



Government of Nepal
Ministry of Physical Infrastructure and Transport
Department Of Roads
Development Cooperation Implementation Division
Strategic Road Connectivity & Trade Improvement Project
(SRCTIP)

**Detailed Design of Upgradation of Kamala- Dhalkebar- Pathlaiya
Road Section (130km) of Mahendra Highway and Bridges**

Final Design Report
Volume IV
Design Report & Drawing of Bridges

Bridge Name- Basai
Volume-2
Detailed Drawing

April, 2023

Joint Venture Of:

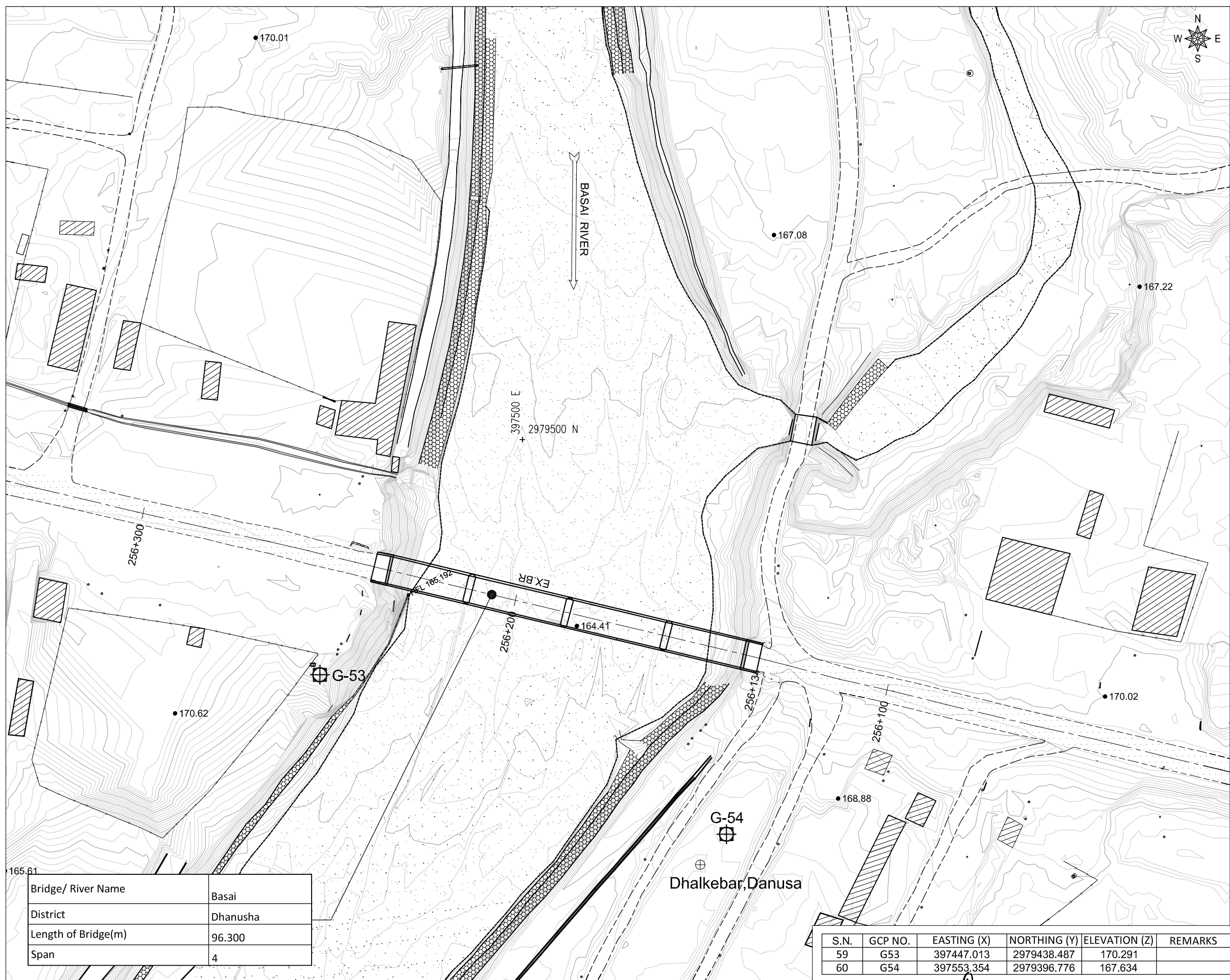
eptisa EPTISA Servicios De Ingenieria
Madrid, Spain

STUP STUP Consultants Private Limited
India

In Association With
Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited

TABLE OF CONTENTS:

S.No.	DRAWING NAME	DRAWING No.	SHEET No.
1	LOCATION MAP OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -1	1
2	DETAILED SURVEY TOPOGRAPHIC MAP (EXISTING CONDITION) OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -2	1
3	DETAILED SURVEY TOPOGRAPHIC MAP (WITH PROPOSED BRIDGE) OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -3	1
4	GENERAL NOTES OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -4	1
5	GENERAL ARRANGEMENT OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -5	1
6	LAYOUT AND DETAIL OF PILE FOUNDATION OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -6	2
7	ABUTMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -7	2
8	ABUTMENT REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -8	2
9	ABUTMENT BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -9	2
10	PIER DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -10	1
11	PIER BAR DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -11	1
12	PIER BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -12	1
13	PIER DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -13	1
14	PIER BAR DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -14	1
15	PIER BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -15	1
16	SUPERSTRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -16	2
17	DECK SLAB DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -17	1
18	MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -18	2
19	CROSS GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -19	1
20	SUPERSTRUCTURE BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -20	2
21	SUPERSTRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -21	2
22	DECK SLAB DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -22	1
23	MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -23	2
24	CROSS GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -24	1
25	SUPERSTRUCTURE BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -25	2
26	MISCELLANEOUS DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -26	2
27	WING WALL DETAILS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -27	1
28	RIVER TRAINING WORKS OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -28	1
29	BEARING DESIGN DATA OF BRIDGE OVER RIVER BASAI	KDP/DPR/ST R/BR/BASAI/DD -29	1

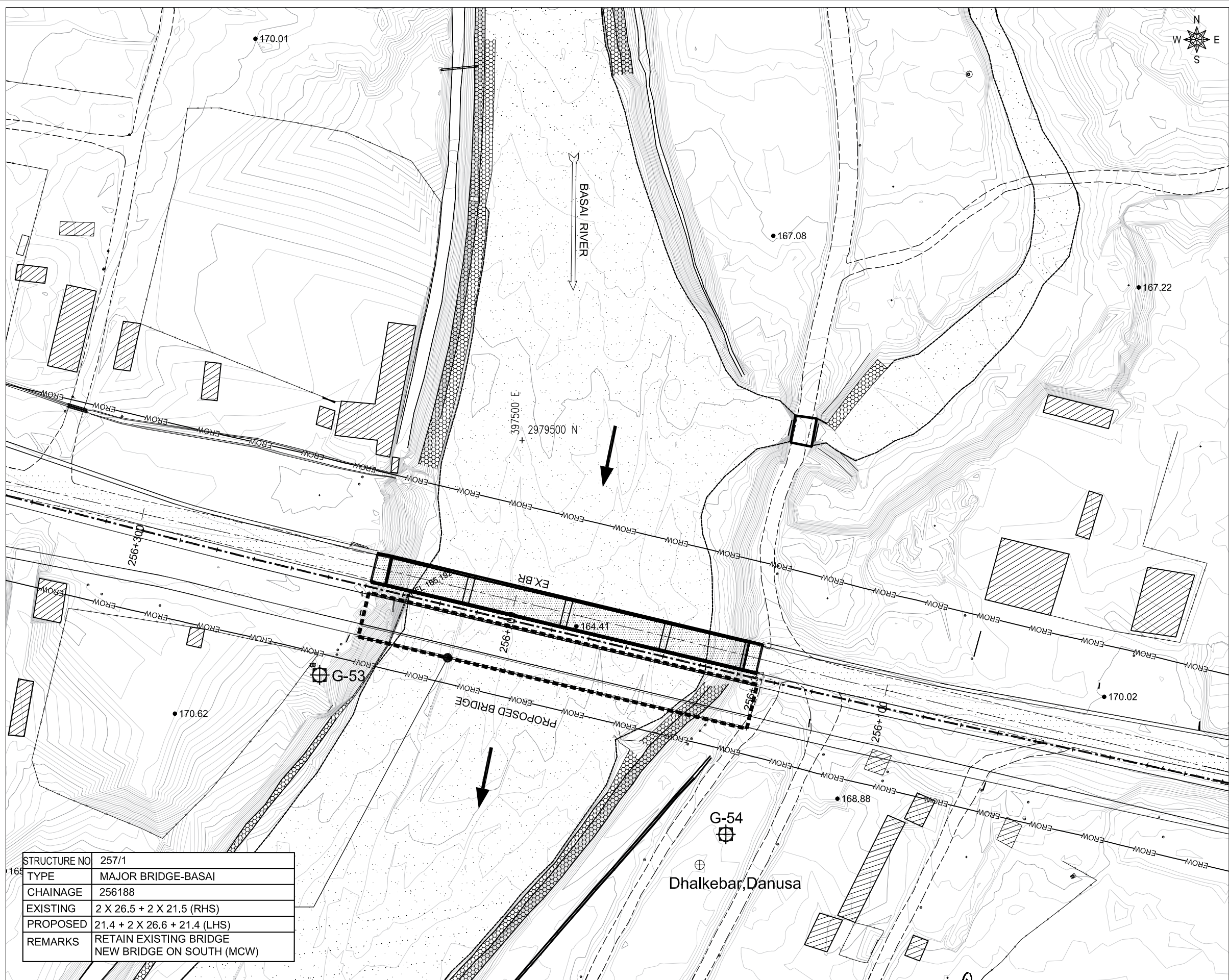


DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
MAIN FOOT TRAIL		ANIMAL FARM	
PLACE NAME		BAMBOO	
POLICE STATION		BIO GAS	
PETROL PUMP		BUS WAITING STATION	
Pond/ Water Body		BRIDGE	
POULTRY FARM		CONTOUR	
PROPERTY BOUNDARY		CANAL	
ROAD INFORMATION BOARD		CULVERT	
RIVER		CONTROL POINT (G)	
SPOT HEIGHT		CRUSHER	
SHED		DELINOTOR	
SAFTY TANK		ELECTRIC POLE	
SCHOOL		FACTORY	
STREET LIGHT		FEEDAR ROAD	
TAP		FISH FARM	
TEMPORARY HOUSE		FLOW DIRECTION	
TREE		GABION WALL	
TRANSMISSION LINE TOWER		HOSPITAL	
WELL		HAND PUMP	
TEMPLE		HOUSE	
CGI SHEET HOUSE		HOADING BOARD	
TOILET		CARRIAGE WAY	
WOODEN HOUSE		HUT	
WATER TANK		INDEX CONTOUR	
TRANSFORMER		KILOMETER POST	
SHOULDER		MONASTERY	

Bridge/ River Name	Basai
District	Dhanusha
Length of Bridge(m)	96.300
Span	4

S.N.	GCP NO.	EASTING (X)	NORTHING (Y)	ELEVATION (Z)	REMARKS
59	G53	397447.013	2979438.487	170.291	
60	G54	397553.354	2979396.776	167.634	

EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Designed By	Mr. R.D. Nec.No.489 CIVIL/14		Drawing Name	Scale:	AS SHOWN	Date:	20.04.2023								
	Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP)	Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of										Checked By	Mr. S.M.		Reference Drawings	Chainage:	256+188	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 02	Sheet No.1/1
				 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India																



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TAP		FISH FARM	
TEMPORARY HOUSE		FLOW DIRECTION	
TREE		GABION WALL	
TRANSMISSION LINE TOWER		HOSPITAL	
WELL		HAND PUMP	
TEMPLE		HOUSE	
CGI SHEET HOUSE		HOADING BOARD	
TOILET		CARRIAGE WAY	
WOODEN HOUSE		HUT	
WATER TANK		INDEX CONTOUR	
TRANSFORMER		KILOMETER POST	
SHOULDER		MONASTERY	

STRUCTURE NO	257/1
TYPE	MAJOR BRIDGE-BASAI
CHAINAGE	256188
EXISTING	2 X 26.5 + 2 X 21.5 (RHS)
PROPOSED	21.4 + 2 X 26.6 + 21.4 (LHS)
REMARKS	RETAIN EXISTING BRIDGE NEW BRIDGE ON SOUTH (MCW)

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			Checked By Mr. S.M.			
			Approved By Mr. H.B.			

A. GENERAL

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS NOTED OTHERWISE.
2. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. DIMENSIONS ARE NOT TO BE SCALED.
3. THE LAYOUT OF THE BRIDGE/CULVERT SHALL BE SET AS PER RELEVANT HIGHWAY PLAN AND PROFILE DRAWING.
4. THE FORMATION LEVEL GIVEN IN THIS DRAWING SHALL BE VERIFIED FROM THE RELEVANT HIGHWAY DRAWING. IN CASE OF ANY DISCREPANCY THE HIGHWAY DRAWING SHALL BE CONSIDERED CORRECT.

B. DESIGN CRITERIA

1. THE DESIGN HAS BEEN PREPARED BASED ON THE FOLLOWING CODES:
a) NEPAL ROAD STANDARD 2070
b) IRC-5 2015
c) IRC-6 2017
d) IRC-78 2014
e) IRC-112 2020
f) IRC SP-13 2022
2. TOTAL WIDTH OF THE BRIDGE DECK: 11.85 M (8 M WIDE CARRIAGEWAY + 2.5 M WIDE FOOTPATH) HOWEVER THIS BRIDGE IS DESIGNED FOR THE FOLLOWING CARRIAGEWAY LIVE LOADS AS PER IRC:6-2017
a) ONE LANE OF IRC CLASS 70R (WHEELED) FOR TWO LANES + ONE LANE OF IRC CLASS A
b) THREE LANES OF IRC CLASS A
3. SEISMIC ZONE CONSIDERED IN THE DESIGN IS ZONE-V.
4. LAYING, COMPACTION, & EXTENT OF BACKFILL BEHIND ABUTMENT & RETURN/RETAINING WALLS SHALL CONSIST OF SELECTED EARTH CONFORMING TO THE APPENDIX-6 OF IRC:78-2014 HAVING PROPERTIES $C=0$, $\phi=30^\circ$ & DENSITY=20KN/m³.
5. 100mm DIA WEEP HOLES AT 1000mm C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT AND RETURN WALL ABOVE GL. IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.

C. HYDRAULIC DATA: -

1. DESIGN DISCHARGE, (Q100) - 125.72 CUMECs
2. HFL - 165.650 M
3. FREE BOARD (MINIMUM) - 1 M
4. MAXIMUM SCOUR LEVEL:
ABUTMENT - 162.670M
PIER - 161.200M

SCOUR LEVELS WERE CALCULATED AS PER IRC 78:2014 CL 703 WITH APPROPRIATELY INCREASED DESIGN DISCHARGE

D. STRUCTURAL AND OTHER DATA: -

1. SPAN ARRANGEMENT: 21.4 + 2X26.6+21.4 = 96 M
2. SUPERSTRUCTURE:
PRECAST RCC LONGITUDINAL GIRDERS & CAST-IN-SITU RCC CROSS GIRDERS AND DECK SLAB.
3. SUBSTRUCTURE
A) ABUTMENTS - RCC WALL TYPE
4. FOUNDATIONS
A) ABUTMENT - 1200 DIA BORED CAST-IN-SITU PILE
DESIGN WORKING LOAD ON PILE - 272.71 TON
B) PIER- 1200 DIA BORED CAST-IN-SITU PILE
DESIGN WORKING LOAD ON PILE - 256.77 TON
RCC BORED PILES SHOULD BE CONSTRUCTED AS PER IS: 2911(PART 1/SEC 2)-2010.
5. BEARINGS
ELASTOMERIC BEARINGS
6. WEARING COAT:
65 MM THICK ASPHALTIC CONCRETE WEARING COAT AS PER STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (2073) ,
DEPARTMENT OF ROADS
7. EXPANSION JOINT -
SLAB SEAL TYPE EXPANSION JOINT OF PROVEN QUALITY SHALL BE PROVIDED IN ACCORDANCE WITH IRC:SP-69-2005 (GUIDELINES AND SPECIFICATIONS OF EXPANSION JOINT)
8. DRAINAGE SPOUTS - AS PER STANDARD SPECIFICATION FOR ROAD & BRIDGE WORKS 2073
9. RAILINGS/CRASH BARRIER:
RCC CRASH BARRIER AT EDGES OF CARRIAGEWAY AND FOOTPATH

10. FOOTPATH

2.5m WIDE FOOTPATH AT OUTER EDGE OF DECK

11. CONCRETE: -

- a. PILE..... M35 (CEMENT CONTENT AS PER SPECIFICATION)
b. PILE CAP.....M35
c. BEARING PEDESTALS.....M40
d. ABUTMENTM35
e. PIER.....M35
f. PIER CAP.....M35
g. RETURN WALL.....M35
h. LEVELING COURSE: I) BELOW APPROACH SLAB.....M15
II) BELOW PILE CAP.....M15
g. APPROACH SLABM30
h. CAST-IN-SITU CRASH BARRIERM40
i. KERBM35
j. DECK SLAB FOR RCC GIRDERS.....M35
k. PRECAST RCC GIRDERSM35
l. CAST-IN-SITU CROSS GIRDER FOR RCC GIRDERS.....M35

12. REINFORCEMENT STEEL: -

- a. H.Y.S.D. BARS - GRADE 500 CONFORMING TO IS 1786
b. REINFORCEMENT WHERE EVER NECESSARY SHALL BE LOCALLY BENT OR ADJUSTED TO ENSURE PROPER CONCRETING.

