850	192		3234
16	U2	18	192	4860	192		5244
16	U3	29	192	2850	192		3234
16	U4	17	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	4	192	4112	192		4496
12	U8	12	Var. 2200 to 3100	175	525		Avg. 3500
12	U9	8	Var. 1975 to 2200	175	525		Avg. 2844
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	12	1150	350	4160		5660
12	Z1	29	1350	866	144		2360
12	S1	29	650	1800	240		2690
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120302

Web Copy

SHEET 3 OF 3
SPAN RANGE :12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	1550	144			1694
12	L2	21	1050	144			1194
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 750 to 1350	144			Avg. 1194
12	L6	6	Var. 750 to 1350	144			Avg. 1194
16	L7	14	Var. 1900 to 3100	192			Avg. 2778
16	L8	6	Var. 1975 to 1900	192			Avg. 2130
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	3050	192		3434
16	U2	19	192	3640	192		4024
16	U3	22	192	3050	192		3434
16	U4	18	192	3640	192		4024
16	U6	9	192	2892	192		3276
16	U7	3	192	2892	192		3276
12	U8	14	Var. 1900 to 3100	175	525		Avg. 3286
12	U9	6	Var. 1975 to 1900	175	525		Avg. 2638
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	11	1150	350	2940		4440
12	CC2	10	1150	350	2940		4440
12	Z1	21	1550	866	144		2560
12	S1	21	650	1600	240		2490
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	21	1300	144			1444
12	L2	21	1300	144			1444
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 1000 to 1600	144			Avg. 1444
12	L6	6	Var. 1000 to 1600	144			Avg. 1444
16	L7	12	Var. 2275 to 3100	192			Avg. 3017
16	L8	8	Var. 1975 to 2275	192			Avg. 2317
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	22	192	3050	192		3434
16	U2	19	192	3640	192		4024
16	U3	22	192	3050	192		3434
16	U4	18	192	3640	192		4024
16	U5	8	192	2892	192		3276
16	U7	4	192	2892	192		3276
12	U8	12	Var. 2275 to 3100	175	525		Avg. 3525
12	U9	8	Var. 1975 to 2275	175	525		Avg. 2825
12	U10	8	1975	175	525		2675
16	U12	5	192	2940	192		3324
12	CC1	9	1150	350	2940		4440
12	CC2	12	1150	350	2940		4440
12	Z1	21	1300	866	144		2310
12	S1	21	650	1850	240		2740
16	C1	28	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

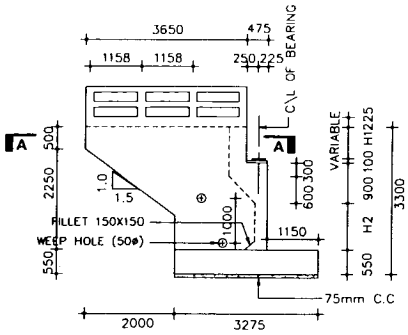
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.0m , DECK WIDTH 3.04m)

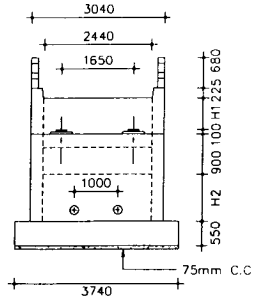
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120303

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



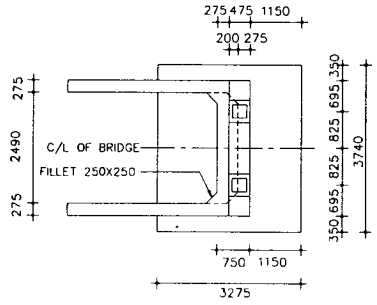
SIDE ELEVATION



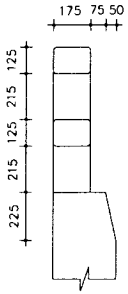
FRONT ELEVATION

TABLE-1

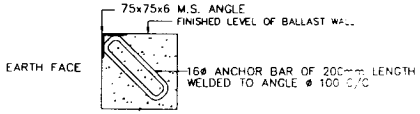
GIRDER SPAN	H1	H2
20000	1350	400
19500	1350	400
19000	1350	400
18500	1350	400
18000	1200	550
17500	1200	550
17000	1200	550
16500	1200	550
16000	1200	550
15500	1200	550
15000	950	800
14500	950	800
14000	950	800
13500	950	800
13000	950	800
12500	950	800



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m².
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

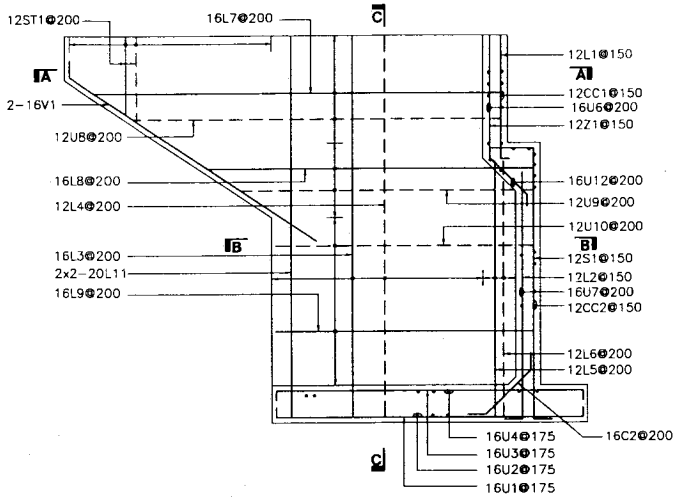
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.3m , DECK WIDTH 3.04m)

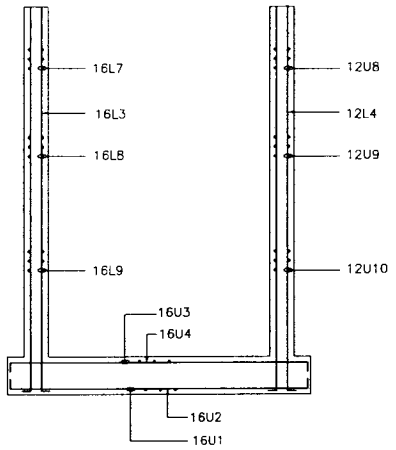
DATE :
ISSUED BY
CAD FILE REF : ABUT\00120331

Web Copy

SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO



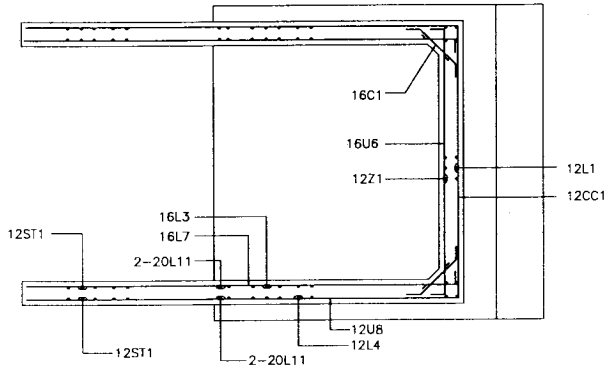
REINFORCEMENT DETAIL



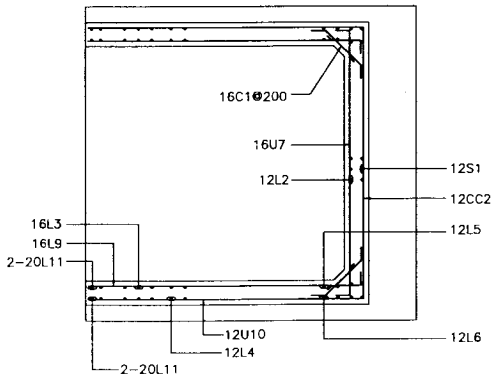
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

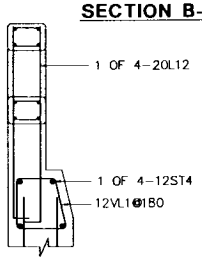
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	1700	144			1844
12	L2	21	1200	144			1344
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 900 to 1500	144			Avg. 1344
12	L6	6	Var. 900 to 1500	144			Avg. 1344
16	L7	16	Var. 2125 to 3550	192			Avg. 3030
16	L8	6	Var. 2025 to 2125	192			Avg. 2267
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	3175	192		3559
16	U2	20	192	3640	192		4024
16	U3	22	192	3175	192		3559
16	U4	20	192	3640	192		4024
16	U6	10	192	2892	192		3276
16	U7	4	192	2892	192		3276
12	U8	16	Var. 2125 to 3550	175	525		Avg. 3538
12	U9	6	Var. 2025 to 2125	175	525		Avg. 2775
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	12	1150	350	2940		4440
12	CC2	11	1150	350	2940		4440
12	Z1	21	1700	866	144		2710
12	S1	21	650	1750	240		2640
16	C1	30	320	851	320		1491
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000



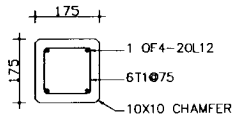
SECTION A-A



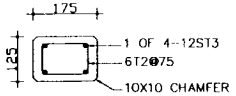
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 278 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad file: ABU1\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABU1\00120332	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	1550	144			1694
12	L2	21	1350	144			1494
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1050 to 1650	144			Avg. 1494
12	L6	6	Var. 1050 to 1650	144			Avg. 1494
16	L7	14	Var. 2350 to 3550	192			Avg. 3228
16	L8	8	Var. 2025 to 2350	192			Avg. 2380
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U5	9	192	2892	192		3276
16	U7	5	192	2892	192		3276
12	U8	14	Var. 2350 to 3550	175	525		Avg. 3736
12	U9	8	Var. 2025 to 2350	175	525		Avg. 2888
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	11	1150	350	2940		4440
12	CC2	12	1150	350	2940		4440
12	Z1	21	1550	866	144		2560
12	S1	21	650	1900	240		2790
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	21	1300	144			1444
12	L2	21	1600	144			1744
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1300 to 1900	144			Avg. 1744
12	L6	6	Var. 1300 to 1900	144			Avg. 1744
16	L7	12	Var. 2725 to 3550	192			Avg. 3467
16	L8	10	Var. 2025 to 2725	192			Avg. 2567
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	22	192	2875	192		3259
16	U2	18	192	3640	192		4024
16	U3	22	192	2875	192		3259
16	U4	18	192	3640	192		4024
16	U6	8	192	2892	192		3276
16	U7	6	192	2892	192		3276
12	U8	12	Var. 2725 to 3550	175	525		Avg. 3975
12	U9	10	Var. 2025 to 2725	175	525		Avg. 3075
12	U10	8	2025	175	525		2725
16	U12	5	192	2940	192		3324
12	CC1	9	1150	350	2940		4440
12	CC2	14	1150	350	2940		4440
12	Z1	21	1300	866	144		2310
12	S1	21	650	2150	240		3040
16	C1	30	320	846	320		1486
16	C2	16	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

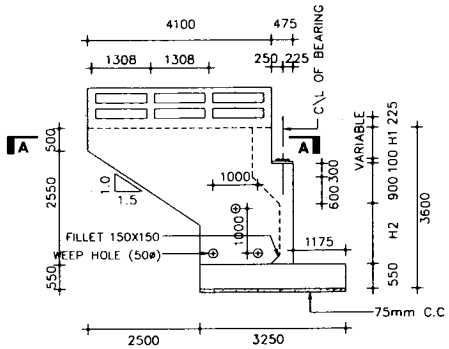
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 3.04m)

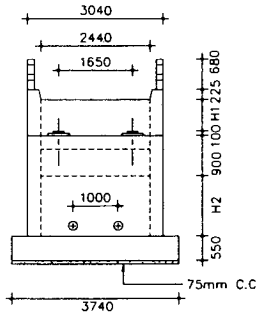
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120333	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



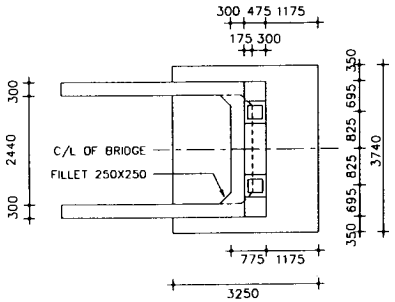
SIDE ELEVATION



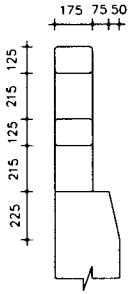
FRONT ELEVATION

TABLE-1

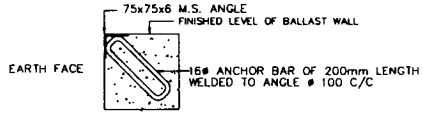
GIRDER SPAN	H1	H2
20000	1350	700
19500	1350	700
19000	1350	700
18500	1350	700
18000	1200	850
17500	1200	850
17000	1200	850
16500	1200	850
16000	1200	850
15500	1200	850
15000	950	1100
14500	950	1100
14000	950	1100
13500	950	1100
13000	950	1100
12500	950	900



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 100 kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metarial shall be provided as per specificotion.

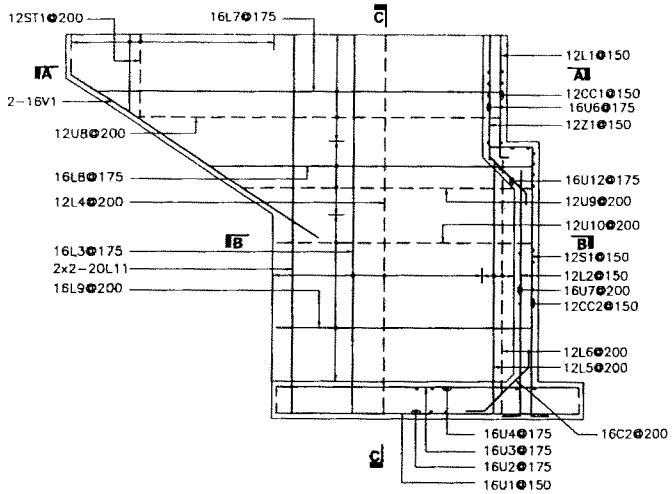
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.6m , DECK WIDTH 3.04m)

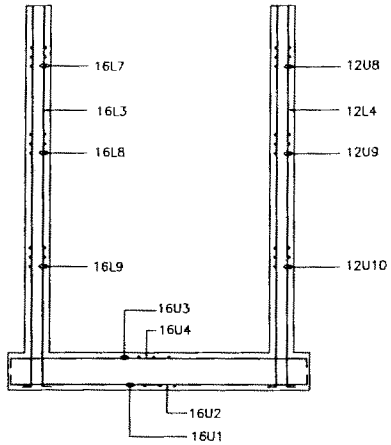
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120361

Web Copy

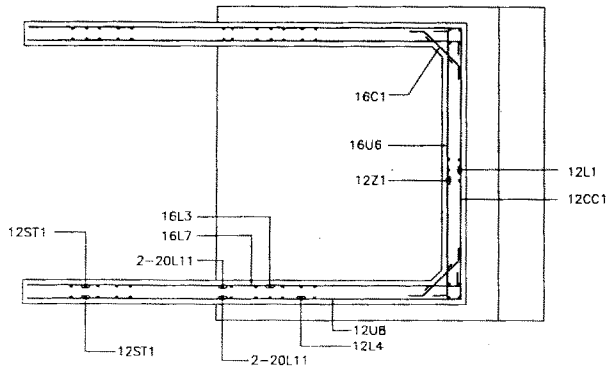
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO



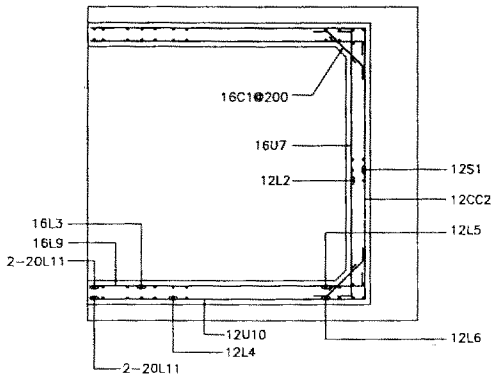
REINFORCEMENT DETAIL



SECTION C-C



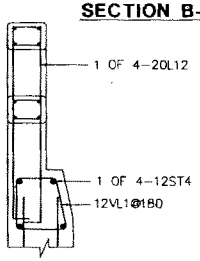
SECTION A-A



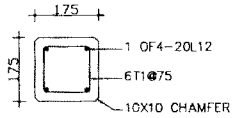
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

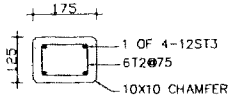
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	1700	144			1844
12	L2	21	1500	144			1644
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1200 to 1800	144			Avg. 1644
12	L6	6	Var. 1200 to 1800	144			Avg. 1644
16	L7	18	Var. 2575 to 4000	192			Avg. 3400
16	L8	12	Var. 1975 to 2575	192			Avg. 2467
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	26	192	3150	192		3534
16	U2	19	192	3640	192		4024
16	U3	22	192	3150	192		3534
16	U4	18	192	3640	192		4024
16	U5	11	192	2892	192		3276
16	U7	5	192	2892	192		3276
12	U8	16	Var. 2575 to 4000	200	550		Avg. 4038
12	U9	10	Var. 1975 to 2575	200	550		Avg. 3025
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	12	1200	400	2940		4540
12	CC2	13	1200	400	2940		4540
12	Z1	21	1700	866	144		2710
12	S1	21	675	2050	240		2965
16	C1	34	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **275** MPa.
6) Clear cover for : a) Rail-20mm, b) Post -20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120362	

Web Copy

SHEET 3 OF 3
SPAN RANGE :12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	1550	144			1694
12	L2	21	1650	144			1794
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1350 to 1950	144			Avg. 1794
12	L6	6	Var. 1350 to 1950	144			Avg. 1794
16	L7	16	Var. 2800 to 4000	192			Avg. 3592
16	L8	12	Var. 1975 to 2800	192			Avg. 2580
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	26	192	3150	192		3534
16	U2	19	192	3640	192		4024
16	U3	22	192	3150	192		3534
16	U4	18	192	3640	192		4024
16	U6	10	192	2892	192		3276
16	U7	6	192	2892	192		3276
12	U8	14	Var. 2800 to 4000	200	550		Avg. 4236
12	U9	12	Var. 1975 to 2800	200	550		Avg. 3138
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	11	1200	400	2940		4540
12	CC2	14	1200	400	2940		4540
12	Z1	21	1550	866	144		2560
12	S1	21	675	2200	240		3115
16	C1	34	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	21	1300	144			1444
12	L2	21	1900	144			2044
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	14	Var. 3175 to 4000	192			Avg. 3838
16	L8	16	Var. 1975 to 3175	192			Avg. 2767
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	26	192	3150	192		3534
16	U2	19	192	3640	192		4024
16	U3	22	192	3150	192		3534
16	U4	18	192	3640	192		4024
16	U6	9	192	2892	192		3276
16	U7	7	192	2892	192		3276
12	U8	12	Var. 3175 to 4000	200	550		Avg. 4475
12	U9	14	Var. 1975 to 3175	200	550		Avg. 3325
12	U10	8	1975	200	550		2725
16	U12	6	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	16	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	2450	240		3365
16	C1	34	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

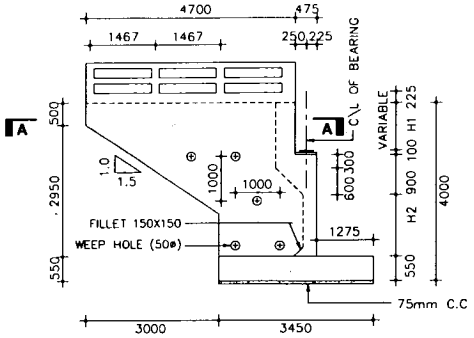
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120363	

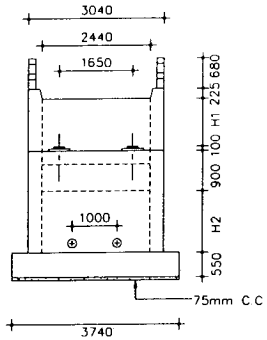
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OA-130

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



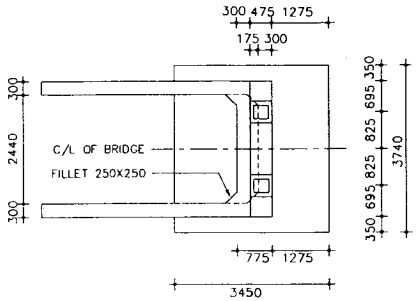
SIDE ELEVATION



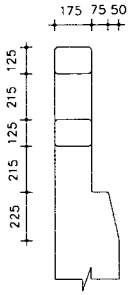
FRONT ELEVATION

TABLE-1

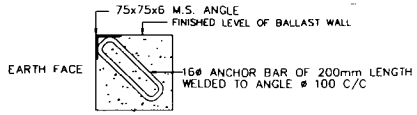
GIRDER SPAN	H1	H2
20000	1350	1100
19500	1350	1100
19000	1350	1100
18500	1350	1100
18000	1200	1250
17500	1200	1250
17000	1200	1250
16500	1200	1250
16000	1200	1250
15500	1200	1250
15000	950	1500
14500	950	1500
14000	950	1500
13500	950	1500
13000	950	1500
12500	950	1500



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.0m , DECK WIDTH 3.04m)

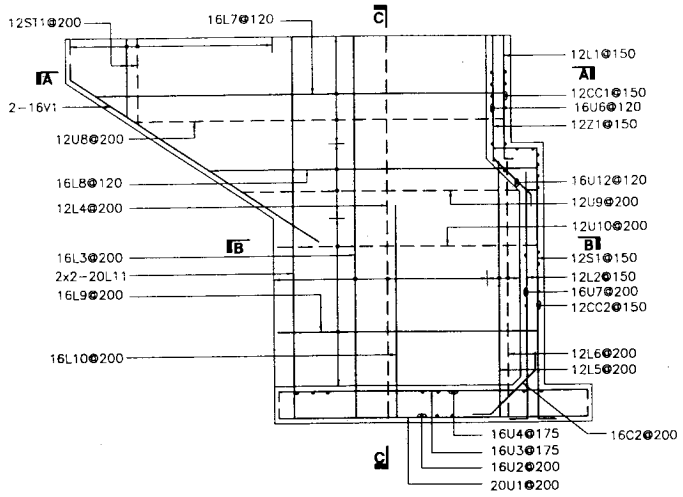
DATE :

ISSUED BY :

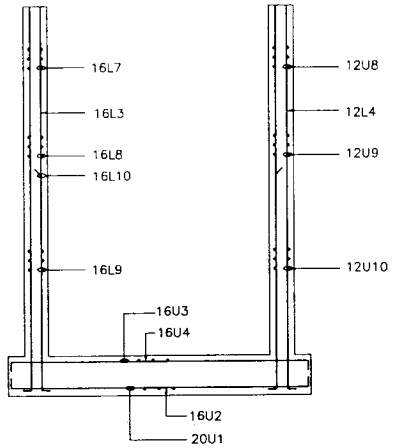
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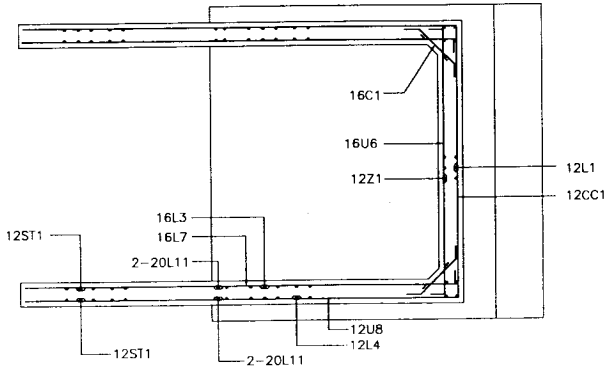
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO



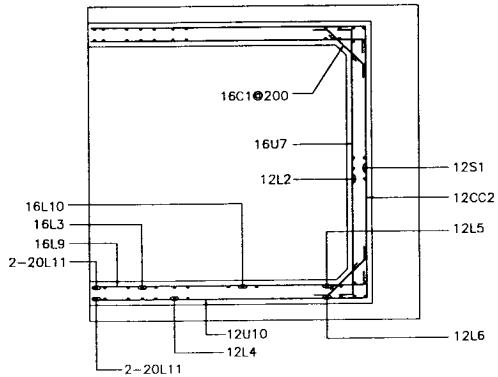
REINFORCEMENT DETAIL



SECTION C-C



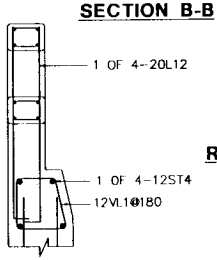
SECTION A-A



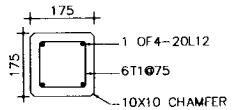
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

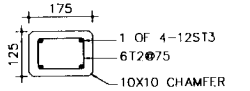
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	1700	144			1844
12	L2	21	1900	144			2044
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	26	Var. 3175 to 4600	192			Avg. 4025
16	L8	20	Var. 2075 to 3175	192			Avg. 2817
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	20	240	3350	240		3830
16	U2	18	192	3640	192		4024
16	U3	22	192	3350	192		3734
16	U4	21	192	3640	192		4024
16	U6	16	192	2892	192		3276
16	U7	7	192	2892	192		3276
12	U8	16	Var. 3175 to 4600	200	550		Avg. 4638
12	U9	14	Var. 2075 to 3175	200	550		Avg. 3375
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	12	1200	400	2940		4540
12	CC2	16	1200	400	2940		4540
12	Z1	21	1700	866	144		2710
12	S1	21	675	2450	240		3365
16	C1	38	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120402

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	1550	144			1694
12	L2	21	2050	144			2194
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1750 to 2350	144			Avg. 2194
12	L6	6	Var. 1750 to 2350	144			Avg. 2194
16	L7	24	Var. 3400 to 4600	192			Avg. 4192
16	L8	22	Var. 2075 to 3400	192			Avg. 2930
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	20	240	3350	240		3830
16	U2	18	192	3640	192		4024
16	U3	22	192	3350	192		3734
16	U4	21	192	3640	192		4024
16	U6	14	192	2892	192		3276
16	U7	8	192	2892	192		3276
12	U8	14	Var. 3400 to 4600	200	550		Avg. 4836
12	U9	14	Var. 2075 to 3400	200	550		Avg. 3488
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	11	1200	400	2940		4540
12	CC2	17	1200	400	2940		4540
12	Z1	21	1550	866	144		2560
12	S1	21	675	2600	240		3515
16	C1	38	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	21	1300	144			1444
12	L2	21	2300	144			2444
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 2000 to 2600	144			Avg. 2444
12	L6	6	Var. 2000 to 2600	144			Avg. 2444
16	L7	20	Var. 3775 to 4600	192			Avg. 4462
16	L8	28	Var. 2075 to 3775	192			Avg. 3117
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	20	240	3350	240		3830
16	U2	18	192	3640	192		4024
16	U3	22	192	3350	192		3734
16	U4	21	192	3640	192		4024
16	U6	12	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	12	Var. 3775 to 4600	200	550		Avg. 5075
12	U9	18	Var. 2075 to 3775	200	550		Avg. 3675
12	U10	8	2075	200	550		2825
16	U12	9	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	19	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	2850	240		3765
16	C1	38	320	922	320		1562
16	C2	16	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

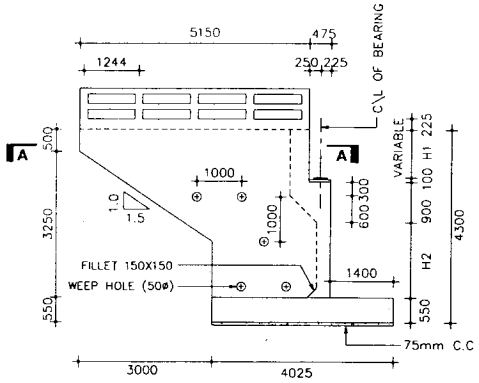
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 3.04m)

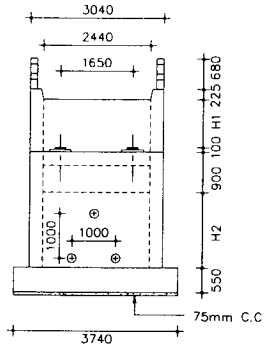
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120403

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



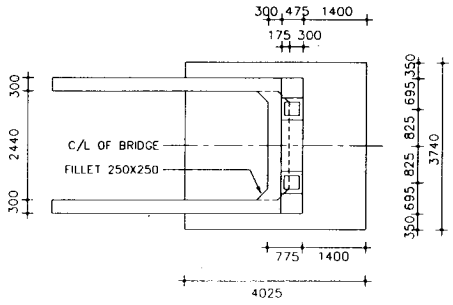
SIDE ELEVATION



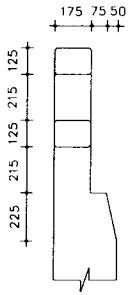
FRONT ELEVATION

TABLE-1

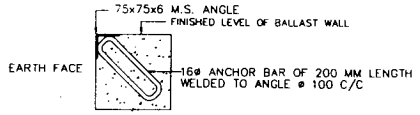
GIRDER SPAN	H1	H2
20000	1350	1400
19500	1350	1400
19000	1350	1400
18500	1350	1400
18000	1200	1550
17500	1200	1550
17000	1200	1550
16500	1200	1550
16000	1200	1550
15500	1200	1550
15000	950	1800
14500	950	1800
14000	950	1800
13500	950	1800
13000	950	1800
12500	950	1600



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in crawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

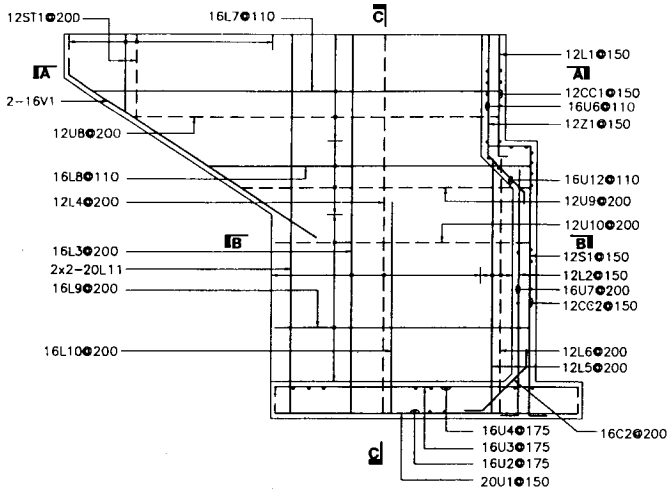
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.3m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\001204.31	

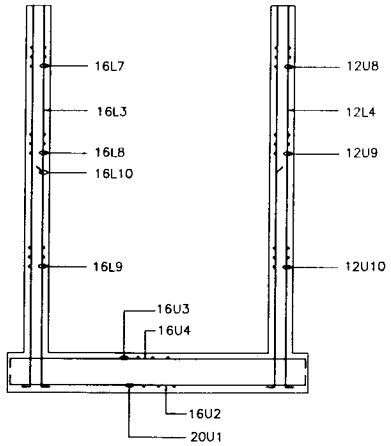
Web Copy

OA-134

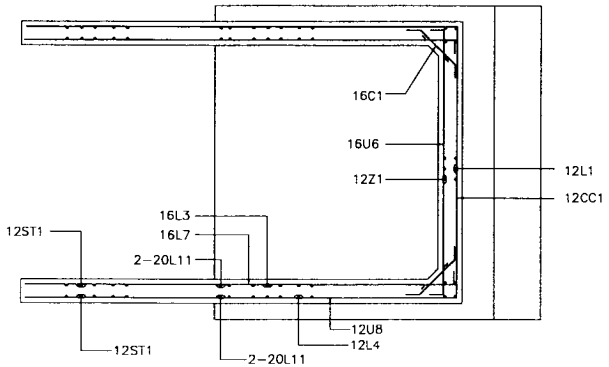
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO



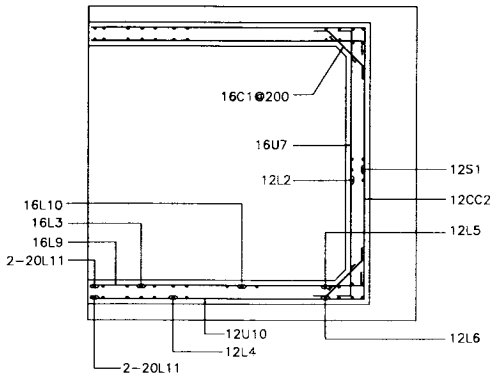
REINFORCEMENT DETAIL



SECTION C-C



SECTION A-A



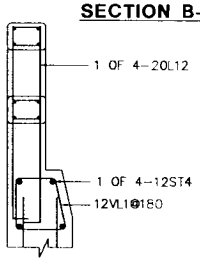
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1350)

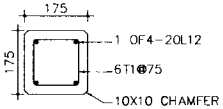
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	1700	144			1844
12	L2	21	2200	144			2344
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 1900 to 2500	144			Avg. 2344
12	L6	6	Var. 1900 to 2500	144			Avg. 2344
16	L7	28	Var. 3625 to 5050	192			Avg. 4428
16	L8	22	Var. 2525 to 3625	192			Avg. 3267
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	26	240	3925	240		4405
16	U2	24	192	3640	192		4024
16	U3	22	192	3925	192		4309
16	U4	24	192	3640	192		4024
16	U6	17	192	2892	192		3276
16	U7	9	192	2892	192		3276
12	U8	16	Var. 3625 to 5050	200	550		Avg. 5088
12	U9	14	Var. 2525 to 3625	200	550		Avg. 3825
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	12	1200	400	2940		4540
12	CC2	18	1200	400	2940		4540
12	Z1	21	1700	866	144		2710
12	S1	21	675	2750	240		3665
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

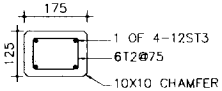
1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120432

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1200)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	1550	144			1694
12	L2	21	2350	144			2494
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2050 to 2650	144			Avg. 2494
12	L6	6	Var. 2050 to 2650	144			Avg. 2494
16	L7	26	Var. 3850 to 5050	192			Avg. 4596
16	L8	24	Var. 2525 to 3850	192			Avg. 3380
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	26	240	3925	240		4405
16	U2	24	192	3640	192		4024
16	U3	22	192	3925	192		4309
16	U4	24	192	3640	192		4024
16	U6	16	192	2892	192		3276
16	U7	10	192	2892	192		3276
12	U8	14	Var. 3850 to 5050	200	550		Avg. 5286
12	U9	14	Var. 2525 to 3850	200	550		Avg. 3938
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	11	1200	400	2940		4540
12	CC2	19	1200	400	2940		4540
12	Z1	21	1550	866	144		2560
12	S1	21	675	2900	240		3815
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	21	1300	144			1444
12	L2	21	2600	144			2744
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2300 to 2900	144			Avg. 2744
12	L6	6	Var. 2300 to 2900	144			Avg. 2744
16	L7	20	Var. 4225 to 5050	192			Avg. 4912
16	L8	30	Var. 2525 to 4225	192			Avg. 3567
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	26	240	3925	240		4405
16	U2	24	192	3640	192		4024
16	U3	22	192	3925	192		4309
16	U4	24	192	3640	192		4024
16	U6	13	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	12	Var. 4225 to 5050	200	550		Avg. 5525
12	U9	18	Var. 2525 to 4225	200	550		Avg. 4125
12	U10	12	2525	200	550		3275
16	U12	10	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	3150	240		4065
16	C1	40	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

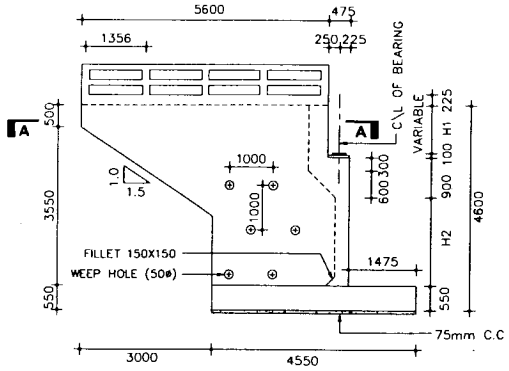
REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 4.3m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120433