13. CONCRETE COVER

- a. DECK SLAB, GIRDER, PEDESTAL, CAP : 40 MM
b. SUBSTRUCTURE AND FOUNDATION : 75 MM

14. LAPS (Ls) ARE TO BE STAGGERED AND MINIMUM LAP LENGTH ARE TO BE AS FOLLOWS:

- a) FOR M 30 GRADE CONCRETE : 57.2Ø
b) FOR M 35 GRADE CONCRETE : 51.48Ø
c) FOR M 40 GRADE CONCRETE : 48.62Ø

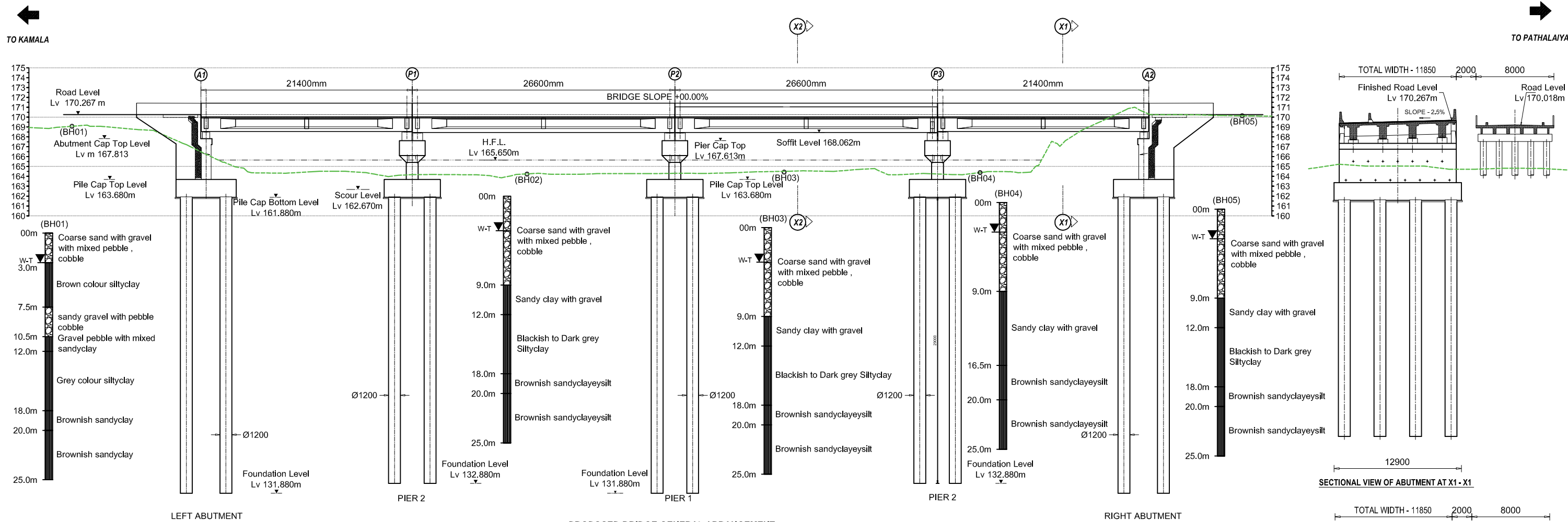
(WHERE Ø IS THE DIAMETER OF THE BAR)

15. LAP LENGTH SHALL BE INCREASED BY A FACTOR BASED ON THE PERCENTAGE OF LAPPED BAR RELATIVE TO THE TOTAL CROSS SECTIONAL AREA. LAP LENGTH FOR DIFFERENT GRADE OF CONCRETE AS WELL AS DIFFERENT PERCENTAGE OF LAP LENGTH ARE AS FOLLOWS:

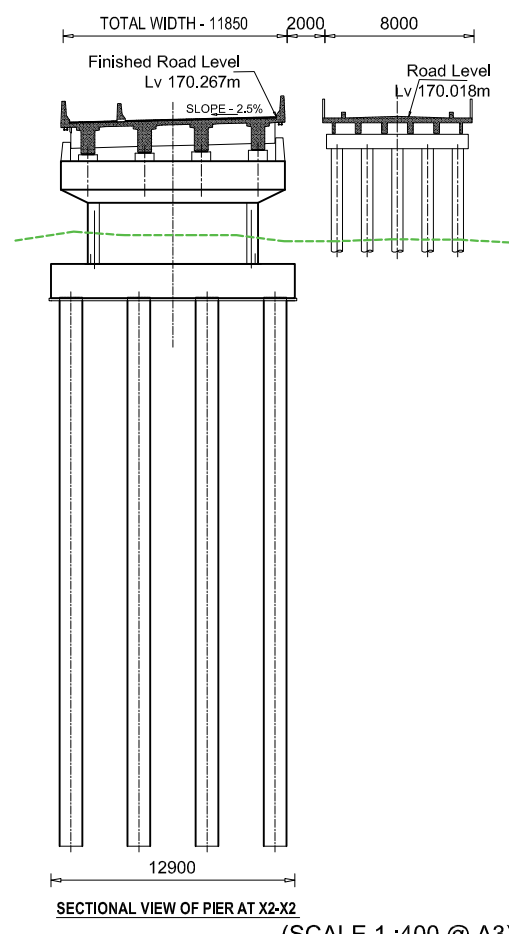
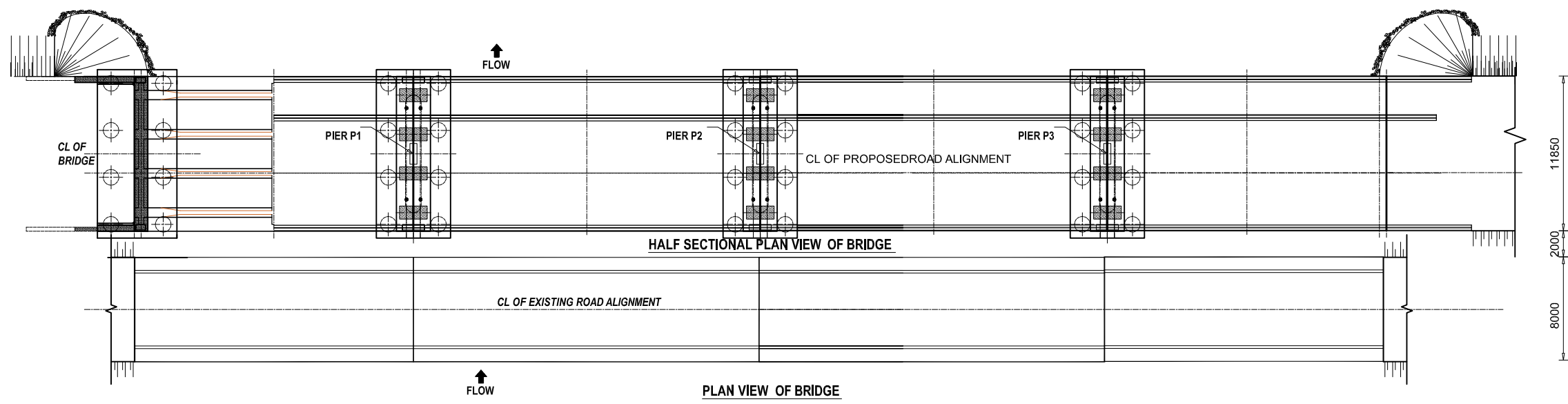
GRADE OF CONCRETE	M30	M35	M40	M45
LAPPED BAR <25%	57.2Ø	51.48Ø	48.62Ø	45.76Ø
25%≤LAPPED BAR <33%	65.78Ø	62.65Ø	55.91Ø	52.62Ø
33%≤LAPPED BAR <50%	80.08Ø	72.07Ø	68.07Ø	64.06Ø
50%≤LAPPED BAR	85.8Ø	77.22Ø	72.93Ø	68.64Ø

16. THE LAP LENGTH SHALL BE STAGGERED BY MINIMUM DISTANCE OF 1.3 TIMES THE LAP LENGTH.
17. HELICAL REINFORCEMENT SHALL BE LAPPED BY 1.5 TURNS.
18. INSTEAD OF LAPPING SPLICING OF REINFORCEMENT CAN BE DONE WITH WELDED JOINT AS PER CL. 15.2.5.2 OF IRC 112-2020. WELD LENGTH SHALL NOT BE LESS THAN 18Ø.
19. SHARP EDGES OF CONCRETE TO BE CHAMFERED MINIMUM 50 X 50

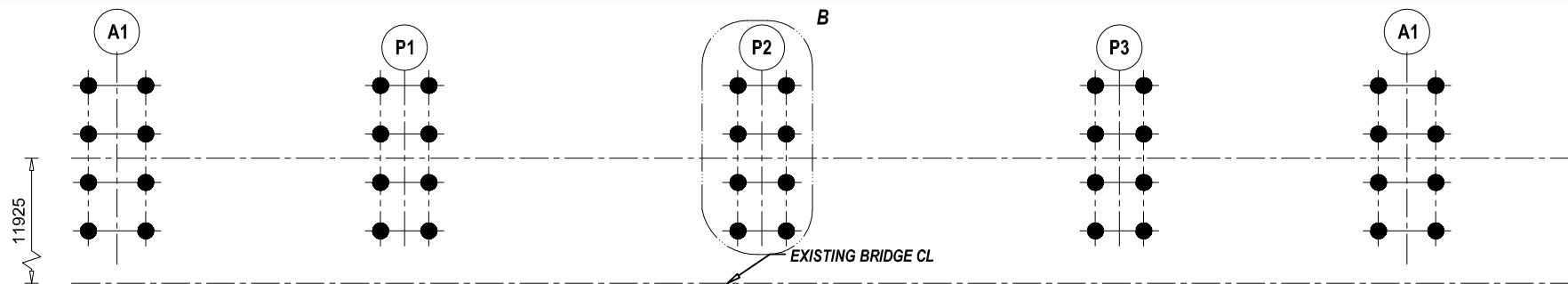
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		In Association With Udaya Consultancy, Geocom International, Sundar Krti Consultant and Rays Consultant Private Limited	Mr. H.B.	Signature	Reference Drawings	Chainage:	Drawing No.- KDP/DPR/STR/BR/BASAI /DD-4
						256+188	Sheet No. 1 / 1



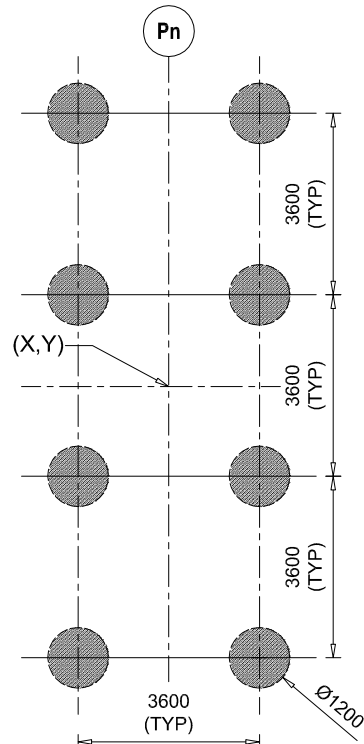
Finished Road Level(D/S)	170.267	170.267	170.267	170.267	170.267
Finished Road Level (Existing Bridge)	170.018	170.018	170.018	170.018	170.018
Existing Ground Level(D/S)	125.923	122.228	122.050	122.228	122.228
Existing Ground Lv	126.150	122.352	122.215	122.313	122.313
Chainage	256+140	256+161.4	256+188	256+214.6	256+236



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		In Association With Udaya Consultancy, Geocom International, Sundar Krti Consultant and Rays Consultant Private Limited	Mr. S.M.				
					Mr. H.B.		Reference Drawings



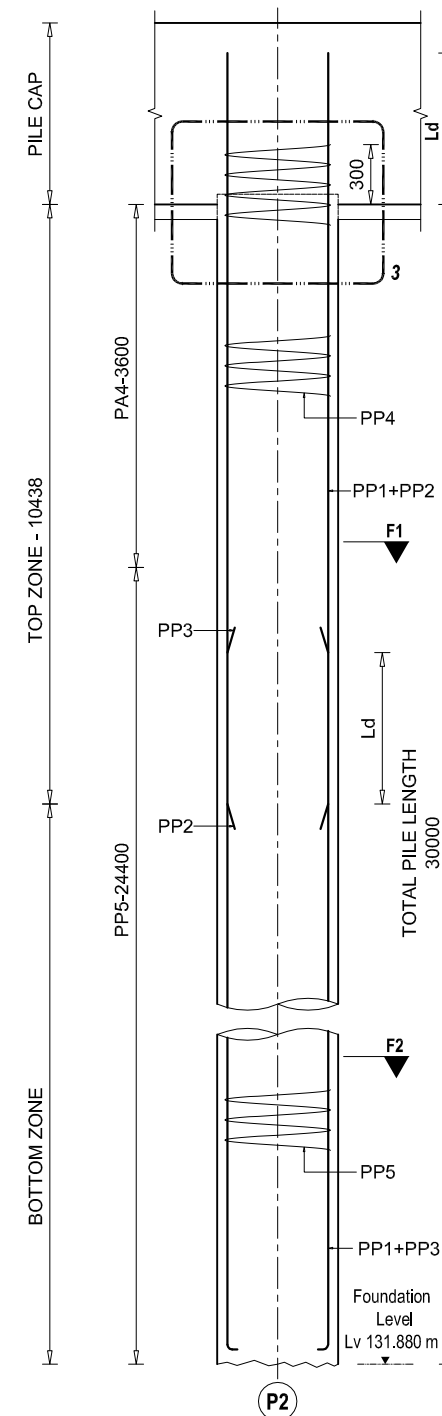
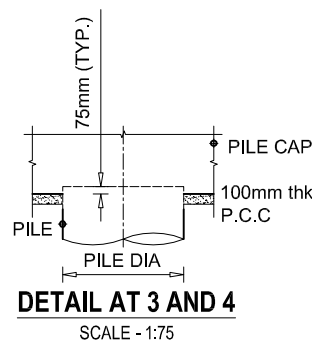
DETAILS AT PILE LAYOUT
SCALE - 1:500



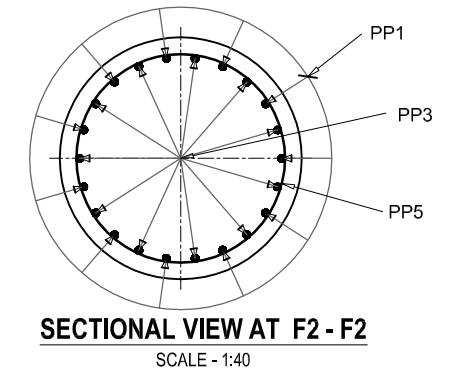
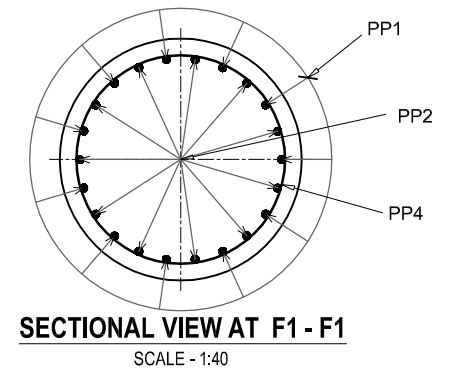
DETAILS AT B
SCALE - 1:150

BAR BENDING SCHEDULE OF PIER PILE 1								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	PP1	300 31650	32		31.950	22	6.321	4443.02
2	PP2	13363	32		13.363	11	6.320988	929.1409
3	PP3	300 20687	12		20.987	11	0.889	205.21
4	PP4	Dia. 1034 100	16	100	3.448	117	1.580	637.55
5	PP5	Dia. 1034 100	12	100	3.448	184	0.889	563.99
TOTAL (KG) :								6778.91
No. of Pile								8.00
TOTAL WEIGHT (KG) :								54231.31