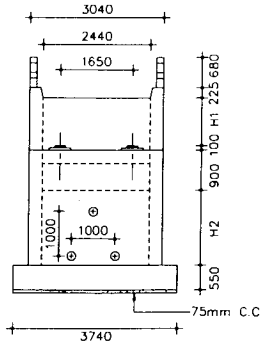
Web Copy

QA-136

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



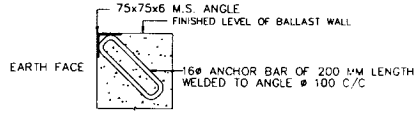
SIDE ELEVATION



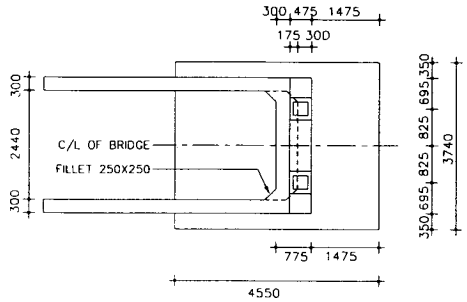
FRONT ELEVATION

TABLE-1

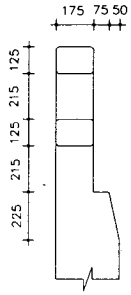
GIRDER SPAN	H1	H2
20000	1350	1700
19500	1350	1700
19000	1350	1700
18500	1350	1700
18000	1200	1850
17500	1200	1850
17000	1200	1850
16500	1200	1850
16000	1200	1850
15500	1200	1850
15000	950	2100
14500	950	2100
14000	950	2100
13500	950	2100
13000	950	2100
12500	950	2100



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

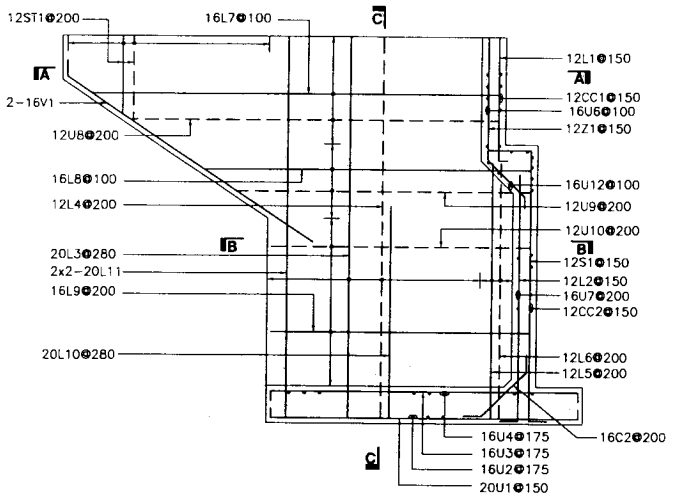
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metarial shall be provided as per specification

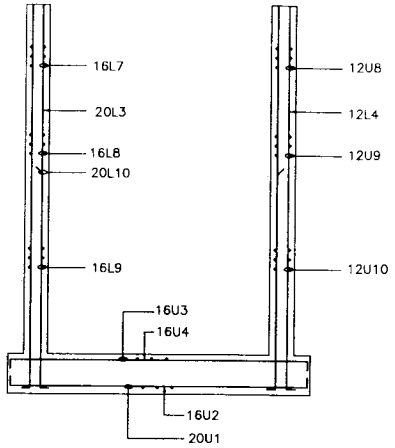
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT : 4.6m , DECK WIDTH 3.04m)
DATE : / ISSUED BY :
CAD FILE REF : ABUT\00120461

Web Copy

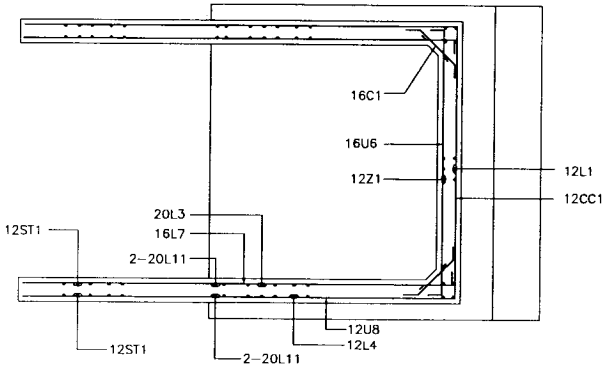
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO



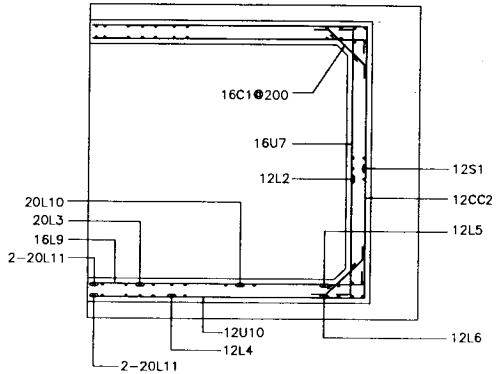
REINFORCEMENT DETAIL



SECTION C-C



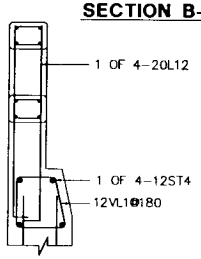
SECTION A-A



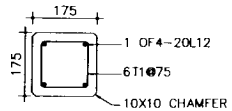
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1350)

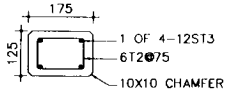
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	1700	144			1844
12	L2	21	2500	144			2644
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	30	Var. 4075 to 5500	192			Avg. 4837
16	L8	24	Var. 2975 to 4075	192			Avg. 3717
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4450	240		4930
16	U2	27	192	3640	192		4024
16	U3	22	192	4450	192		4834
16	U4	27	192	3640	192		4024
16	U6	18	192	2892	192		3276
16	U7	10	192	2892	192		3276
12	U8	16	Var. 4075 to 5500	200	550		Avg. 5538
12	U9	14	Var. 2975 to 4075	200	550		Avg. 4275
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	12	1200	400	2940		4540
12	CC2	20	1200	400	2940		4540
12	Z1	21	1700	866	144		2710
12	S1	21	675	3050	240		3965
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120462	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	1550	144			1694
12	L2	21	2650	144			2794
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2350 to 2950	144			Avg. 2794
12	L6	6	Var. 2350 to 2950	144			Avg. 2794
16	L7	26	Var. 4300 to 5500	192			Avg. 5046
16	L8	26	Var. 2975 to 4300	192			Avg. 3830
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4450	240		4930
16	U2	27	192	3640	192		4024
16	U3	22	192	4450	192		4834
16	U4	27	192	3640	192		4024
16	U6	17	192	2892	192		3276
16	U7	11	192	2892	192		3276
12	U8	14	Var. 4300 to 5500	200	550		Avg. 5736
12	U9	14	Var. 2975 to 4300	200	550		Avg. 4388
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	11	1200	400	2940		4540
12	CC2	21	1200	400	2940		4540
12	Z1	21	1550	866	144		2560
12	S1	21	675	3200	240		4115
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	21	1300	144			1444
12	L2	21	2900	144			3044
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	22	Var. 4675 to 5500	192			Avg. 5317
16	L8	32	Var. 2975 to 4675	192			Avg. 4017
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	26	240	4450	240		4930
16	U2	27	192	3640	192		4024
16	U3	22	192	4450	192		4834
16	U4	27	192	3640	192		4024
16	U6	14	192	2892	192		3276
16	U7	12	192	2892	192		3276
12	U8	12	Var. 4675 to 5500	200	550		Avg. 5975
12	U9	18	Var. 2975 to 4675	200	550		Avg. 4575
12	U10	14	2975	200	550		3725
16	U12	11	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	23	1200	400	2940		4540
12	Z1	21	1300	866	144		2310
12	S1	21	675	3450	240		4365
16	C1	44	320	916	320		1556
16	C2	16	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

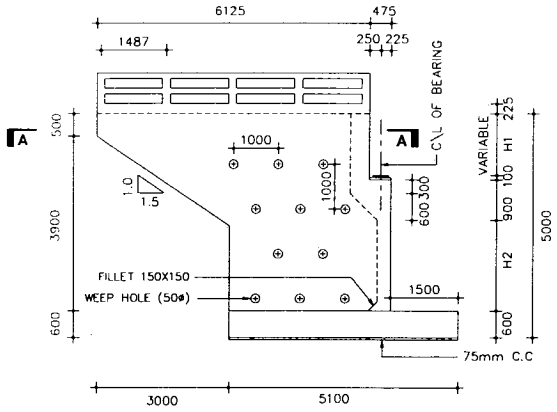
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 3.04m)

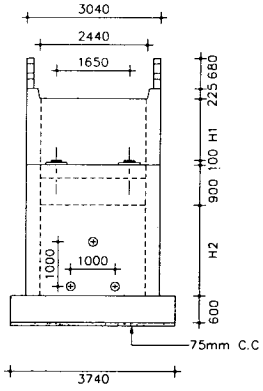
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120463	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



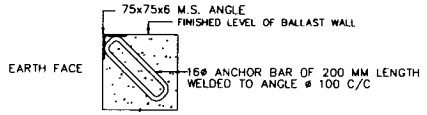
SIDE ELEVATION



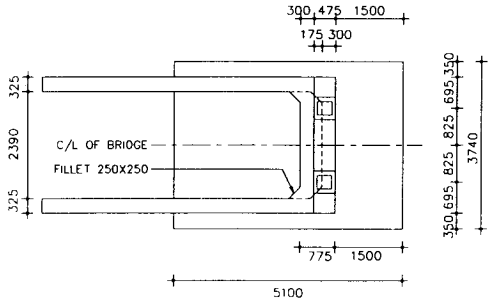
FRONT ELEVATION

TABLE-1

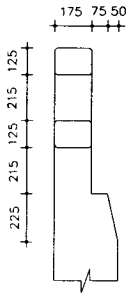
GIRDER SPAN	H1	H2
20000	1350	2050
19500	1350	2050
19000	1350	2050
18500	1350	2050
18000	1200	2200
17500	1200	2200
17000	1200	2200
16500	1200	2200
16000	1200	2200
15500	1200	2200
15000	950	2450
14500	950	2450
14000	950	2450
13500	950	2450
13000	950	2450
12500	950	2450



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 100 kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

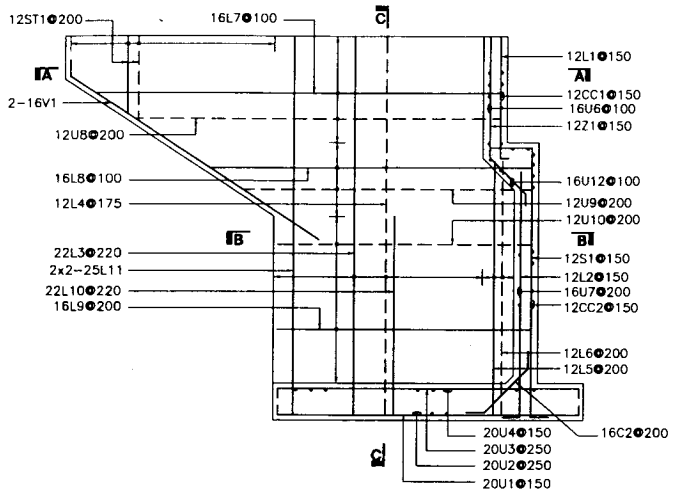
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120501	

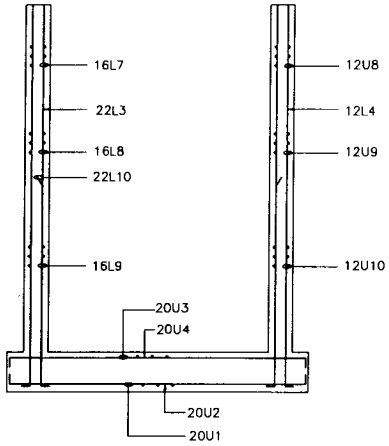
Web Copy

OA-140

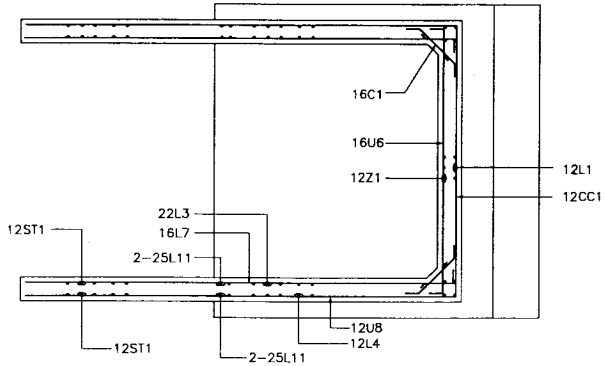
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO



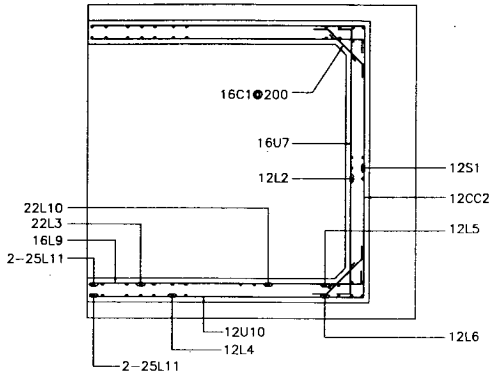
REINFORCEMENT DETAIL



SECTION C-C



SECTION A-A



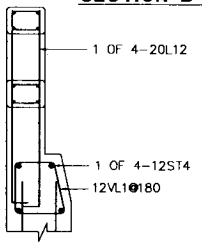
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

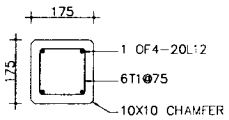
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	1700	144			1844
12	L2	21	2900	144			3044
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	30	Var. 4600 to 6025	192			Avg. 5362
16	L8	24	Var. 3500 to 4600	192			Avg. 4242
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	5000	240		5480
20	U2	21	240	3640	240		4120
20	U3	16	240	5000	240		5480
20	U4	35	240	3640	240		4120
16	U6	18	192	2892	192		3276
16	U7	12	192	2892	192		3276
12	U8	16	Var. 4600 to 6025	225	550		Avg. 6088
12	U9	14	Var. 3500 to 4600	225	550		Avg. 4825
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	12	1250	400	2940		4590
12	CC2	22	1250	400	2940		4590
12	Z1	21	1700	866	144		2710
12	S1	21	675	3450	240		4365
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

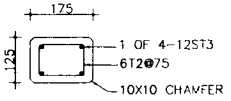
1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 5.0m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/00120502	

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SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	1550	144			1694
12	L2	21	3050	144			3194
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 2750 to 3350	144			Avg. 3194
12	L6	6	Var. 2750 to 3350	144			Avg. 3194
16	L7	26	Var. 4825 to 6025	192			Avg. 5571
16	L8	26	Var. 3500 to 4825	192			Avg. 4355
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	5000	240		5480
20	U2	21	240	3640	240		4120
20	U3	16	240	5000	240		5480
20	U4	35	240	3640	240		4120
16	U6	17	192	2892	192		3276
16	U7	13	192	2892	192		3276
12	U8	14	Var. 4825 to 6025	225	550		Avg. 6286
12	U9	14	Var. 3500 to 4825	225	550		Avg. 4938
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	11	1250	400	2940		4590
12	CC2	23	1250	400	2940		4590
12	Z1	21	1550	866	144		2560
12	S1	21	675	3600	240		4515
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	21	1300	144			1444
12	L2	21	3300	144			3444
22	L3	20	4900	264			5164
12	L4	28	4900	144			5044
12	L5	6	Var. 3000 to 3600	144			Avg. 3444
12	L6	6	Var. 3000 to 3600	144			Avg. 3444
16	L7	22	Var. 5200 to 6025	192			Avg. 5842
16	L8	32	Var. 3500 to 5200	192			Avg. 4542
16	L9	18	3500	192			3692
22	L10	20	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	26	240	5000	240		5480
20	U2	21	240	3640	240		4120
20	U3	16	240	5000	240		5480
20	U4	35	240	3640	240		4120
16	U6	14	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	12	Var. 5200 to 6025	225	550		Avg. 6525
12	U9	18	Var. 3500 to 5200	225	550		Avg. 5125
12	U10	18	3500	225	575		4300
16	U12	11	192	2940	192		3324
12	CC1	9	1250	400	2940		4590
12	CC2	25	1250	400	2940		4590
12	Z1	21	1300	866	144		2310
12	S1	21	675	3850	240		4765
16	C1	46	320	952	320		1592
16	C2	16	320	1205	320		1845
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

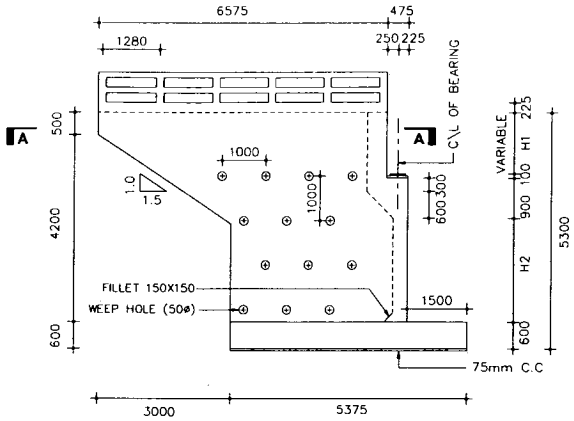
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 3.04m)

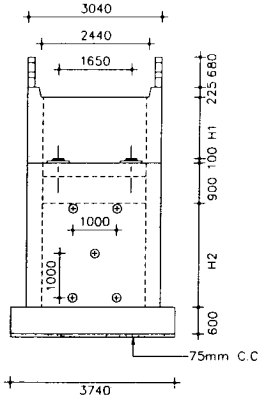
DATE :	ISSUED BY :
CAD FILE REF : ABUT/00120503	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



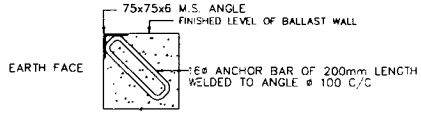
SIDE ELEVATION



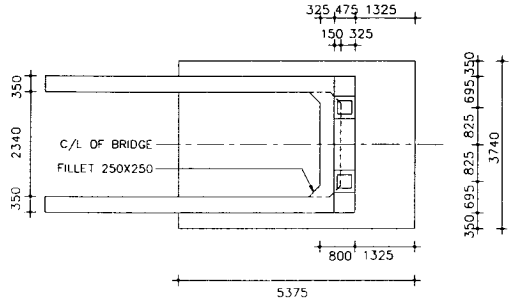
FRONT ELEVATION

TABLE-1

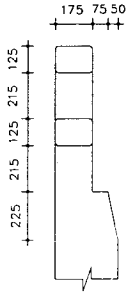
GIRDER SPAN	H1	H2
20000	1350	2350
19500	1350	2350
19000	1350	2350
18500	1350	2350
18000	1200	2500
17500	1200	2500
17000	1200	2500
16500	1200	2500
16000	1200	2500
15500	1200	2500
15000	950	2750
14500	950	2750
14000	950	2750
13500	950	2750
13000	950	2750
12500	950	2750



NOSING AT ABUTMENT



SECTION A-A



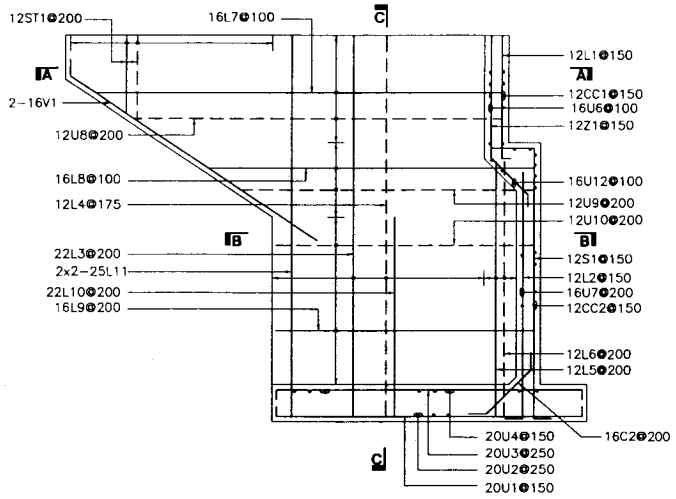
GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

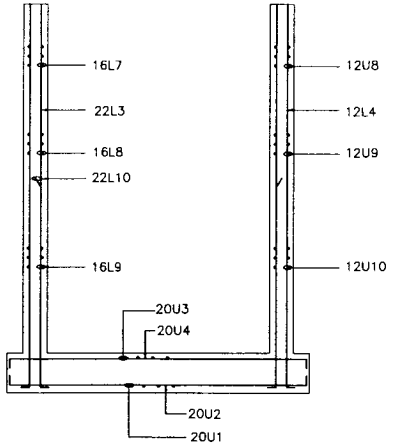
1) All dimensions are in millimetre unless otherwise specified.
3) Bering capacity of soil should be ≥ **110** kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 5.3m , DECK WIDTH 3.04m)	
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120531	

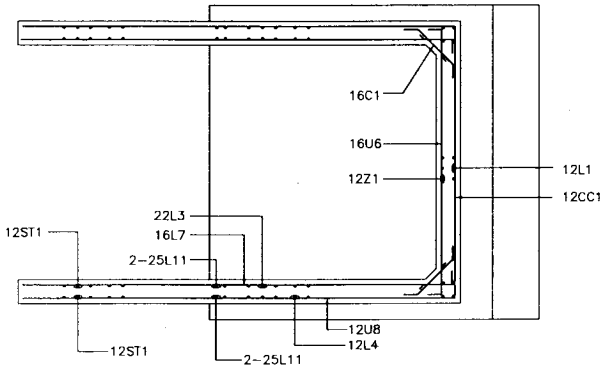
Web Copy



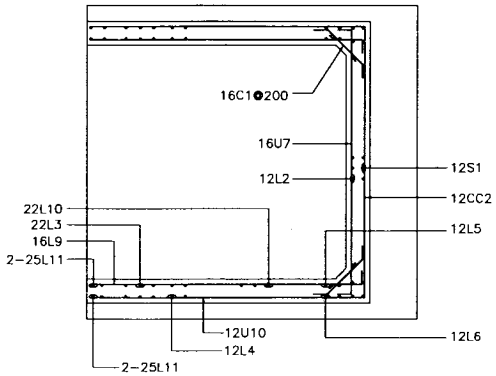
REINFORCEMENT DETAIL



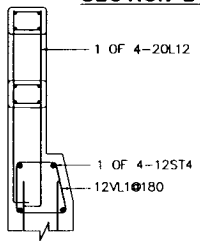
SECTION C-C



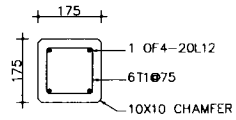
SECTION A-A



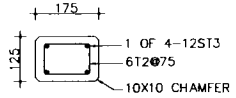
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6360				6360
12	ST4	8	6350				6350
12	L1	21	1700	144			1844
12	L2	21	3200	144			3344
22	L3	26	5200	264			5464
12	L4	30	5200	144			5344
12	L5	6	Var. 2900 to 3500	144			Avg. 3344
12	L6	6	Var. 2900 to 3500	144			Avg. 3344
16	L7	30	Var. 4875 to 6300	192			Avg. 5637
16	L8	24	Var. 3775 to 4875	192			Avg. 4517
16	L9	20	3775	192			3967
22	L10	26	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	26	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	18	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	16	Var. 4875 to 6300	250	575		Avg. 6413
12	U9	14	Var. 3775 to 4875	250	575		Avg. 5150
12	U10	20	3775	250	600		4625
16	U12	11	192	2940	192		3324
12	CC1	12	1300	450	2940		4690
12	CC2	24	1300	450	2940		4690
12	Z1	21	1700	866	144		2710
12	S1	21	700	3750	240		4690
16	C1	50	320	1022	320		1682
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	74	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/o0120532

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SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6360				6360
12	ST4	8	6350				6350
12	L1	21	1550	144			1694
12	L2	21	3350	144			3494
22	L3	26	5200	264			5464
12	L4	30	5200	144			5344
12	L5	6	Var. 3050 to 3650	144			Avg. 3494
12	L6	6	Var. 3050 to 3650	144			Avg. 3494
16	L7	26	Var. 5100 to 6300	192			Avg. 5846
16	L8	26	Var. 3775 to 5100	192			Avg. 4630
16	L9	20	3775	192			3967
22	L10	26	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	26	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	17	192	2892	192		3276
16	U7	14	192	2892	192		3276
12	U8	14	Var. 5100 to 6300	250	575		Avg. 6611
12	U9	14	Var. 3775 to 5100	250	575		Avg. 5263
12	U10	20	3775	250	600		4625
16	U12	11	192	2940	192		3324
12	CC1	11	1300	450	2940		4690
12	CC2	25	1300	450	2940		4690
12	Z1	21	1550	866	144		2560
12	S1	21	700	3900	240		4840
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	74	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6360				6360
12	ST4	8	6350				6350
12	L1	21	1300	144			1444
12	L2	21	3600	144			3744
22	L3	26	5200	264			5464
12	L4	30	5200	144			5344
12	L5	6	Var. 3300 to 3900	144			Avg. 3744
12	L6	6	Var. 3300 to 3900	144			Avg. 3744
16	L7	22	Var. 5475 to 6300	192			Avg. 6117
16	L8	32	Var. 3775 to 5475	192			Avg. 4817
16	L9	20	3775	192			3967
22	L10	26	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	26	240	5275	240		5755
20	U2	23	240	3640	240		4120
20	U3	16	240	5275	240		5755
20	U4	37	240	3640	240		4120
16	U6	14	192	2892	192		3276
16	U7	16	192	2892	192		3276
12	U8	12	Var. 5475 to 6300	250	575		Avg. 6850
12	U9	18	Var. 3775 to 5475	250	575		Avg. 5450
12	U10	20	3775	250	600		4625
16	U12	11	192	2940	192		3324
12	CC1	9	1300	450	2940		4690
12	CC2	27	1300	450	2940		4690
12	Z1	21	1300	866	144		2310
12	S1	21	700	4150	240		5090
16	C1	50	320	1022	320		1662
16	C2	16	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	74	272	200	250	278	1000

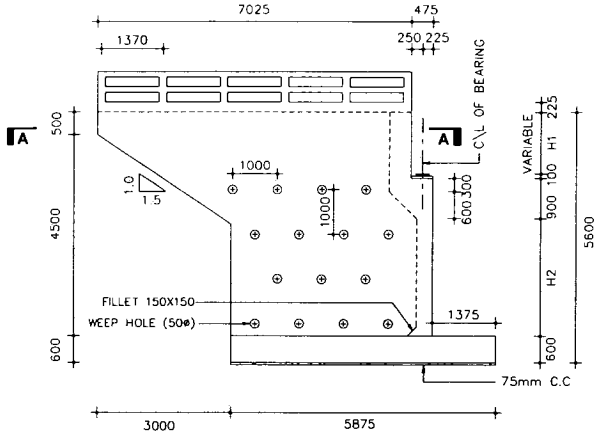
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 3.04m)

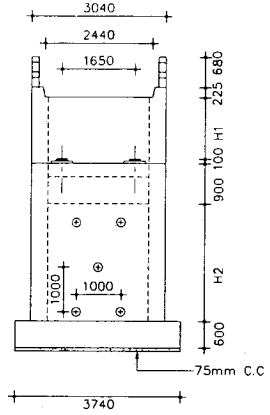
DATE :	ISSUED BY :
CAD FILE REF : ABUT/o0120533	

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



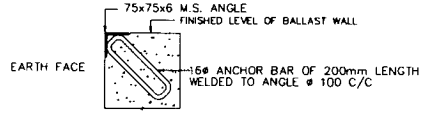
SIDE ELEVATION



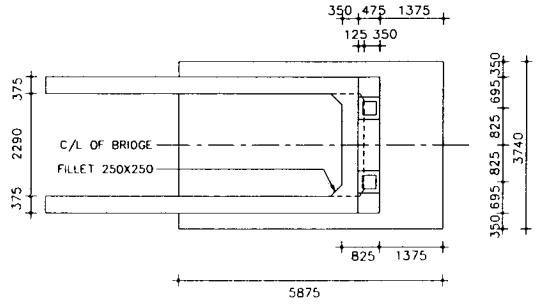
FRONT ELEVATION

TABLE-1

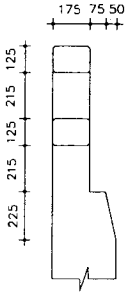
GIRDER SPAN	H1	H2
20000	1350	2650
19500	1350	2650
19000	1350	2650
18500	1350	2650
18000	1200	2800
17500	1200	2800
17000	1200	2800
16500	1200	2800
16000	1200	2800
15500	1200	2800
15000	950	3050
14500	950	3050
14000	950	3050
13500	950	3050
13000	950	3050
12500	950	3050



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 114 kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

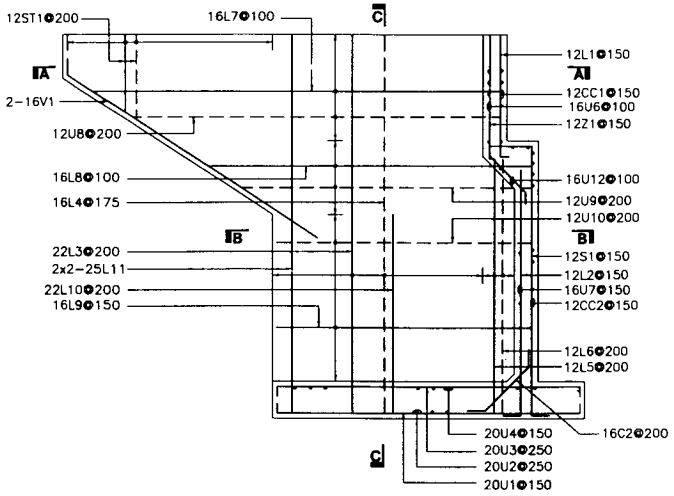
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.6m , DECK WIDTH 3.04m)

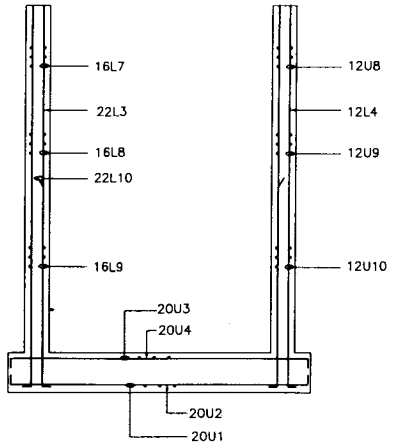
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120561	

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SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO



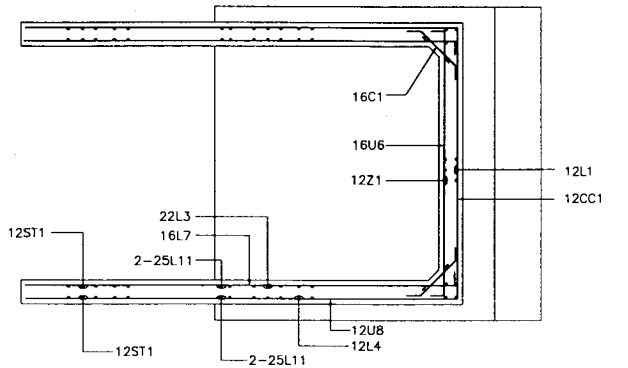
REINFORCEMENT DETAIL



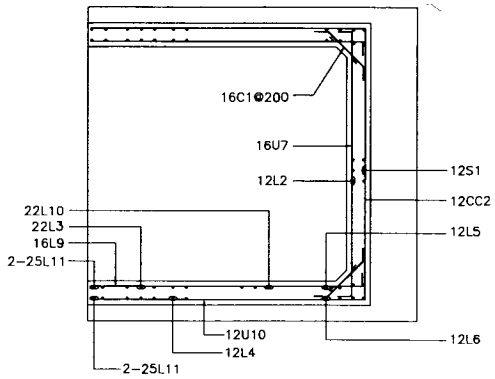
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

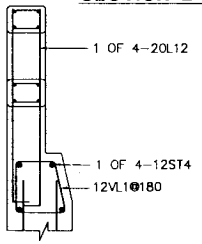
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	1700	144			1844
12	L2	21	3500	144			3644
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	30	Var. 5500 to 6925	192			Avg. 6262
16	L8	24	Var. 4400 to 5500	192			Avg. 5142
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	26	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	18	192	2884	192		3268
16	U7	20	192	2892	192		3276
12	U8	16	Var. 5500 to 6925	275	600		Avg. 7088
12	U9	14	Var. 4400 to 5500	275	600		Avg. 5825
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	12	1350	500	2940		4790
12	CC2	26	1350	500	2940		4790
12	Z1	21	1700	866	144		2710
12	S1	21	725	4050	240		5015
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000



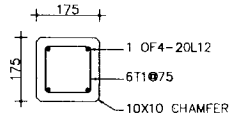
SECTION A-A



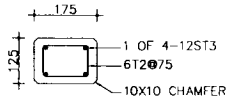
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/00120562	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	1550	144			1694
12	L2	21	3650	144			3794
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3350 to 3950	144			Avg. 3794
12	L6	6	Var. 3350 to 3950	144			Avg. 3794
16	L7	26	Var. 5725 to 6925	192			Avg. 6471
16	L8	26	Var. 4400 to 5725	192			Avg. 5255
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	26	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	17	192	2884	192		3268
16	U7	21	192	2892	192		3276
12	U8	14	Var. 5725 to 6925	275	600		Avg. 7286
12	U9	14	Var. 4400 to 5725	275	600		Avg. 5938
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	11	1350	500	2940		4790
12	CC2	27	1350	500	2940		4790
12	Z1	21	1550	866	144		2560
12	S1	21	725	4200	240		5165
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	21	1300	144			1444
12	L2	21	3900	144			4044
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	22	Var. 6100 to 6925	192			Avg. 6742
16	L8	32	Var. 4400 to 6100	192			Avg. 5442
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	26	240	5775	240		6255
20	U2	25	240	3640	240		4120
20	U3	16	240	5775	240		6255
20	U4	40	240	3640	240		4120
16	U6	14	192	2884	192		3268
16	U7	23	192	2892	192		3276
12	U8	12	Var. 6100 to 6925	275	600		Avg. 7525
12	U9	18	Var. 4400 to 6100	275	600		Avg. 6125
12	U10	24	4400	275	625		5300
16	U12	11	192	2940	192		3324
12	CC1	9	1350	500	2940		4790
12	CC2	29	1350	500	2940		4790
12	Z1	21	1300	866	144		2310
12	S1	21	725	4450	240		5415
16	C1	52	320	1093	320		1733
16	C2	16	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

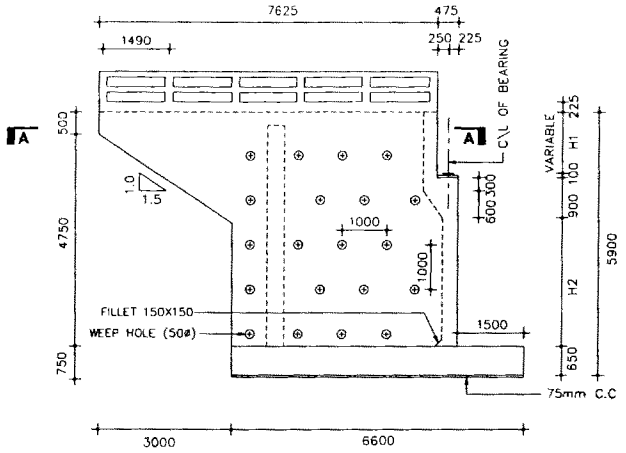
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 3.04m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/00120563	

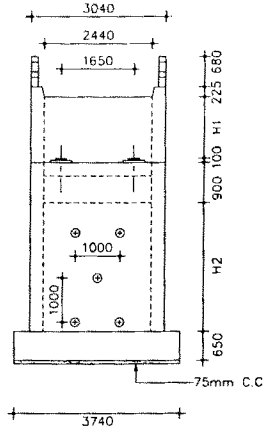
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OA-148

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



SIDE ELEVATION



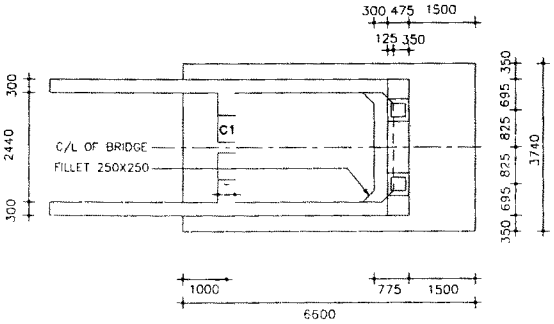
FRONT ELEVATION

TABLE-1

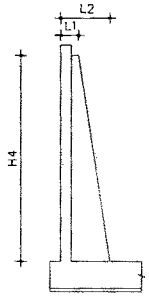
GIRDER SPAN	H1	H2
20000	1350	3000
19500	1350	3000
19000	1350	3000
18500	1350	3000
18000	1200	3150
17500	1200	3150
17000	1200	3150
16500	1200	3150
16000	1200	3150
15500	1200	3150
15000	950	3400
14500	950	3400
14000	950	3400
13500	950	3400
13000	950	3400
12500	950	3400

TABLE-2

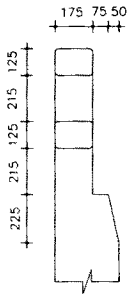
L1	L2	H4	T
700	1400	5050	400



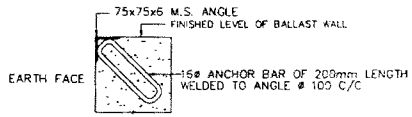
SECTION A-A



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 121 kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

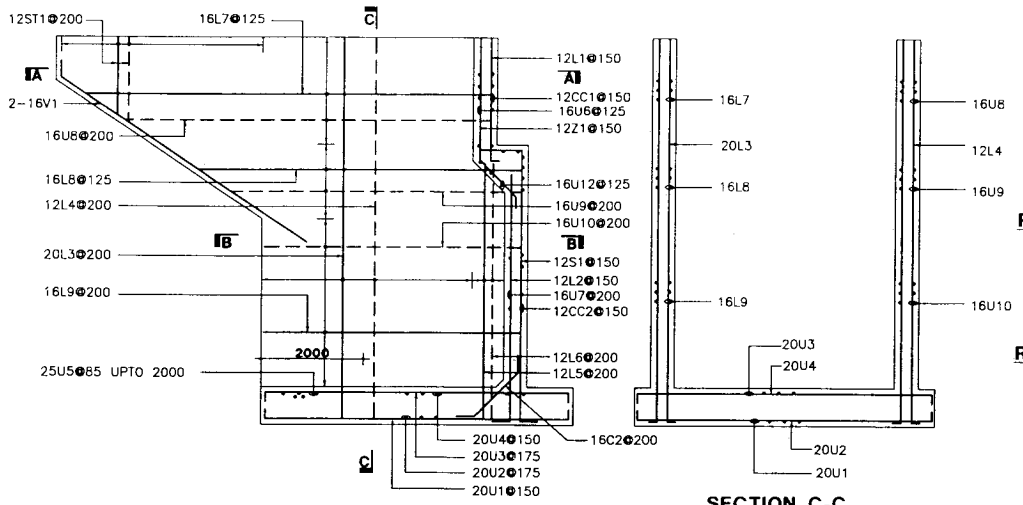
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 6.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\OD120601

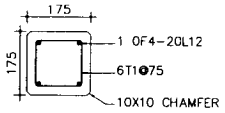
Web Copy

SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

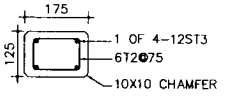


REINFORCEMENT DETAIL

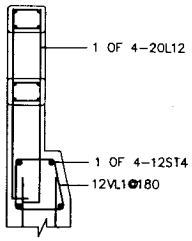
SECTION C-C



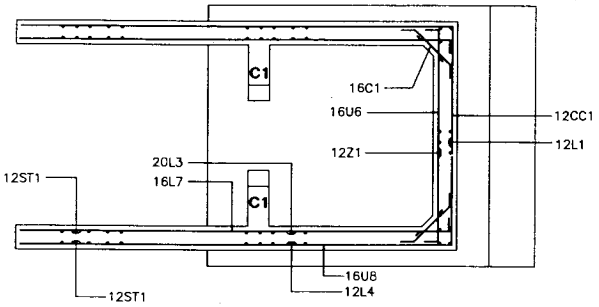
REINF. DETAIL OF POST



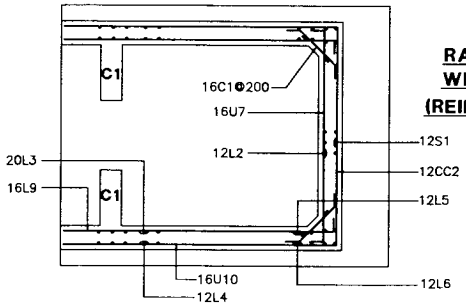
REINF. DETAIL OF RAILING



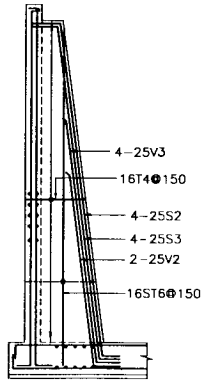
RAILING ON WING WALL (REINF. DETAIL)



SECTION A-A



SECTION B-B



REINFORCEMENT DETAIL OF COUNTERFORT C1

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	1300	144			1444
12	L2	21	4300	144			4444
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4000 to 4600	144			Avg. 4444
12	L6	6	Var. 4000 to 4600	144			Avg. 4444
16	L7	18	Var. 6700 to 7525	192			Avg. 7350
16	L8	26	Var. 5000 to 6700	192			Avg. 6042
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	22	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	12	192	2884	192		3268
16	U7	19	192	2884	192		3268
16	U8	12	Var. 6700 to 7525	200	550		Avg. 8090
16	U9	18	Var. 5000 to 6700	200	600		Avg. 6650
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	31	1200	500	2940		4640
12	Z1	21	1300	836	144		2280
12	S1	21	675	4850	240		5765
16	C1	56	320	993	320		1633
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 3.04m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00120602

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SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1200)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	1550	144			1694
12	L2	21	4050	144			4194
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3750 to 4350	144			Avg. 4194
12	L6	6	Var. 3750 to 4350	144			Avg. 4194
16	L7	22	Var. 6325 to 7525	192			Avg. 7062
16	L8	22	Var. 5000 to 6325	192			Avg. 5855
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	26	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	14	192	2884	192		3268
16	U7	18	192	2884	192		3268
16	U8	14	Var. 6325 to 7525	200	550		Avg. 7761
16	U9	14	Var. 5000 to 6325	200	600		Avg. 6463
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	11	1200	400	2940		4540
12	CC2	30	1200	500	2940		4640
12	Z1	21	1550	836	144		2530
12	S1	21	675	4600	240		5515
16	C1	56	320	987	320		1627
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 950)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	21	1300	144			1444
12	L2	21	4300	144			4444
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 4000 to 4600	144			Avg. 4444
12	L6	6	Var. 4000 to 4600	144			Avg. 4444
16	L7	18	Var. 6700 to 7525	192			Avg. 7350
16	L8	26	Var. 5000 to 6700	192			Avg. 6042
16	L9	28	5000	192			5192
20	L12	48	971	120			1091
20	U1	26	240	6500	240		6980
20	U2	39	240	3640	240		4120
20	U3	22	240	6500	240		6980
20	U4	31	240	3640	240		4120
25	U5	24	300	3640	300		4240
16	U6	12	192	2884	192		3268
16	U7	19	192	2884	192		3268
16	U8	12	Var. 6700 to 7525	200	550		Avg. 8000
16	U9	18	Var. 5000 to 6700	200	600		Avg. 6650
16	U10	28	5000	200	550		5750
16	U12	9	192	2940	192		3324
12	CC1	9	1200	400	2940		4540
12	CC2	31	1200	500	2940		4640
12	Z1	21	1300	836	144		2280
12	S1	21	675	4850	240		5765
16	C1	56	320	987	320		1627
16	C2	16	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

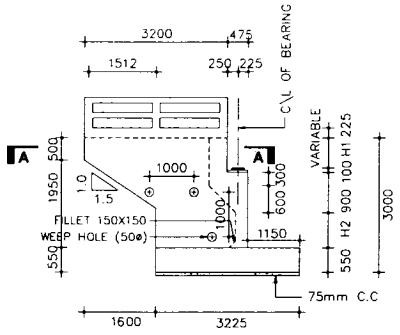
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 3.04m)

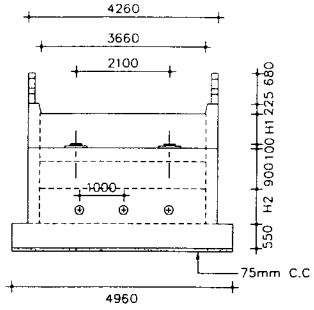
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00120603	

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



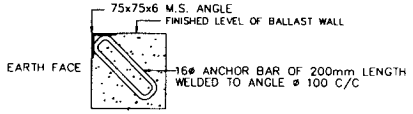
SIDE ELEVATION



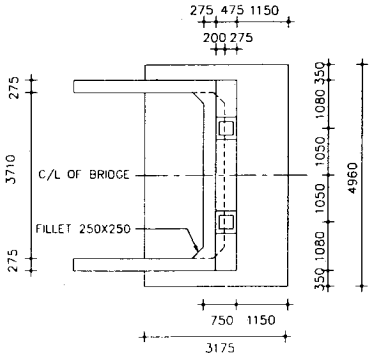
FRONT ELEVATION

TABLE-1

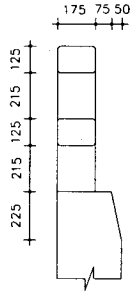
GIRDER SPAN	H1	H2
20000		
19500	NOT APPLICABLE	
19000		
18500	1500	
18000	1350	100
17500	1350	100
17000	1350	100
16500	1350	100
16000	1350	100
15500	1350	100
15000	1100	350
14500	1100	350
14000	1100	350
13500	1100	350
13000	1100	350
12500	1000	450



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

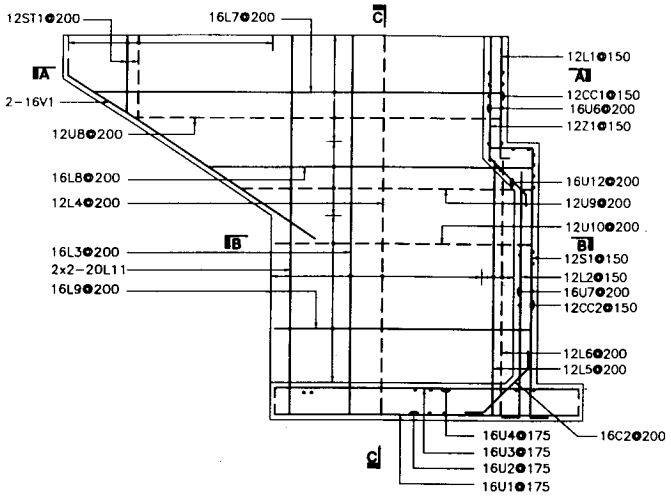
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

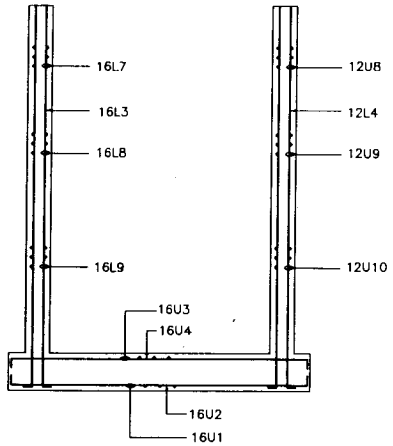
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 3.0m , DECK WIDTH 4.26m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\00220301

Web Copy

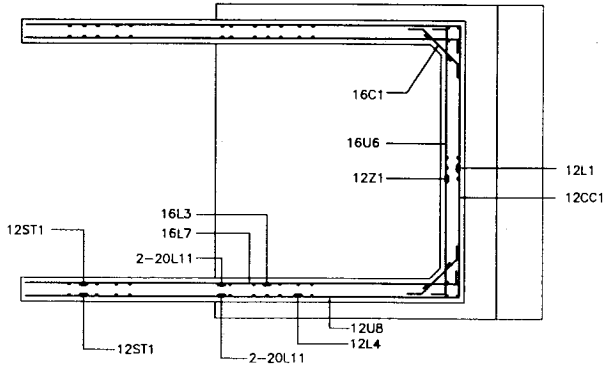
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO



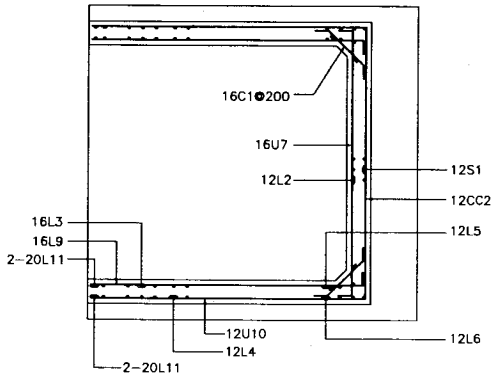
REINFORCEMENT DETAIL



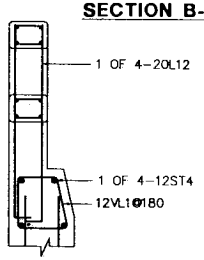
SECTION C-C



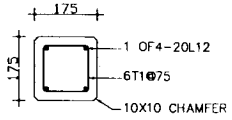
SECTION A-A



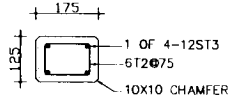
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1850	144			1994
12	L2	29	750	144			894
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 450 to 1050	144			Avg. 894
12	L6	6	Var. 450 to 1050	144			Avg. 894
16	L7	18	Var. 1450 to 3100	192			Avg. 2375
16	L8	2	Var. 1975 to 1450	192			Avg. 1905
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	3125	192		3509
16	U2	19	192	4860	192		5244
16	U3	29	192	3125	192		3509
16	U4	18	192	4860	192		5244
16	U6	11	192	4112	192		4496
16	U7	2	192	4112	192		4496
12	U8	18	Var. 1450 to 3100	175	525		Avg. 2883
12	U9	2	Var. 1975 to 1450	175	525		Avg. 2282
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	13	1150	350	4160		5660
12	CC2	8	1150	350	4160		5660
12	Z1	29	1850	866	144		2860
12	S1	29	650	1300	240		2190
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220302

Web Copy

SHEET 3 OF 3
SPAN RANGE : 112.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1700	144			1844
12	L2	29	900	144			1044
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 800 to 1200	144			Avg. 1044
12	L6	6	Var. 800 to 1200	144			Avg. 1044
16	L7	16	Var. 1675 to 3100	192			Avg. 2580
16	L8	4	Var. 1975 to 1675	192			Avg. 2017
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	3125	192		3509
16	U2	19	192	4860	192		5244
16	U3	29	192	3125	192		3509
16	U4	18	192	4860	192		5244
16	U6	10	192	4112	192		4496
16	U7	2	192	4112	192		4496
12	U8	16	Var. 1675 to 3100	175	525		Avg. 3088
12	U9	4	Var. 1975 to 1675	175	525		Avg. 2450
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	12	1150	350	4160		5660
12	CC2	9	1150	350	4160		5660
12	Z1	29	1700	866	144		2710
12	S1	29	650	1450	240		2340
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1450	144			1594
12	L2	29	1150	144			1294
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 850 to 1450	144			Avg. 1294
12	L6	6	Var. 850 to 1450	144			Avg. 1294
16	L7	14	Var. 2050 to 3100	192			Avg. 2842
16	L8	6	Var. 1975 to 2050	192			Avg. 2205
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	3125	192		3509
16	U2	19	192	4860	192		5244
16	U3	29	192	3125	192		3509
16	U4	18	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	4	192	4112	192		4496
12	U8	14	Var. 2050 to 3100	175	525		Avg. 3350
12	U9	6	Var. 1975 to 2050	175	525		Avg. 2732
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	11	1150	350	4160		5660
12	Z1	29	1450	866	144		2460
12	S1	29	650	1700	240		2590
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	29	1350	144			1494
12	L2	29	1250	144			1394
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 950 to 1550	144			Avg. 1394
12	L6	6	Var. 950 to 1550	144			Avg. 1394
16	L7	12	Var. 2200 to 3100	192			Avg. 2992
16	L8	8	Var. 1975 to 2200	192			Avg. 2280
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	971	120			1091
16	U1	29	192	3125	192		3509
16	U2	19	192	4860	192		5244
16	U3	29	192	3125	192		3509
16	U4	18	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	4	192	4112	192		4496
12	U8	12	Var. 2200 to 3100	175	525		Avg. 3500
12	U9	8	Var. 1975 to 2200	175	525		Avg. 2844
12	U10	8	1975	175	525		2675
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	12	1150	350	4160		5660
12	Z1	29	1350	866	144		2360
12	S1	29	650	1800	240		2690
16	C1	28	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	60	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

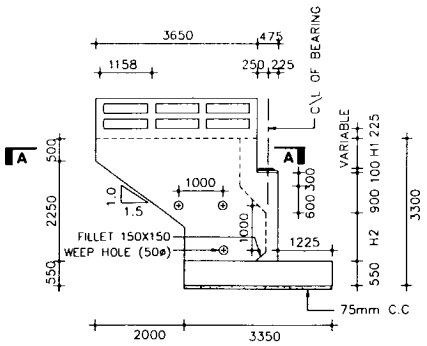
REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220303

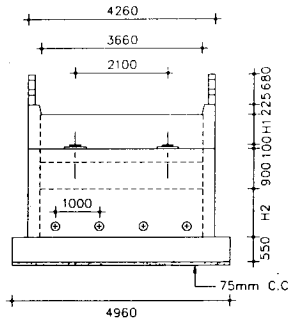
Web Copy

OA 154

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



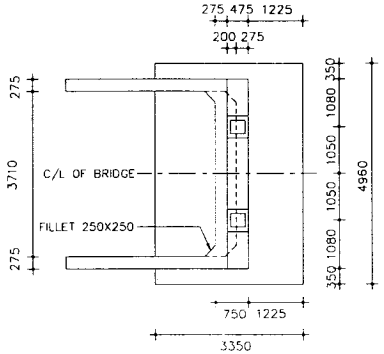
SIDE ELEVATION



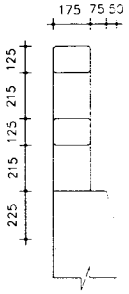
FRONT ELEVATION

TABLE-1

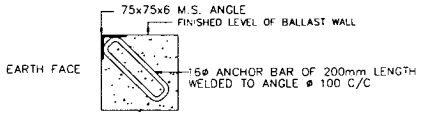
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20000	1500	250
19500	1500	250
19000	1500	250
18500	1500	250
18000	1350	400
17500	1350	400
17000	1350	400
16500	1350	400
16000	1350	400
15500	1350	400
15000	1100	650
14500	1100	650
14000	1100	650
13500	1100	650
13000	1100	650
12500	1000	750



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter meterial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

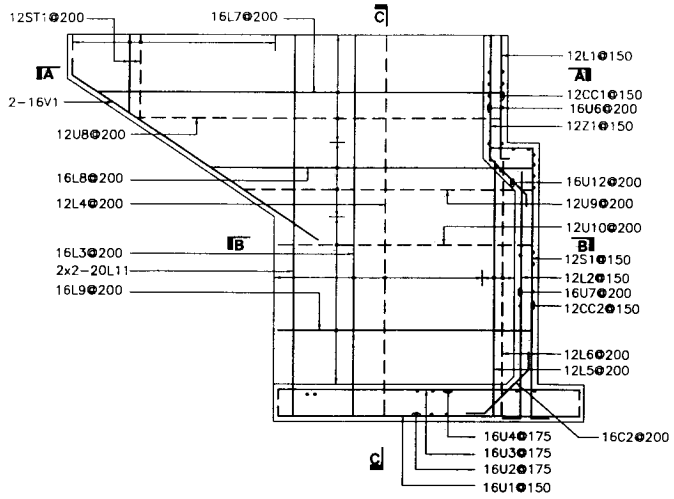
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 3.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220331	

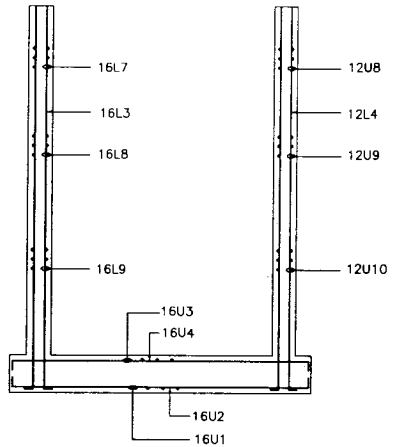
Web Copy

OA-155

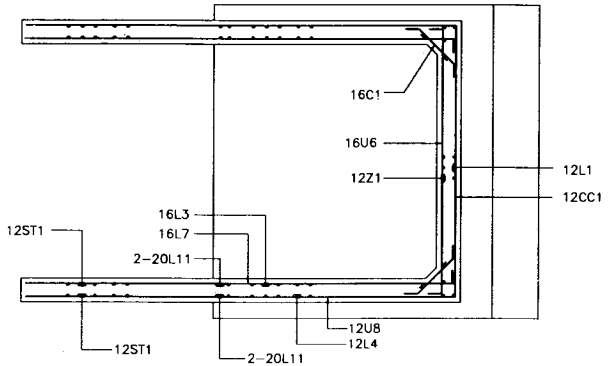
SHEET 2 OF 3
SPAN RANGE :12.5m TO 20m
SIDE WALK: NO



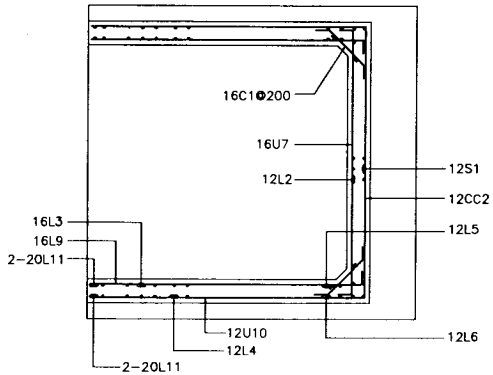
REINFORCEMENT DETAIL



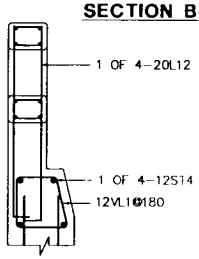
SECTION C-C



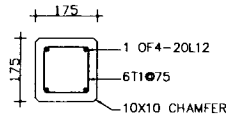
SECTION A-A



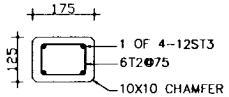
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1850	144			1994
12	L2	29	1050	144			1194
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 750 to 1350	144			Avg. 1194
12	L6	6	Var. 750 to 1350	144			Avg. 1194
16	L7	18	Var. 1900 to 3550	192			Avg. 2825
16	L8	6	Var. 2025 to 1900	192			Avg. 2155
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	19	192	4860	192		5244
16	U6	11	192	4112	192		4496
16	U7	3	192	4112	192		4496
12	U8	18	Var. 1900 to 3550	175	525		Avg. 3333
12	U9	6	Var. 2025 to 1900	175	525		Avg. 2632
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	13	1150	350	4160		5660
12	CC2	10	1150	350	4160		5660
12	Z1	29	1850	866	144		2860
12	S1	29	650	1600	240		2490
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220332	

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SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1700	144			1844
12	L2	29	1200	144			1344
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 900 to 1500	144			Avg. 1344
12	L6	6	Var. 900 to 1500	144			Avg. 1344
16	L7	16	Var. 2125 to 3550	192			Avg. 3030
16	L8	6	Var. 2025 to 2125	192			Avg. 2267
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	19	192	4860	192		5244
16	U6	10	192	4112	192		4496
16	U7	4	192	4112	192		4496
12	U8	16	Var. 2125 to 3550	175	525		Avg. 3538
12	U9	6	Var. 2025 to 2125	175	525		Avg. 2800
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	12	1150	350	4160		5660
12	CC2	11	1150	350	4160		5660
12	Z1	29	1700	866	144		2710
12	S1	29	650	1750	240		2640
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1450	144			1594
12	L2	29	1450	144			1594
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1150 to 1750	144			Avg. 1594
12	L6	6	Var. 1150 to 1750	144			Avg. 1594
16	L7	14	Var. 2500 to 3550	192			Avg. 3292
16	L8	10	Var. 2025 to 2500	192			Avg. 2455
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	19	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	5	192	4112	192		4496
12	U8	14	Var. 2500 to 3550	175	525		Avg. 3600
12	U9	10	Var. 2025 to 2500	175	525		Avg. 3082
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	13	1150	350	4160		5660
12	Z1	29	1450	866	144		2480
12	S1	29	850	2000	240		2890
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	29	1350	144			1494
12	L2	29	1550	144			1694
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1250 to 1850	144			Avg. 1694
12	L6	6	Var. 1250 to 1850	144			Avg. 1694
16	L7	12	Var. 2650 to 3550	192			Avg. 3442
16	L8	10	Var. 2025 to 2650	192			Avg. 2530
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	971	120			1091
16	U1	34	192	3250	192		3634
16	U2	20	192	4860	192		5244
16	U3	29	192	3250	192		3634
16	U4	19	192	4860	192		5244
16	U6	8	192	4112	192		4496
16	U7	6	192	4112	192		4496
12	U8	12	Var. 2650 to 3650	175	525		Avg. 3850
12	U9	10	Var. 2025 to 2650	175	525		Avg. 3194
12	U10	8	2025	175	525		2725
16	U12	5	192	4160	192		4544
12	CC1	10	1150	350	4160		5660
12	CC2	14	1150	350	4160		5660
12	Z1	29	1350	866	144		2360
12	S1	29	650	2100	240		2990
16	C1	30	320	851	320		1491
16	C2	22	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	80	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

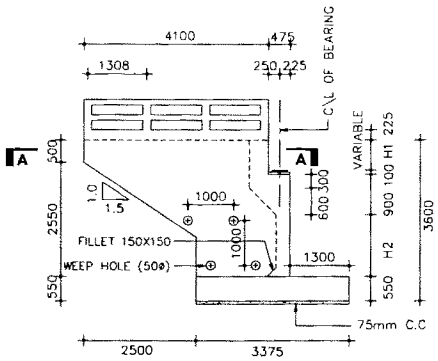
REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 3.3m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220333

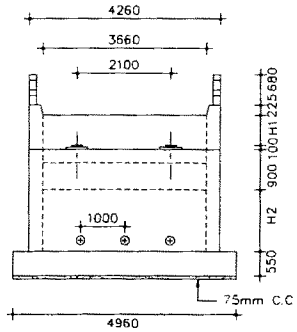
Web Copy

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



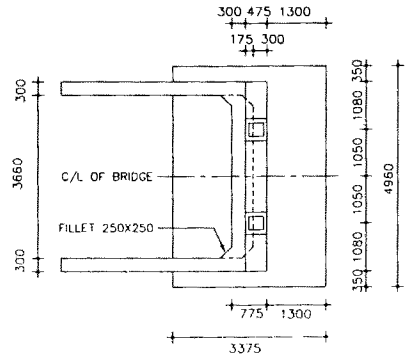
SIDE ELEVATION



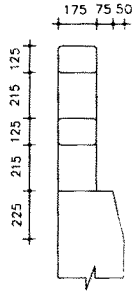
FRONT ELEVATION

TABLE-1

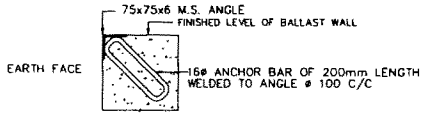
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20000	1500	550
19500	1500	550
19000	1500	550
18500	1500	550
18000	1350	700
17500	1350	700
17000	1350	700
16500	1350	700
16000	1350	700
15500	1350	700
15000	1100	950
14500	1100	950
14000	1100	950
13500	1100	950
13000	1100	950
12500	1000	1050



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

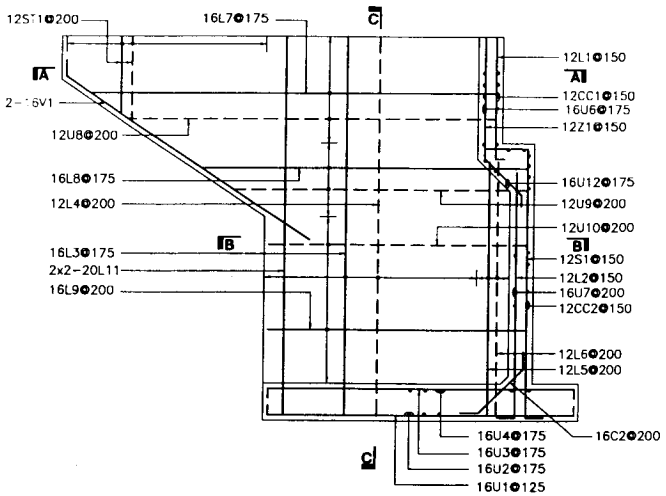
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220361	

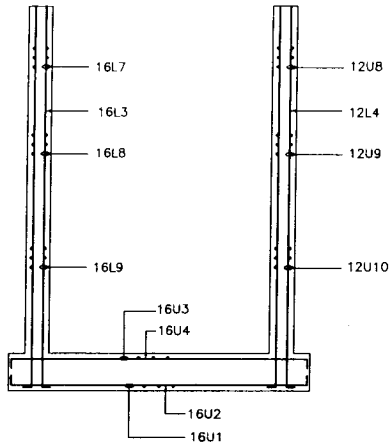
Web Copy

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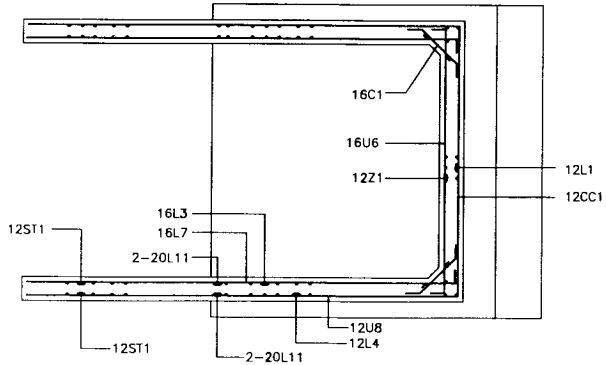
SHEET 2 OF 3
SPAN RANGE :12.5m TO 20m
SIDE WALK: NO



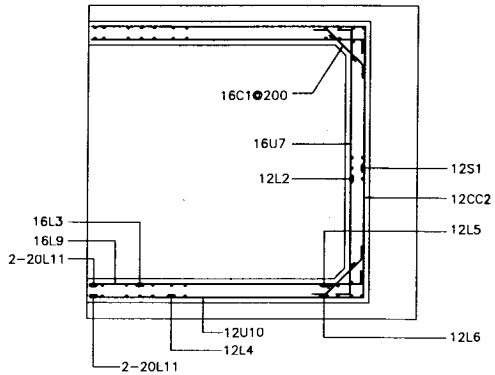
REINFORCEMENT DETAIL



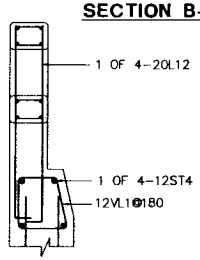
SECTION C-C



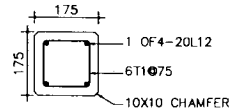
SECTION A-A



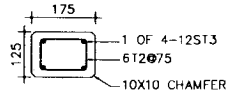
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1850	144			1994
12	L2	29	1350	144			1494
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1050 to 1650	144			Avg. 1494
12	L6	6	Var. 1050 to 1650	144			Avg. 1494
16	L7	20	Var. 2350 to 4000	192			Avg. 3302
16	L8	10	Var. 1975 to 2350	192			Avg. 2355
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	40	192	3275	192		3659
16	U2	20	192	4860	192		5244
16	U3	29	192	3275	192		3659
16	U4	19	192	4860	192		5244
16	U6	12	192	4112	192		4496
16	U7	5	192	4112	192		4496
12	U8	18	Var. 2350 to 4000	200	550		Avg. 3833
12	U9	8	Var. 1975 to 2350	200	550		Avg. 3007
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	13	1200	400	4160		5760
12	CC2	12	1200	400	4160		5760
12	Z1	29	1850	866	144		2860
12	S1	29	675	1900	240		2815
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220362	

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SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1700	144			1844
12	L2	29	1500	144			1644
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1200 to 1800	144			Avg. 1644
12	L6	6	Var. 1200 to 1800	144			Avg. 1644
16	L7	16	Var. 2575 to 4000	192			Avg. 3400
16	L8	12	Var. 1975 to 2575	192			Avg. 2467
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	40	192	3275	192		3659
16	U2	20	192	4860	192		5244
16	U3	29	192	3275	192		3659
16	U4	19	192	4860	192		5244
16	U6	11	192	4112	192		4496
16	U7	5	192	4112	192		4496
12	U8	16	Var. 2575 to 4000	200	550		Avg. 4038
12	U9	10	Var. 1975 to 2575	200	550		Avg. 3175
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	12	1200	400	4160		5760
12	CC2	13	1200	400	4160		5760
12	Z1	29	1700	866	144		2710
12	S1	29	675	2050	240		2965
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1450	144			1594
12	L2	29	1750	144			1894
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1450 to 2050	144			Avg. 1894
12	L6	6	Var. 1450 to 2050	144			Avg. 1894
16	L7	14	Var. 2950 to 4000	192			Avg. 3742
16	L8	14	Var. 1975 to 2950	192			Avg. 2655
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	40	192	3275	192		3659
16	U2	20	192	4860	192		5244
16	U3	29	192	3275	192		3659
16	U4	19	192	4860	192		5244
16	U6	10	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	14	Var. 2950 to 4000	200	550		Avg. 4300
12	U9	12	Var. 1975 to 2950	200	550		Avg. 3457
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	15	1200	400	4160		5760
12	Z1	29	1450	866	144		2460
12	S1	29	675	2300	240		3215
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	29	1350	144			1494
12	L2	29	1850	144			1994
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1550 to 2150	144			Avg. 1994
12	L6	6	Var. 1550 to 2150	144			Avg. 1994
16	L7	14	Var. 3100 to 4000	192			Avg. 3806
16	L8	16	Var. 1975 to 3100	192			Avg. 2730
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	971	120			1091
16	U1	40	192	3275	192		3659
16	U2	20	192	4860	192		5244
16	U3	29	192	3275	192		3659
16	U4	19	192	4860	192		5244
16	U6	9	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	12	Var. 3100 to 4000	200	550		Avg. 4450
12	U9	14	Var. 1975 to 3100	200	550		Avg. 3569
12	U10	8	1975	200	550		2725
16	U12	6	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	16	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	2400	240		3315
16	C1	34	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	80	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