PILE CAPACITY		
SN.	DESCRIPTION	CAPACITY (Ton)
2	PIER 01	256.77

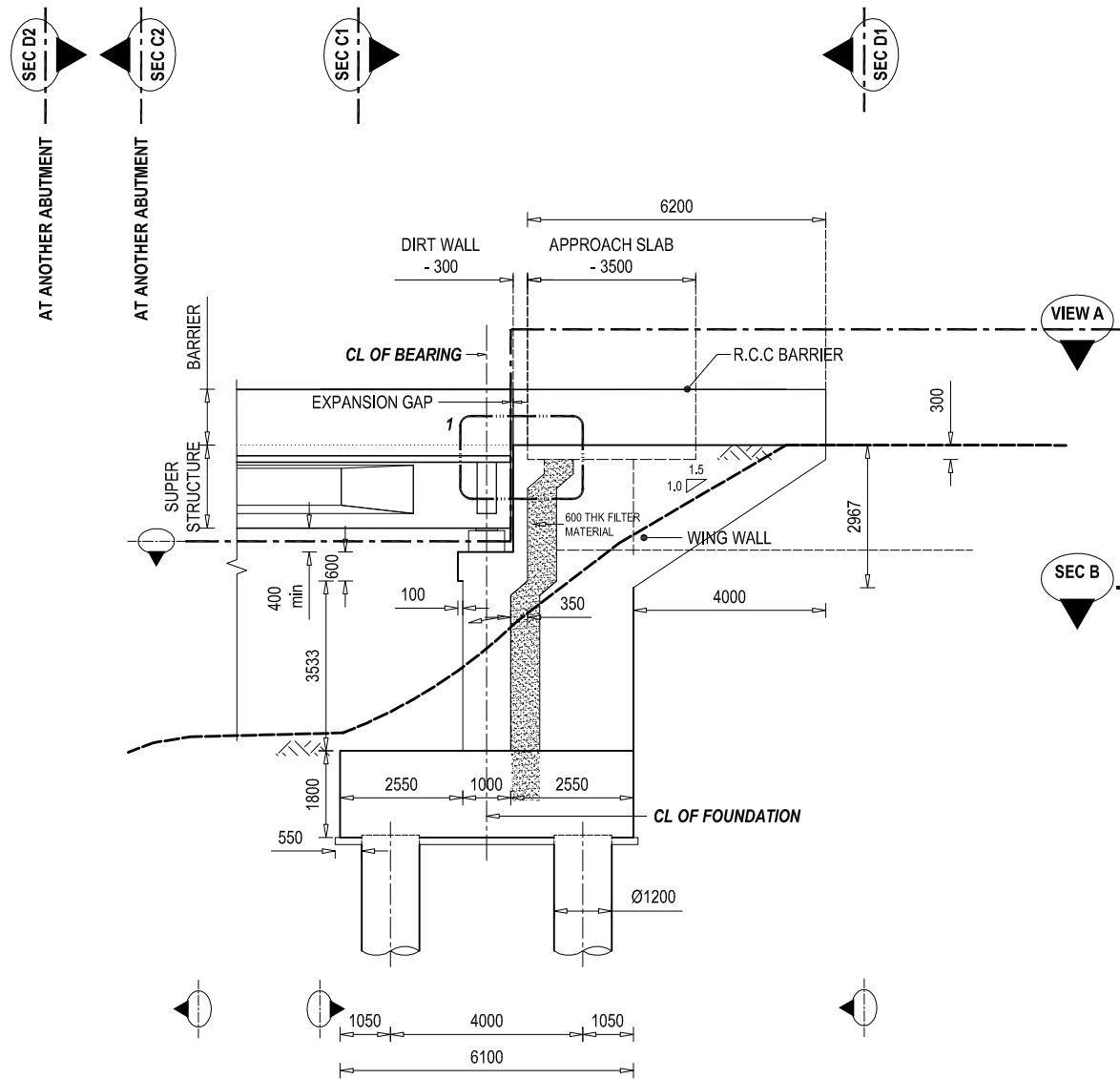


ELEVATION VIEW
BAR DETAIL AT PIER PILE
SCALE - 1:75

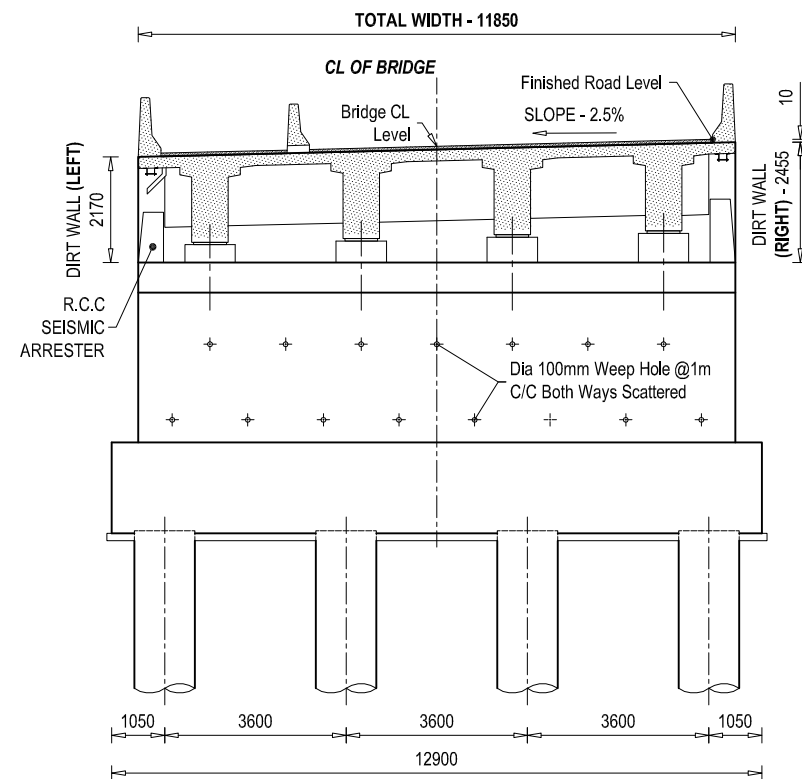


NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

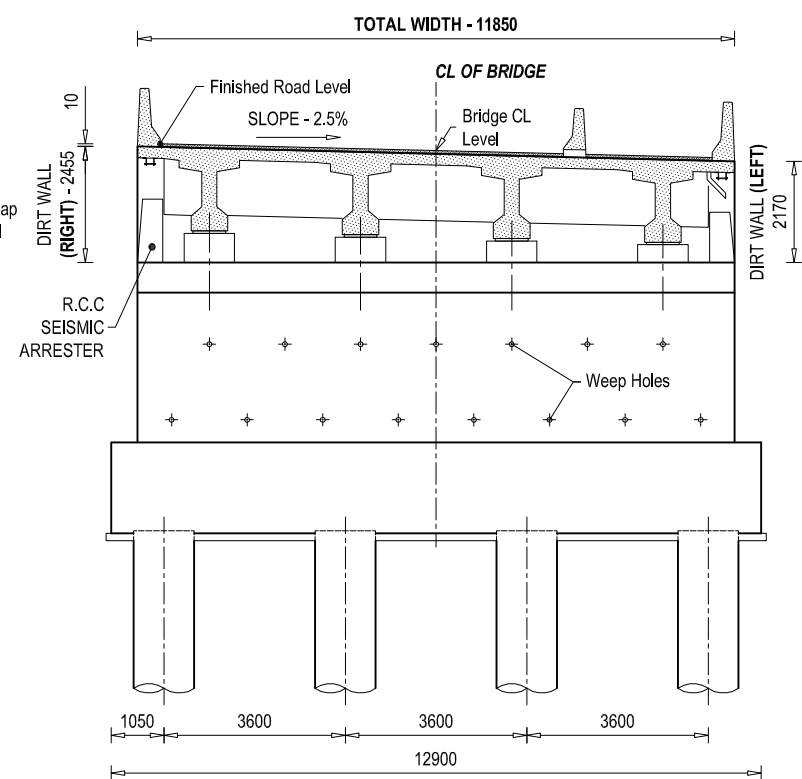
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										Sheet No.2/2	
				Designed By Mr. R.D. Nec.No.6489 CIVIL/TA Signature							
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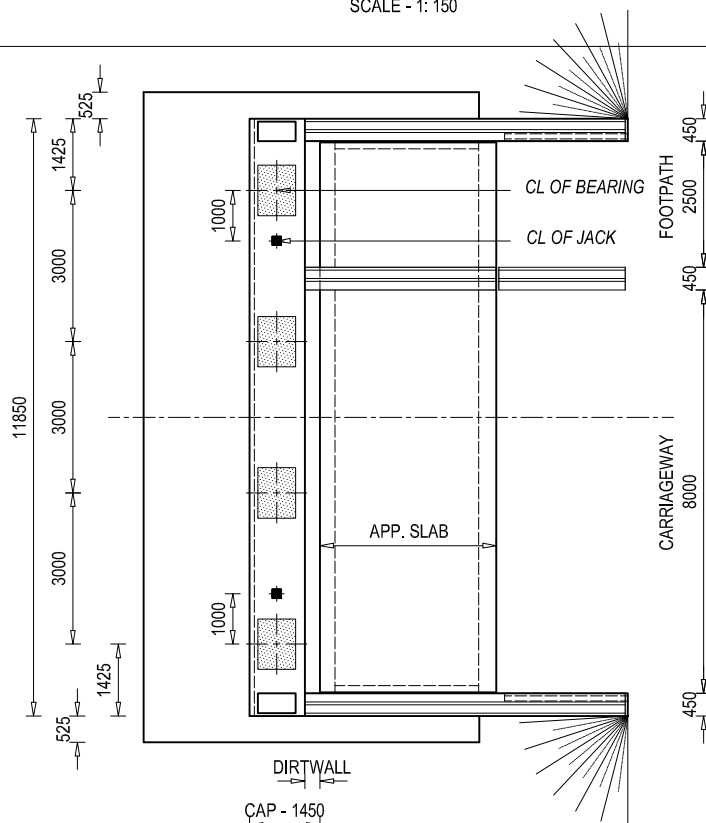
A2
OUTLINE DETAILS OF ABUTMENT
SCALE - 1: 150



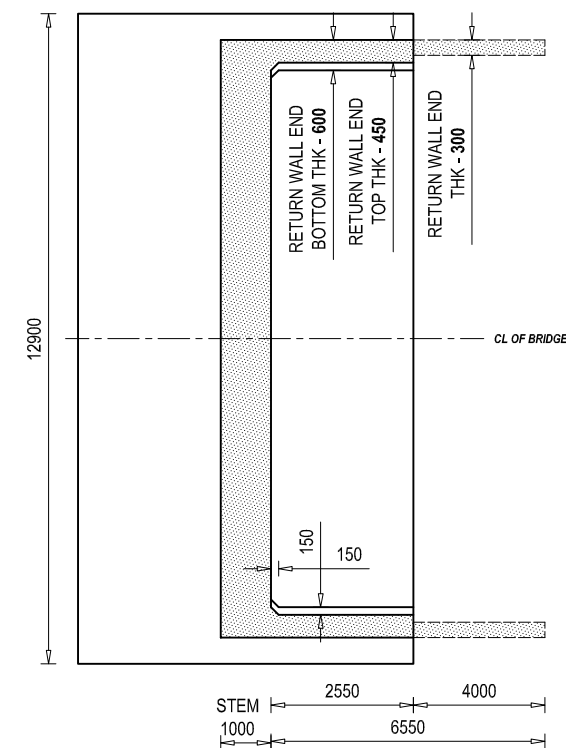
SECTIONAL VIEW AT C1 - C1
SCALE - 1: 150



SECTIONAL VIEW AT C2 - C2
SCALE - 1: 150



VIEW AT A
SCALE - 1: 150



SECTIONAL VIEW AT B - B
SCALE - 1: 150

NOTE
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Ministry of Physical Infrastructure and Transport
Department of Roads
Development Cooperation Implementation
Division

Strategic Road Connectivity & Trade Improvement Project
(SRCTIP)
Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya
Road Section (130 KM) of Mahendra Highway and Bridges

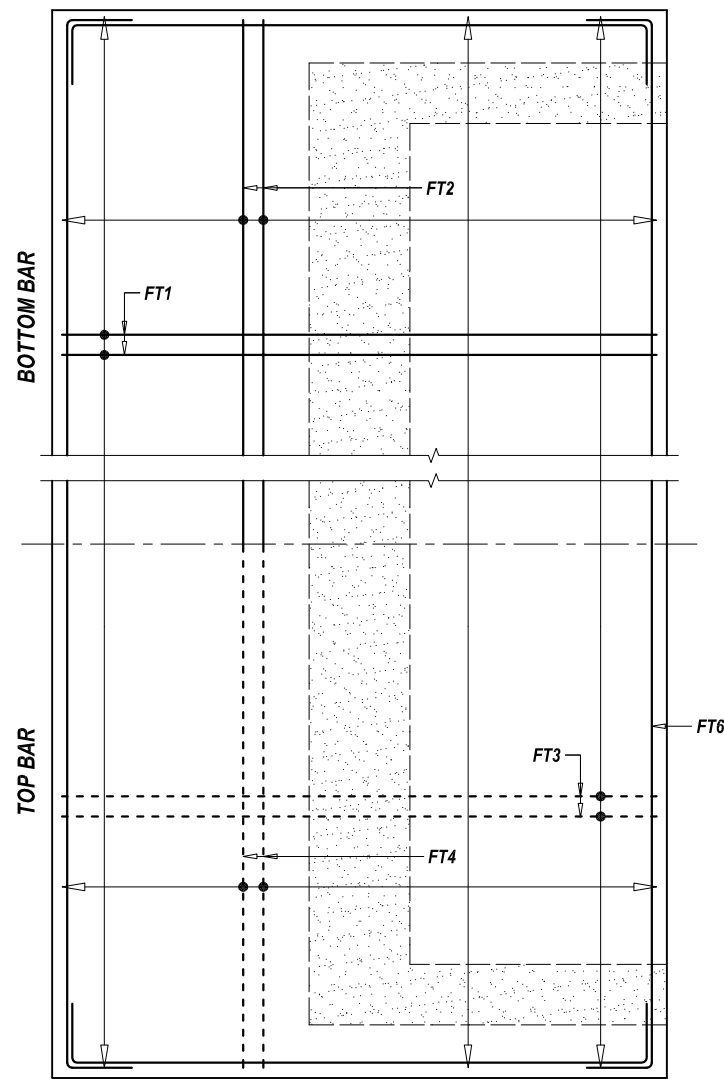
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Joint Venture of
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Madrid, Spain
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Nec.No. 6489 CHN/14
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Approved By Mr. H.B.

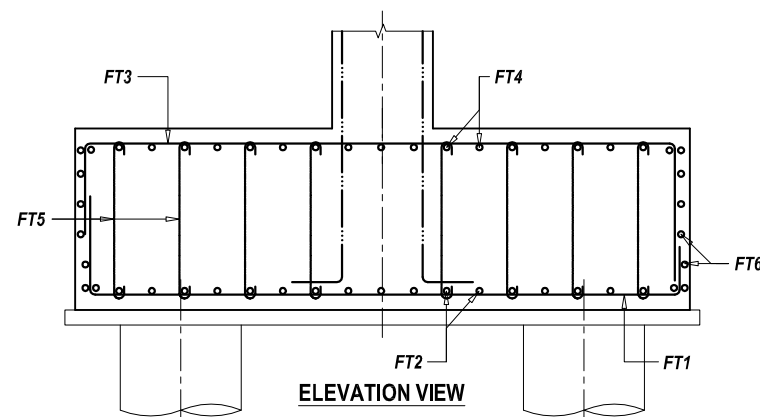
Drawing Name
ABUTMENT DETAILS OF BRIDGE OVER RIVER BASAI
Reference Drawings
KDP/DPR/STR/BR/BASAI/DD-9

Scale:
AS SHOWN
Chainage:
256+188

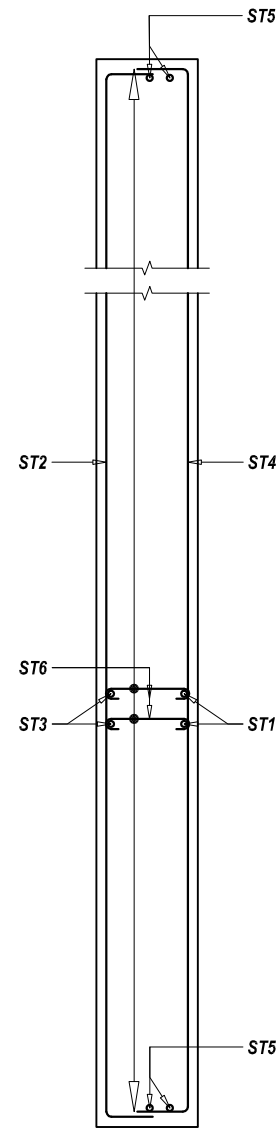
Date:
03.06.2023
Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 7
Sheet No. 1 / 2