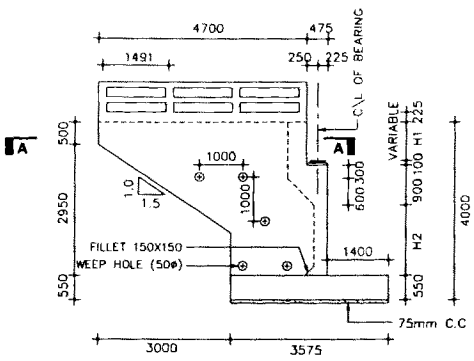
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 4.26m)

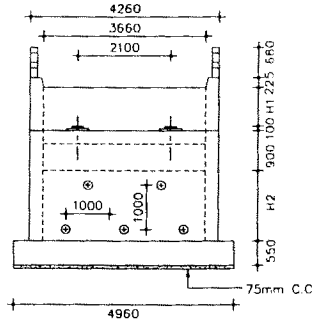
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220363

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



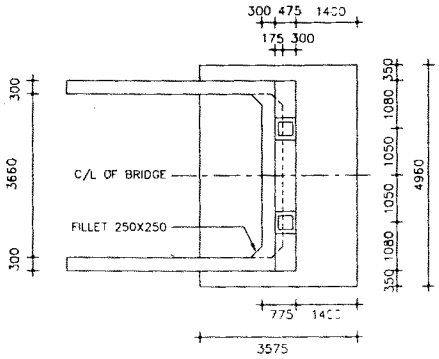
SIDE ELEVATION



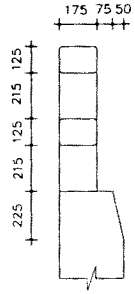
FRONT ELEVATION

TABLE-1

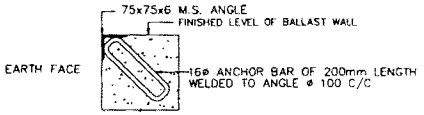
GIRDER SPAN	H1	H2
20000	1500	950
19500	1500	950
19000	1500	950
18500	1500	950
18000	1350	1100
17500	1350	1100
17000	1350	1100
16500	1350	1100
16000	1350	1100
15500	1350	1100
15000	1100	1350
14500	1100	1350
14000	1100	1350
13500	1100	1350
13000	1100	1350
12500	1000	1450



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

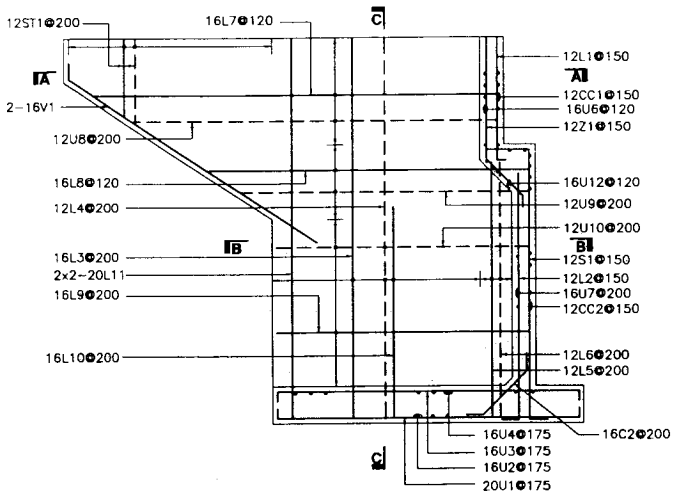
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.0m , DECK WIDTH 4.26m)

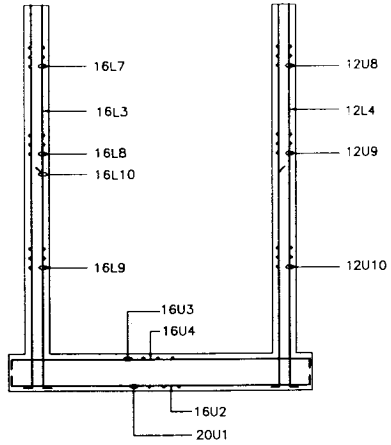
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Web Copy

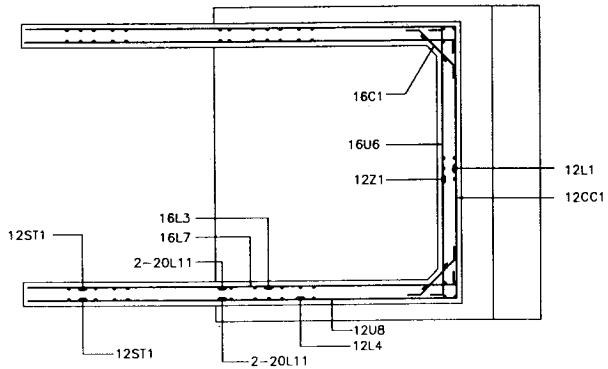
SHEET 2 OF 3	
SPAN RANGE : 12.5m TO 20.0m	
SIDE WALK: NO	



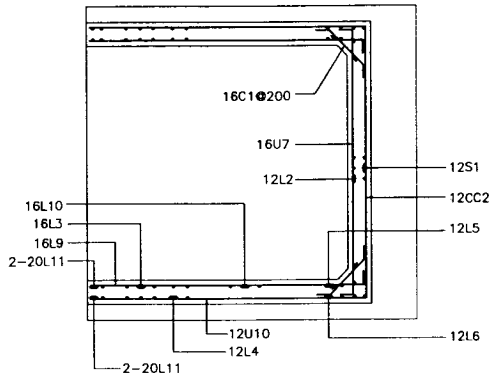
REINFORCEMENT DETAIL



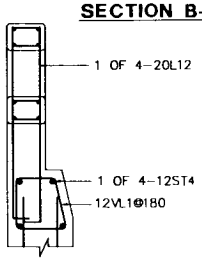
SECTION C-C



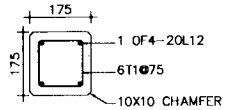
SECTION A-A



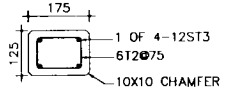
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4650				4650
12	ST4	8	4650				4650
12	L1	29	1850	144			1994
12	L2	29	1750	144			1894
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1450 to 2050	144			Avg. 1894
12	L6	6	Var. 1450 to 2050	144			Avg. 1894
16	L7	30	Var. 2950 to 4600	192			Avg. 3802
16	L8	18	Var. 2075 to 2950	192			Avg. 2705
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	29	240	3475	240		3955
16	U2	21	192	4860	192		5244
16	U3	29	192	3475	192		3859
16	U4	21	192	4860	192		5244
16	U6	17	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	18	Var. 2950 to 4600	200	550		Avg. 4433
12	U9	12	Var. 2075 to 2950	200	550		Avg. 3482
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	13	1200	400	4160		5760
12	CC2	15	1200	400	4160		5760
12	Z1	29	1850	866	144		2860
12	S1	29	675	2300	240		3215
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220402	

Web Copy

SHEET 3 OF 3

SPAN RANGE : 12.5m TO 20.0m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1700	144			1844
12	L2	29	1900	144			2044
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	26	Var. 3175 to 4600	192			Avg. 4025
16	L8	20	Var. 2075 to 3175	192			Avg. 2817
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	29	240	3475	240		3955
16	U2	21	192	4860	192		5244
16	U3	29	192	3475	192		3859
16	U4	21	192	4860	192		5244
16	U6	16	192	4112	192		4496
16	U7	7	192	4112	192		4496
12	U8	16	Var. 3175 to 4600	200	550		Avg. 4638
12	U9	14	Var. 2075 to 3175	200	550		Avg. 3650
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	12	1200	400	4160		5760
12	CC2	16	1200	400	4160		5760
12	Z1	29	1700	866	144		2710
12	S1	29	675	2450	240		3365
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1450	144			1594
12	L2	29	2150	144			2294
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1850 to 2450	144			Avg. 2294
12	L6	6	Var. 1850 to 2450	144			Avg. 2294
16	L7	22	Var. 3550 to 4600	192			Avg. 4315
16	L8	24	Var. 2075 to 3550	192			Avg. 3005
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	29	240	3475	240		3955
16	U2	21	192	4860	192		5244
16	U3	29	192	3475	192		3859
16	U4	21	192	4860	192		5244
16	U6	14	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	14	Var. 3550 to 4600	200	550		Avg. 4900
12	U9	16	Var. 2075 to 3550	200	550		Avg. 3932
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	18	1200	400	4160		5760
12	Z1	29	1450	866	144		2460
12	S1	29	675	2700	240		3615
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	29	1350	144			1494
12	L2	29	2250	144			2394
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	20	Var. 3700 to 4600	192			Avg. 4432
16	L8	26	Var. 2075 to 3700	192			Avg. 3080
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	971	120			1091
20	U1	29	240	3475	240		3955
16	U2	21	192	4860	192		5244
16	U3	29	192	3475	192		3859
16	U4	21	192	4860	192		5244
16	U6	13	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	12	Var. 3700 to 4600	200	550		Avg. 5050
12	U9	16	Var. 2075 to 3700	200	550		Avg. 4044
12	U10	8	2075	200	550		2825
16	U12	9	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	18	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	2800	240		3715
16	C1	38	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	80	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 4.26m)

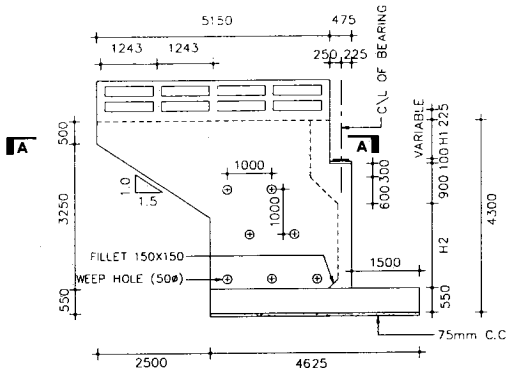
DATE :

ISSUED BY :

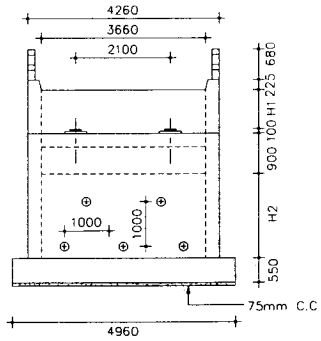
CAD FILE REF : ABUT\D0220403

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



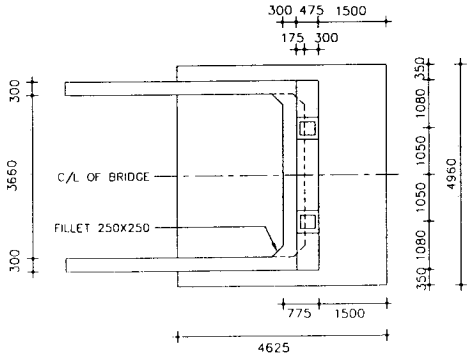
SIDE ELEVATION



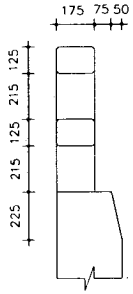
FRONT ELEVATION

TABLE-1

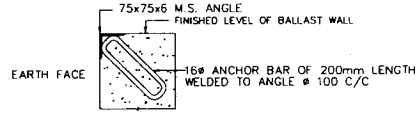
GIRDER SPAN	H1	H2
20000	1500	1250
19500	1500	1250
19000	1500	1250
18500	1500	1250
18000	1350	1400
17500	1350	1400
17000	1350	1400
16500	1350	1400
16000	1350	1400
15500	1350	1400
15000	1100	1650
14500	1100	1650
14000	1100	1650
13500	1100	1650
13000	1100	1650
12500	1000	1750



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

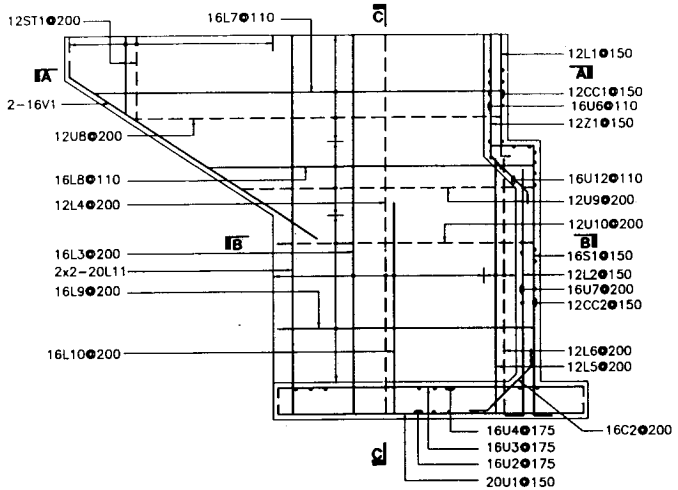
1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **102** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter meterial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT : 4.3m , DECK WIDTH 4.26m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\0022043.1

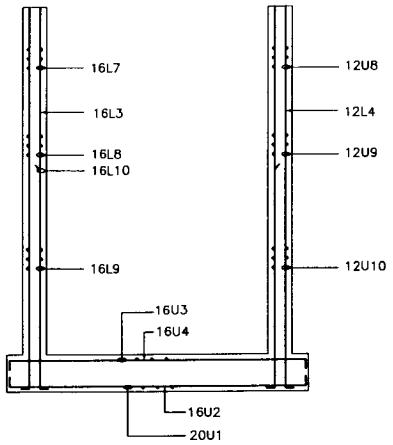
Web Copy

OA-164

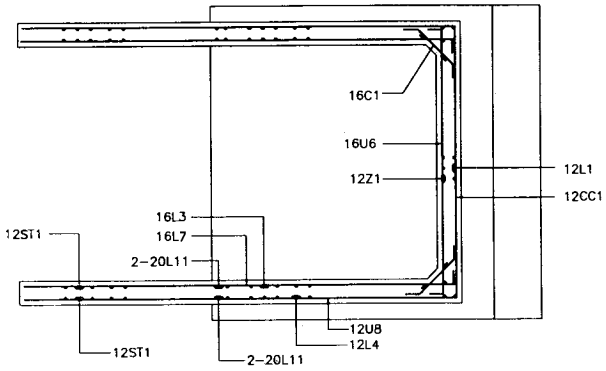
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO



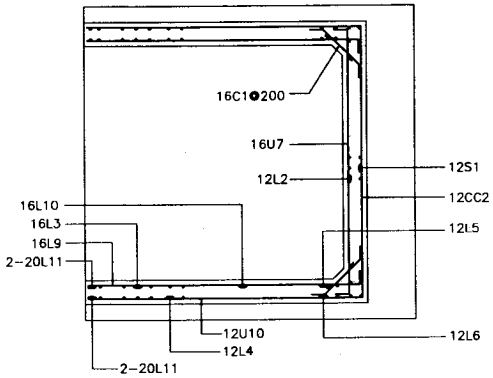
REINFORCEMENT DETAIL



SECTION C-C



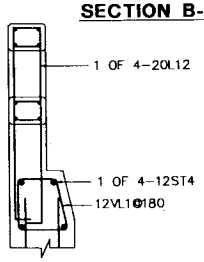
SECTION A-A



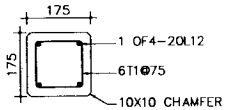
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

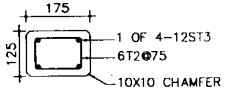
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1850	144			1994
12	L2	29	2050	144			2194
16	L3	18	4200	192			4392
12	L4	18	4200	144			4344
12	L5	6	Var. 1750 to 2350	144			Avg. 2194
12	L6	6	Var. 1750 to 2350	144			Avg. 2194
16	L7	30	Var. 3400 to 5050	192			Avg. 4252
16	L8	14	Var. 3025 to 3400	192			Avg. 3405
16	L9	14	3025	192			3217
16	L10	18	2044	192			2236
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	34	240	4525	240		5005
16	U2	27	192	4860	192		5244
16	U3	29	192	4525	192		4909
16	U4	27	192	4860	192		5244
16	U6	18	192	4112	192		4496
16	U7	8	192	4112	192		4496
12	U8	18	Var. 3400 to 5050	200	550		Avg. 4883
12	U9	8	Var. 3025 to 3400	200	550		Avg. 4057
12	U10	14	3025	200	550		3775
16	U12	10	192	4160	192		4544
12	CC1	13	1200	400	4160		5760
12	CC2	17	1200	400	4160		5760
12	Z1	29	1850	866	144		2860
12	S1	29	675	2600	240		3515
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3811			4061
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\SD000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220432

Web Copy

SHEET 3 OF 3

SPAN RANGE : 12.5m TO 20.0m

SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1700	144			1844
12	L2	29	2200	144			2344
16	L3	18	4200	192			4392
12	L4	18	4200	144			4344
12	L5	6	Var. 1900 to 2500	144			Avg. 2344
12	L6	6	Var. 1900 to 2500	144			Avg. 2344
16	L7	28	Var. 3625 to 5050	192			Avg. 4428
16	L8	16	Var. 3025 to 3625	192			Avg. 3517
16	L9	14	3025	192			3217
16	L10	18	2044	192			2236
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	34	240	4525	240		5005
16	U2	27	192	4860	192		5244
16	U3	29	192	4525	192		4909
16	U4	27	192	4860	192		5244
16	U6	17	192	4112	192		4496
16	U7	9	192	4112	192		4496
12	U8	16	Var. 3625 to 5050	200	550		Avg. 5088
12	U9	10	Var. 3025 to 3625	200	550		Avg. 4225
12	U10	14	3025	200	550		3775
16	U12	10	192	4160	192		4544
12	CC1	12	1200	400	4160		5760
12	CC2	18	1200	400	4160		5760
12	Z1	29	1700	866	144		2710
12	S1	29	675	2750	240		3665
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3811			4061
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1450	144			1594
12	L2	29	2450	144			2594
16	L3	18	4200	192			4392
12	L4	18	4200	144			4344
12	L5	6	Var. 2150 to 2750	144			Avg. 2594
12	L6	6	Var. 2150 to 2750	144			Avg. 2594
16	L7	24	Var. 4000 to 5050	192			Avg. 4717
16	L8	20	Var. 3025 to 4000	192			Avg. 3705
16	L9	14	3025	192			3217
16	L10	18	2044	192			2236
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	34	240	4525	240		5005
16	U2	27	192	4860	192		5244
16	U3	29	192	4525	192		4909
16	U4	27	192	4860	192		5244
16	U6	15	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	14	Var. 4000 to 5050	200	550		Avg. 5350
12	U9	12	Var. 3025 to 4000	200	550		Avg. 4507
12	U10	14	3025	200	550		3775
16	U12	10	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	1450	866	144		2460
12	S1	29	675	3000	240		3915
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3811			4061
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	29	1350	144			1494
12	L2	29	2550	144			2694
16	L3	18	4200	192			4392
12	L4	18	4200	144			4344
12	L5	6	Var. 2250 to 2850	144			Avg. 2694
12	L6	6	Var. 2250 to 2850	144			Avg. 2694
16	L7	22	Var. 4150 to 5050	192			Avg. 4833
16	L8	22	Var. 3025 to 4150	192			Avg. 3780
16	L9	14	3025	192			3217
16	L10	18	2044	192			2236
20	L11	8	4200	240			4440
20	L12	40	971	120			1091
20	U1	34	240	4525	240		5005
16	U2	27	192	4860	192		5244
16	U3	29	192	4525	192		4909
16	U4	27	192	4860	192		5244
16	U6	14	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	12	Var. 4150 to 5050	200	550		Avg. 5500
12	U9	14	Var. 3025 to 4150	200	550		Avg. 4619
12	U10	14	3025	200	550		3775
16	U12	10	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	3100	240		4015
16	C1	40	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	3811			4061
6	T1	100	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 4.26m)

DATE :

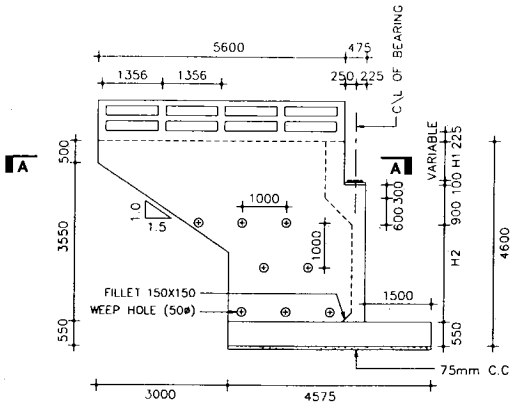
ISSUED BY :

CAD FILE REF : ABUT\00220433

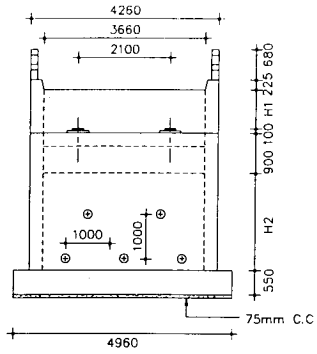
Web Copy

OA-166

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK NO



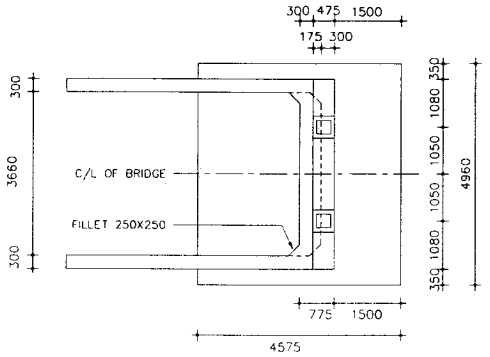
SIDE ELEVATION



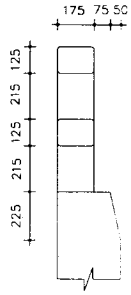
FRONT ELEVATION

TABLE-1

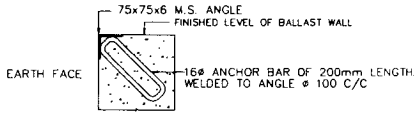
GIRDER SPAN	H1	H2
20000	1500	1550
19500	1500	1550
19000	1500	1550
18500	1500	1550
18000	1350	1700
17500	1350	1700
17000	1350	1700
16500	1350	1700
16000	1350	1700
15500	1350	1700
15000	1100	1950
14500	1100	1950
14000	1100	1950
13500	1100	1950
13000	1100	1950
12500	1000	2050



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **108** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.6m , DECK WIDTH 4.26m)

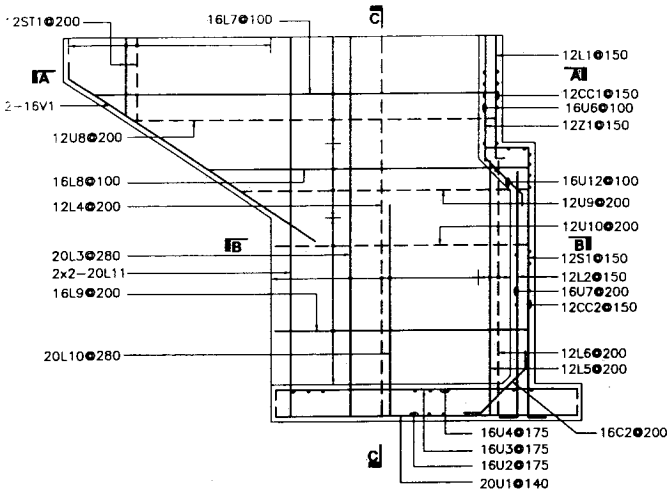
DATE :

ISSUED BY :

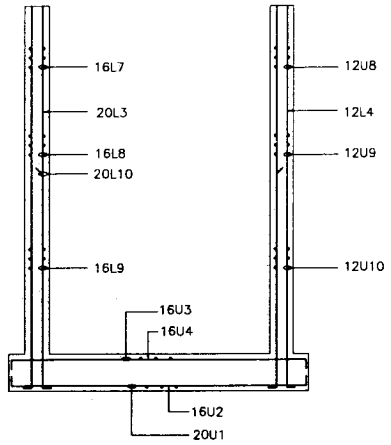
CAD FILE REF : ABUT\0022046

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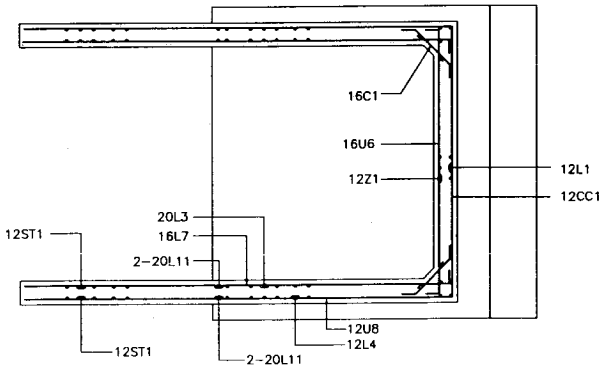
SHEET 2 OF 3
SPAN RANGE :12.5m TO 20.0m
SIDE WALK: NO



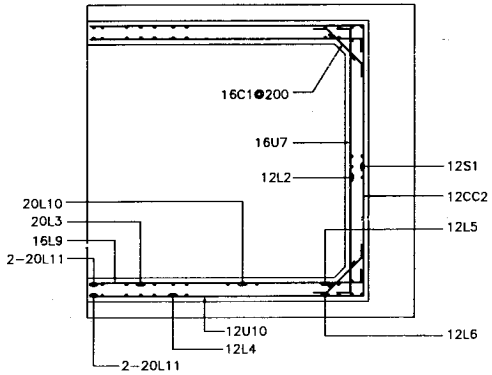
REINFORCEMENT DETAIL



SECTION C-C



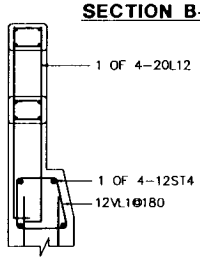
SECTION A-A



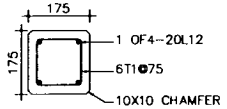
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

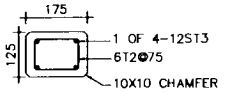
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1850	144			1994
12	L2	29	2350	144			2494
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2050 to 2650	144			Avg. 2494
12	L6	6	Var. 2050 to 2650	144			Avg. 2494
16	L7	32	Var. 3850 to 5500	192			Avg. 4661
16	L8	20	Var. 2975 to 3850	192			Avg. 3605
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	36	240	4475	240		4955
16	U2	27	192	4860	192		5244
16	U3	29	192	4475	192		4859
16	U4	27	192	4860	192		5244
16	U6	20	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	18	Var. 3850 to 5500	200	550		Avg. 5333
12	U9	12	Var. 2975 to 3850	200	550		Avg. 4382
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	13	1200	400	4160		5760
12	CC2	19	1200	400	4160		5760
12	Z1	29	1850	866	144		2860
12	S1	29	675	2900	240		3815
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cod File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220462

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1700	144			1844
12	L2	29	2500	144			2644
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	30	Var. 4075 to 5500	192			Avg. 4837
16	L8	24	Var. 2975 to 4075	192			Avg. 3717
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	36	240	4475	240		4955
16	U2	27	192	4860	192		5244
16	U3	29	192	4475	192		4859
16	U4	27	192	4860	192		5244
16	U6	18	192	4112	192		4496
16	U7	10	192	4112	192		4496
12	U8	16	Var. 4075 to 5500	200	550		Avg. 5538
12	U9	14	Var. 2975 to 4075	200	550		Avg. 4550
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	12	1200	400	4160		5760
12	CC2	20	1200	400	4160		5760
12	Z1	29	1700	866	144		2710
12	S1	29	675	3050	240		3965
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1450	144			1594
12	L2	29	2750	144			2894
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2450 to 3050	144			Avg. 2894
12	L6	6	Var. 2450 to 3050	144			Avg. 2894
16	L7	24	Var. 4450 to 5500	192			Avg. 5167
16	L8	28	Var. 2975 to 4450	192			Avg. 3905
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	36	240	4475	240		4955
16	U2	27	192	4860	192		5244
16	U3	29	192	4475	192		4859
16	U4	27	192	4860	192		5244
16	U6	16	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	14	Var. 4450 to 5500	200	550		Avg. 5800
12	U9	16	Var. 2975 to 4450	200	550		Avg. 4832
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	22	1200	400	4160		5760
12	Z1	29	1450	866	144		2460
12	S1	29	675	3300	240		4215
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	29	1350	144			1494
12	L2	29	2850	144			2994
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2550 to 3150	144			Avg. 2994
12	L6	6	Var. 2550 to 3150	144			Avg. 2994
16	L7	22	Var. 4600 to 5500	192			Avg. 5283
16	L8	30	Var. 2975 to 4600	192			Avg. 3980
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	971	120			1091
20	U1	36	240	4475	240		4955
16	U2	27	192	4860	192		5244
16	U3	29	192	4475	192		4859
16	U4	27	192	4860	192		5244
16	U6	15	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	12	Var. 4600 to 5500	200	550		Avg. 5950
12	U9	16	Var. 2975 to 4600	200	550		Avg. 4944
12	U10	14	2975	200	550		3725
16	U12	11	192	4160	192		4544
12	CC1	10	1200	400	4160		5760
12	CC2	22	1200	400	4160		5760
12	Z1	29	1350	866	144		2360
12	S1	29	675	3400	240		4315
16	C1	44	320	922	320		1562
16	C2	22	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	100	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in ony view.
3) Coorse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **278** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

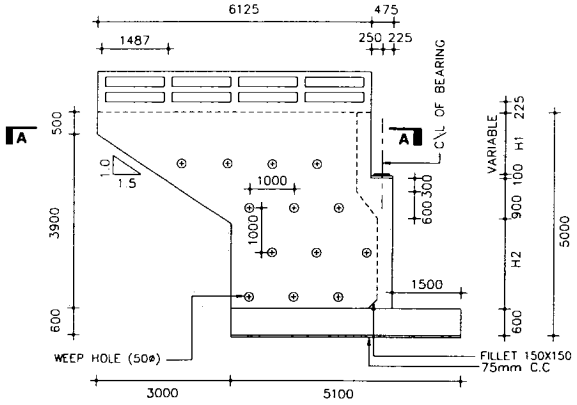
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 4.26m)

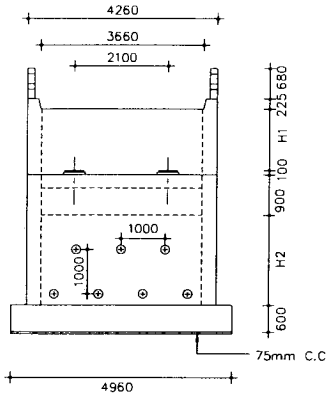
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220463	

Web Copy

SHEET 1 OF 3	
SPAN RANGE : 12.5m TO 20m	
SIDE WALK : NO	



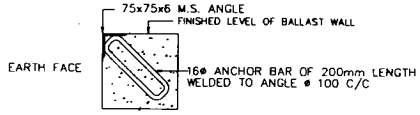
SIDE ELEVATION



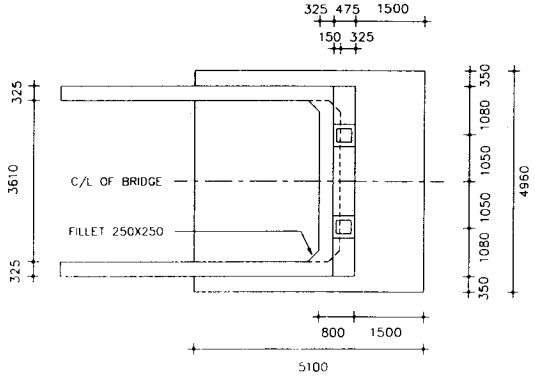
FRONT ELEVATION

TABLE-1

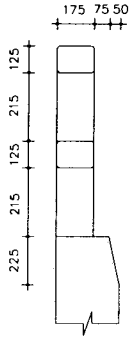
GIRDER SPAN	H1	H2
20000	1500	1900
19500	1500	1900
19000	1500	1900
18500	1500	1900
18000	1350	2050
17500	1350	2050
17000	1350	2050
16500	1350	2050
16000	1350	2050
15500	1350	2050
15000	1100	2300
14500	1100	2300
14000	1100	2300
13500	1100	2300
13000	1100	2300
12500	1000	2400



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **118** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and verticolly as shown in drawings; filter meterial shall be provided as per specification.