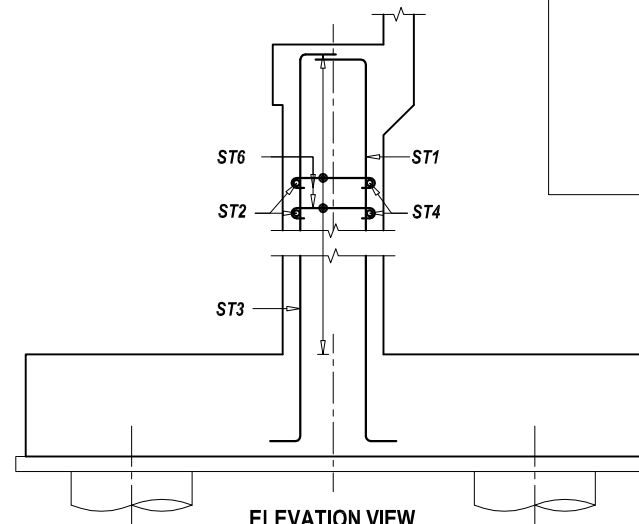
PLAN VIEW



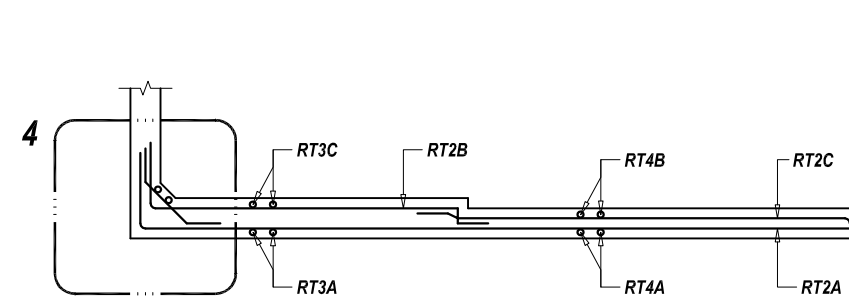
BAR DETAIL OF PILE CAP
SCALE - 1 : 75



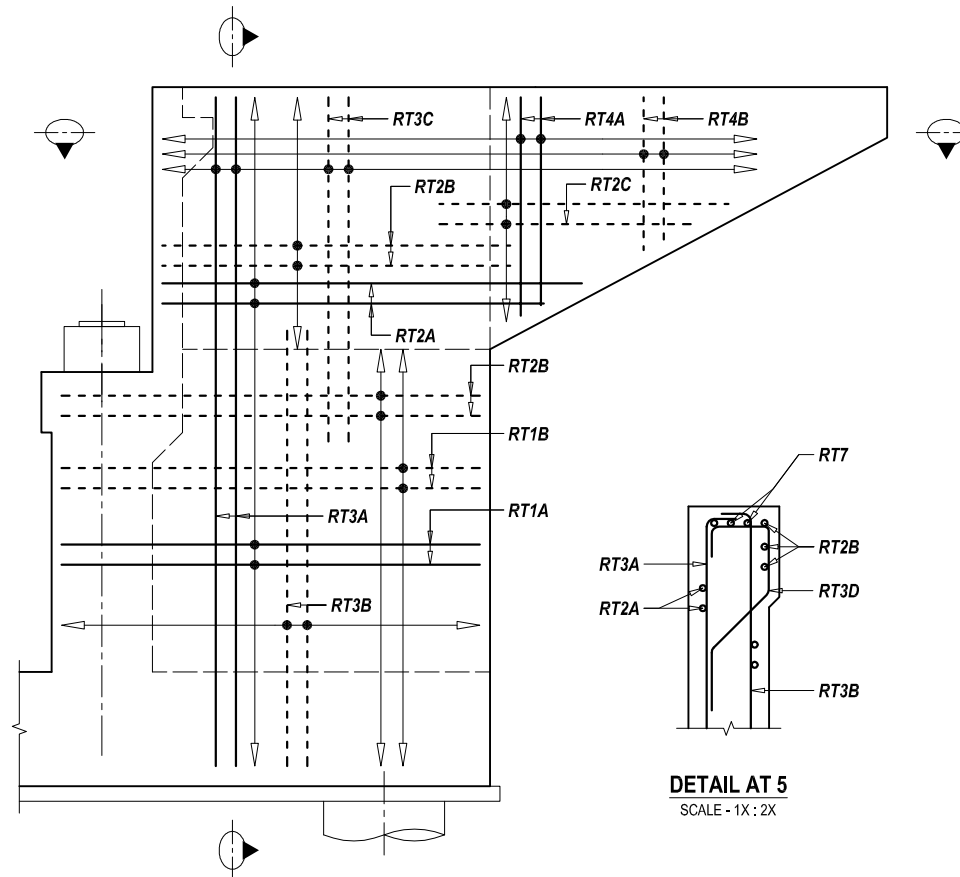
SECTIONAL PLAN VIEW



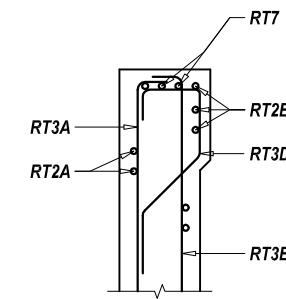
BAR DETAIL AT ABUTMENT STEM
SCALE - 1 : 75



SECTIONAL PLAN VIEW

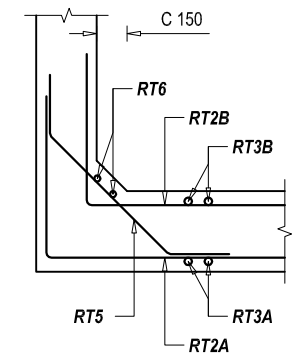


ELEVATION VIEW

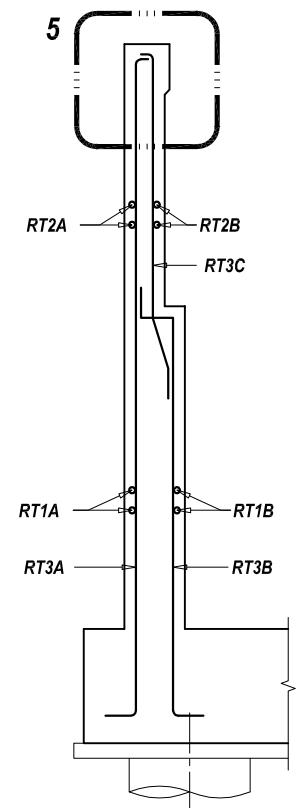


DETAIL AT 5
SCALE - 1X : 2X

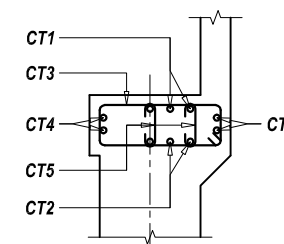
BAR DETAIL AT RETURN WALL
SCALE - 1 : 75



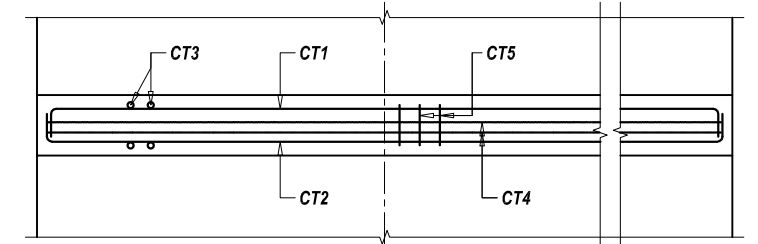
DETAILS AT 4



SECTIONAL SIDE VIEW



ELEVATION VIEW



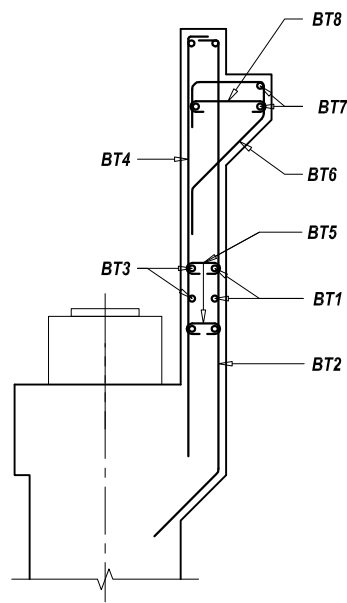
FRONT VIEW

BAR DETAIL AT ABUTMENT CAP
SCALE - 1 : 75

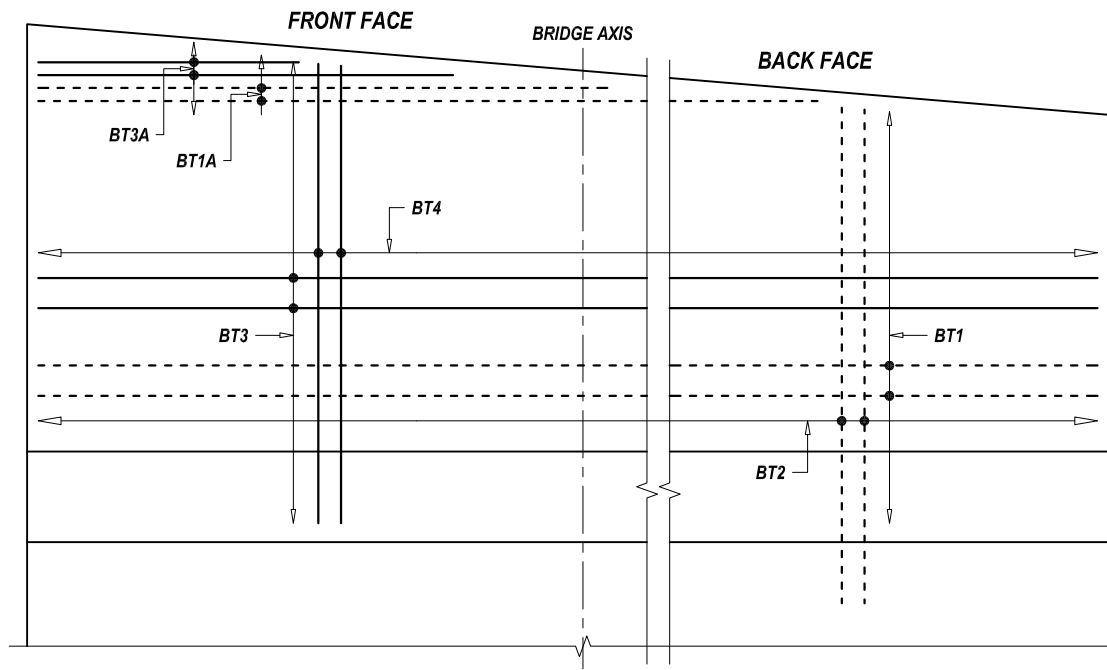
--- TOP BAR OR NEAR FACE REINFORCEMENT
--- BOTTOM BAR OR FAR FACE REINFORCEMENT

NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalaya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of ep4sa EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kirti Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CH/1/24 Mr. S.M. Mr. H.B.	ABUTMENT REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-9	AS SHOWN Chainage: 256+188	03.06.2023 Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 8 Sheet No. 1 / 2



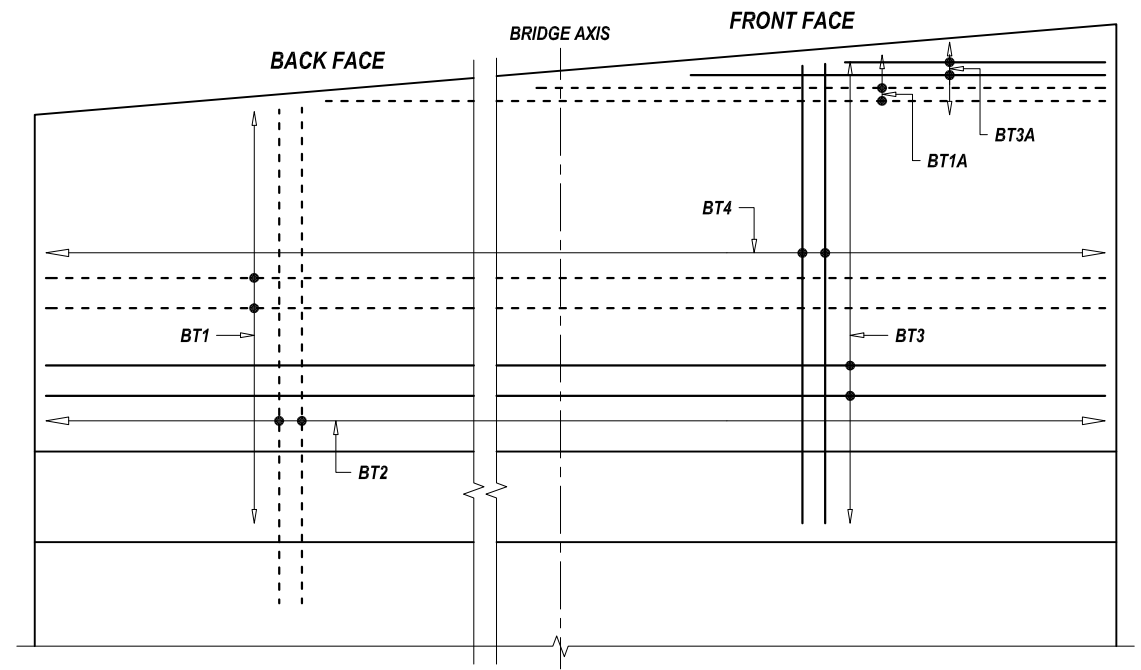
SECTIONAL SIDE VIEW



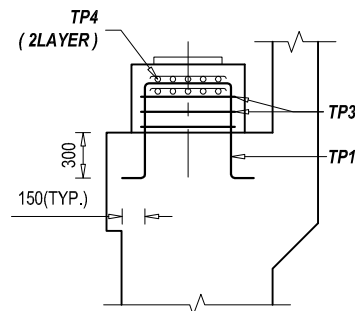
ELEVATION VIEW / VIEW AT D1

BAR DETAIL AT DIRT WALL

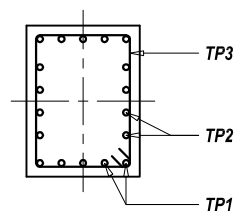
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ELEVATION VIEW / VIEW AT D2



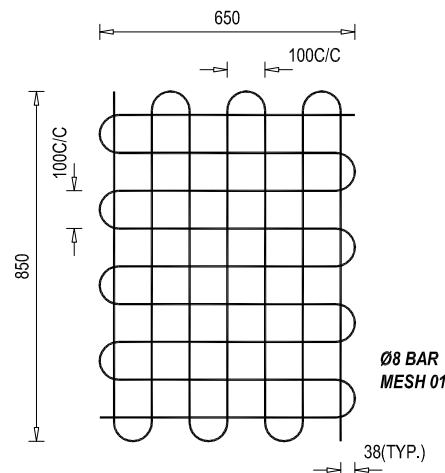
SECTIONAL SIDE VIEW



SECTIONAL PLAN VIEW
BAR DETAIL AT PEDESTAL

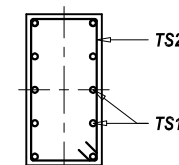
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NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

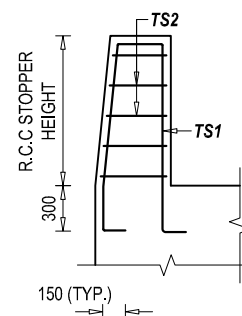


REINFORCEMENT DETAILS OF
BEARING MESH

SCALE - 1 : 50

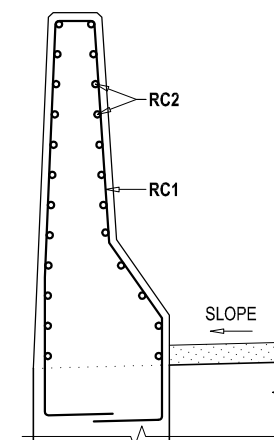


SECTIONAL PLAN VIEW



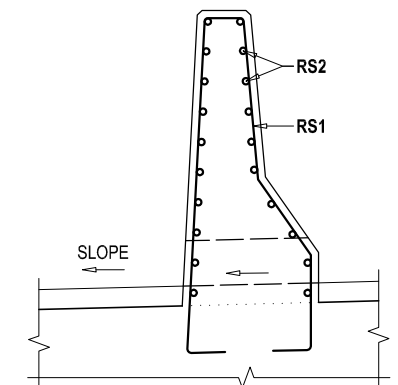
R.C.C STOPPER LEFT
ELEVATION VIEW

SCALE - 1 : 50



REINFORCEMENT DETAILS OF
R.C.C BARRIER (B)- SECTIONAL VIEW

SCALE - 1 : 25



REINFORCEMENT DETAILS OF
R.C.C SEPARATOR - SECTIONAL VIEW

SCALE - 1 : 25

--- TOP BAR OR
NEAR FACE REINFORCEMENT
--- BOTTOM BAR OR
FAR FACE REINFORCEMENT

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP)	Joint Venture of EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkatta, India	Mr. S.M.	AS SHOWN	03.06.2023		
	Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	In Association With Udaya Consultancy, Geocom International, Sundar Kritt Consultant and Rays Consultant Private Limited	Checked By	Mr. H.B.	ABUTMENT REINGORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	Chainage:	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 8
			Approved By		Reference Drawings KDP/DPR/STR/BR/BASAI/DD-9	256+188	Sheet No. 2 / 2

BAR BENDING SCHEDULE OF DIRT WALL								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	BT1	150 11700 150	16	200	12.000	17	1.580	322.37
2	BT1A	Avg. 5850 150	16	200	6.000	3	1.580	28.44
3	BT2	150 2803 Avg. 450	16	125	3.403	96	1.580	516.25
4	BT3	150 11700 150	16	200	12.000	13	1.580	246.52
5	BT3A	Avg. 5850 150	16	200	6.000	3	1.580	28.44
6	BT4	150 2878 Avg.	12	125	3.028	96	0.889	258.39
7	BT5	100 150 100	12	500	0.350	96	0.889	29.87
8	BT6	200 450 220 200 756	12	200	1.826	61	0.889	99.01
9	BT7	11700	16		11.700	5	1.580	92.44
10	BT8	100 450 100	12	200	0.650	120	0.889	69.33
TOTAL (KG) :								1691.07

BAR BENDING SCHEDULE OF ABUTMENT CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CT1	300 11700 300	16	150	12.300	11	1.580	213.81
2	CT2	300 11700 300	16	150	12.300	11	1.580	213.81
3	CT3	450 1300 100	16	150	3.700	80	1.580	467.75
4	CT4	300 11700 300	12	150	12.300	8	0.889	87.47
5	CT5	450 100 100	12	Long. 150 Trans.300	0.650	382	0.889	220.71
TOTAL (KG) :								1203.55

BAR BENDING SCHEDULE OF ABUTMENT STEM								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	ST1	300 5783 750	25		6.833	118	3.858	3110.70
2	ST2	500 11700 500	16	160	12.700	23	1.580	461.59
3	ST3	300 5783 750	20		6.833	118	2.469	1990.85
4	ST4	500 11700 500	16	160	12.700	23	1.580	461.59
5	ST5	300 5783 750	16		6.833	14	1.580	151.17
6	ST6	100 850 100	12	Ver. 500 Hor.500	1.050	192	0.889	179.20
TOTAL (KG) :								6355.10