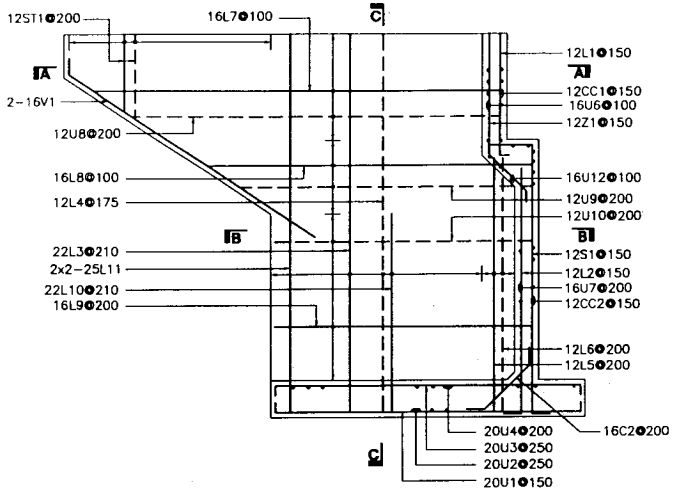
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.0m , DECK WIDTH 4.26m)

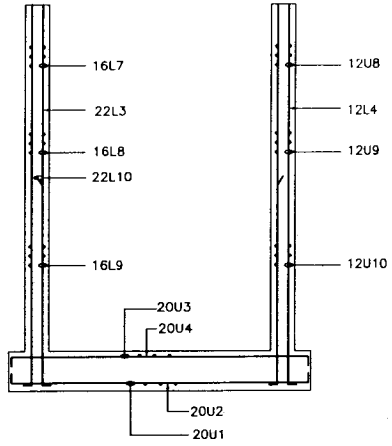
DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220501	

Web Copy

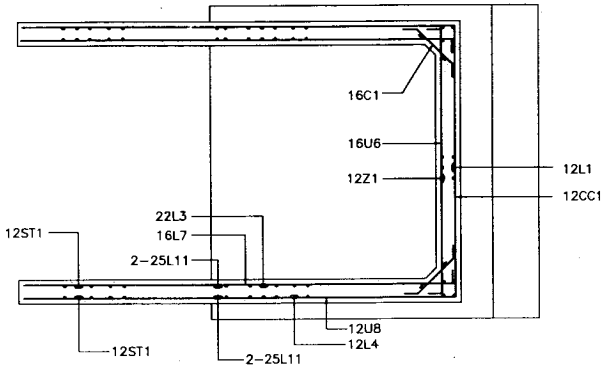
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO



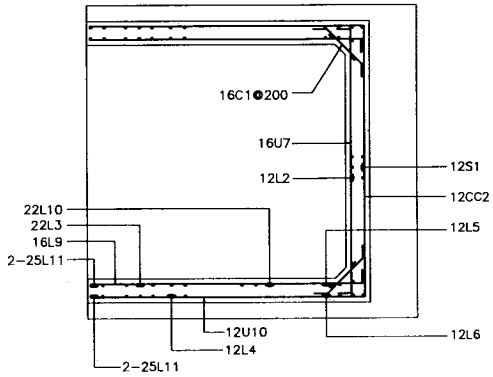
REINFORCEMENT DETAIL



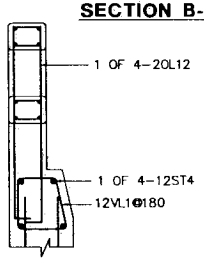
SECTION C-C



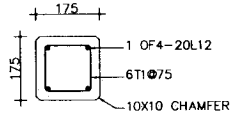
SECTION A-A



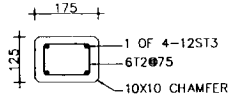
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1850	144			1994
12	L2	29	2750	144			2894
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2450 to 3050	144			Avg. 2894
12	L6	6	Var. 2450 to 3050	144			Avg. 2894
16	L7	32	Var. 4375 to 6025	192			Avg. 5186
16	L8	20	Var. 3500 to 4375	192			Avg. 4130
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	34	240	5000	240		5480
20	U2	21	240	4860	240		5340
20	U3	21	240	5000	240		5480
20	U4	26	240	4860	240		5340
16	U6	20	192	4112	192		4496
16	U7	11	192	4112	192		4496
12	U8	18	Var. 4375 to 6025	225	575		Avg. 5908
12	U9	12	Var. 3500 to 4375	225	575		Avg. 4957
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	13	1250	450	4160		5860
12	CC2	21	1250	450	4160		5860
12	Z1	29	1850	866	144		2860
12	S1	29	700	3300	240		4240
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/00220502

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SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1700	144			1844
12	L2	29	2900	144			3044
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	30	Var. 4600 to 6025	192			Avg. 5362
16	L8	24	Var. 3500 to 4600	192			Avg. 4242
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	34	240	5000	240		5480
20	U2	21	240	4860	240		5340
20	U3	21	240	5000	240		5480
20	U4	26	240	4860	240		5340
16	U6	18	192	4112	192		4496
16	U7	12	192	4112	192		4496
12	U8	16	Var. 4600 to 6025	225	575		Avg. 6113
12	U9	14	Var. 3500 to 4600	225	575		Avg. 5125
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	12	1250	450	4160		5860
12	CC2	22	1250	450	4160		5860
12	Z1	29	1700	866	144		2710
12	S1	29	700	3450	240		4390
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1450	144			1594
12	L2	29	3150	144			3294
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2850 to 3450	144			Avg. 3294
12	L6	6	Var. 2850 to 3450	144			Avg. 3294
16	L7	24	Var. 4975 to 6025	192			Avg. 5692
16	L8	28	Var. 3500 to 4975	192			Avg. 4430
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	34	240	5000	240		5480
20	U2	21	240	4860	240		5340
20	U3	21	240	5000	240		5480
20	U4	26	240	4860	240		5340
16	U6	16	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	14	Var. 4975 to 6025	225	575		Avg. 6375
12	U9	16	Var. 3500 to 4975	225	575		Avg. 5407
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	10	1250	450	4160		5860
12	CC2	24	1250	450	4160		5860
12	Z1	29	1450	866	144		2460
12	S1	29	700	3700	240		4640
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	29	1350	144			1494
12	L2	29	3250	144			3394
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	22	Var. 5125 to 6025	192			Avg. 5808
16	L8	30	Var. 3500 to 5125	192			Avg. 4505
16	L9	18	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	971	120			1091
20	U1	34	240	5000	240		5480
20	U2	21	240	4860	240		5340
20	U3	21	240	5000	240		5480
20	U4	26	240	4860	240		5340
16	U6	15	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	12	Var. 5125 to 6025	225	575		Avg. 6525
12	U9	16	Var. 3500 to 5125	225	575		Avg. 5519
12	U10	18	3500	225	575		4300
16	U12	11	192	4160	192		4544
12	CC1	10	1250	450	4160		5860
12	CC2	25	1250	450	4160		5860
12	Z1	29	1350	866	144		2360
12	S1	29	700	3800	240		4740
16	C1	46	320	993	320		1633
16	C2	22	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	100	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

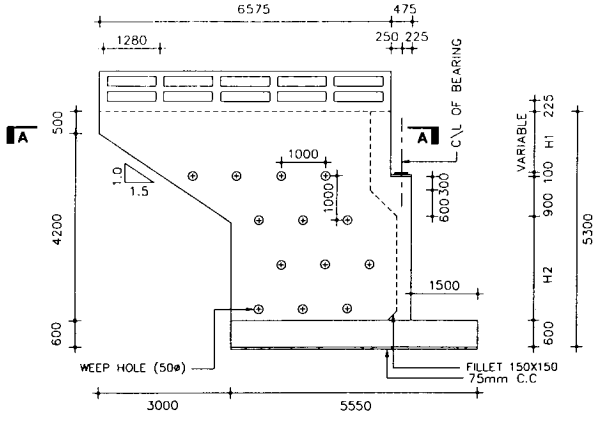
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/00220503	

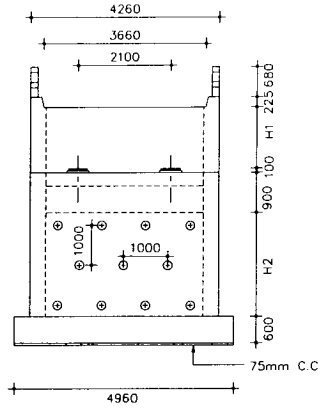
Web Copy

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



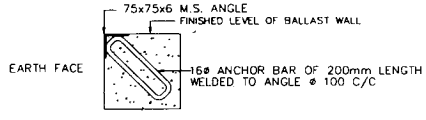
SIDE ELEVATION



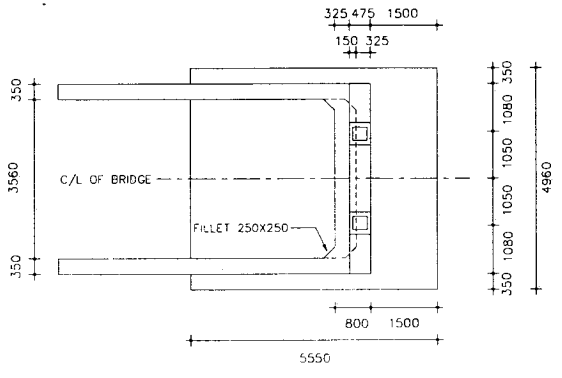
FRONT ELEVATION

TABLE-1

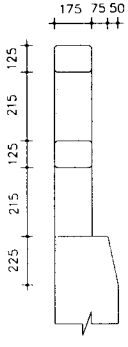
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19500	1500	2200
19000	1500	2200
18500	1500	2200
18000	1350	2350
17500	1350	2350
17000	1350	2350
16500	1350	2350
16000	1350	2350
15500	1350	2350
15000	1100	2600
14500	1100	2600
14000	1100	2600
13500	1100	2600
13000	1100	2600
12500	1000	2700



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **122** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

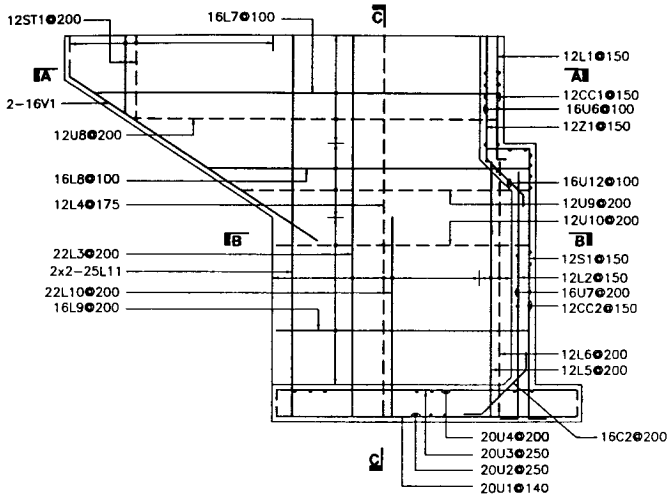
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.3m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\00220531	

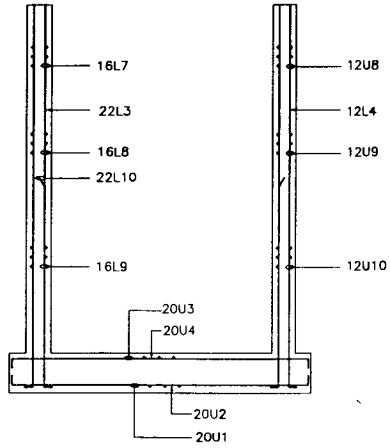
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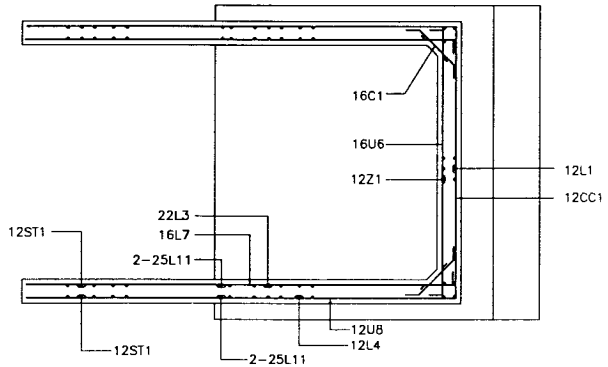
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO



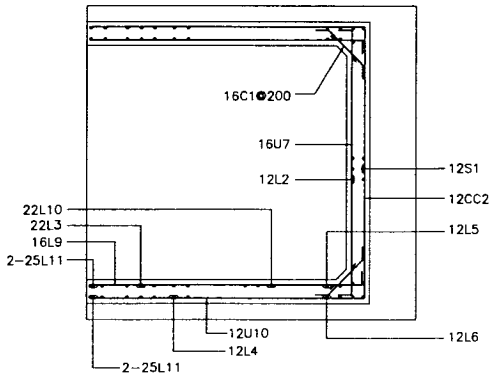
REINFORCEMENT DETAIL



SECTION C-C



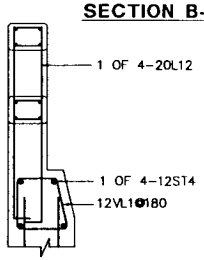
SECTION A-A



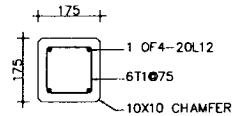
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

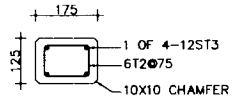
BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
*12	ST4	8	6525				6525
12	L1	29	1850	144			1994
12	L2	29	3050	144			3194
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 2750 to 3350	144			Avg. 3194
12	L6	6	Var. 2750 to 3350	144			Avg. 3194
16	L7	32	Var. 4825 to 6475	192			Avg. 5636
16	L8	20	Var. 3950 to 4825	192			Avg. 4580
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	36	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	20	192	4112	192		4496
16	U7	13	192	4112	192		4496
12	U8	18	Var. 4825 to 6475	250	575		Avg. 6383
12	U9	12	Var. 3950 to 4825	250	575		Avg. 5432
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	13	1300	450	4160		5910
12	CC2	23	1300	450	4160		5910
12	Z1	29	1850	866	144		2860
12	S1	29	700	3600	240		4540
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/00220532

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BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1700	144			1844
12	L2	29	3200	144			3344
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 2900 to 3500	144			Avg. 3344
12	L6	6	Var. 2900 to 3500	144			Avg. 3344
16	L7	30	Var. 5050 to 6475	192			Avg. 5812
16	L8	24	Var. 3950 to 5050	192			Avg. 4692
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	36	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	18	192	4112	192		4496
16	U7	14	192	4112	192		4496
12	U8	16	Var. 5050 to 6475	250	575		Avg. 6588
12	U9	14	Var. 3950 to 5050	250	575		Avg. 5600
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	12	1300	450	4160		5910
12	CC2	24	1300	450	4160		5910
12	Z1	29	1700	866	144		2710
12	S1	29	700	3750	240		4690
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1450	144			1594
12	L2	29	3450	144			3594
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3150 to 3750	144			Avg. 3594
12	L6	6	Var. 3150 to 3750	144			Avg. 3594
16	L7	24	Var. 5425 to 6475	192			Avg. 6142
16	L8	28	Var. 3950 to 5425	192			Avg. 4880
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	36	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	16	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	14	Var. 5425 to 6475	250	575		Avg. 6850
12	U9	16	Var. 3950 to 5425	250	575		Avg. 5882
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	10	1300	450	4160		5910
12	CC2	26	1300	450	4160		5910
12	Z1	29	1450	866	144		2460
12	S1	29	700	4000	240		4940
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	29	1350	144			1494
12	L2	29	3550	144			3694
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3250 to 3850	144			Avg. 3694
12	L6	6	Var. 3250 to 3850	144			Avg. 3694
16	L7	22	Var. 5575 to 6475	192			Avg. 6258
16	L8	30	Var. 3950 to 5575	192			Avg. 4955
16	L9	20	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	971	120			1091
20	U1	36	240	5450	240		5930
20	U2	23	240	4860	240		5340
20	U3	21	240	5450	240		5930
20	U4	29	240	4860	240		5340
16	U6	15	192	4112	192		4496
16	U7	15	192	4112	192		4496
12	U8	12	Var. 5575 to 6475	250	575		Avg. 7000
12	U9	16	Var. 3950 to 5575	250	575		Avg. 5994
12	U10	20	3950	250	600		4800
16	U12	11	192	4160	192		4544
12	CC1	10	1300	450	4160		5910
12	CC2	27	1300	450	4160		5910
12	Z1	29	1350	866	144		2360
12	S1	29	700	4100	240		5040
16	C1	50	320	1028	320		1668
16	C2	22	320	1240	320		1880
16	V1	4	250	4600			4850
6	T1	120	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conferming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

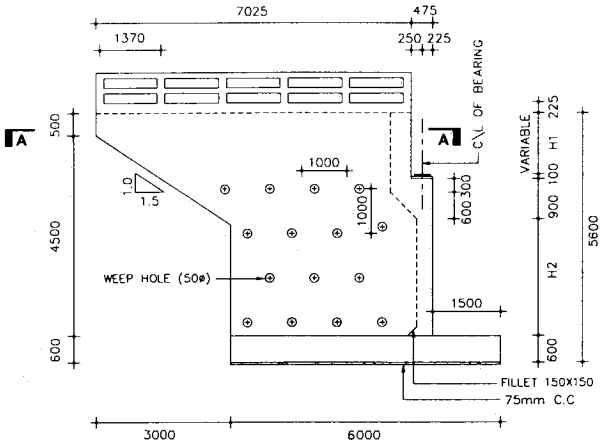
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 4.26m)

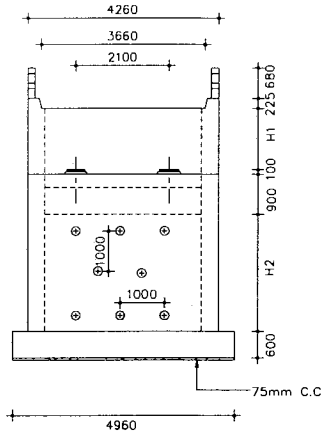
DATE :
ISSUED BY :
CAD FILE REF : ABUT/00220533

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



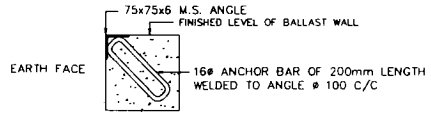
SIDE ELEVATION



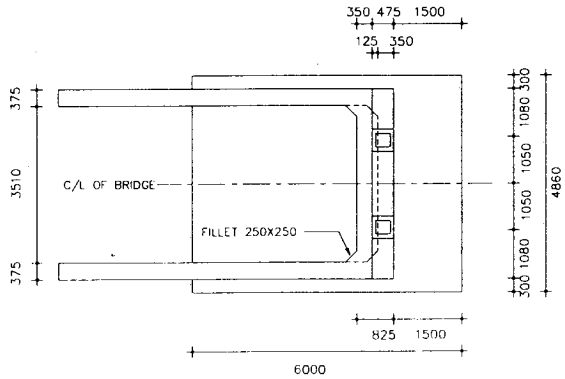
FRONT ELEVATION

TABLE-1

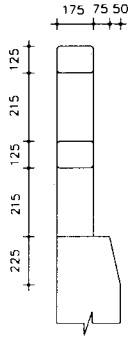
GIRDER SPAN	H1	H2
20000	1500	2500
19500	1500	2500
19000	1500	2500
18500	1500	2500
18000	1350	2650
17500	1350	2650
17000	1350	2650
16500	1350	2650
16000	1350	2650
15500	1350	2650
15000	1100	2900
14500	1100	2900
14000	1100	2900
13500	1100	2900
13000	1100	2900
12500	1000	3000



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

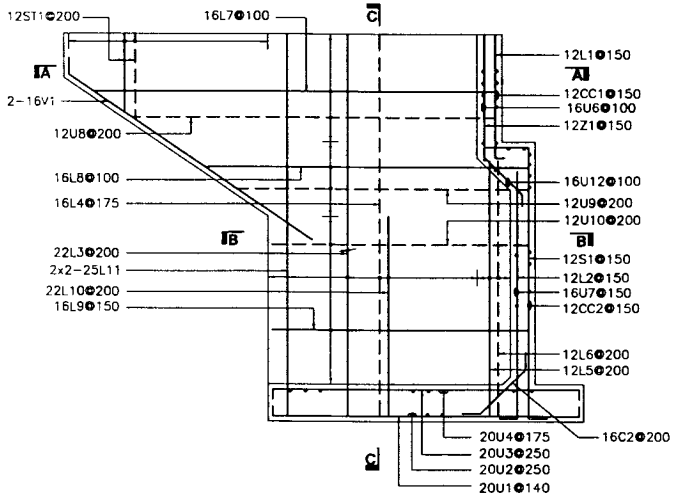
1) All dimensions ore in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **126** kN/m^2
3) Weep hole shall be provided at 1000mm horozontolly ond verticolly os shown in drawings; filter metorial shall be provided os per specificotion.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 5.6m , DECK WIDTH 4.26m)
DATE : ISSUED BY :
CAD FILE REF : ABUT\00220561

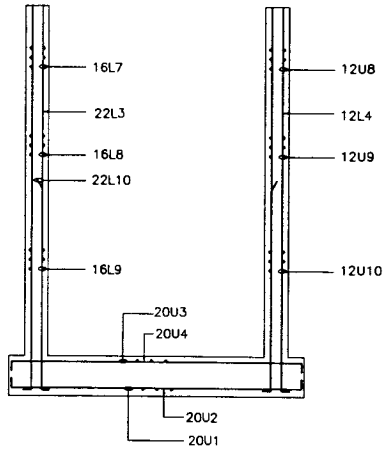
Web Copy

OA-176

SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO



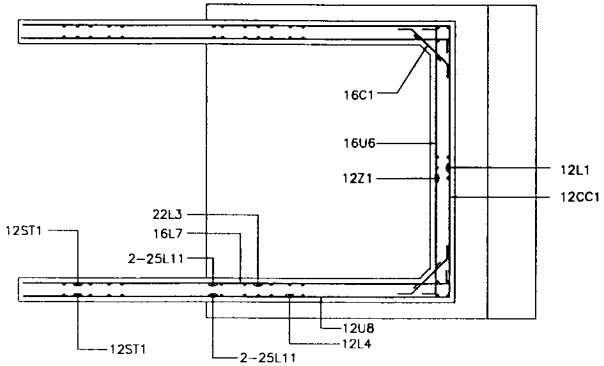
REINFORCEMENT DETAIL



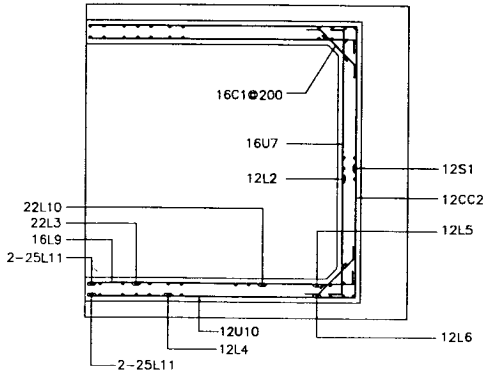
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

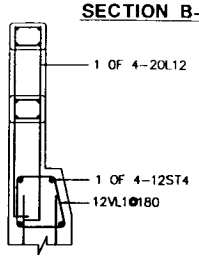
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1850	144			1994
12	L2	29	3350	144			3494
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3050 to 3650	144			Avg. 3494
12	L6	6	Var. 3050 to 3650	144			Avg. 3494
16	L7	32	Var. 5275 to 6925	192			Avg. 6086
16	L8	20	Var. 4400 to 5275	192			Avg. 5030
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	36	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	20	192	4104	192		4488
16	U7	19	192	4112	192		4496
12	U8	18	Var. 5275 to 6925	275	600		Avg. 6883
12	U9	12	Var. 4400 to 5275	275	600		Avg. 5932
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	13	1350	500	4160		6010
12	CC2	25	1350	500	4160		6010
12	Z1	29	1850	866	144		2860
12	S1	29	725	3900	240		4865
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000



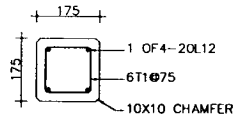
SECTION A-A



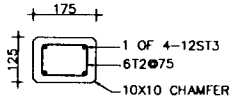
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/00220562	

OA-1 Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1700	144			1844
12	L2	29	3500	144			3644
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	30	Var. 5500 to 6925	192			Avg. 6262
16	L8	24	Var. 4400 to 5500	192			Avg. 5142
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	36	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	18	192	4104	192		4488
16	U7	20	192	4112	192		4496
12	U8	16	Var. 5500 to 6925	275	600		Avg. 7088
12	U9	14	Var. 4400 to 5500	275	600		Avg. 6100
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	12	1350	500	4160		6010
12	CC2	26	1350	500	4160		6010
12	Z1	29	1700	866	144		2710
12	S1	29	725	4050	240		5015
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1450	144			1594
12	L2	29	3750	144			3894
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3450 to 4050	144			Avg. 3894
12	L6	6	Var. 3450 to 4050	144			Avg. 3894
16	L7	24	Var. 5875 to 6925	192			Avg. 6592
16	L8	28	Var. 4400 to 5875	192			Avg. 5330
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	36	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	16	192	4104	192		4488
16	U7	22	192	4112	192		4496
12	U8	14	Var. 5875 to 6925	275	600		Avg. 7350
12	U9	16	Var. 4400 to 5875	275	600		Avg. 6382
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	10	1350	500	4160		6010
12	CC2	28	1350	500	4160		6010
12	Z1	29	1450	866	144		2460
12	S1	29	725	4300	240		5265
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	29	1350	144			1494
12	L2	29	3850	144			3994
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3550 to 4150	144			Avg. 3994
12	L6	6	Var. 3550 to 4150	144			Avg. 3994
16	L7	22	Var. 6025 to 6925	192			Avg. 6708
16	L8	30	Var. 4400 to 6025	192			Avg. 5405
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	971	120			1091
20	U1	36	240	5900	240		6380
20	U2	25	240	4860	240		5340
20	U3	21	240	5900	240		6380
20	U4	35	240	4860	240		5340
16	U6	15	192	4104	192		4488
16	U7	22	192	4112	192		4496
12	U8	12	Var. 6025 to 6925	275	600		Avg. 7500
12	U9	16	Var. 4400 to 6025	275	600		Avg. 6494
12	U10	24	4400	275	625		5300
16	U12	11	192	4160	192		4544
12	CC1	10	1350	500	4160		6010
12	CC2	29	1350	500	4160		6010
12	Z1	29	1350	866	144		2360
12	S1	29	725	4400	240		5365
16	C1	52	320	1099	320		1739
16	C2	22	320	1276	320		1916
16	V1	4	250	4656			4906
6	T1	120	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structurol grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

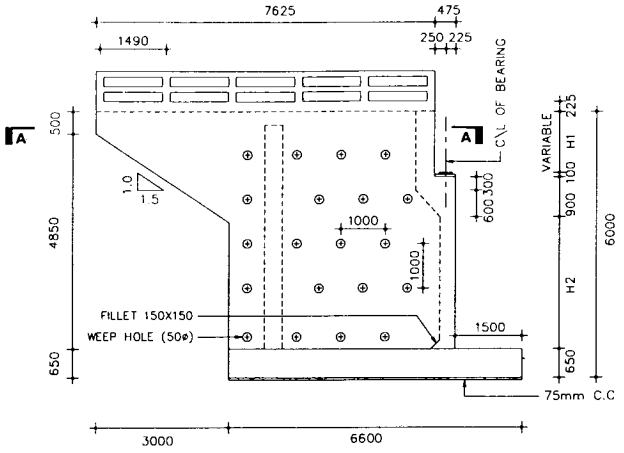
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 4.26m)

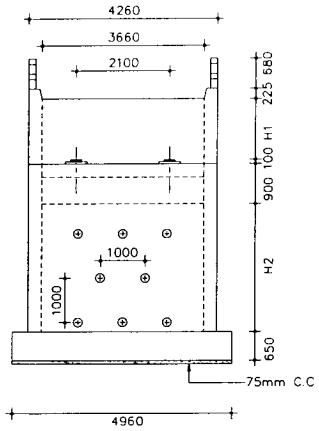
DATE :	ISSUED BY :
CAD FILE REF : ABUT/00220563	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : NO



SIDE ELEVATION



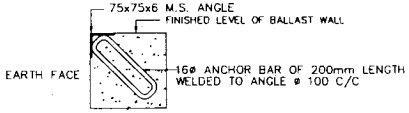
FRONT ELEVATION

TABLE-1

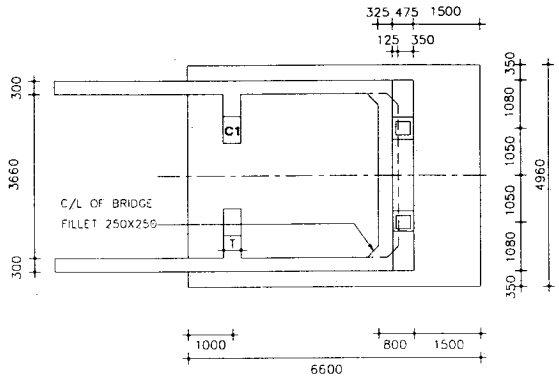
GIRDER SPAN	H1	H2
20000	1500	2850
19500	1500	2850
19000	1500	2850
18500	1500	2850
18000	1350	3000
17500	1350	3000
17000	1350	3000
16500	1350	3000
16000	1350	3000
15500	1350	3000
15000	1100	3250
14500	1100	3250
14000	1100	3250
13500	1100	3250
13000	1100	3250
12500	1000	3350

TABLE-2

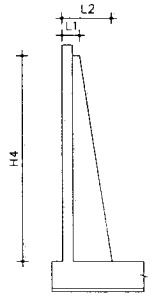
L1	L2	H4	T
700	1400	5100	400



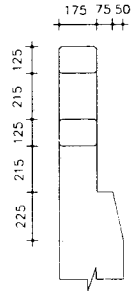
NOSING AT ABUTMENT



SECTION A-A



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **133** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification

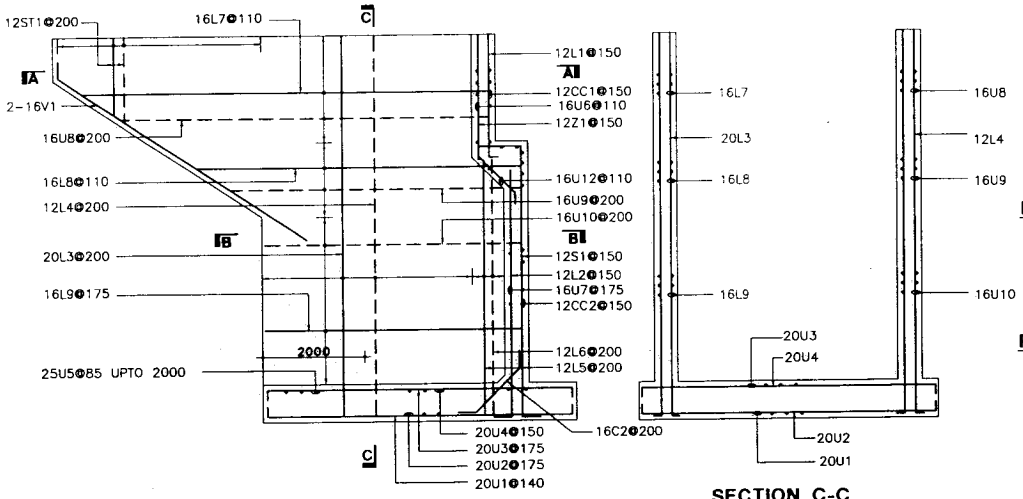
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 6.0m , DECK WIDTH 4.26m)

DATE :	ISSUED BY :
CAD FILE REF : ABU1\00220601	

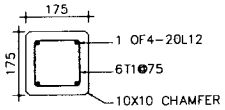
Web Copy

SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

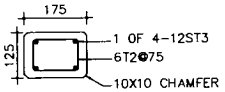


REINFORCEMENT DETAIL

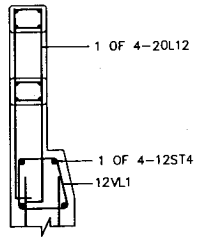
SECTION C-C



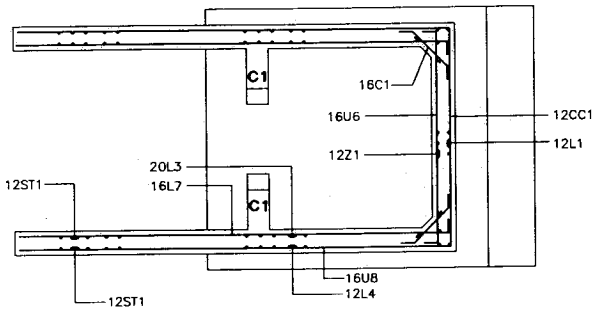
REINF. DETAIL OF POST



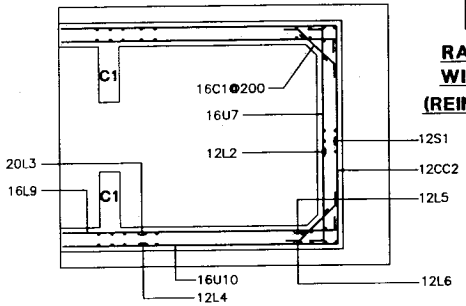
REINF. DETAIL OF RAILING



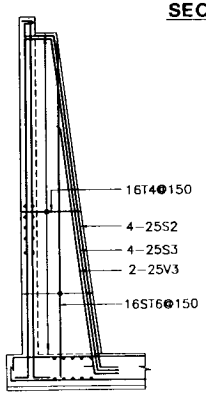
RAILING ON WING WALL (REINF. DETAIL)



SECTION A-A



SECTION B-B



REINFORCEMENT DETAIL OF COUNTERFORT C1

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1850	144			1994
12	L2	29	3750	144			3894
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3450 to 4050	144			Avg. 3894
12	L6	6	Var. 3450 to 4050	144			Avg. 3894
16	L7	30	Var. 5875 to 7525	192			Avg. 6727
16	L8	20	Var. 5000 to 5875	192			Avg. 5630
16	L9	32	5900	192			5192
20	L12	48	971	120			1091
20	U1	36	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	18	192	4104	192		4488
16	U7	18	192	4104	192		4488
16	U8	18	Var. 5875 to 7525	200	575		Avg. 7383
16	U9	12	Var. 5000 to 5875	200	600		Avg. 6457
16	U10	28	5000	200	550		5750
16	U12	10	192	4104	192		4488
12	CC1	13	1200	450	4160		5810
12	CC2	28	1200	500	4160		5860
12	Z1	29	1850	850	144		2844
12	S1	29	700	4300	240		5240
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032
12	W1	2	325	535	329		1189

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT (HEIGHT 6.0m , DECK WIDTH 4.26m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220602

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: NO

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1700	144			1844
12	L2	29	3900	144			4044
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	28	Var. 6100 to 7525	192			Avg. 6903
16	L8	22	Var. 5000 to 6100	192			Avg. 5742
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	36	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	17	192	4104	192		4488
16	U7	19	192	4104	192		4488
16	U8	16	Var. 6100 to 7525	200	575		Avg. 7588
16	U9	14	Var. 5000 to 6100	200	600		Avg. 6625
16	U10	28	5000	200	550		5750
16	U12	10	192	4104	192		4488
12	CC1	12	1200	450	4160		5810
12	CC2	29	1200	500	4160		5860
12	Z1	29	1700	850	144		2694
12	S1	29	700	4450	240		5390
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1450	144			1594
12	L2	29	4150	144			4294
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3850 to 4450	144			Avg. 4294
12	L6	6	Var. 3850 to 4450	144			Avg. 4294
16	L7	24	Var. 6475 to 7525	192			Avg. 7192
16	L8	26	Var. 5000 to 6475	192			Avg. 5930
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	36	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	15	192	4104	192		4488
16	U7	21	192	4104	192		4488
16	U8	14	Var. 6475 to 7525	200	575		Avg. 7850
16	U9	16	Var. 5000 to 6475	200	600		Avg. 6907
16	U10	28	5000	200	550		5750
16	U12	10	192	4104	192		4488
12	CC1	10	1200	450	4160		5810
12	CC2	30	1200	500	4160		5860
12	Z1	29	1450	850	144		2444
12	S1	29	700	4700	240		5640
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	29	1350	144			1494
12	L2	29	4250	144			4394
20	L3	44	5900	240			6140
12	L4	44	5900	144			6044
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	22	Var. 6625 to 7525	192			Avg. 7308
16	L8	28	Var. 5000 to 6625	192			Avg. 6005
16	L9	32	5000	192			5192
20	L12	48	971	120			1091
20	U1	36	240	6500	240		6980
20	U2	39	240	4860	240		5340
20	U3	29	240	6500	240		6980
20	U4	31	240	4860	240		5340
25	U5	24	300	4860	300		5460
16	U6	14	192	4104	192		4488
16	U7	21	192	4104	192		4488
16	U8	12	Var. 6625 to 7525	200	575		Avg. 8000
16	U9	16	Var. 5000 to 6625	200	600		Avg. 7019
16	U10	28	5000	200	550		5750
16	U12	10	192	4104	192		4488
12	CC1	10	1200	450	4160		5810
12	CC2	31	1200	500	4160		5860
12	Z1	29	1350	850	144		2344
12	S1	29	700	4800	240		5740
16	C1	56	320	993	320		1633
16	C2	22	320	1346	320		1986
16	V1	4	250	4731			4981
6	T1	120	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	68	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5459	600		6359
25	S3	8	325	5459	575		6359
25	V2	4	375	2875			3250
25	V3	8	350	3664			4014
16	ST6	16	Var. 1147 to 5860				Avg. 3032

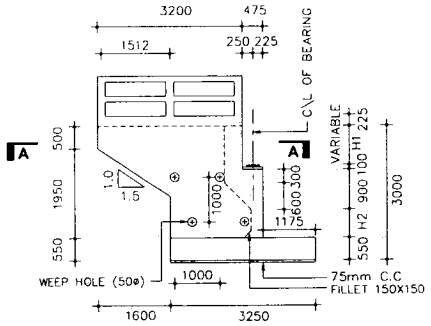
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 4.26m)

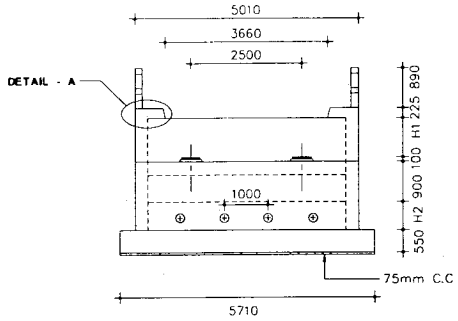
DATE :
ISSUED BY :
CAD FILE REF : ABUT\00220603