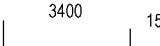
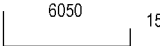
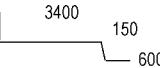
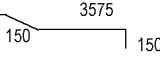
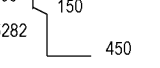
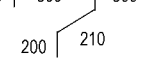
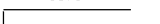
BAR BENDING SCHEDULE OF PILE CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	FT1	900 5950 900	25		7.750	100	3.858	2989.97
2	FT2	900 12750 900	20		14.550	50	2.469	1796.30
3	FT3	900 5950 900	16		7.750	100	1.580	1224.69
4	FT4	900 12750 900	16		14.550	50	1.580	1149.63
5	FT5	100 1650 100	10	Long. 250 Trans.500	1.850	607	0.617	693.18
6	FT6	5900 12710 150	16	200	37.520	8	1.580	474.33
TOTAL (KG) :								8328.09

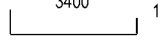
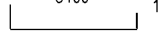
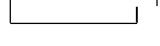
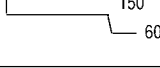
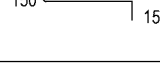
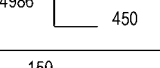
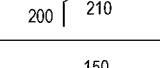
BAR BENDING SCHEDULE OF PEDESTAL								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TP1	150 950 Avg. 650	16	150	2.850	6	1.580	27.02
1	TP2	150 700 Avg. 650	16	150	2.350	8	1.580	29.71
2	TP3	950 700 100	16	150	3.500	3	1.580	16.59
1	TP4	850 650 @ 100	8		13.400	2	0.395	10.59
TOTAL (KG) :								83.91

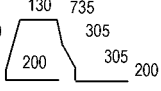
BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - LEFT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-L	1010 400 1270 300 150 150	16	150	3.280	6	1.580	31.10
2	TS2-L	400 700 100	12	150	2.400	7	0.889	14.93
TOTAL (KG) :								46.03

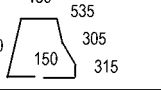
BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - RIGHT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-R	1260 400 1525 300 150 150	16	150	3.785	6	1.580	35.89
2	TS2-R	400 700 100	12	150	3.400	9	0.889	27.20
TOTAL (KG) :								63.09

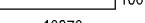
EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Drawing Name		Scale:		Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr. R.D.	 Signature	ABUTMENT BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	AS SHOWN	03.06.2023		
		EPTISA Servicios De Ingeniera Madrid, Spain		Checked By	Mr. S.M.				 Signature	Reference Drawings	Chainage: 256+188
		STUP Consultants Private Limited Kolkatta, India		Approved By	Mr. H.B.	 Signature	Sheet No. 1 / 2				
In Association With Udaya Consultancy, Geocom International, Sundar Krill Consultant and Rays Consultant Private Limited											

BAR BENDING SCHEDULE OF RETURN WALL - LEFT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RT1A	450  150	12	200	4.000	33	0.889	117.33
2	RT1B	450  150	12	200	4.000	33	0.889	117.33
3	RT2A	450  150	12	200	6.650	16	0.889	94.58
4	RT2B	150  600	12	200	4.300	16	0.889	61.16
5	RT2C	600  150	12	200	4.475	16	0.889	63.64
6	RT3A	8249  450	12	200	8.849	14	0.889	110.12
7	RT3B	800  450	16	200	6.682	14	1.580	147.83
8	RT3C	150  150	16	200	3.992	14	1.580	88.32
9	RT3D	200  210	16	200	1.210	32	1.580	61.19
10	RT4A	1483.5  150	12	200	1.784	38	0.889	60.24
11	RT4B	1483.5  150	16	200	1.784	38	1.580	107.10
12	RT5	300  300	12	200	1.470	49	0.889	64.03
13	RT6	 6599	12		6.599	2	0.889	11.73
14	RT7	225  5375	20		5.6	4	2.469	55.31
TOTAL (KG) :								1159.91

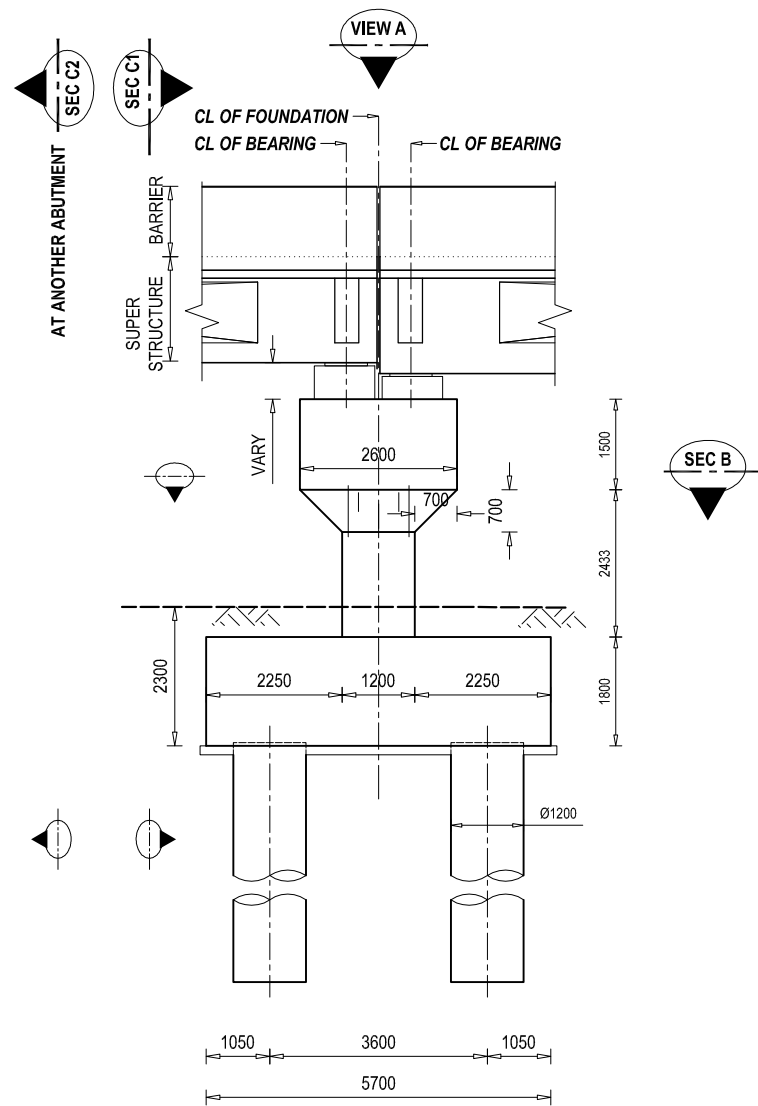
BAR BENDING SCHEDULE OF RETURN WALL - RIGHT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RT1A	450  150	12	200	4.000	32	0.889	113.78
2	RT1B	450  150	12	200	4.000	32	0.889	113.78
3	RT2A	450  150	12	200	6.650	16	0.889	94.58
4	RT2B	150  600	12	200	4.300	16	0.889	61.16
5	RT2C	600  150	12	200	4.475	16	0.889	63.64
6	RT3A	7953  450	12	200	8.553	14	0.889	106.44
7	RT3B	800  450	16	200	6.386	14	1.580	141.28
8	RT3C	150  150	16	200	3.992	14	1.580	88.32
9	RT3D	200  210	16	200	1.210	32	1.580	61.19
10	RT4A	1483.5  150	12	200	1.784	38	0.889	60.24
11	RT4B	1483.5  150	16	200	1.784	38	1.580	107.10
12	RT5	300  300	12	200	1.470	49	0.889	64.03
13	RT6	 6303	12		6.303	2	0.889	11.21
14	RT7	225  5375	20		5.6	4	2.469	55.31
TOTAL (KG) :								1142.04

BAR BENDING SCHEDULE OF R.C.C BARRIER								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RC1	 200	16	150	3.170	42	1.580	210.39
2	RC2	150  6100 150	10	150	6.400	20	0.617	79.01
TOTAL (KG) :								289.41

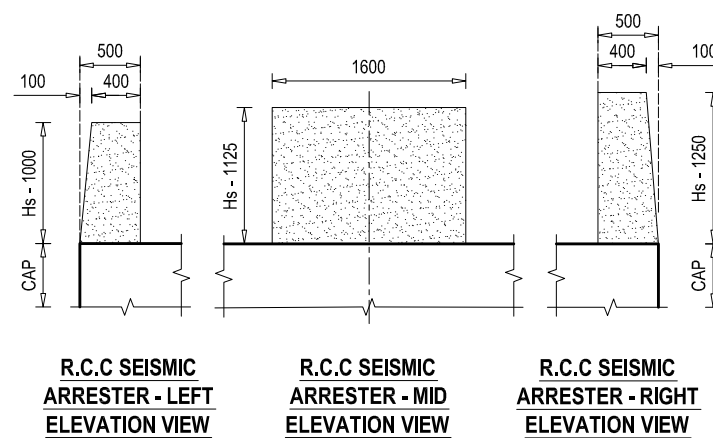
BAR BENDING SCHEDULE OF R.C.C SEPARATOR								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RS1	 150	16	150	2.695	25	1.580	106.47
2	RS2	150  3500 150	10	150	3.800	17	0.617	39.88
TOTAL (KG) :								146.35

BAR BENDING SCHEDULE OF APPROACH SLAB								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	1601	100  100 10970	16	150	11.170	48	1.580	847.27
2	1202	100  3420 100	12	150	3.620	150	0.889	482.67
TOTAL (KG) :								1329.93

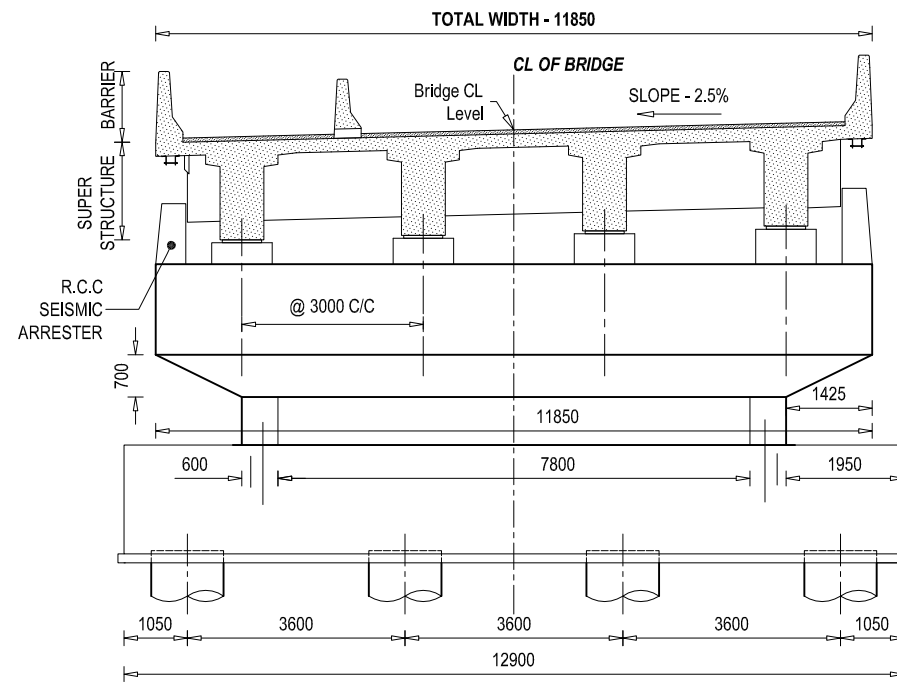
EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Drawing Name		Scale:		Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division		Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalaya Road Section (130 KM) of Mahendra Highway and Bridges		Joint Venture of		Designed By	Mr. R.D.	AS SHOWN		03.06.2023	
				 EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkatta, India		Checked By	Mr. S.M.			Drawing No.- KDP/DPR/STR/BR/BASA/ID- 9	
				In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	Mr. H.B.			Sheet No. 2 / 2	



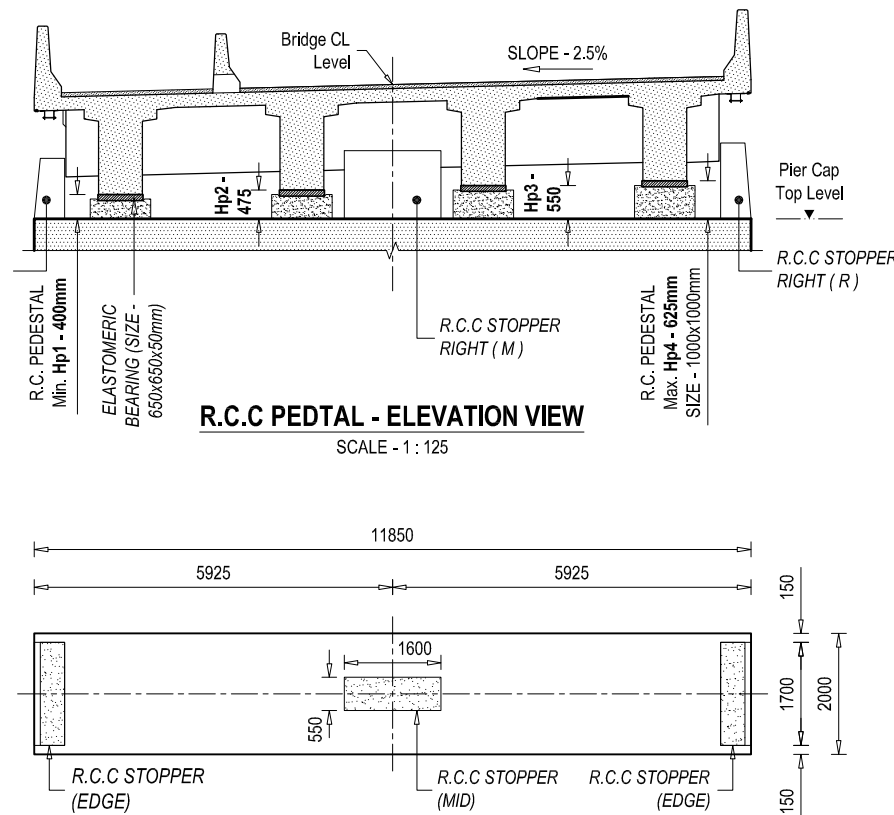
ELEVATION VIEW OF PIER
SCALE - 1 : 125



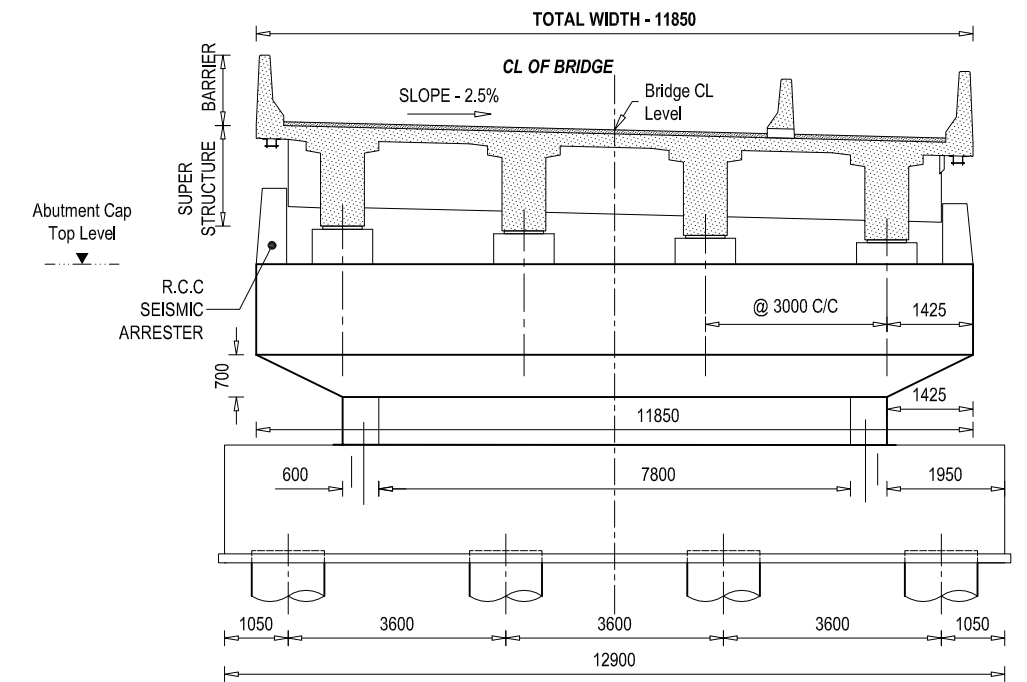
DETAIL AT PEDESTAL
SCALE - 1 : 75



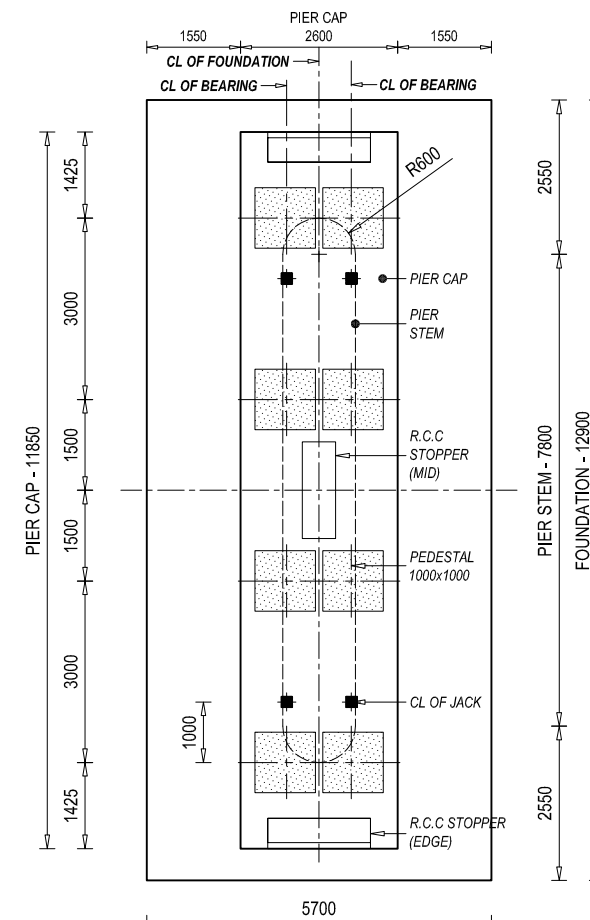
SECTIONAL VIEW AT C1 - C1
SCALE - 1 : 125



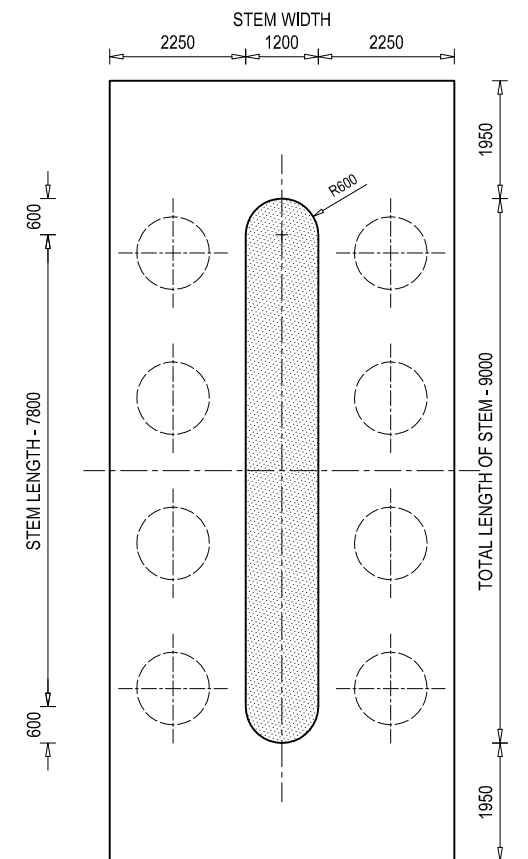
DETAIL AT R.C.C SEISMIC ARRESTER
SCALE - 1 : 150



SECTIONAL VIEW AT C2 - C2
SCALE - 1 : 125



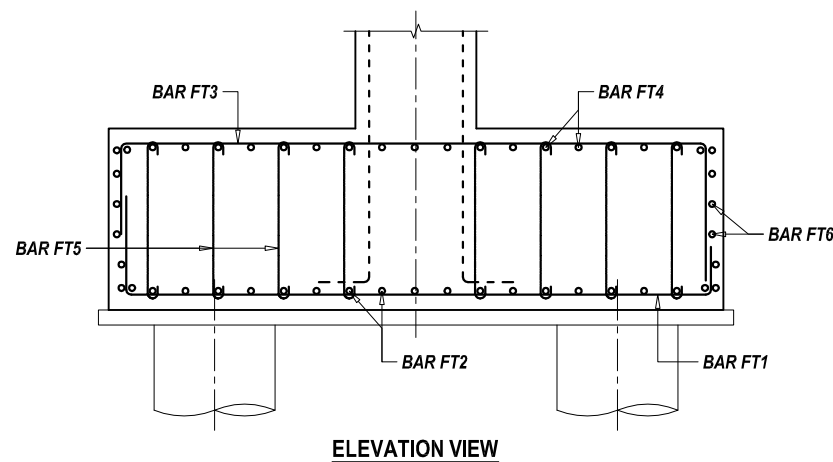
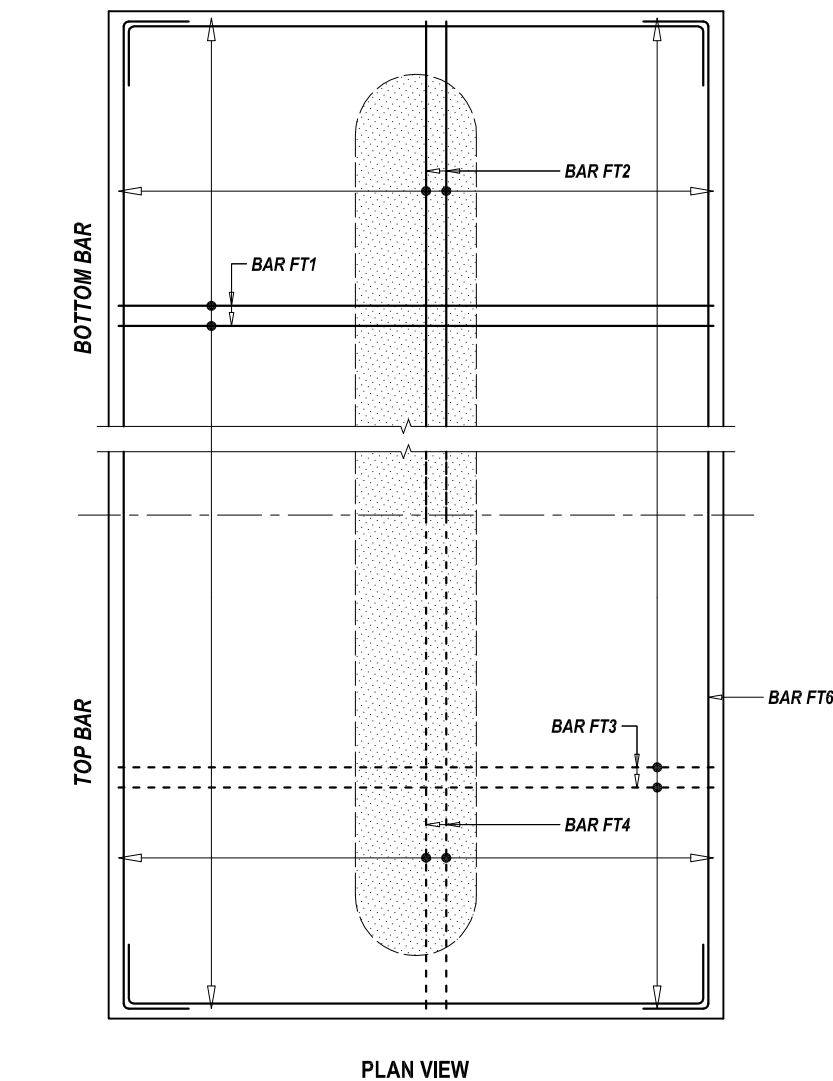
PLAN VIEW OF PIER (VIEW AT A)
SCALE - 1 : 125



SECTIONAL VIEW AT B - B
SCALE - 1 : 125

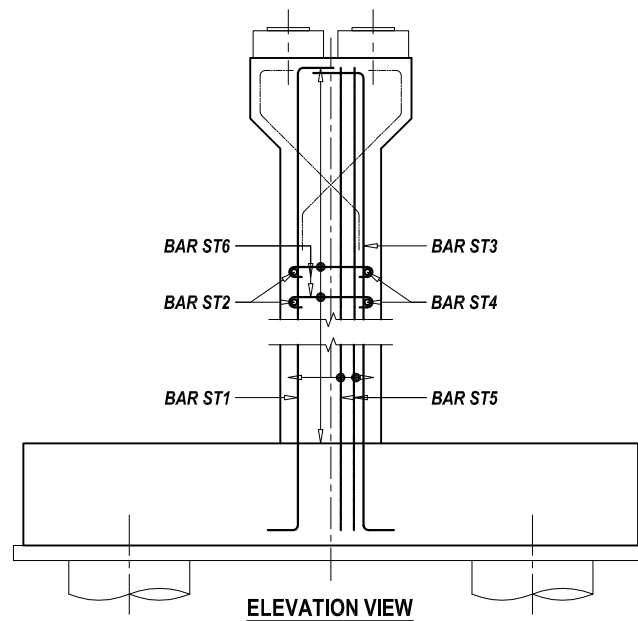
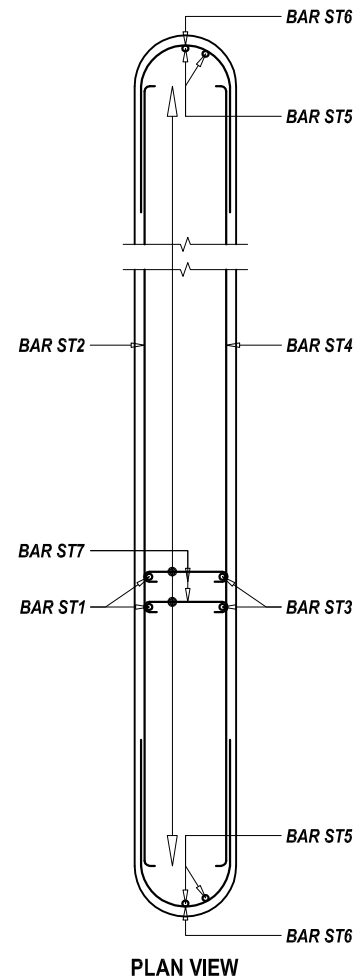
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READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkhebar-Pathlajay Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of ep4sa EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kritt Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CH/1/24 Signature Mr. S.M. Signature Mr. H.B. Signature	PIER DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-12	AS SHOWN Chainage: 256+188	03.06.2023 Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 10 Sheet No. 1/1



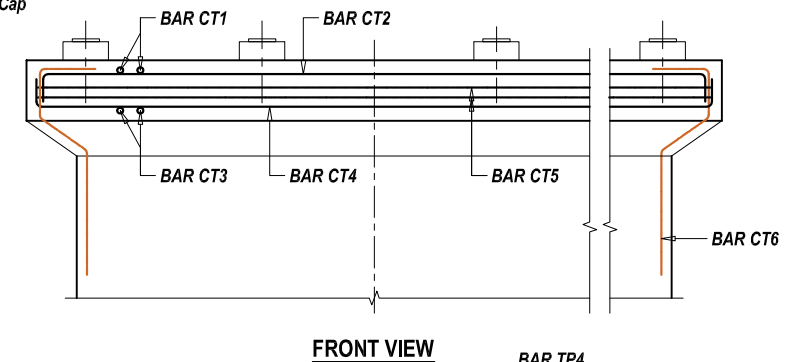
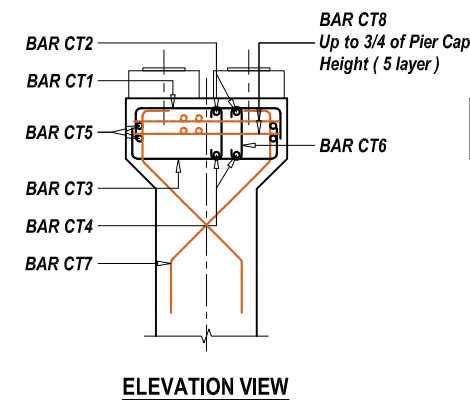
BAR DETAIL OF FOUNDATION

SCALE - 1 : 75



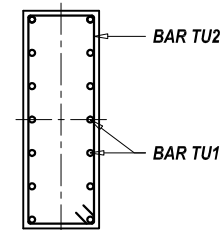
BAR DETAIL AT PIER STEM

SCALE - 1 : 75

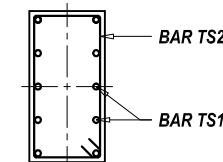


BAR DETAIL AT PIER CAP

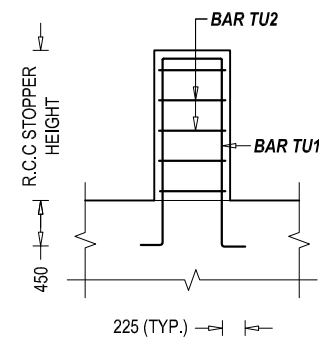
SCALE - 1 : 75



SECTIONAL PLAN VIEW



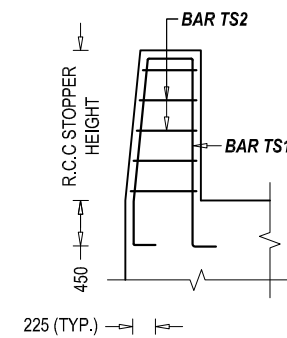
SECTIONAL PLAN VIEW



SECTIONAL ELEVATION VIEW

R.C.C STOPPER AT MID

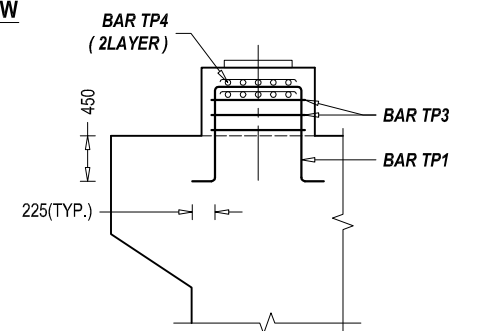
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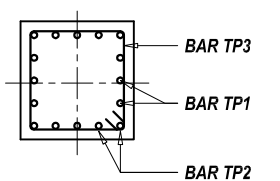
SECTIONAL ELEVATION VIEW

R.C.C STOPPER AT EDGE

SCALE - 1 : 50



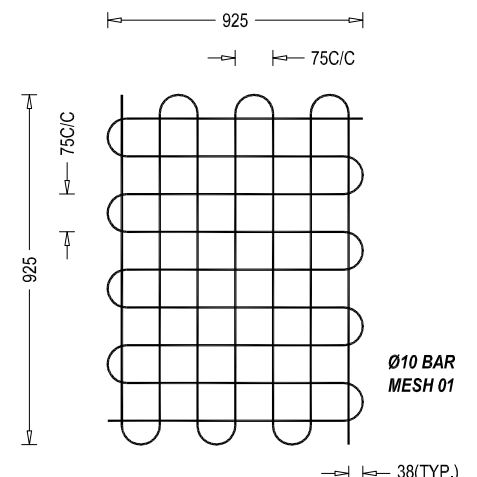
SECTIONAL SIDE VIEW



SECTIONAL PLAN VIEW

BAR DETAIL AT PEDESTAL

SCALE - 1 : 50

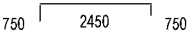
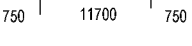
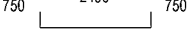
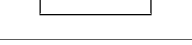
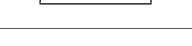
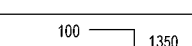
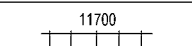
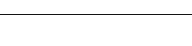


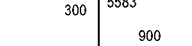
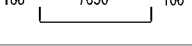
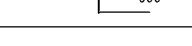
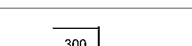
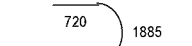
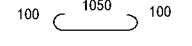
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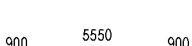
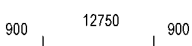
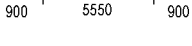
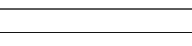
--- TOP BAR OR NEAR FACE REINFORCEMENT
--- BOTTOM BAR OR FAR FACE REINFORCEMENT

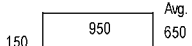
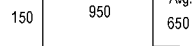
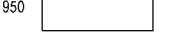
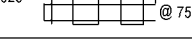
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READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

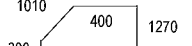
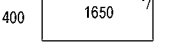
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP)	Joint Venture of		Nec.No. 6489 CH/1/14				Signature
		 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkata, India		Checked By				
	Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	In Association With Udaya Consultancy, Geocom International, Sundar Kirti Consultant and Rays Consultant Private Limited	Approved By	Mr. H.B.	Reference Drawings	Chainage:		
				Signature	KDP/DPR/STR/BR/BASAI/DD-12	256+188	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 11	
							Sheet No.1/1	

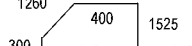
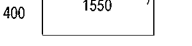
BAR BENDING SCHEDULE OF PIER CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CT1		32		3.950	75	6.321	1872.59
2	CT2		32		13.200	20	6.321	1668.74
3	CT3		32		3.950	75	6.321	1872.59
4	CT4		32		13.200	20	6.321	1668.74
5	CT5		16		28.500	11	1.580	495.41
6	CT6		16	X: 260 Y: 320	1.550	370	1.580	906.27
7	CT7		16		1.550	137	1.580	335.57
8	CT8		16		296.650	5 Layer	1.580	2343.90
TOTAL (KG) :								11163.81

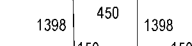
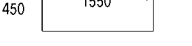
BAR BENDING SCHEDULE OF PIER STEM								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	ST1		25		6.783	50	3.858	1308.45
2	ST2		16	200	7.850	13	1.580	161.26
3	ST3		25		6.783	50	3.858	1308.45
4	ST4		16	200	7.850	13	1.580	161.26
5	ST5		25		6.783	12	3.858	314.03
5	ST6		16	200	3.325	26	1.580	136.61
6	ST7		12	Ver. 150 Hor.400	1.250	391	0.889	434.44
TOTAL (KG) :								3824.51

BAR BENDING SCHEDULE OF PILE CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	FT1		25		7.350	90	3.858	2552.08
2	FT2		25		14.550	50	3.858	2806.71
3	FT3		25		7.350	90	3.858	2552.08
4	FT4		25		14.550	50	3.858	2806.71
5	FT5		12	Long 225 Trans 275	1.85	1144	0.889	1881.24
6	FT6		16	200	36.700	8	1.580	463.96
TOTAL (KG) :								13062.80