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



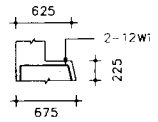
SIDE ELEVATION



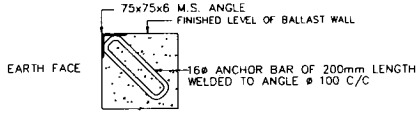
FRONT ELEVATION

TABLE-1

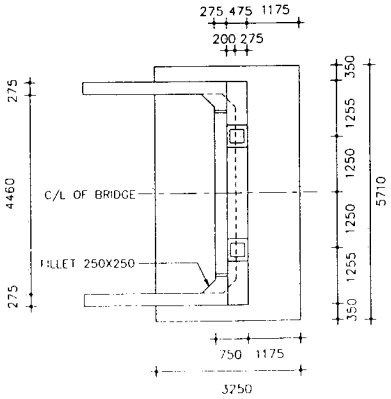
GIRDER SPAN	H1	H2
20000	1500	-50
19500	1500	-50
19000	1500	-50
18500	1500	-50
18000	1350	100
17500	1350	100
17000	1350	100
16500	1350	100
16000	1350	100
15500	1350	100
15000	1100	350
14500	1100	350
14000	1100	350
13500	1100	350
13000	1100	350
12500	1000	450



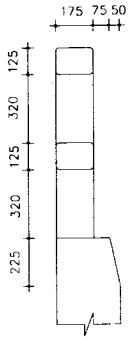
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter metorial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

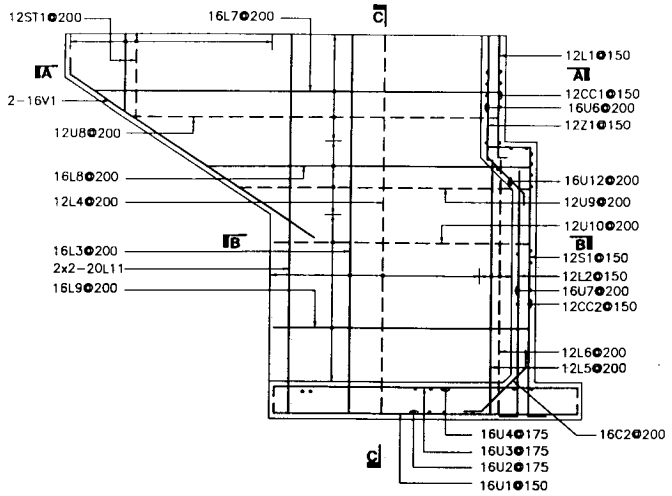
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 3.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220301	

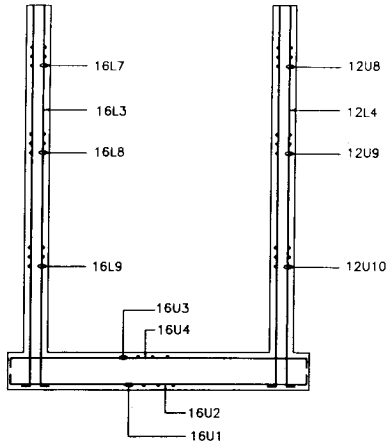
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OA-182

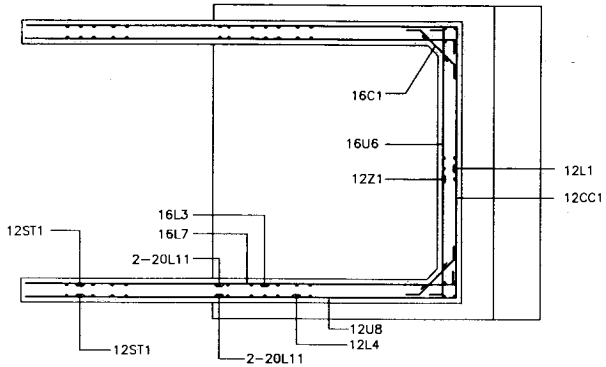
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES



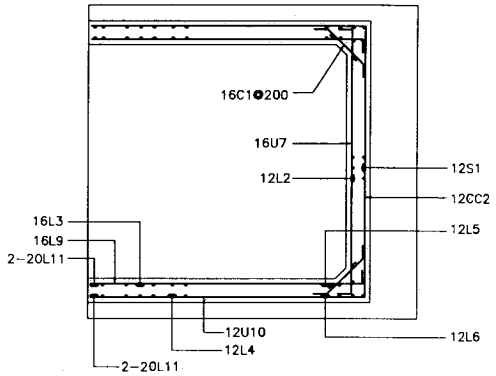
REINFORCEMENT DETAIL



SECTION C-C



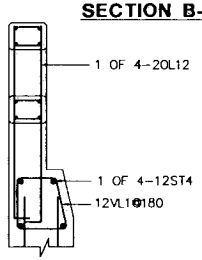
SECTION A-A



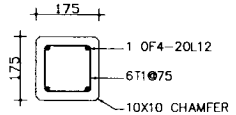
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

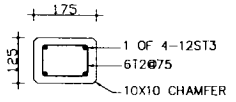
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1850	144			1994
12	L2	34	1050	144			1194
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 450 to 1050	144			Avg. 894
12	L6	6	Var. 450 to 1050	144			Avg. 894
16	L7	18	Var. 1450 to 3100	192			Avg. 2375
16	L8	2	Var. 1975 to 1450	192			Avg. 1905
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	1181	120			1301
16	U1	39	192	3150	192		3534
16	U2	19	192	5610	192		5994
16	U3	34	192	3150	192		3534
16	U4	18	192	5610	192		5994
16	U6	11	192	4862	192		5246
16	U7	2	192	4862	192		5246
12	U8	18	Var. 1450 to 3100	175	525		Avg. 2700
12	U9	2	Var. 1975 to 1450	175	525		Avg. 2282
12	U10	8	1975		525		2500
16	U12	5	192	4910	192		5294
12	CC1	13	1150	350	4910		6410
12	CC2	8	1150	350	4910		6410
12	Z1	34	1850	866	144		2860
12	S1	34	650	1300	240		2190
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	72	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220302	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1700	144			1844
12	L2	34	1200	144			1344
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 600 to 1200	144			Avg. 1044
12	L6	6	Var. 600 to 1200	144			Avg. 1044
16	L7	16	Var. 1675 to 3100	192			Avg. 2580
16	L8	4	Var. 1975 to 1675	192			Avg. 2017
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	1181	120			1301
16	U1	39	192	3150	192		3534
16	U2	19	192	5610	192		5994
16	U3	34	192	3150	192		3534
16	U4	18	192	5610	192		5994
16	U6	10	192	4862	192		5246
16	U7	2	192	4862	192		5246
12	U8	16	Var. 1675 to 3100	175	525		Avg. 2909
12	U9	4	Var. 1975 to 1675	175	525		Avg. 2450
12	U10	8	1975		525		2500
16	U12	5	192	4910	192		5294
12	CC1	12	1150	350	4910		6410
12	CC2	9	1150	350	4910		6410
12	Z1	34	1700	866	144		2710
12	S1	34	650	1450	240		2340
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	72	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1450	144			1594
12	L2	34	1450	144			1594
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 850 to 1450	144			Avg. 1294
12	L6	6	Var. 850 to 1450	144			Avg. 1294
16	L7	14	Var. 2050 to 3100	192			Avg. 2842
16	L8	6	Var. 1975 to 2050	192			Avg. 2205
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	1181	120			1301
16	U1	39	192	3150	192		3534
16	U2	19	192	5610	192		5994
16	U3	34	192	3150	192		3534
16	U4	18	192	5610	192		5994
16	U6	9	192	4862	192		5246
16	U7	4	192	4862	192		5246
12	U8	14	Var. 2050 to 3100	175	525		Avg. 3200
12	U9	6	Var. 1975 to 2050	175	525		Avg. 2732
12	U10	8	1975		525		2500
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	11	1150	350	4910		6410
12	Z1	34	1450	866	144		2460
12	S1	34	650	1700	240		2590
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	72	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	32	Var. 400 to 1467				Avg. 934
12	ST3	16	3160				3160
12	ST4	8	3150				3150
12	L1	34	1350	144			1494
12	L2	34	1550	144			1694
16	L3	8	2900	192			3092
12	L4	8	2900	144			3044
12	L5	6	Var. 950 to 1550	144			Avg. 1394
12	L6	6	Var. 950 to 1550	144			Avg. 1394
16	L7	12	Var. 2200 to 3100	192			Avg. 2992
16	L8	8	Var. 1975 to 2200	192			Avg. 2280
16	L9	8	1975	192			2167
20	L11	8	2900	240			3140
20	L12	24	1181	120			1301
16	U1	39	192	3150	192		3534
16	U2	19	192	5610	192		5994
16	U3	34	192	3150	192		3534
16	U4	18	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	4	192	4862	192		5246
12	U8	12	Var. 2200 to 3100	175	525		Avg. 3350
12	U9	8	Var. 1975 to 2200	175	525		Avg. 2844
12	U10	8	1975		525		2500
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	12	1150	350	4910		6410
12	Z1	34	1350	866	144		2360
12	S1	34	650	1800	240		2690
16	C1	28	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	2486			2736
6	T1	72	306	306			612
6	T2	152	206	306			512
12	VL1	38	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coorse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **278** MPa.
6) Cleor cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

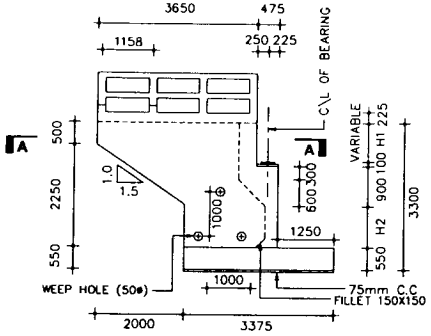
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.0m , DECK WIDTH 5.01m)

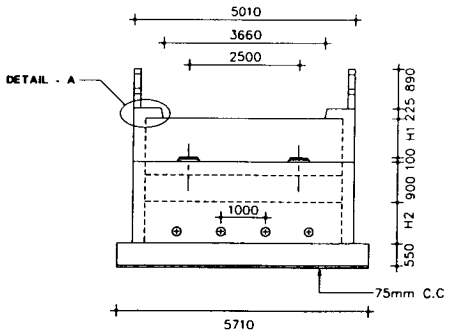
DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220303

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



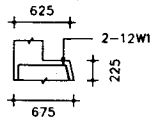
SIDE ELEVATION



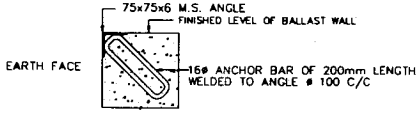
FRONT ELEVATION

TABLE-1

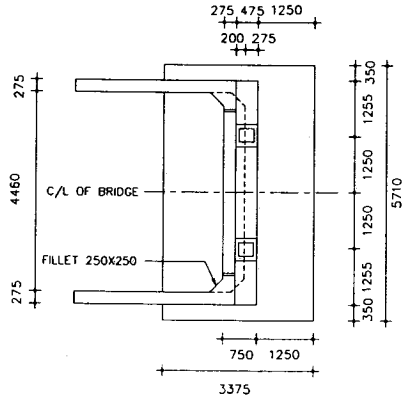
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20000	1500	250
19500	1500	250
19000	1500	250
18500	1500	250
18000	1350	400
17500	1350	400
17000	1350	400
16500	1350	400
16000	1350	400
15500	1350	400
15000	1100	650
14500	1100	650
14000	1100	650
13500	1100	650
13000	1100	650
12500	1000	750



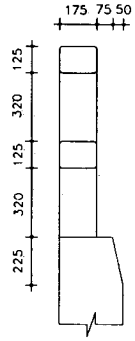
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

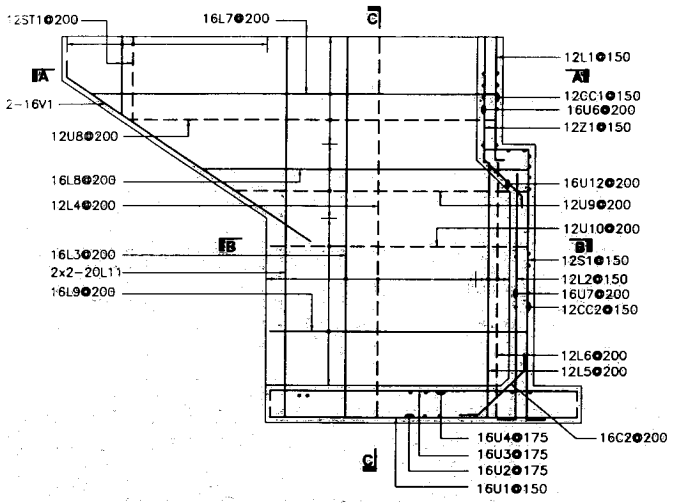
NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 100 kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

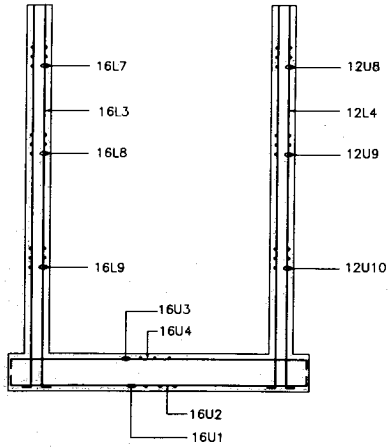
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 3.3m , DECK WIDTH 5.01m)
DATE : ISSUED BY :
CAD FILE REF . ABUT\01220331

Web Copy

SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES



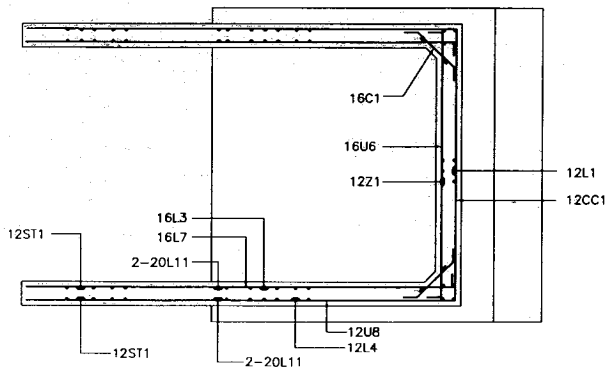
REINFORCEMENT DETAIL



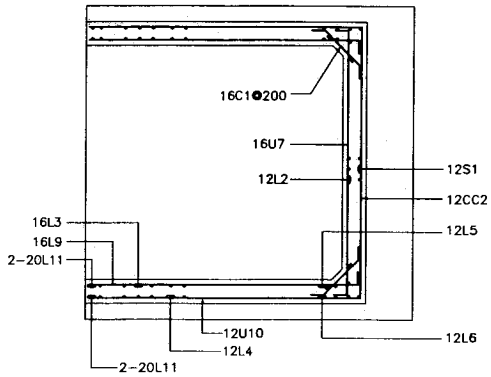
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

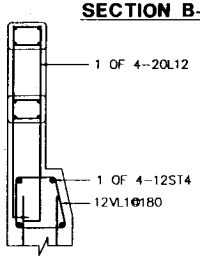
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1704				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1850	144			1994
12	L2	34	1050	144			1194
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 750 to 1350	144			Avg. 1194
12	L6	6	Var. 750 to 1350	144			Avg. 1194
16	L7	18	Var. 1900 to 3550	192			Avg. 2825
16	L8	6	Var. 2025 to 1900	192			Avg. 2155
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	39	192	3275	192		3659
16	U2	20	192	5610	192		5994
16	U3	34	192	3275	192		3659
16	U4	19	192	5610	192		5994
16	U5	11	192	4862	192		5246
16	U7	3	192	4862	192		5246
12	U8	18	Var. 1900 to 3550	175	525		Avg. 3150
12	U9	6	Var. 2025 to 1900	175	525		Avg. 2632
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	13	1150	350	4910		6410
12	CC2	10	1150	350	4910		6410
12	Z1	34	1850	866	144		2860
12	S1	34	650	1800	240		2490
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981



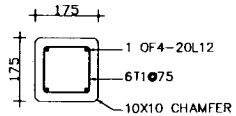
SECTION, A-A



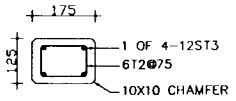
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220332	

Web Copy

SPAN RANGE : 12.5m TO 20m

SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1700	144			1844
12	L2	34	1200	144			1344
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 900 to 1500	144			Avg. 1344
12	L6	6	Var. 900 to 1500	144			Avg. 1344
16	L7	16	Var. 2125 to 3550	192			Avg. 3030
16	L8	6	Var. 2025 to 2125	192			Avg. 2257
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	39	192	3275	192		3659
16	U2	20	192	5610	192		5994
16	U3	34	192	3275	192		3659
16	U4	19	192	5610	192		5994
16	U6	10	192	4862	192		5246
16	U7	4	192	4862	192		5246
12	U8	16	Var. 2125 to 3550	175	525		Avg. 3359
12	U8	6	Var. 2025 to 2125	175	525		Avg. 2800
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	12	1150	350	4910		6410
12	CC2	11	1150	350	4910		6410
12	Z1	34	1700	866	144		2710
12	S1	34	650	1750	240		2640
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1450	144			1594
12	L2	34	1450	144			1594
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1150 to 1750	144			Avg. 1594
12	L6	6	Var. 1150 to 1750	144			Avg. 1594
16	L7	14	Var. 2500 to 3550	192			Avg. 3292
16	L8	10	Var. 2025 to 2500	192			Avg. 2455
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	39	192	3275	192		3659
16	U2	20	192	5610	192		5994
16	U3	34	192	3275	192		3659
16	U4	19	192	5610	192		5994
16	U6	9	192	4862	192		5246
16	U7	5	192	4862	192		5246
12	U8	14	Var. 2500 to 3550	175	525		Avg. 3650
12	U8	10	Var. 2025 to 2500	175	525		Avg. 3082
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	13	1150	350	4910		6410
12	Z1	34	1450	866	144		2460
12	S1	34	650	2000	240		2890
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	40	Var. 400 to 1734				Avg. 1067
12	ST3	16	3610				3610
12	ST4	8	3600				3600
12	L1	34	1350	144			1494
12	L2	34	1550	144			1694
16	L3	8	3200	192			3392
12	L4	8	3200	144			3344
12	L5	6	Var. 1250 to 1850	144			Avg. 1694
12	L6	6	Var. 1250 to 1850	144			Avg. 1694
16	L7	12	Var. 2650 to 3550	192			Avg. 3442
16	L8	10	Var. 2025 to 2650	192			Avg. 2530
16	L9	8	2025	192			2217
20	L11	8	3200	240			3440
20	L12	32	1181	120			1301
16	U1	39	192	3275	192		3659
16	U2	20	192	5610	192		5994
16	U3	34	192	3275	192		3659
16	U4	19	192	5610	192		5994
16	U6	8	192	4862	192		5246
16	U7	6	192	4862	192		5246
12	U8	12	Var. 2650 to 3550	175	525		Avg. 3809
12	U8	10	Var. 2025 to 2650	175	525		Avg. 3194
12	U10	8	2025	175	525		2725
16	U12	5	192	4910	192		5294
12	CC1	10	1150	350	4910		6410
12	CC2	14	1150	350	4910		6410
12	Z1	34	1350	866	144		2360
12	S1	34	650	2100	240		2990
16	C1	30	320	851	320		1491
16	C2	26	320	1099	320		1739
16	V1	4	250	3023			3273
6	T1	96	306	306			612
6	T2	180	206	306			512
12	VL1	44	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.3m , DECK WIDTH 5.01m)

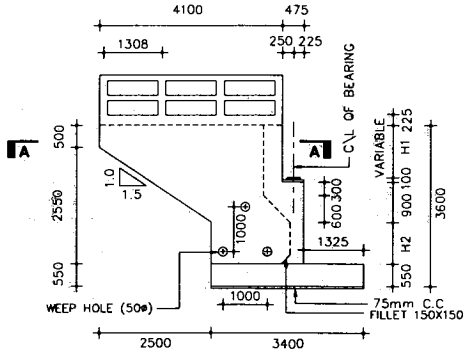
DATE :

ISSUED BY :

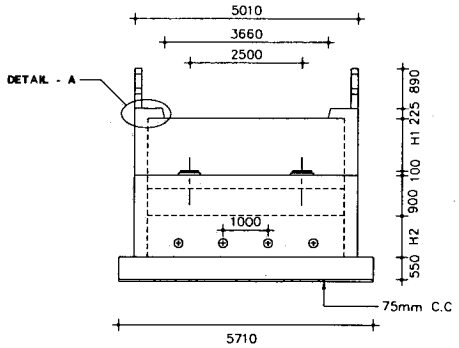
CAD FILE REF : ABUT\01220333

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



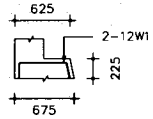
SIDE ELEVATION



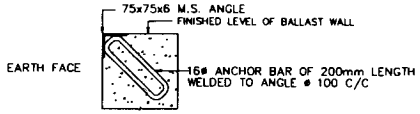
FRONT ELEVATION

TABLE-1

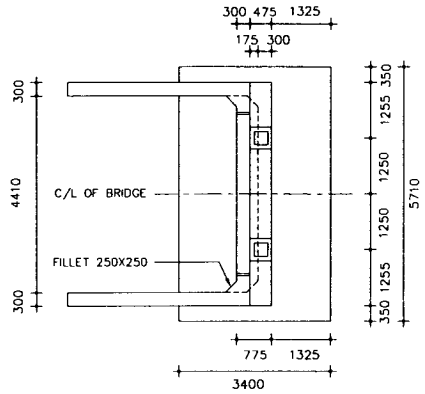
GIRDER SPAN	H1	H2
20000	1500	550
19500	1500	550
19000	1500	550
18500	1500	550
18000	1350	700
17500	1350	700
17000	1350	700
16500	1350	700
16000	1350	700
15500	1350	700
15000	1100	950
14500	1100	950
14000	1100	950
13500	1100	950
13000	1100	950
12500	1000	1050



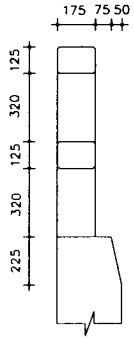
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

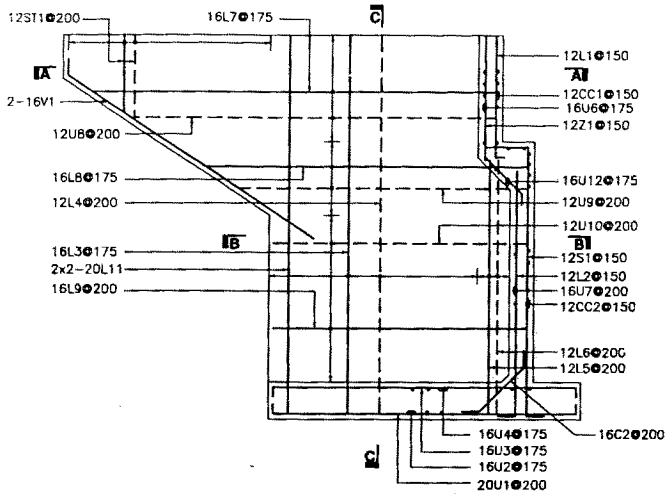
1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m^2
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	
GENERAL ARRANGEMENT OF ABUTMENT (HEIGHT = 3.6m , DECK WIDTH 5.01m)	
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220361	

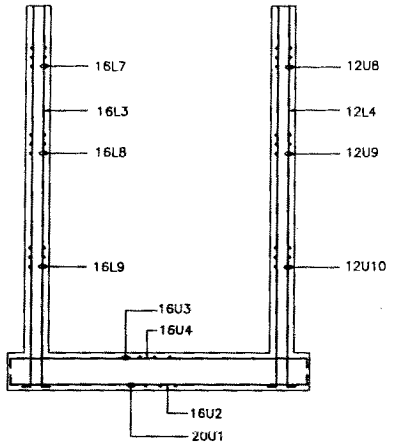
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DA-188

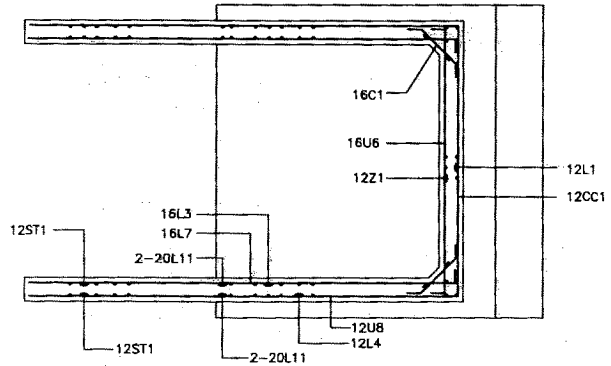
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES



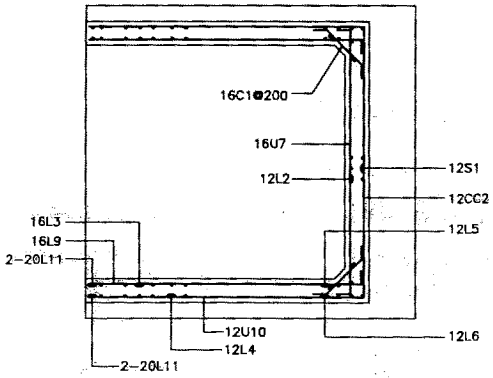
REINFORCEMENT DETAIL



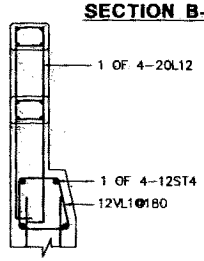
SECTION C-C



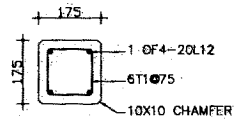
SECTION A-A



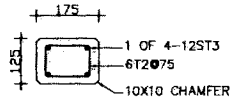
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1850	144			1994
12	L2	34	1350	144			1494
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1050 to 1650	144			Avg. 1494
12	L6	6	Var. 1050 to 1650	144			Avg. 1494
16	L7	20	Var. 2350 to 4000	192			Avg. 3202
16	L8	10	Var. 1975 to 2350	192			Avg. 2355
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
20	U1	30	240	3300	240		3780
16	U2	20	192	5610	192		5994
16	U3	34	192	3300	192		3684
16	U4	19	192	5610	192		5994
16	U6	12	192	4862	192		5246
16	U7	5	192	4862	192		5246
12	U8	18	Var. 2350 to 4000	200	550		Avg. 3650
12	U9	8	Var. 1975 to 2350	200	550		Avg. 3007
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	13	1200	400	4910		6510
12	CC2	12	1200	400	4910		6510
12	Z1	34	1850	866	144		2860
12	S1	34	675	1900	240		2815
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220362

Web Copy

SHEET 3 OF 3

SPAN RANGE : 12.5m TO 20m

SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4080				4060
12	ST4	8	4050				4050
12	L1	34	1700	144			1844
12	L2	34	1500	144			1644
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1200 to 1800	144			Avg. 1644
12	L6	6	Var. 1200 to 1800	144			Avg. 1644
16	L7	18	Var. 2575 to 4000	192			Avg. 3400
16	L8	12	Var. 1975 to 2575	192			Avg. 2467
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
20	U1	30	240	3300	240		3780
16	U2	20	192	5610	192		5994
16	U3	34	192	3300	192		3684
16	U4	19	192	5610	192		5994
16	U6	11	192	4862	192		5246
16	U7	5	192	4862	192		5246
12	U8	16	Var. 2575 to 4000	200	550		Avg. 3859
12	U9	10	Var. 1975 to 2575	200	550		Avg. 3175
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	12	1200	400	4910		6510
12	CC2	13	1200	400	4910		6510
12	Z1	34	1700	866	144		2710
12	S1	34	675	2050	240		2965
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1450	144			1594
12	L2	34	1750	144			1894
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1450 to 2050	144			Avg. 1894
12	L6	6	Var. 1450 to 2050	144			Avg. 1894
16	L7	14	Var. 2950 to 4000	192			Avg. 3742
16	L8	14	Var. 1975 to 2950	192			Avg. 2655
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
20	U1	30	240	3300	240		3780
16	U2	20	192	5610	192		5994
16	U3	34	192	3300	192		3684
16	U4	19	192	5610	192		5994
16	U6	10	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	14	Var. 2950 to 4000	200	550		Avg. 4150
12	U9	12	Var. 1975 to 2950	200	550		Avg. 3457
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	15	1200	400	4910		6510
12	Z1	34	1450	866	144		2460
12	S1	34	675	2300	240		3215
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	52	Var. 400 to 2067				Avg. 1234
12	ST3	16	4060				4060
12	ST4	8	4050				4050
12	L1	34	1350	144			1494
12	L2	34	1850	144			1994
16	L3	10	3500	192			3692
12	L4	8	3500	144			3644
12	L5	6	Var. 1550 to 2150	144			Avg. 1994
12	L6	6	Var. 1550 to 2150	144			Avg. 1994
16	L7	14	Var. 3100 to 4000	192			Avg. 3806
16	L8	16	Var. 1975 to 3100	192			Avg. 2730
16	L9	8	1975	192			2167
20	L11	8	3500	240			3740
20	L12	32	1181	120			1301
20	U1	30	240	3300	240		3780
16	U2	20	192	5610	192		5994
16	U3	34	192	3300	192		3684
16	U4	19	192	5610	192		5994
16	U6	9	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	12	Var. 3100 to 4000	200	550		Avg. 4300
12	U9	14	Var. 1975 to 3100	200	550		Avg. 3569
12	U10	8	1975	200	550		2725
16	U12	6	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	16	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	2400	240		3315
16	C1	34	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	3680			3930
6	T1	96	306	306			612
6	T2	204	206	306			512
12	VL1	48	272	200	250	278	1000
12	w1	4	200	575	206		981

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 3.6m , DECK WIDTH 5.01m)

DATE :

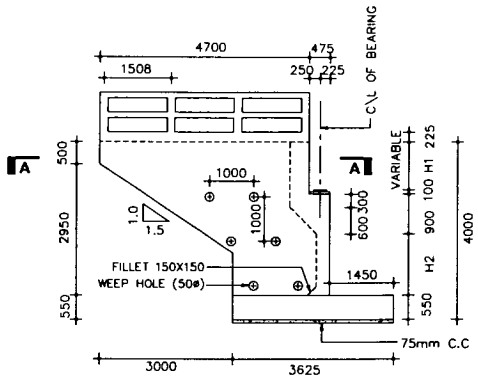
ISSUED BY :

CAD FILE REF : ABUT\01220363

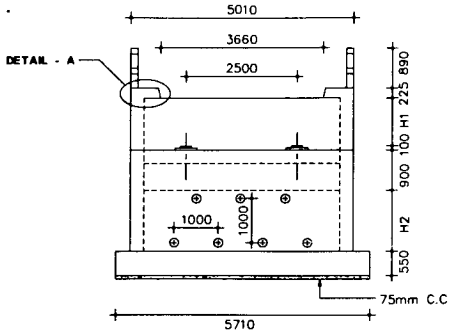
Web Copy

OA-190

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



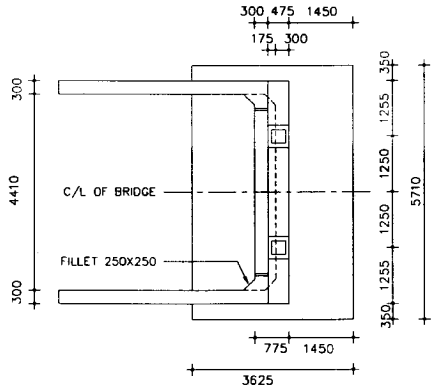
SIDE ELEVATION



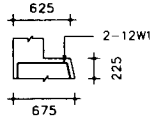
FRONT ELEVATION

TABLE-1

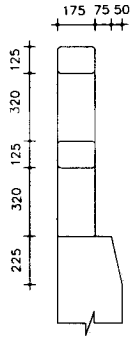
GIRDER SPAN	H1	H2
20000	1500	950
19500	1500	950
19000	1500	950
18500	1500	950
18000	1350	1100
17500	1350	1100
17000	1350	1100
16500	1350	1100
16000	1350	1100
15500	1350	1100
15000	1100	1350
14500	1100	1350
14000	1100	1350
13500	1100	1350
13000	1100	1350
12500	1000	1450



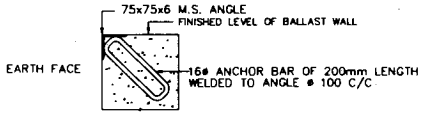
SECTION A-A



REINF. DETAIL 'A'



GENERAL ARRANGEMENT
OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **100** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

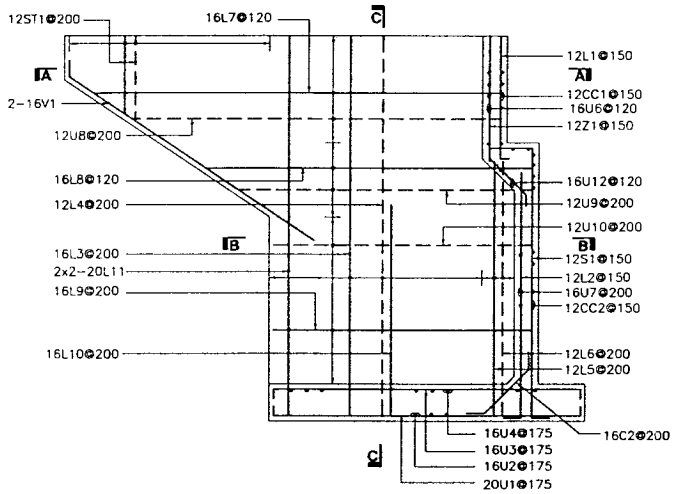
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.0m , DECK WIDTH 5.01m)

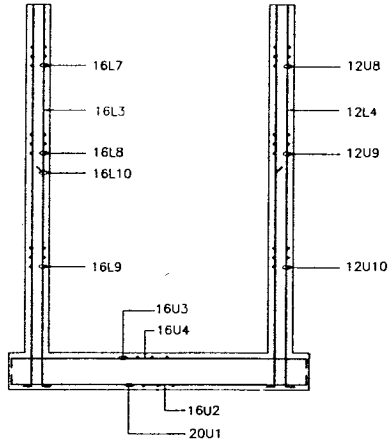
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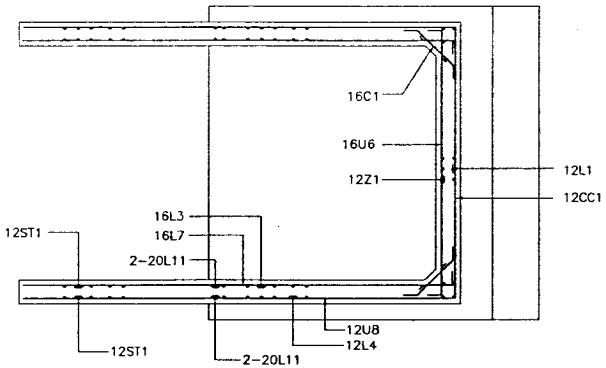
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: YES



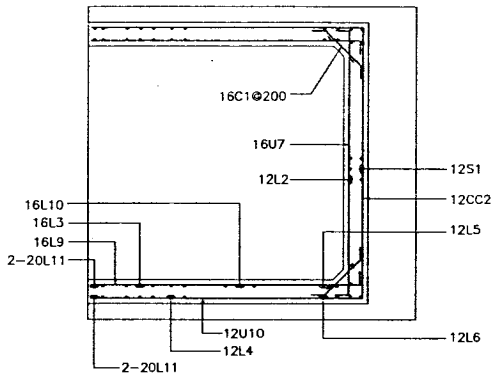
REINFORCEMENT DETAIL



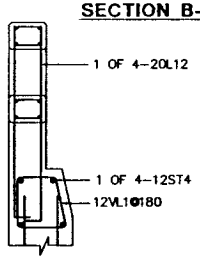
SECTION C-C



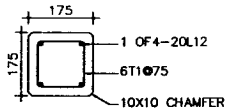
SECTION A-A



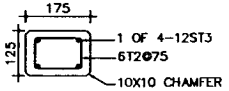
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	34	1850	144			1994
12	L2	34	1750	144			1894
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1450 to 2050	144			Avg. 1894
12	L6	6	Var. 1450 to 2050	144			Avg. 1894
16	L7	30	Var. 2950 to 4600	192			Avg. 3802
16	L8	18	Var. 2075 to 2950	192			Avg. 2705
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
20	U1	34	240	3525	240		4005
16	U2	22	192	5610	192		5994
16	U3	34	192	3525	192		3909
16	U4	22	192	5610	192		5994
16	U6	17	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	18	Var. 2950 to 4600	200	550		Avg. 4250
12	U9	12	Var. 2075 to 2950	200	550		Avg. 3482
12	U10	8	2075	200	550		2825
16	U12	9	192	4910	192		5294
12	CC1	13	1200	400	4910		6510
12	CC2	15	1200	400	4910		6510
12	Z1	34	1850	866	144		2860
12	S1	34	675	2300	240		3215
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220402