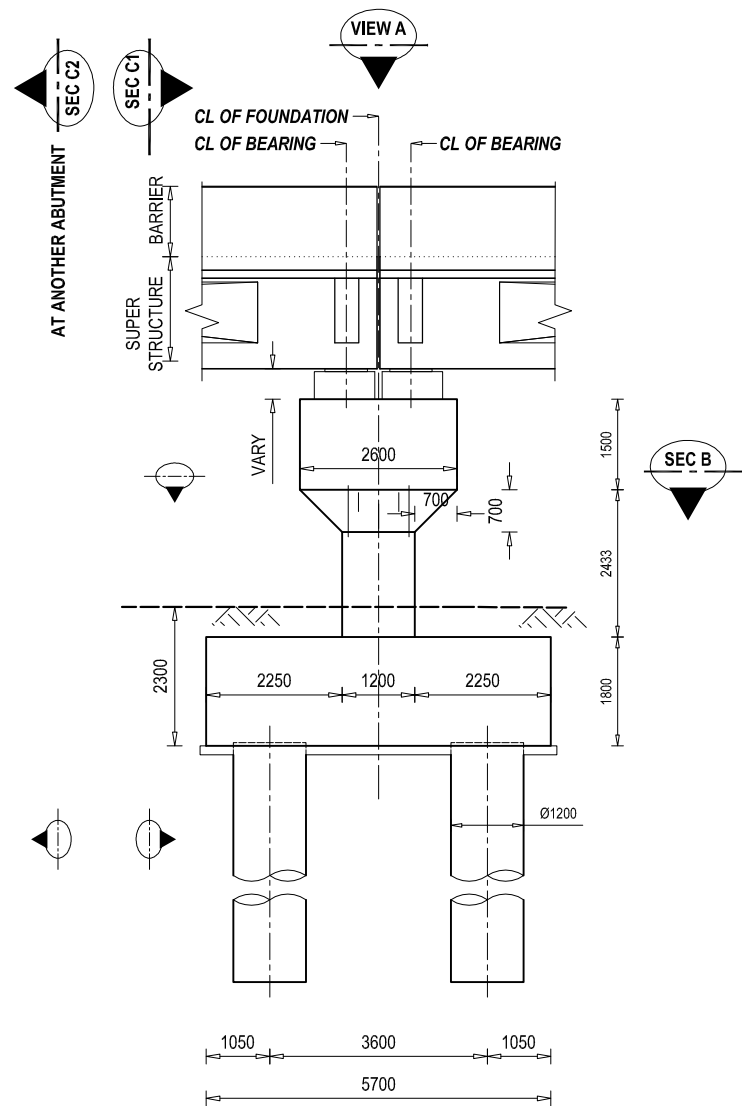
BAR BENDING SCHEDULE OF PEDESTAL								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TP1		16		2.850	8	1.580	36.03
2	TP2		16		2.850	8	1.580	36.03
3	TP3		16		4.000	3	1.580	18.96
4	TP4		10		26.000	2	0.617	32.10
TOTAL (KG) :								123.12

BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - LEFT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-L		16		3.280	13	1.580	67.38
2	TS2-L		12		4.300	7	0.889	26.76
TOTAL (KG) :								94.14

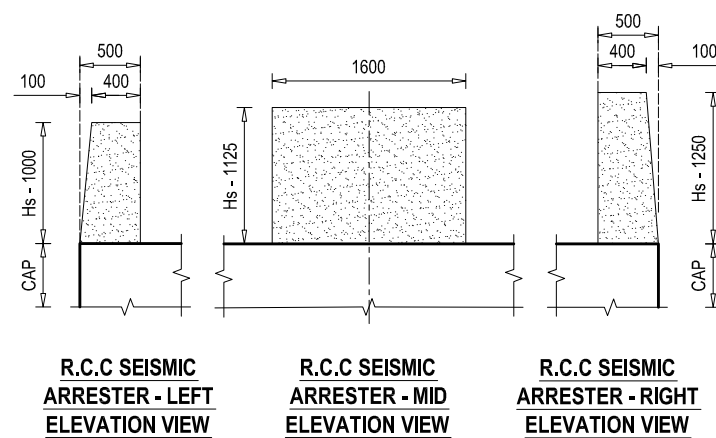
BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - RIGHT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-R		16		3.785	13	1.580	77.76
2	TS2-R		12		4.100	9	0.889	32.80
TOTAL (KG) :								110.56

BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - MID								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TU1		16		3.546	13	1.580	72.85
2	TU2		12		4.200	8	0.889	29.87
TOTAL (KG) :								102.71

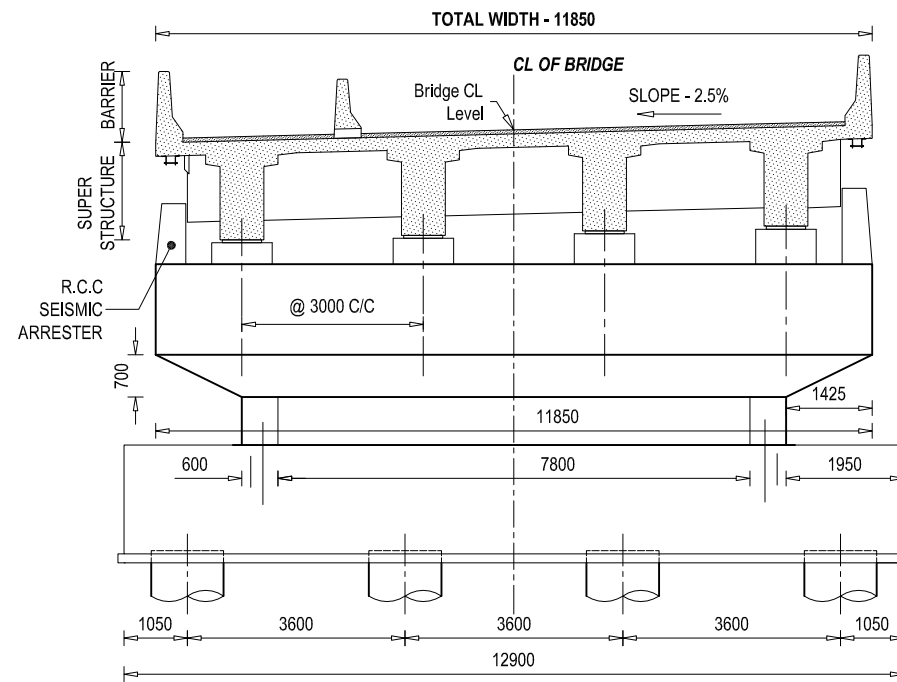
EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Drawing Name		Scale:		Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr. R.D.	PIER BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	AS SHOWN	03.06.2023			
		EPTISA Servicios De Ingeniera Madrid, Spain		Checked By	Mr. S.M.					Drawing No.- KDP/DPR/STR/BR/BASA/IDD- 12	
		STUP Consultants Private Limited Kolkatta, India		Approved By	Mr. H.B.			Chainage: 256+188		Sheet No. 1/1	



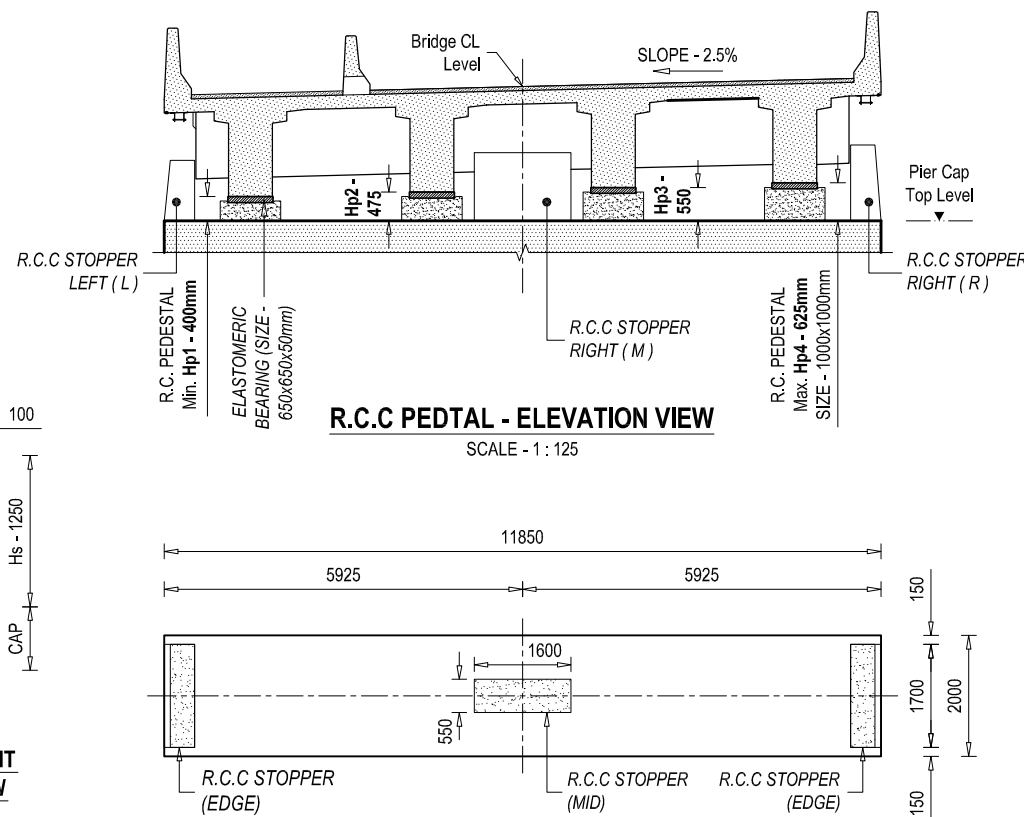
ELEVATION VIEW OF PIER
SCALE - 1: 125



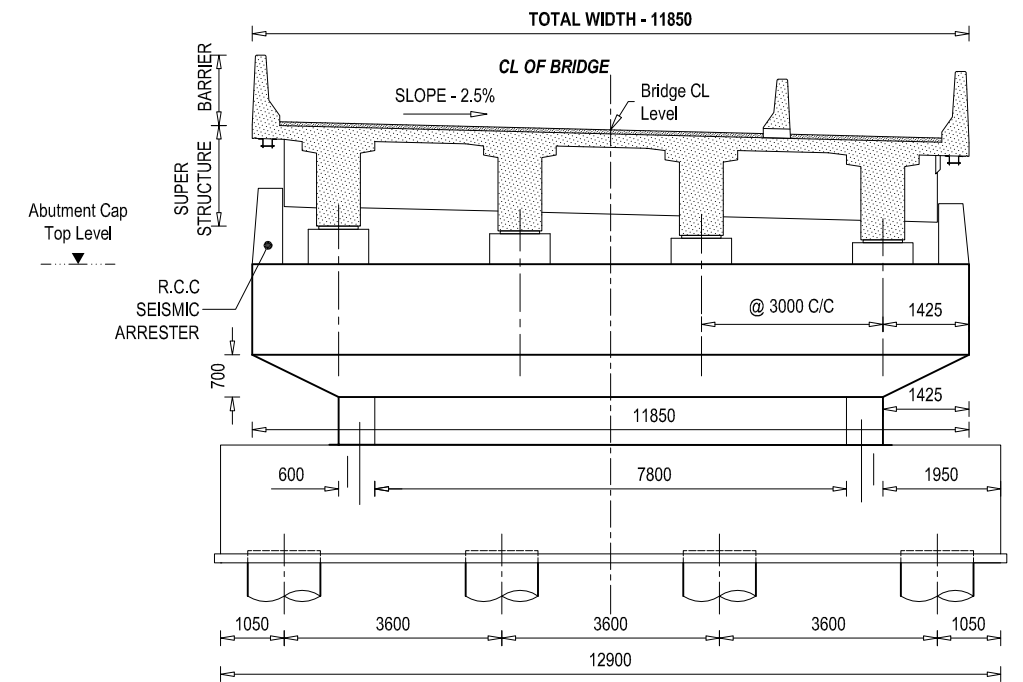
DETAIL AT PEDESTAL
SCALE - 1: 75



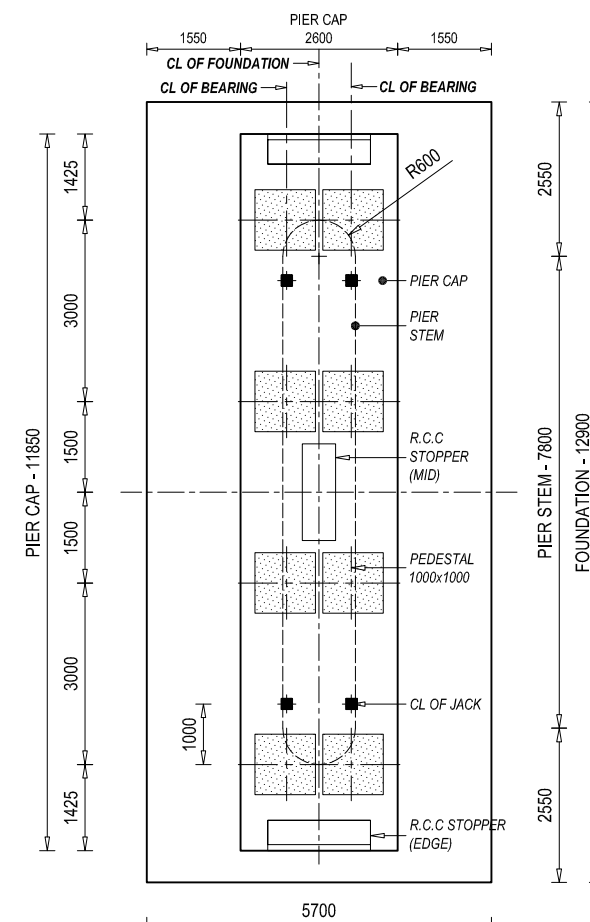
SECTIONAL VIEW AT C1 - C1
SCALE - 1: 125



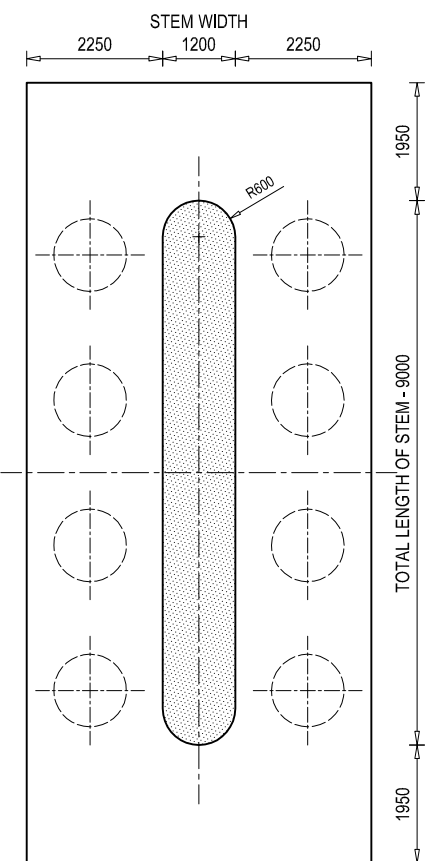
DETAIL AT R.C.C SEISMIC ARRESTER
SCALE - 1: 150



SECTIONAL VIEW AT C2 - C2
SCALE - 1: 125



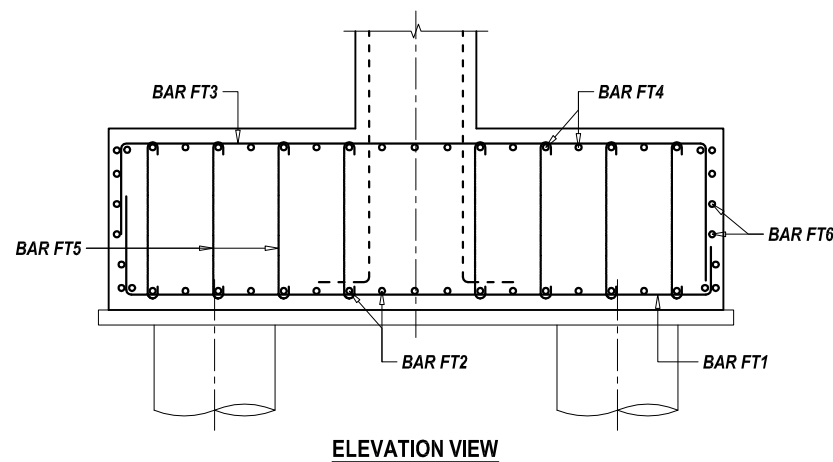
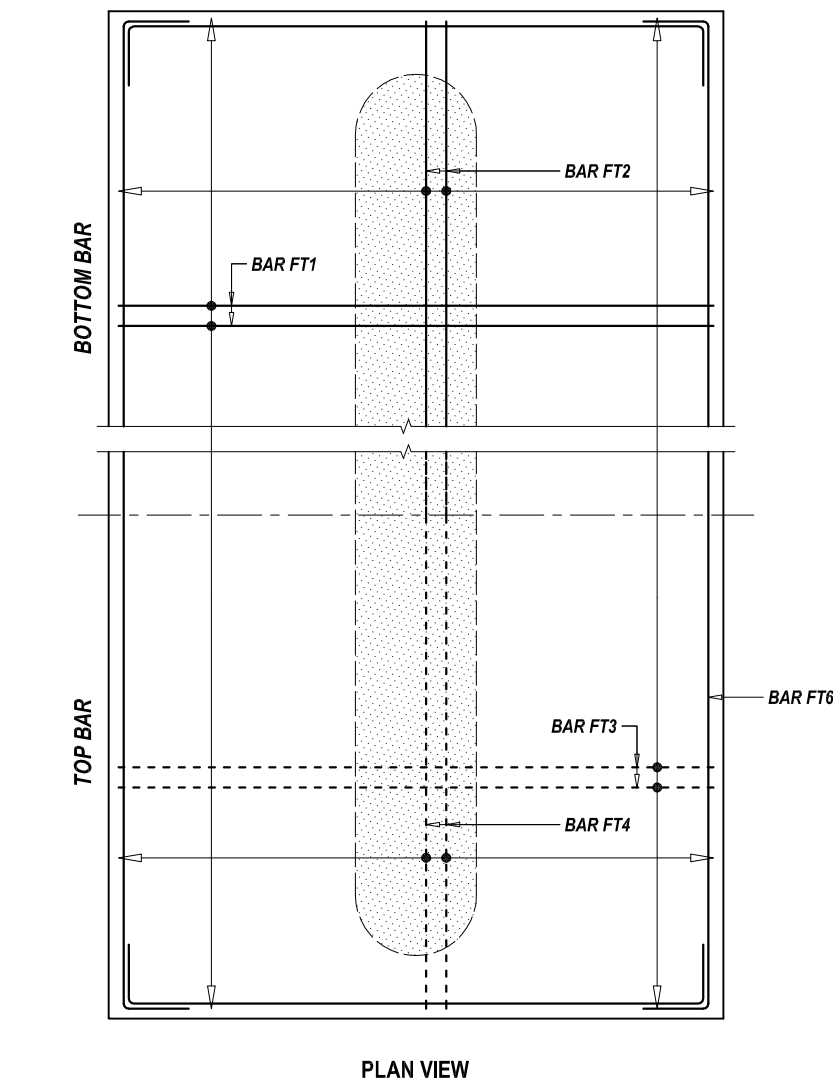
PLAN VIEW OF PIER (VIEW AT A)
SCALE - 1: 125