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	34	1700	144			1844
12	L2	34	1900	144			2044
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1600 to 2200	144			Avg. 2044
12	L6	6	Var. 1600 to 2200	144			Avg. 2044
16	L7	26	Var. 3175 to 4600	192			Avg. 4025
16	L8	20	Var. 2075 to 3175	192			Avg. 2817
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
20	U1	34	240	3525	240		4005
16	U2	22	192	5610	192		5994
16	U3	34	192	3525	192		3909
16	U4	22	192	5610	192		5994
16	U6	16	192	4862	192		5246
16	U7	7	192	4862	192		5246
12	U8	16	Var. 3175 to 4600	200	550		Avg. 4459
12	U9	14	Var. 2075 to 3175	200	550		Avg. 3650
12	U10	8	2075	200	550		2825
16	U12	9	192	4910	192		5294
12	CC1	12	1200	400	4910		6510
12	CC2	16	1200	400	4910		6510
12	Z1	34	1700	866	144		2710
12	S1	34	675	2450	240		3365
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	34	1450	144			1594
12	L2	34	2150	144			2294
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1850 to 2450	144			Avg. 2294
12	L6	6	Var. 1850 to 2450	144			Avg. 2294
16	L7	22	Var. 3550 to 4600	192			Avg. 4315
16	L8	24	Var. 2075 to 3550	192			Avg. 3005
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
20	U1	34	240	3525	240		4005
16	U2	22	192	5610	192		5994
16	U3	34	192	3525	192		3909
16	U4	22	192	5610	192		5994
16	U6	14	192	4862	192		5246
16	U7	9	192	4862	192		5246
12	U8	14	Var. 3550 to 4600	200	550		Avg 4750
12	U8	16	Var. 2075 to 3550	200	550		Avg. 3932
12	U10	8	2075	200	550		2825
16	U12	9	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	18	1200	400	4910		6510
12	Z1	34	1450	866	144		2460
12	S1	34	675	2730	240		3615
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH =1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	4660				4660
12	ST4	8	4650				4650
12	L1	34	1350	144			1494
12	L2	34	2250	144			2394
16	L3	8	3900	192			4092
12	L4	8	3900	144			4044
12	L5	6	Var. 1950 to 2550	144			Avg. 2394
12	L6	6	Var. 1950 to 2550	144			Avg. 2394
16	L7	20	Var. 3700 to 4600	192			Avg. 4432
16	L8	26	Var. 2075 to 3700	192			Avg. 3080
16	L9	8	2075	192			2267
16	L10	8	1410	192			1602
20	L11	8	3900	240			4140
20	L12	32	1181	120			1301
20	U1	34	240	3525	240		4005
16	U2	22	192	5610	192		5994
16	U3	34	192	3525	192		3909
16	U4	22	192	5610	192		5994
16	U6	13	192	4862	192		5246
16	U7	9	192	4862	192		5246
12	U8	12	Var. 3700 to 4600	200	550		Avg. 4960
12	U9	16	Var. 2075 to 3700	200	550		Avg. 4044
12	U10	8	2075	200	550		2825
16	U12	9	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	18	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	2800	240		3715
16	C1	38	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4356			4606
6	T1	96	306	306			612
6	T2	228	206	306			512
12	VL1	56	272	200	250	275	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

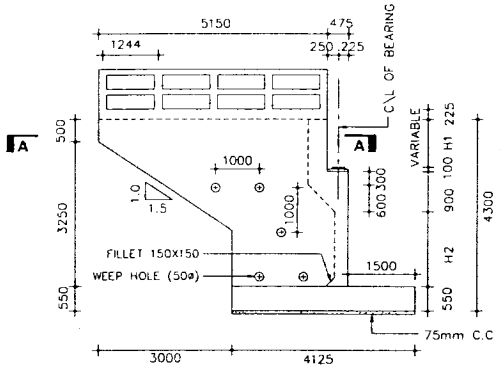
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.0m , DECK WIDTH 5.01m)

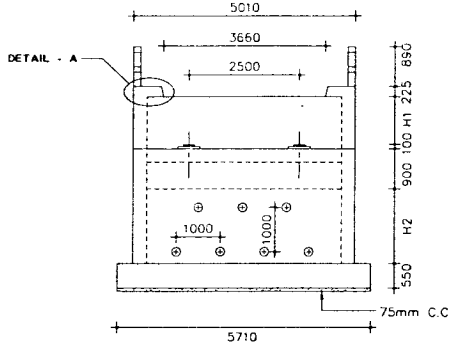
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220403	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



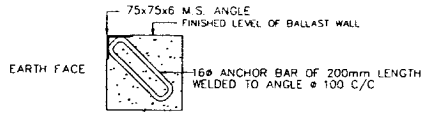
SIDE ELEVATION



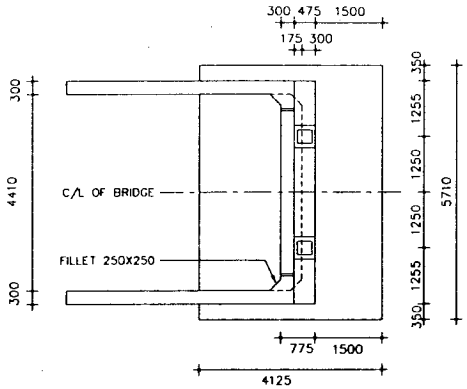
FRONT ELEVATION

TABLE-1

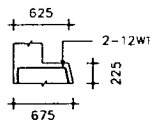
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19500	1500	1250
19000	1500	1250
18500	1500	1250
18000	1350	1400
17500	1350	1400
17000	1350	1400
16500	1350	1400
16000	1350	1400
15500	1350	1400
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14500	1100	1650
14000	1100	1650
13500	1100	1650
13000	1100	1650
12500	1000	1750



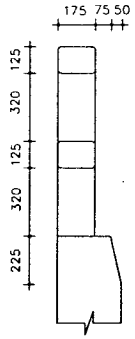
NOSING AT ABUTMENT



SECTION A-A



REINF. DETAIL 'A'



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 104 kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

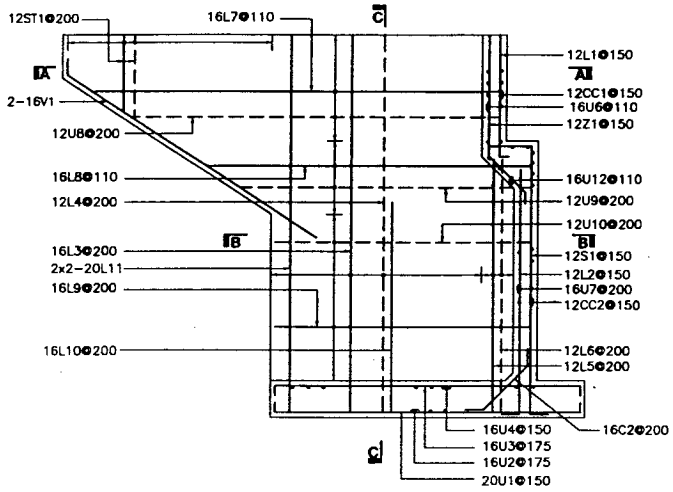
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 4.3m , DECK WIDTH 5.01m)

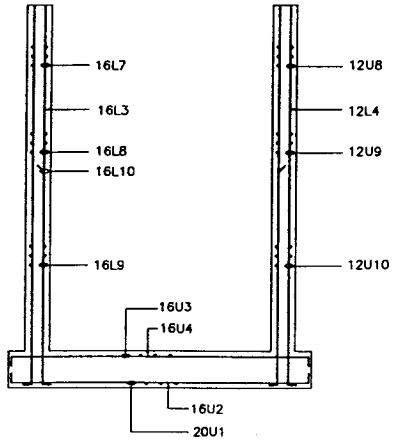
DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220431

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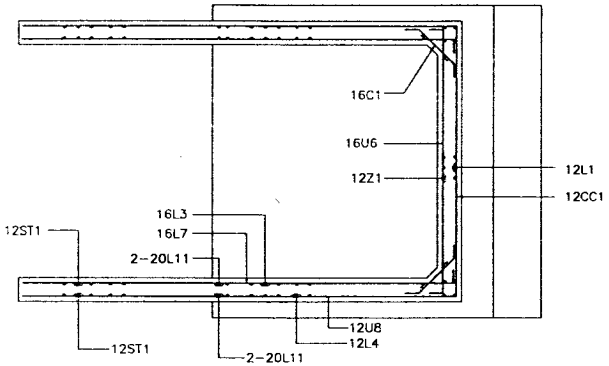
SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: YES



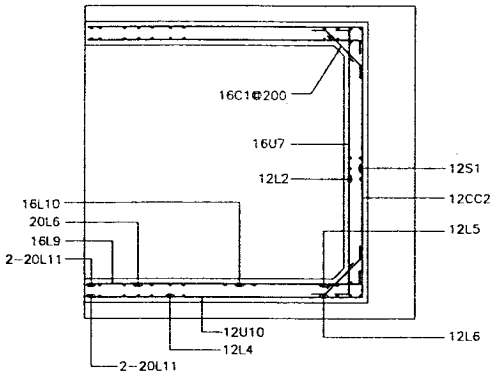
REINFORCEMENT DETAIL



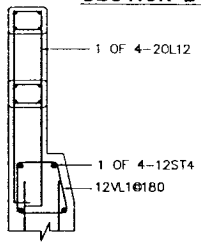
SECTION C-C



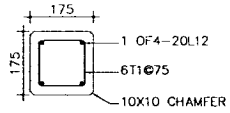
SECTION A-A



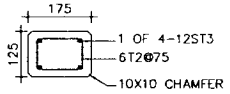
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1850	144			1994
12	L2	34	2050	144			2194
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 1750 to 2350	144			Avg. 2194
12	L6	6	Var. 1750 to 2350	144			Avg. 2194
16	L7	30	Var. 3400 to 5050	192			Avg. 4252
16	L8	20	Var. 2525 to 3400	192			Avg. 3155
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1161	120			1301
20	U1	39	240	4025	240		4505
16	U2	24	192	5610	192		5994
16	U3	34	192	4025	192		4409
16	U4	28	192	5610	192		5994
16	U5	18	192	4862	192		5246
16	U7	8	192	4862	192		5246
12	U8	18	Var. 3400 to 5050	200	550		Avg. 4700
12	U9	12	Var. 2525 to 3400	200	550		Avg. 3932
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	13	1200	400	4910		6510
12	CC2	17	1200	400	4910		6510
12	Z1	34	1850	866	144		2860
12	S1	34	675	2500	240		3515
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in ony view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220432

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1700	144			1844
12	L2	34	2200	144			2344
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 1900 to 2500	144			Avg. 2344
12	L6	6	Var. 1900 to 2500	144			Avg. 2344
16	L7	28	Var. 3625 to 5050	192			Avg. 4428
16	L8	22	Var. 2525 to 3625	192			Avg. 3267
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	39	240	4025	240		4505
16	U2	24	192	5610	192		5994
16	U3	34	192	4025	192		4409
16	U4	28	192	5610	192		5994
16	U5	17	192	4862	192		5246
16	U7	9	192	4862	192		5246
12	U8	16	Var. 3625 to 5050	200	550		Avg. 4909
12	U9	14	Var. 2525 to 3625	200	550		Avg. 4100
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	12	1200	400	4910		6510
12	CC2	18	1200	400	4910		6510
12	Z1	34	1700	866	144		2710
12	S1	34	675	2750	240		3665
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1450	144			1594
12	L2	34	2450	144			2594
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2150 to 2750	144			Avg. 2594
12	L6	6	Var. 2150 to 2750	144			Avg. 2594
16	L7	24	Var. 4000 to 5050	192			Avg. 4717
16	L8	26	Var. 2525 to 4000	192			Avg. 3455
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	39	240	4025	240		4505
16	U2	24	192	5610	192		5994
16	U3	34	192	4025	192		4409
16	U4	28	192	5610	192		5994
16	U6	15	192	4862	192		5246
16	U7	10	192	4862	192		5246
12	U8	14	Var. 4000 to 5050	200	550		Avg. 5200
12	U9	16	Var. 2525 to 4000	200	550		Avg. 4382
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	20	1200	400	4910		6510
12	Z1	34	1450	866	144		2460
12	S1	34	675	3000	240		3915
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5110				5110
12	ST4	8	5100				5100
12	L1	34	1350	144			1494
12	L2	34	2550	144			2694
16	L3	14	4200	192			4392
12	L4	14	4200	144			4344
12	L5	6	Var. 2250 to 2850	144			Avg. 2694
12	L6	6	Var. 2250 to 2850	144			Avg. 2694
16	L7	22	Var. 4150 to 5050	192			Avg. 4833
16	L8	28	Var. 2525 to 4150	192			Avg. 3530
16	L9	12	2525	192			2717
16	L10	14	1710	192			1902
20	L11	8	4200	240			4440
20	L12	40	1181	120			1301
20	U1	39	240	4025	240		4505
16	U2	24	192	5610	192		5994
16	U3	34	192	4025	192		4409
16	U4	28	192	5610	192		5994
16	U6	14	192	4862	192		5246
16	U7	11	192	4862	192		5246
12	U8	12	Var. 4150 to 5050	200	550		Avg. 5350
12	U9	16	Var. 2525 to 4150	200	550		Avg. 4494
12	U10	12	2525	200	550		3275
16	U12	10	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	20	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	3100	240		4015
16	C1	40	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4412			4662
6	T1	120	306	306			612
6	T2	256	206	306			512
12	VL1	60	272	200	250	278	1000
12	w1	4	200	575	206		981

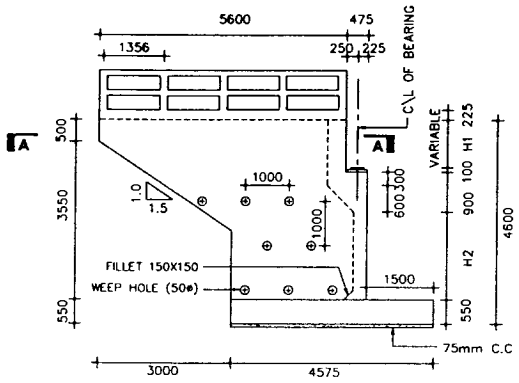
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.3m , DECK WIDTH 5.01m)

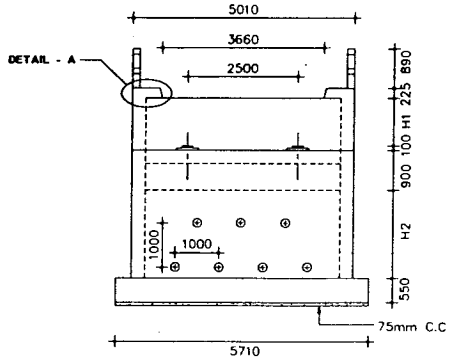
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220433	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



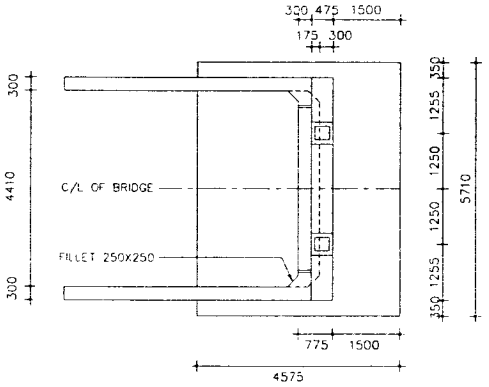
SIDE ELEVATION



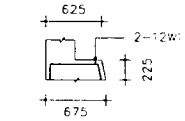
FRONT ELEVATION

TABLE-1

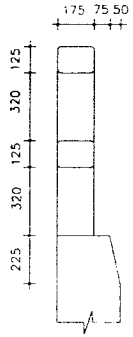
GIRDER SPAN	H1	H2
20000	1500	1550
19500	1500	1550
19000	1500	1550
18500	1500	1550
18000	1350	1700
17500	1350	1700
17000	1350	1700
16500	1350	1700
16000	1350	1700
15500	1350	1700
15000	1100	1950
14500	1100	1950
14000	1100	1950
13500	1100	1950
13000	1100	1950
12500	1000	2050



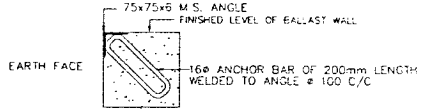
SECTION A-A



REINF. DETAIL 'A'



GENERAL ARRANGEMENT OF RAILING ON WING WALL



NOSING AT ABUTMENT

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ 111 kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter material shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 4.6m , DECK WIDTH 5.01m)

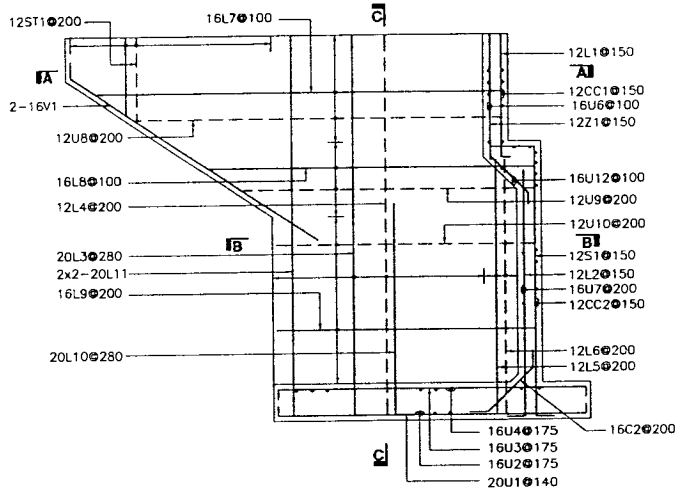
DATE :

ISSUED BY :

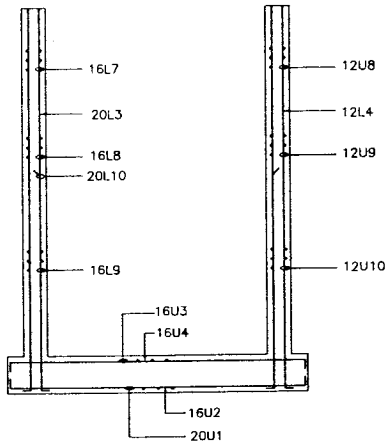
CAD FILE REF : ABUT\01220461

Web Copy

SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES



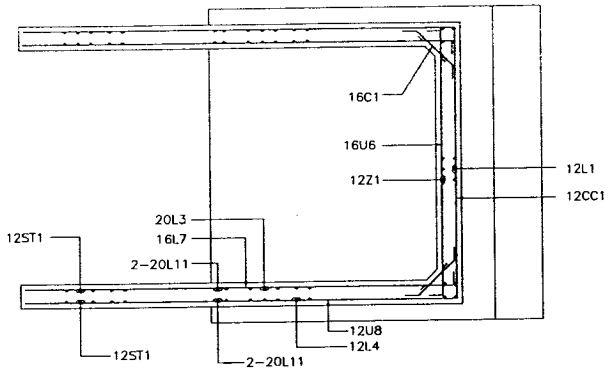
REINFORCEMENT DETAIL



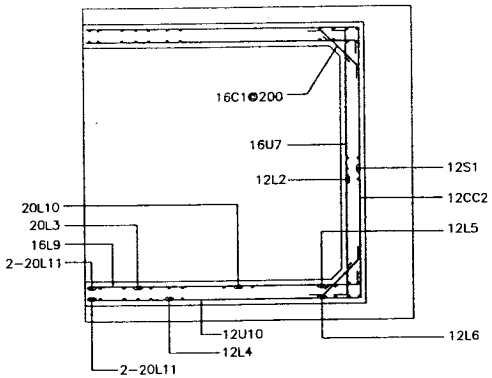
SECTION C-C

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

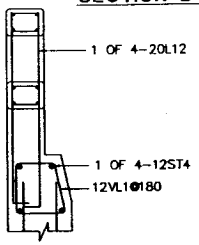
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5560				5560
12	ST4	8	5550				5550
12	L1	34	1850	144			1994
12	L2	34	2350	144			2494
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2050 to 2650	144			Avg. 2494
12	L6	6	Var. 2050 to 2650	144			Avg. 2494
16	L7	32	Var. 3850 to 5500	192			Avg. 4661
16	L8	20	Var. 2975 to 3850	192			Avg. 3605
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U6	20	192	4862	192		5246
16	U7	10	192	4862	192		5246
12	U8	18	Var. 3850 to 5500	200	550		Avg. 5333
12	U9	12	Var. 2975 to 3850	200	550		Avg. 4382
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	13	1200	400	4910		6510
12	CC2	19	1200	400	4910		6510
12	Z1	34	1850	866	144		2860
12	S1	34	675	2900	240		3815
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981



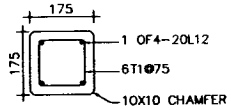
SECTION A-A



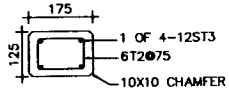
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in ony view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220462	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20.0m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5580				5580
12	ST4	8	5550				5550
12	L1	34	1700	144			1844
12	L2	34	2500	144			2644
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2200 to 2800	144			Avg. 2644
12	L6	6	Var. 2200 to 2800	144			Avg. 2644
16	L7	30	Var. 4075 to 5500	192			Avg. 4837
16	L8	24	Var. 2975 to 4075	192			Avg. 3717
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U5	18	192	4862	192		5246
16	U7	10	192	4862	192		5246
12	U8	16	Var. 4075 to 5500	200	550		Avg. 5538
12	U9	14	Var. 2975 to 4075	200	550		Avg. 4550
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	12	1200	400	4910		6510
12	CC2	20	1200	400	4910		6510
12	Z1	34	1700	866	144		2710
12	S1	34	675	3050	240		3965
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5580				5580
12	ST4	8	5550				5550
12	L1	34	1450	144			1594
12	L2	34	2750	144			2894
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2450 to 3050	144			Avg. 2894
12	L6	6	Var. 2450 to 3050	144			Avg. 2894
16	L7	24	Var. 4450 to 5500	192			Avg. 5167
16	L8	28	Var. 2975 to 4450	192			Avg. 3905
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U5	16	192	4862	192		5246
16	U7	12	192	4862	192		5246
12	U8	14	Var. 4450 to 5500	200	550		Avg. 5800
12	U9	16	Var. 2975 to 4450	200	550		Avg. 4832
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	22	1200	400	4910		6510
12	Z1	34	1450	866	144		2460
12	S1	34	675	3300	240		4215
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	5580				5580
12	ST4	8	5550				5550
12	L1	34	1350	144			1494
12	L2	34	2850	144			2994
20	L3	12	4500	240			4740
12	L4	18	4500	144			4644
12	L5	6	Var. 2550 to 3150	144			Avg. 2994
12	L6	6	Var. 2550 to 3150	144			Avg. 2994
16	L7	22	Var. 4600 to 5500	192			Avg. 5283
16	L8	30	Var. 2975 to 4600	192			Avg. 3980
16	L9	14	2975	192			3167
20	L10	12	2010	240			2250
20	L11	8	4500	240			4740
20	L12	40	1181	120			1301
20	U1	30	240	4325	240		4805
16	U2	26	192	5610	192		5994
16	U3	34	192	4325	192		4709
16	U4	26	192	5610	192		5994
16	U5	15	192	4862	192		5246
16	U7	12	192	4862	192		5246
12	U8	12	Var. 4600 to 5500	200	550		Avg. 5950
12	U9	16	Var. 2975 to 4600	200	550		Avg. 4944
12	U10	14	2975	200	550		3725
16	U12	11	192	4910	192		5294
12	CC1	10	1200	400	4910		6510
12	CC2	22	1200	400	4910		6510
12	Z1	34	1350	866	144		2360
12	S1	34	675	3400	240		4315
16	C1	44	320	922	320		1562
16	C2	26	320	1134	320		1774
16	V1	4	250	4469			4719
6	T1	120	306	306			612
6	T2	272	206	306			512
12	VL1	66	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coorse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be **21** MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of **276** MPa.
6) Cleor cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

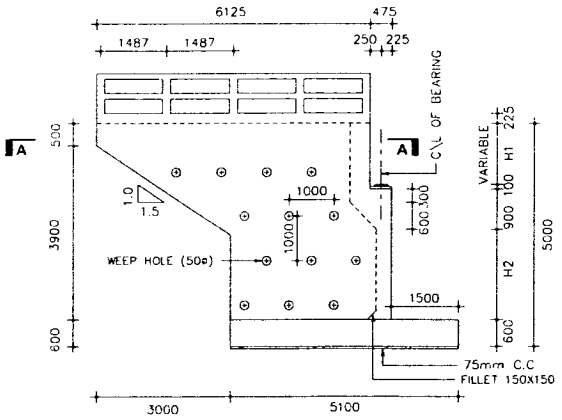
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 4.6m , DECK WIDTH 5.01m)

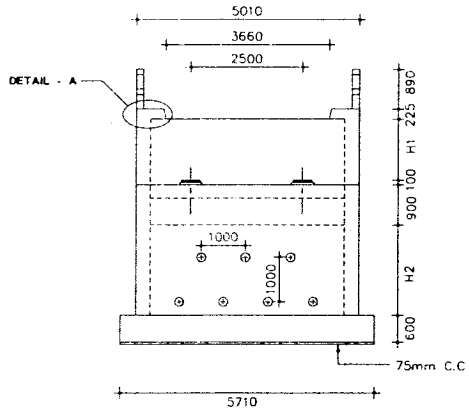
DATE :	ISSUED BY :
CAD FILE REF : ABUT\01220463	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



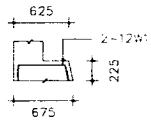
SIDE ELEVATION



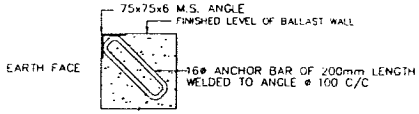
FRONT ELEVATION

TABLE-1

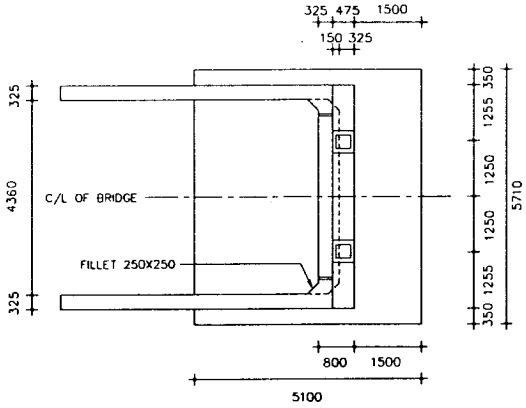
GIRDER SPAN	H1	H2
20000	1500	1900
19500	1500	1900
19000	1500	1900
18500	1500	1900
18000	1350	2050
17500	1350	2050
17000	1350	2050
16500	1350	2050
16000	1350	2050
15500	1350	2050
15000	1100	2300
14500	1100	2300
14000	1100	2300
13500	1100	2300
13000	1100	2300
12500	1000	2400



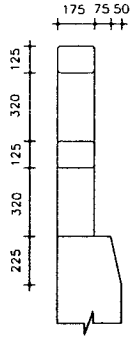
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **121** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

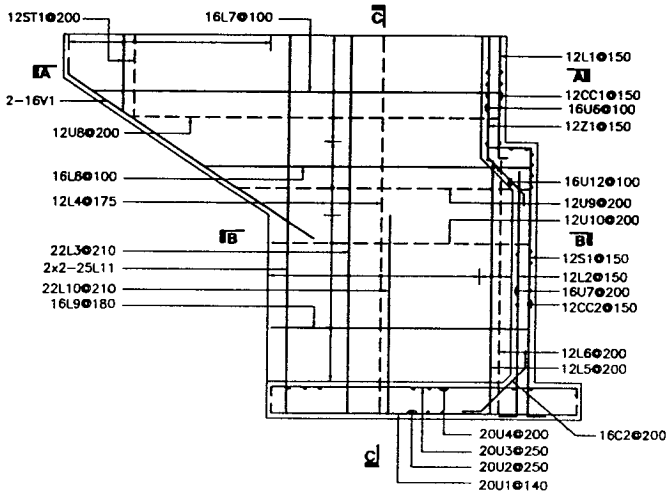
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.0m , DECK WIDTH 5.01m)

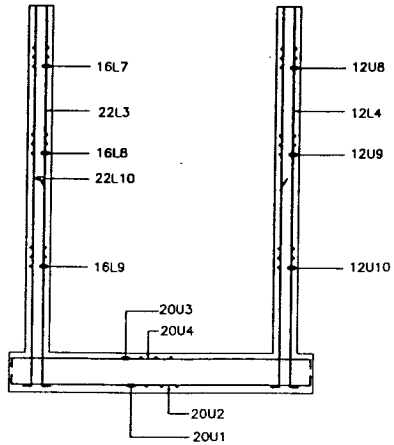
DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220501

Web Copy

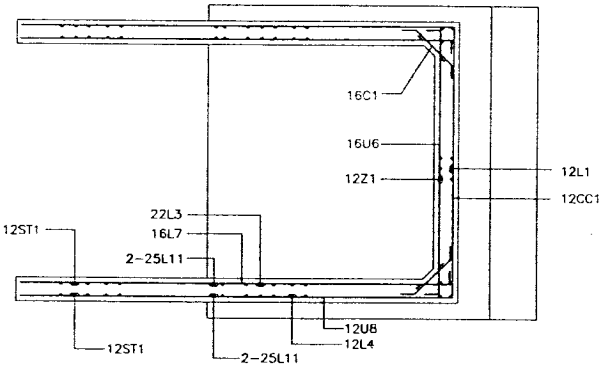
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES



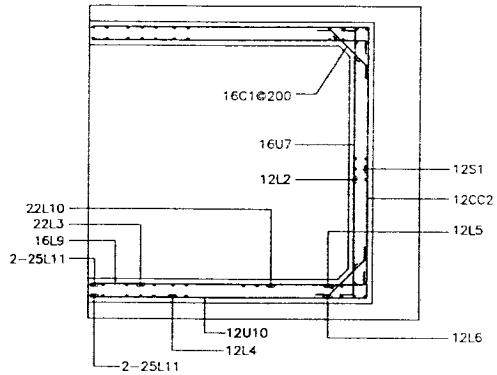
REINFORCEMENT DETAIL



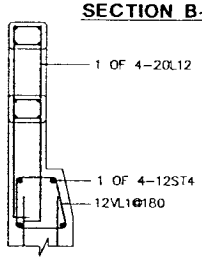
SECTION C-C



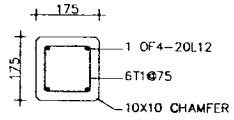
SECTION A-A



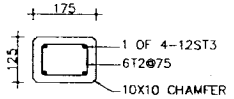
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1850	144			1994
12	L2	34	2750	144			2894
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2450 to 3050	144			Avg. 2894
12	L6	6	Var. 2450 to 3050	144			Avg. 2894
16	L7	32	Var. 4375 to 6025	192			Avg. 5186
16	L8	20	Var. 3500 to 4375	192			Avg. 4130
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	42	240	5000	240		5480
20	U2	21	240	5610	240		6090
20	U3	24	240	5000	240		5480
20	U4	26	240	5610	240		6090
16	U5	20	192	4862	192		5246
16	U7	11	192	4862	192		5246
12	U8	18	Var. 4375 to 6025	225	575		Avg. 5725
12	U9	12	Var. 3500 to 4375	225	576		Avg. 4957
12	U10	19	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	13	1250	450	4910		6610
12	CC2	21	1250	450	4910		6610
12	Z1	34	1650	866	144		2890
12	S1	34	700	3300	240		4240
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/01220502	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1700	144			1844
12	L2	34	2900	144			3044
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2600 to 3200	144			Avg. 3044
12	L6	6	Var. 2600 to 3200	144			Avg. 3044
16	L7	30	Var. 4600 to 6025	192			Avg. 5362
16	L8	24	Var. 3500 to 4600	192			Avg. 4242
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	42	240	5000	240		5480
20	U2	21	240	5610	240		6090
20	U3	24	240	5000	240		5480
20	U4	26	240	5610	240		6090
16	U6	18	192	4862	192		5246
16	U7	12	192	4862	192		5246
12	U8	16	Var. 4600 to 6025	225	575		Avg. 5934
12	U9	14	Var. 3500 to 4600	225	575		Avg. 5125
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	12	1250	450	4910		6610
12	CC2	22	1250	450	4910		6610
12	Z1	34	1700	866	144		2710
12	S1	34	700	3450	240		4390
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1450	144			1594
12	L2	34	3150	144			3294
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2850 to 3450	144			Avg. 3294
12	L6	6	Var. 2850 to 3450	144			Avg. 3294
16	L7	24	Var. 4975 to 6025	192			Avg. 5692
16	L8	28	Var. 3500 to 4975	192			Avg. 4430
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	42	240	5000	240		5480
20	U2	21	240	5610	240		6090
20	U3	24	240	5000	240		5480
20	U4	26	240	5610	240		6090
16	U6	16	192	4862	192		5246
16	U7	13	192	4862	192		5246
12	U8	14	Var. 4975 to 6025	225	575		Avg. 6225
12	U9	16	Var. 3500 to 4975	225	575		Avg. 5407
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	10	1250	450	4910		6610
12	CC2	24	1250	450	4910		6610
12	Z1	34	1450	866	144		2460
12	S1	34	700	3700	240		4640
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6085				6085
12	ST4	8	6075				6075
12	L1	34	1350	144			1494
12	L2	34	3250	144			3394
22	L3	22	4900	264			5164
12	L4	26	4900	144			5044
12	L5	6	Var. 2950 to 3550	144			Avg. 3394
12	L6	6	Var. 2950 to 3550	144			Avg. 3394
16	L7	22	Var. 5125 to 6025	192			Avg. 5808
16	L8	30	Var. 3500 to 5125	192			Avg. 4505
16	L9	20	3500	192			3692
22	L10	22	2410	264			2674
25	L11	8	4900	300			5200
20	L12	40	1181	120			1301
20	U1	42	240	5000	240		5480
20	U2	21	240	5610	240		6090
20	U3	24	240	5000	240		5480
20	U4	26	240	5610	240		6090
16	U6	15	192	4862	192		5246
16	U7	14	192	4862	192		5246
12	U8	12	Var. 5125 to 6025	225	575		Avg. 6375
12	U9	16	Var. 3500 to 5125	225	575		Avg. 5519
12	U10	18	3500	225	575		4300
16	U12	11	192	4910	192		5294
12	CC1	10	1250	450	4910		6610
12	CC2	25	1250	450	4910		6610
12	Z1	34	1350	866	144		2360
12	S1	34	700	3800	240		4740
16	C1	46	320	993	320		1633
16	C2	26	320	1240	320		1880
16	V1	4	250	4544			4794
6	T1	120	306	306			612
6	T2	304	206	306			512
12	VL1	72	272	200	250	278	1000
12	w1	4	200	575	206		981

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

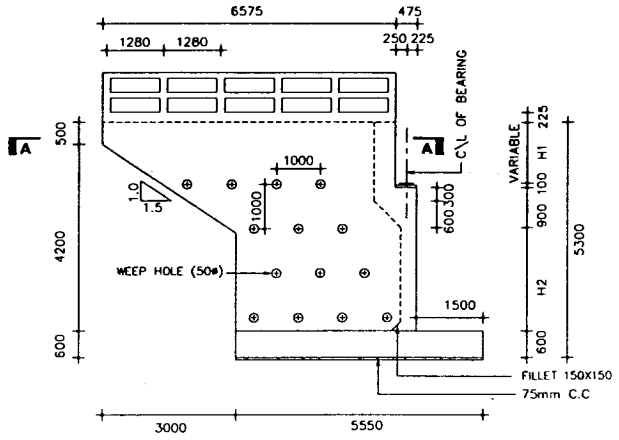
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.0m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/01220503	

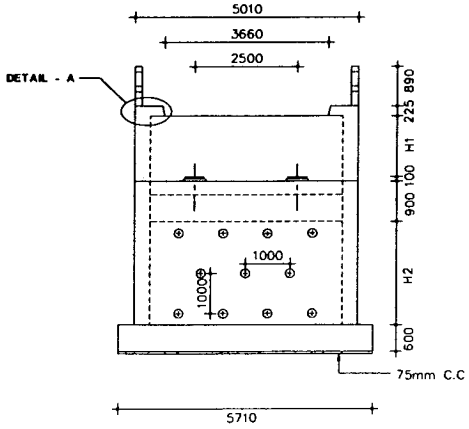
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OA-202

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



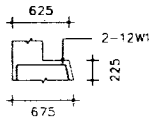
SIDE ELEVATION



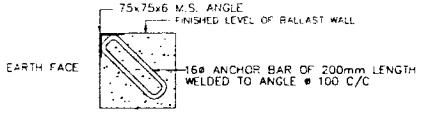
FRONT ELEVATION

TABLE-1

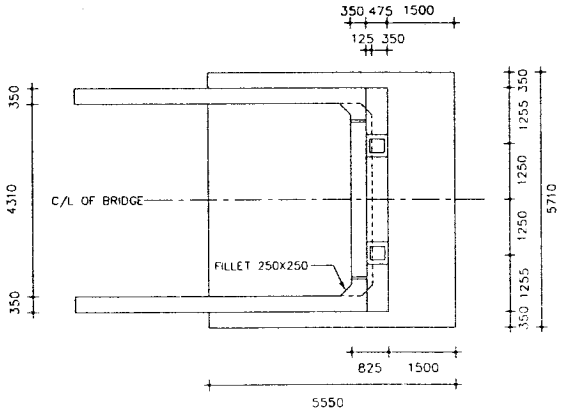
GIRDER SPAN	H1	H2
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19500	1500	2200
19000	1500	2200
18500	1500	2200
18000	1350	2350
17500	1350	2350
17000	1350	2350
16500	1350	2350
16000	1350	2350
15500	1350	2350
15000	1100	2600
14500	1100	2600
14000	1100	2600
13500	1100	2600
13000	1100	2600
12500	1000	2700



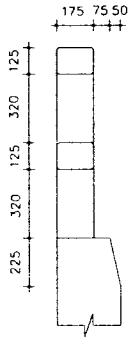
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ **125** kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.3m , DECK WIDTH 5.01m)

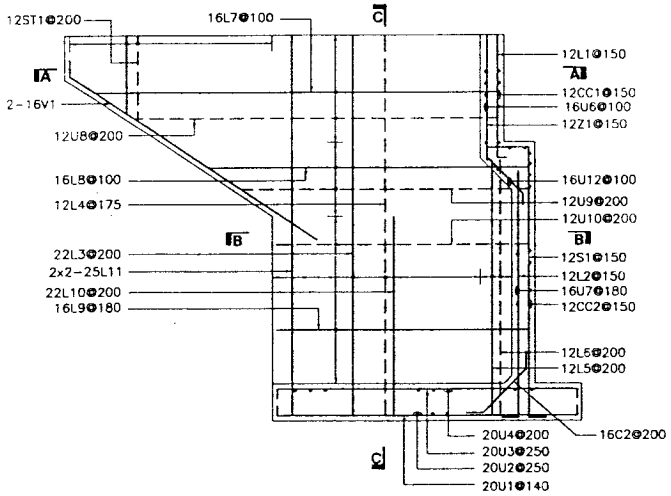
DATE :

ISSUED BY :

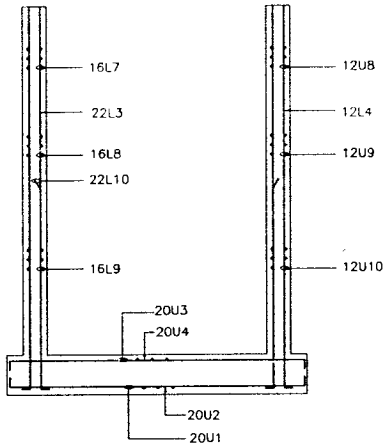
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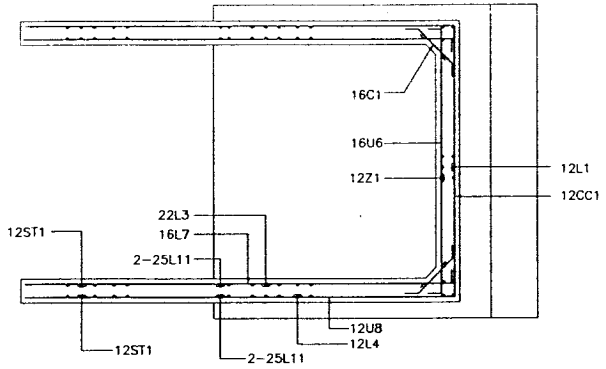
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES



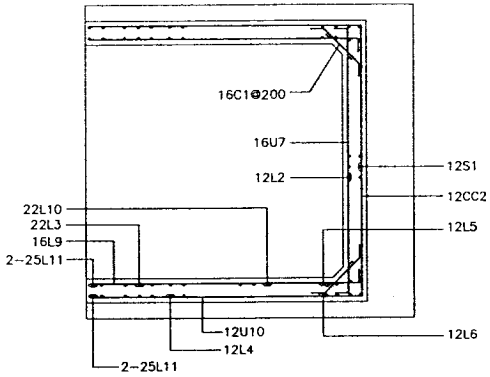
REINFORCEMENT DETAIL



SECTION C-C



SECTION A-A



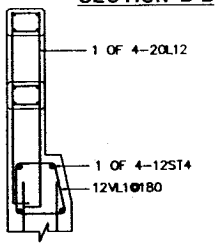
SECTION B-B

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

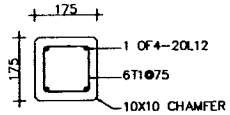
BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1850	144			1994
12	L2	34	3050	144			3194
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 2750 to 3350	144			Avg. 3194
12	L6	6	Var. 2750 to 3350	144			Avg. 3194
16	L7	32	Var. 4825 to 6475	192			Avg. 5636
16	L8	20	Var. 3950 to 4825	192			Avg. 4580
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	42	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U5	20	192	4962	192		5246
16	U7	14	192	4962	192		5246
12	U8	18	Var. 4825 to 6475	250	600		Avg. 6225
12	U9	12	Var. 3950 to 4825	250	600		Avg. 5457
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	13	1300	500	4910		6710
12	CC2	23	1300	500	4910		6710
12	Z1	34	1850	866	144		2860
12	S1	34	725	3600	240		4565
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1915
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

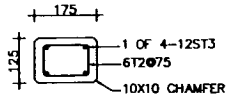
1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Roll-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 5.01m)

DATE :	ISSUED BY :
CAD FILE REF : ABUT/01220532	

Web Copy

SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1700	144			1844
12	L2	34	3200	144			3344
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 2900 to 3500	144			Avg. 3344
12	L6	6	Var. 2900 to 3500	144			Avg. 3344
16	L7	30	Var. 5050 to 6475	192			Avg. 5812
16	L8	24	Var. 3950 to 5050	192			Avg. 4692
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	42	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	18	192	4862	192		5246
16	U7	15	192	4862	192		5246
12	U8	16	Var. 5050 to 6475	250	600		Avg. 6434
12	U9	14	Var. 3950 to 5050	250	600		Avg. 5625
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	12	1300	500	4910		6710
12	CC2	24	1300	500	4910		6710
12	Z1	34	1700	866	144		2710
12	S1	34	725	3750	240		4715
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		961

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1450	144			1594
12	L2	34	3450	144			3594
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3150 to 3750	144			Avg. 3594
12	L6	6	Var. 3150 to 3750	144			Avg. 3594
16	L7	24	Var. 5425 to 6475	192			Avg. 6142
16	L8	28	Var. 3950 to 5425	192			Avg. 4880
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	42	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	16	192	4862	192		5246
16	U7	17	192	4862	192		5246
12	U8	14	Var. 5425 to 6475	250	600		Avg. 6725
12	U9	16	Var. 3950 to 5425	250	600		Avg. 5907
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	10	1300	500	4910		6710
12	CC2	26	1300	500	4910		6710
12	Z1	34	1450	866	144		2460
12	S1	34	725	4000	240		4965
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		961

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6535				6535
12	ST4	8	6525				6525
12	L1	34	1350	144			1494
12	L2	34	3550	144			3694
22	L3	28	5200	264			5464
12	L4	32	5200	144			5344
12	L5	6	Var. 3250 to 3850	144			Avg. 3694
12	L6	6	Var. 3250 to 3850	144			Avg. 3694
16	L7	22	Var. 5575 to 6475	192			Avg. 6258
16	L8	30	Var. 3950 to 5575	192			Avg. 4955
16	L9	24	3950	192			4142
22	L10	28	2710	264			2974
25	L11	8	5200	300			5500
20	L12	48	1181	120			1301
20	U1	42	240	5450	240		5930
20	U2	23	240	5610	240		6090
20	U3	24	240	5450	240		5930
20	U4	29	240	5610	240		6090
16	U6	15	192	4862	192		5246
16	U7	17	192	4862	192		5246
12	U8	12	Var. 5575 to 6475	250	600		Avg. 6875
12	U9	16	Var. 3950 to 5575	250	600		Avg. 6019
12	U10	20	3950	250	600		4800
16	U12	11	192	4910	192		5294
12	CC1	10	1300	500	4910		6710
12	CC2	27	1300	500	4910		6710
12	Z1	34	1350	866	144		2360
12	S1	34	725	4100	240		5065
16	C1	50	320	1063	320		1703
16	C2	26	320	1276	320		1916
16	V1	4	250	4600			4850
6	T1	144	306	306			612
6	T2	320	206	306			512
12	VL1	76	272	200	250	278	1000
12	w1	4	200	575	206		961

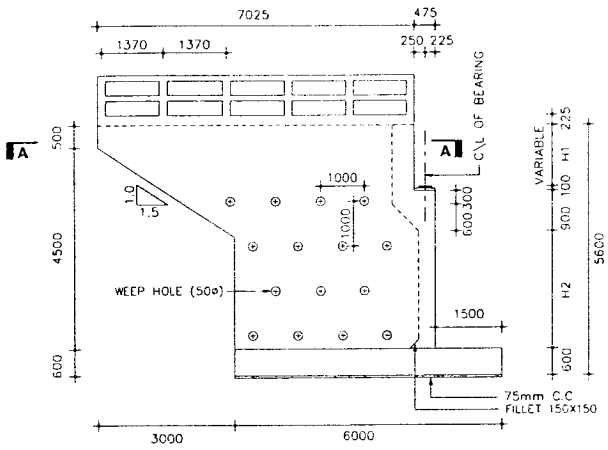
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.3m , DECK WIDTH 5.01m)

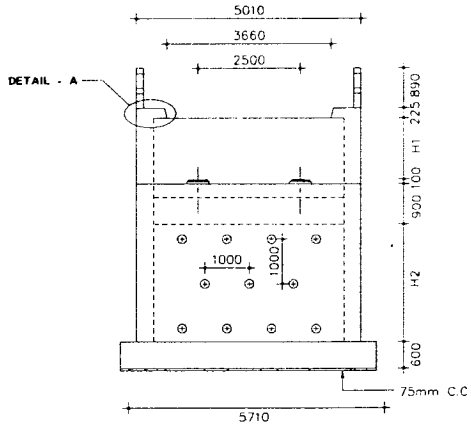
DATE :	ISSUED BY :
CAD FILE REF : ABUT/01220533	

Web Copy

SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



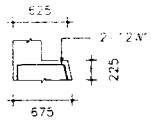
SIDE ELEVATION



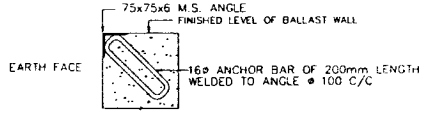
FRONT ELEVATION

TABLE-1

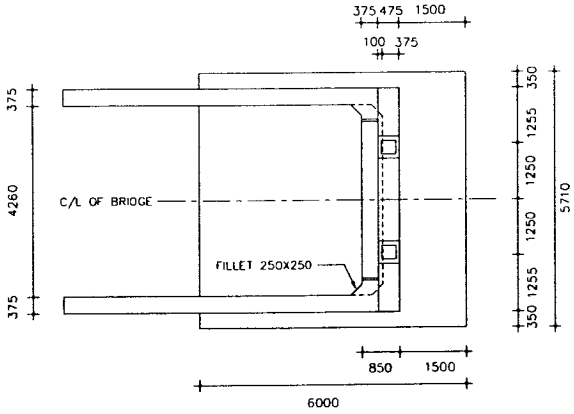
GIRDER SPAN	H1	H2
20000	1500	2500
19500	1500	2500
19000	1500	2500
18500	1500	2500
18000	1350	2650
17500	1350	2650
17000	1350	2650
16500	1350	2650
16000	1350	2650
15500	1350	2650
15000	1100	2900
14500	1100	2900
14000	1100	2900
13500	1100	2900
13000	1100	2900
12500	1000	3000



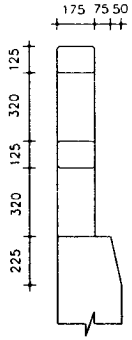
REINF. DETAIL 'A'



NOSING AT ABUTMENT



SECTION A-A



GENERAL ARRANGEMENT
OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ⩾ 100 kN/m²
3) Weep hole shall be provided at 1000mm horozontally and vertically as shown in drawings; filter metarial shall be provided as per specification.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

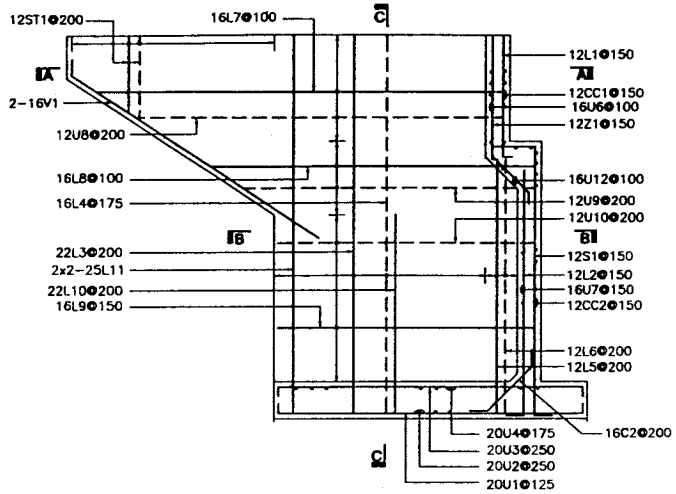
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT = 5.6m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220561

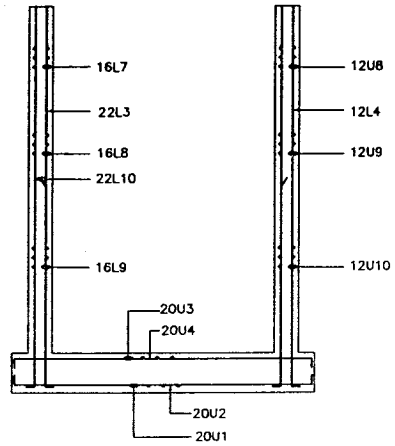
Web Copy

OA-206

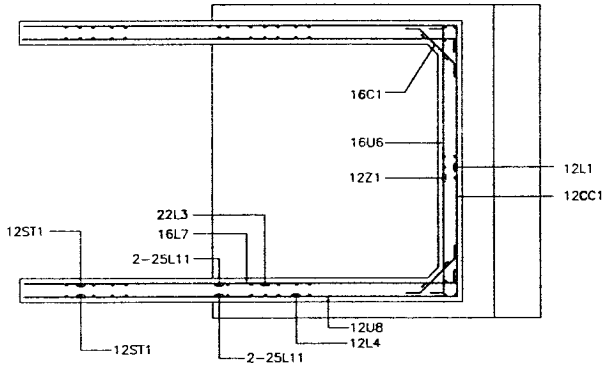
SHEET 2 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES



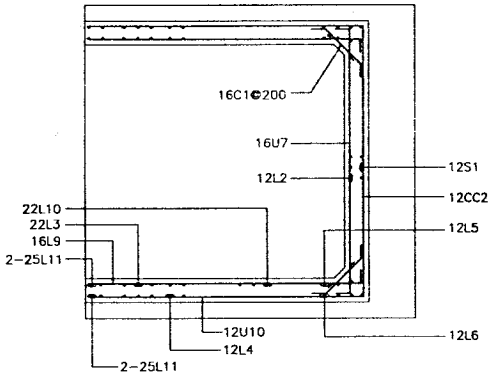
REINFORCEMENT DETAIL



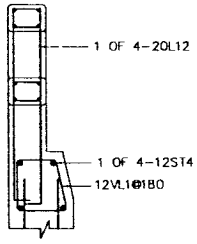
SECTION C-C



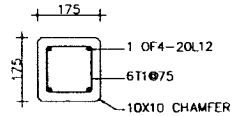
SECTION A-A



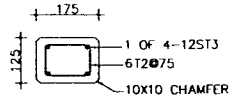
SECTION B-B



RAILING ON WING WALL (REINF. DETAIL)



REINF. DETAIL OF POST



REINF. DETAIL OF RAILING

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	80	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	34	1850	144			1994
12	L2	34	3350	144			3494
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3050 to 3650	144			Avg. 3494
12	L6	6	Var. 3050 to 3650	144			Avg. 3494
16	L7	32	Var. 5275 to 6925	192			Avg. 6086
16	L8	20	Var. 4400 to 5275	192			Avg. 5030
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	46	240	5900	240		6380
20	U2	25	240	5610	240		6090
20	U3	24	240	5900	240		6380
20	U4	35	240	5610	240		6090
16	U6	20	192	4854	192		5238
16	U7	19	192	4802	192		5246
12	U8	16	Var. 5275 to 6925	275	625		Avg. 6725
12	U9	12	Var. 4400 to 5275	275	625		Avg. 5857
12	U10	24	4400	275	625		5300
16	U12	11	192	4910	192		5294
12	CC1	13	1350	550	4910		6810
12	CC2	25	1350	550	4910		6810
12	Z1	34	1850	866	144		2960
12	S1	34	750	3900	240		4890
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strenght of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S0000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/01220562

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SHEET 3 OF 3
SPAN RANGE : 12.5M TO 20M
SIDE WALK : YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	34	1700	144			1844
12	L2	34	3500	144			3644
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3200 to 3800	144			Avg. 3644
12	L6	6	Var. 3200 to 3800	144			Avg. 3644
16	L7	30	Var. 5500 to 6925	192			Avg. 6262
16	L8	24	Var. 4400 to 5500	192			Avg. 5142
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	46	240	5900	240		6380
20	U2	25	240	5610	240		6090
20	U3	24	240	5900	240		6380
20	U4	35	240	5610	240		6090
16	U6	18	192	4854	192		5238
16	U7	20	192	4862	192		5246
12	U8	16	Var. 5500 to 6925	275	625		Avg. 6934
12	U9	14	Var. 4400 to 5500	275	625		Avg. 6125
12	U10	24	4400	275	625		5300
16	U12	11	192	4910	192		5294
12	CC1	12	1350	550	4910		6810
12	CC2	26	1350	550	4910		6810
12	Z1	34	1700	866	144		2710
12	S1	34	750	4050	240		5040
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	34	1450	144			1594
12	L2	34	3750	144			3894
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3450 to 4050	144			Avg. 3894
12	L6	6	Var. 3450 to 4050	144			Avg. 3894
16	L7	24	Var. 5875 to 6925	192			Avg. 6592
16	L8	28	Var. 4400 to 5875	192			Avg. 5330
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	46	240	5900	240		6380
20	U2	25	240	5610	240		6090
20	U3	24	240	5900	240		6380
20	U4	35	240	5610	240		6090
16	U6	16	192	4854	192		5238
16	U7	22	192	4862	192		5246
12	U8	14	Var. 5875 to 6925	275	625		Avg. 7225
12	U9	16	Var. 4400 to 5875	275	625		Avg. 6407
12	U10	24	4400	275	625		5300
16	U12	11	192	4910	192		5294
12	CC1	10	1350	550	4910		6810
12	CC2	28	1350	550	4910		6810
12	Z1	34	1450	866	144		2460
12	S1	34	750	4300	240		5290
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	6985				6985
12	ST4	8	6975				6975
12	L1	34	1350	144			1494
12	L2	34	3850	144			3994
22	L3	32	5500	264			5764
16	L4	36	5500	192			5692
12	L5	6	Var. 3550 to 4150	144			Avg. 3994
12	L6	6	Var. 3550 to 4150	144			Avg. 3994
16	L7	22	Var. 6025 to 6925	192			Avg. 6708
16	L8	30	Var. 4400 to 6025	192			Avg. 5405
16	L9	32	4400	192			4592
22	L10	32	3010	264			3274
25	L11	8	5500	300			5800
20	L12	48	1181	120			1301
20	U1	46	240	5900	240		6380
20	U2	25	240	5610	240		6090
20	U3	24	240	5900	240		6380
20	U4	35	240	5610	240		6090
16	U6	15	192	4854	192		5238
16	U7	22	192	4862	192		5246
12	U8	12	Var. 6025 to 6925	275	625		Avg. 7375
12	U9	16	Var. 4400 to 6025	275	625		Avg. 6519
12	U10	24	4400	275	625		5300
16	U12	11	192	4910	192		5294
12	CC1	10	1350	550	4910		6810
12	CC2	29	1350	550	4910		6810
12	Z1	34	1350	866	144		2360
12	S1	34	750	4400	240		5390
16	C1	52	320	1134	320		1774
16	C2	26	320	1311	320		1951
16	V1	4	250	4656			4906
6	T1	144	306	306			612
6	T2	340	206	306			512
12	VL1	82	272	200	250	278	1000
12	w1	4	200	575	206		981

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

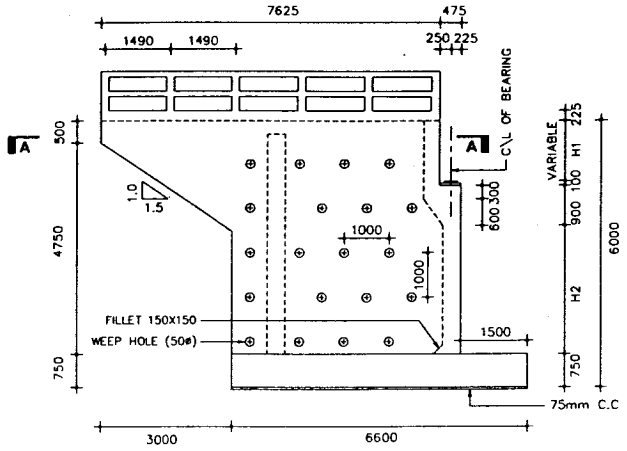
REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 5.6m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT/01220563

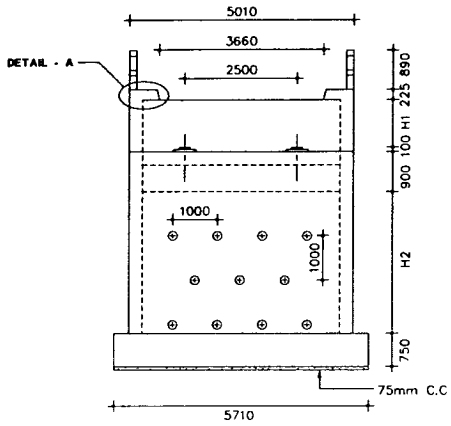
Web Copy

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SHEET 1 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK : YES



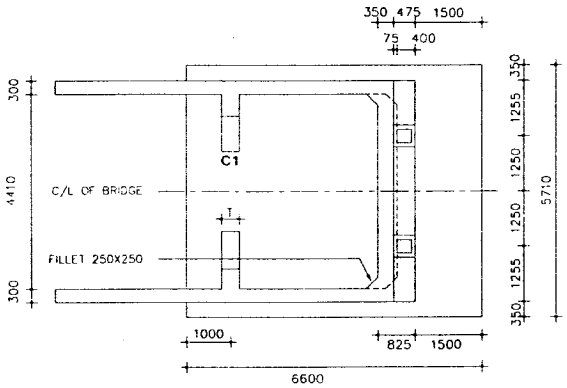
SIDE ELEVATION



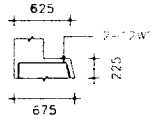
FRONT ELEVATION

TABLE-1

GIRDER SPAN	H1	H2
20000	1500	2900
19500	1500	2900
19000	1500	2900
18500	1500	2900
18000	1350	3050
17500	1350	3050
17000	1350	3050
16500	1350	3050
16000	1350	3050
15500	1350	3050
15000	1100	3300
14500	1100	3300
14000	1100	3300
13500	1100	3300
13000	1100	3300
12500	1000	3400



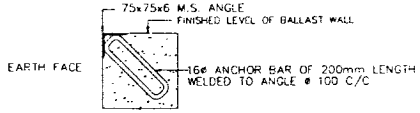
SECTION A-A



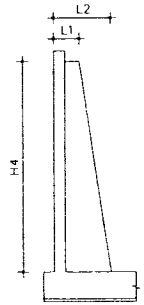
REINF. DETAIL 'A'

TABLE-2

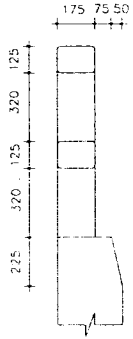
L1	L2	H4	T
700	1400	4950	400



NOSING AT ABUTMENT



COUNTERFORT C1



GENERAL ARRANGEMENT OF RAILING ON WING WALL

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Bering capacity of soil should be ≥ **130** kN/m²
3) Weep hole shall be provided at 1000mm horizontally and vertically as shown in drawings; filter meterial shall be provided as per specification

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

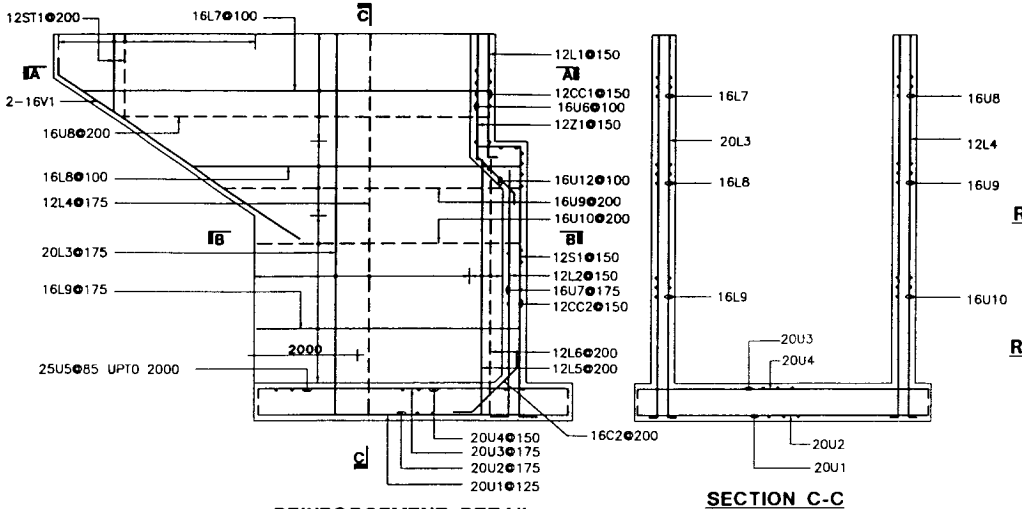
GENERAL ARRANGEMENT OF ABUTMENT
(HEIGHT : 6.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220601

Web Copy

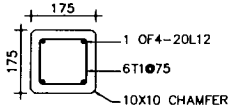
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SHEET 2 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES

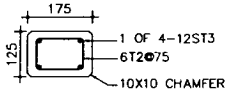


REINFORCEMENT DETAIL

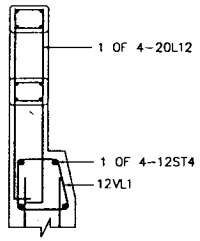
SECTION C-C



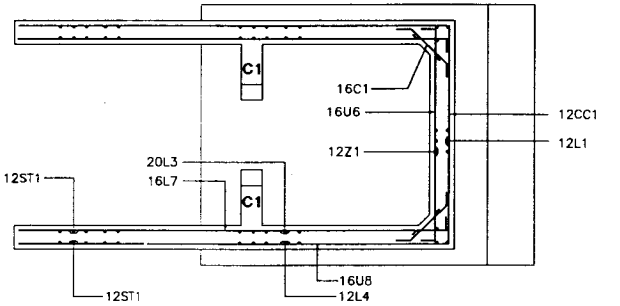
REINF. DETAIL OF POST



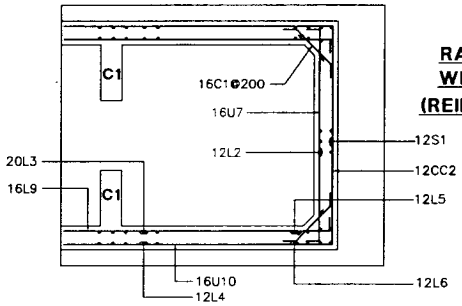
REINF. DETAIL OF RAILING



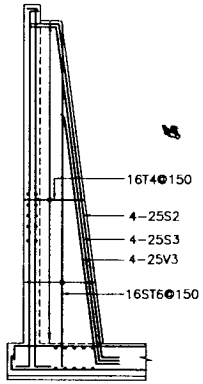
RAILING ON WING WALL (REINF. DETAIL)



SECTION A-A



SECTION B-B



REINFORCEMENT DETAIL OF COUNTERFORT C1

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1500)

BAR DIA	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1850	144			1994
12	L2	34	3750	144			3894
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 3450 to 4050	144			Avg. 3894
12	L6	6	Var. 3450 to 4050	144			Avg. 3894
16	L7	32	Var. 5875 to 7525	192			Avg. 6686
16	L8	20	Var. 5000 to 5875	192			Avg. 5630
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	46	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	20	192	4854	192		5238
16	U7	18	192	4854	192		5238
16	U8	18	Var. 5875 to 7525	200	600		Avg. 7225
16	U9	12	Var. 5000 to 5875	200	650		Avg. 6507
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	13	1200	500	4910		6610
12	CC2	28	1200	600	4910		6710
12	Z1	34	1850	836	144		2830
12	S1	34	725	4300	240		5265
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Rail-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm
7) This drawing is to be read in conjunction with Shape Code; Cad File: ABUT\S000001.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220602

Web Copy

OA-210

SHEET 3 OF 3
SPAN RANGE : 12.5m TO 20m
SIDE WALK: YES

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1350)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1700	144			1844
12	L2	34	3900	144			4044
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 3600 to 4200	144			Avg. 4044
12	L6	6	Var. 3600 to 4200	144			Avg. 4044
16	L7	30	Var. 6100 to 7525	192			Avg. 6862
16	L8	24	Var. 5000 to 6100	192			Avg. 5742
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	46	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	18	192	4854	192		5238
16	U7	19	192	4854	192		5238
16	U8	16	Var. 6100 to 7525	200	600		Avg. 7434
16	U9	14	Var. 5000 to 6100	200	650		Avg. 6675
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	12	1200	500	4910		6610
12	CC2	29	1200	600	4910		6710
12	Z1	34	1700	836	144		2680
12	S1	34	725	4450	240		5415
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1100)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1450	144			1594
12	L2	34	4150	144			4294
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 3850 to 4450	144			Avg. 4294
12	L6	6	Var. 3850 to 4450	144			Avg. 4294
16	L7	24	Var. 6475 to 7525	192			Avg. 7192
16	L8	28	Var. 5000 to 6475	192			Avg. 5930
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	46	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	16	192	4854	192		5238
16	U7	21	192	4854	192		5238
16	U8	14	Var. 6475 to 7525	200	600		Avg. 7725
16	U9	16	Var. 5000 to 6475	200	650		Avg. 6957
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	10	1200	500	4910		6610
12	CC2	30	1200	600	4910		6710
12	Z1	34	1450	836	144		2430
12	S1	34	725	4700	240		5665
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	w1	4	200	575	206		981

BAR BENDING SCHEDULE FOR ONE ABUTMENT (GIRDER DEPTH = 1000)

BAR DIA.	SHAPE CODE	TOTAL NO.	SEGMENT DIMENSIONS a	b	c	d	BAR LENGTH
12	ST1	60	Var. 400 to 2400				Avg. 1400
12	ST3	16	7585				7585
12	ST4	8	7575				7575
12	L1	34	1350	144			1494
12	L2	34	4250	144			4394
20	L3	50	5900	240			6140
12	L4	50	5900	144			6044
12	L5	6	Var. 3950 to 4550	144			Avg. 4394
12	L6	6	Var. 3950 to 4550	144			Avg. 4394
16	L7	22	Var. 6625 to 7525	192			Avg. 7308
16	L8	30	Var. 5000 to 6625	192			Avg. 6005
16	L9	32	5000	192			5192
20	L12	48	1181	120			1301
20	U1	46	240	6500	240		6980
20	U2	39	240	5610	240		6090
20	U3	34	240	6500	240		6980
20	U4	31	240	5610	240		6090
25	U5	24	300	5610	300		6210
16	U6	15	192	4854	192		5238
16	U7	21	192	4854	192		5238
16	U8	12	Var. 6625 to 7525	200	600		Avg. 7875
16	U9	16	Var. 5000 to 6625	200	650		Avg. 7069
16	U10	28	5000	200	550		5750
16	U12	11	192	4910	192		5294
12	CC1	10	1200	500	4910		6610
12	CC2	31	1200	600	4910		6710
12	Z1	34	1350	836	144		2330
12	S1	34	725	4800	240		5765
16	C1	56	320	1063	320		1703
16	C2	26	320	1417	320		2057
16	V1	4	250	4731			4981
6	T1	144	306	306			612
6	T2	380	206	306			512
12	VL1	88	272	200	250	278	1000
16	T4	66	Var. 1296 to 2696	696			Avg. 2692
25	S2	8	300	5360	600		6260
25	S3	8	325	5360	575		6260
25	V2	4	375	2827			3202
25	V3	8	350	3599			3949
16	ST6	16	Var. 1127 to 5860				Avg. 3020
12	w1	4	200	575	206		981

NOTES

1) All dimensions are in millimetre unless otherwise specified.
2) Not all reinforcement are necessarily shown in any view.
3) Coarse aggregate for Concrete shall be 19mm down graded stone chips conforming ASTM C33.
4) 28 days cylinder strength of concrete shall be 21 MPa.
5) Reinforcement shall be structural grade deformed bars, with minimum yield strength of 276 MPa.
6) Clear cover for : a) Roll-20mm, b) Post-20mm, c) Curb-25mm, d) Wall-50mm, e) Base-50mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

REINFORCEMENT DETAILS OF ABUTMENT
(HEIGHT 6.0m , DECK WIDTH 5.01m)

DATE :
ISSUED BY :
CAD FILE REF : ABUT\01220603