SECTIONAL VIEW AT B - B
SCALE - 1: 125

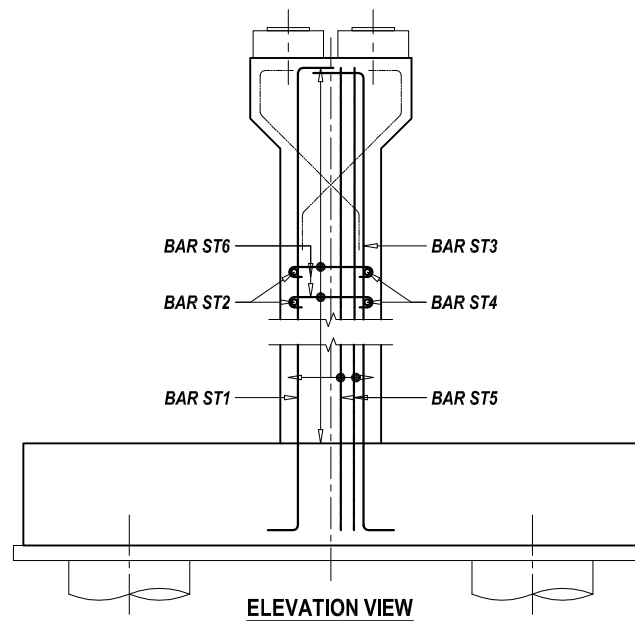
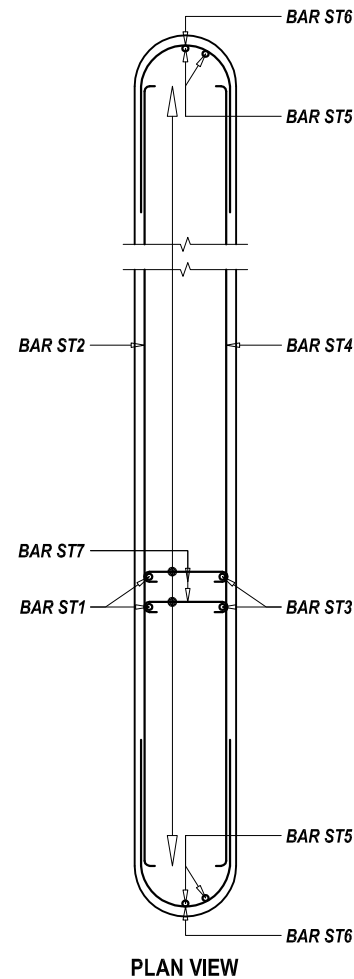
NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkabar-Pathlajay Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of ep4sa EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kritt Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CH/1/24 Signature Mr. S.M. Signature Mr. H.B. Signature	PIER DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-15	AS SHOWN Chainage: 256+188	03.06.2023 Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 13 Sheet No. 1/1



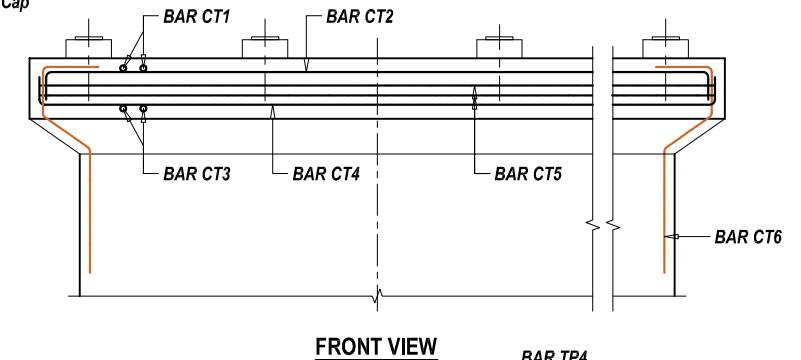
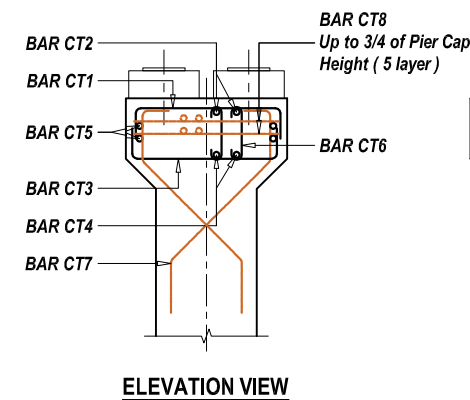
BAR DETAIL OF FOUNDATION

SCALE - 1 : 75



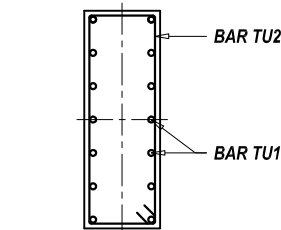
BAR DETAIL AT PIER STEM

SCALE - 1 : 75

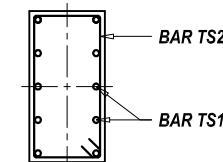


BAR DETAIL AT PIER CAP

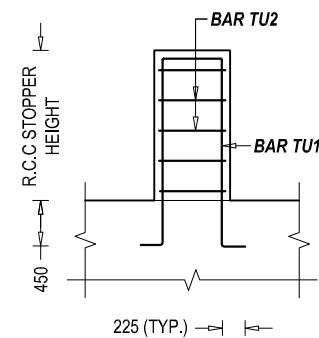
SCALE - 1 : 75



SECTIONAL PLAN VIEW



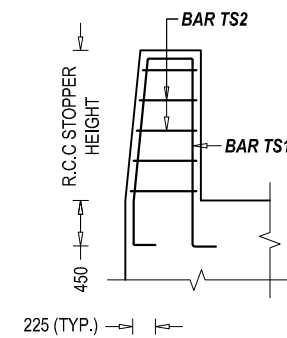
SECTIONAL PLAN VIEW



SECTIONAL ELEVATION VIEW

R.C.C STOPPER AT MID

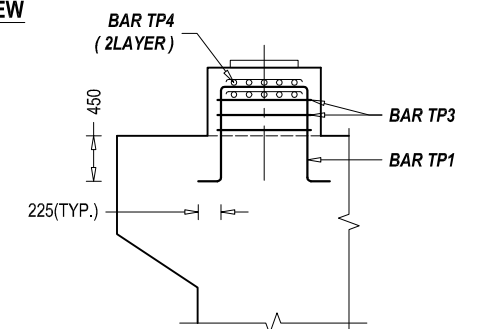
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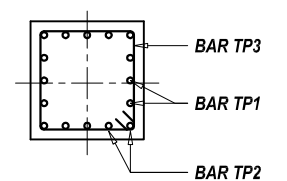
SECTIONAL ELEVATION VIEW

R.C.C STOPPER AT EDGE

SCALE - 1 : 50

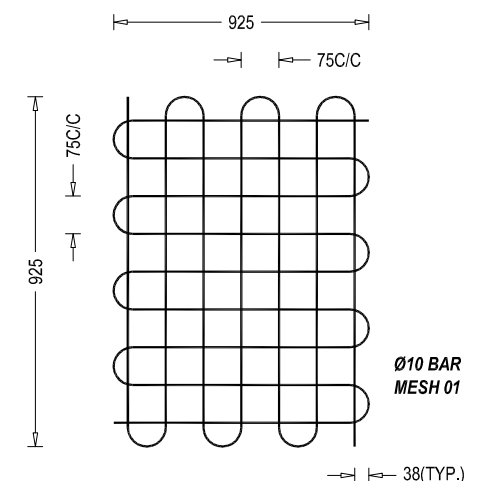


SECTIONAL SIDE VIEW



**SECTIONAL PLAN VIEW
BAR DETAIL AT PEDESTAL**

SCALE - 1 : 50

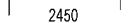
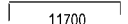
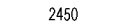
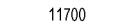
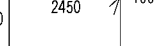
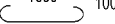
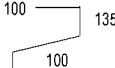
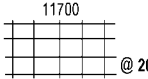


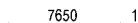
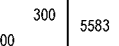
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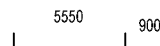
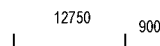
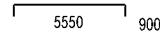
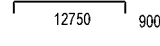
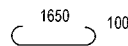
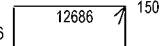
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--- BOTTOM BAR OR FAR FACE REINFORCEMENT

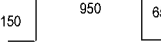
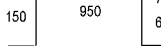
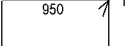
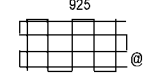
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READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

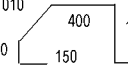
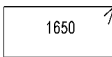
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP)	Joint Venture of		Nec.No. 6489 CH/1/14				Signature
		 EPTISA Servicios De Ingenieria Madrid, Spain		 STUP Consultants Private Limited Kolkata, India				
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	In Association With	Checked By	Mr. S.M.	Reference Drawings	Chainage:	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 14	
		Udaya Consultancy, Geocom International, Sundar Kirti Consultant and Rays Consultant Private Limited	Approved By	Mr. H.B.				Signature

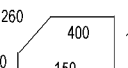
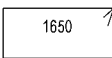
BAR BENDING SCHEDULE OF PIER CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CT1	750  750	20		3.950	52	2.469	507.16
2	CT2	750  750	20		13.200	18	2.469	586.67
3	CT3	750  750	20		3.950	52	2.469	507.16
4	CT4	750  750	20		13.200	18	2.469	586.67
5	CT5	11700  100	16	150	28.500	11	1.580	495.41
6	CT6	100  100	16	X: 280 Y: 460	1.550	234	1.580	573.16
7	CT7	100  1350	16	150	1.550	137	1.580	335.57
8	CT8	2450  @ 200	16		296.650	5 Layer	1.580	2343.90
TOTAL (KG) :								5935.68

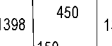
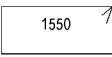
BAR BENDING SCHEDULE OF PIER STEM								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	ST1	300  900	25		6.783	50	3.858	1308.45
2	ST2	100  100	16	200	7.850	13	1.580	161.26
3	ST3	300  900	25		6.783	50	3.858	1308.45
4	ST4	100  100	16	200	7.850	13	1.580	161.26
5	ST5	900  300	25		6.783	12	3.858	314.03
5	ST6	720  1885	16	200	3.325	26	1.580	136.61
6	ST7	100  100	12	Ver. 150 Hor. 400	1.250	391	0.889	434.44
TOTAL (KG) :								3824.51

BAR BENDING SCHEDULE OF PILE CAP								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	FT1	900  900	32		7.350	75	6.321	3484.44
2	FT2	900  900	32		14.550	20	6.321	1839.41
3	FT3	900  900	32		7.350	75	6.321	3484.44
4	FT4	900  900	32		14.550	20	6.321	1839.41
5	FT5	100  100	12	Long 225 Trans 275	1.85	1144	0.889	1881.24
6	FT6	5486  150	16	200	36.644	8	1.580	463.25
TOTAL (KG) :								12992.20

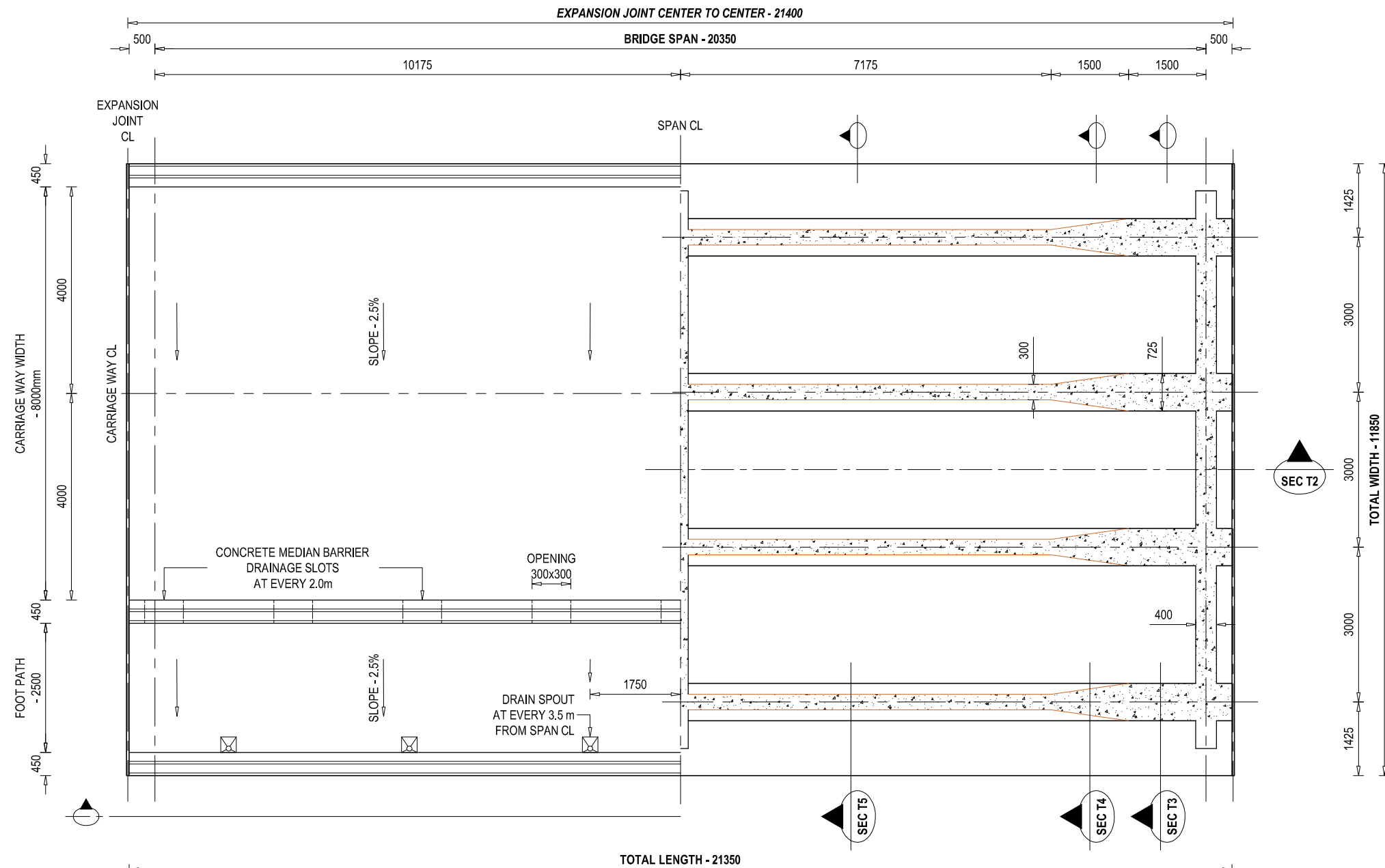
BAR BENDING SCHEDULE OF PEDESTAL								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TP1	150  Avg. 650	16	150	2.850	8	1.580	36.03
2	TP2	150  Avg. 650	16	150	2.850	8	1.580	36.03
3	TP3	950  100	16	150	4.000	3	1.580	18.96
4	TP4	925  @ 75	10		26.000	2	0.617	32.10
TOTAL (KG) :								123.12

BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - LEFT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-L	1010  1270	16	150	3.280	13	1.580	67.38
2	TS2-L	400  100	12	150	4.300	7	0.889	26.76
TOTAL (KG) :								94.14

BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - RIGHT								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TS1-R	1260  1525	16	150	3.785	13	1.580	77.76
2	TS2-R	400  100	12	150	4.300	9	0.889	34.40
TOTAL (KG) :								112.16

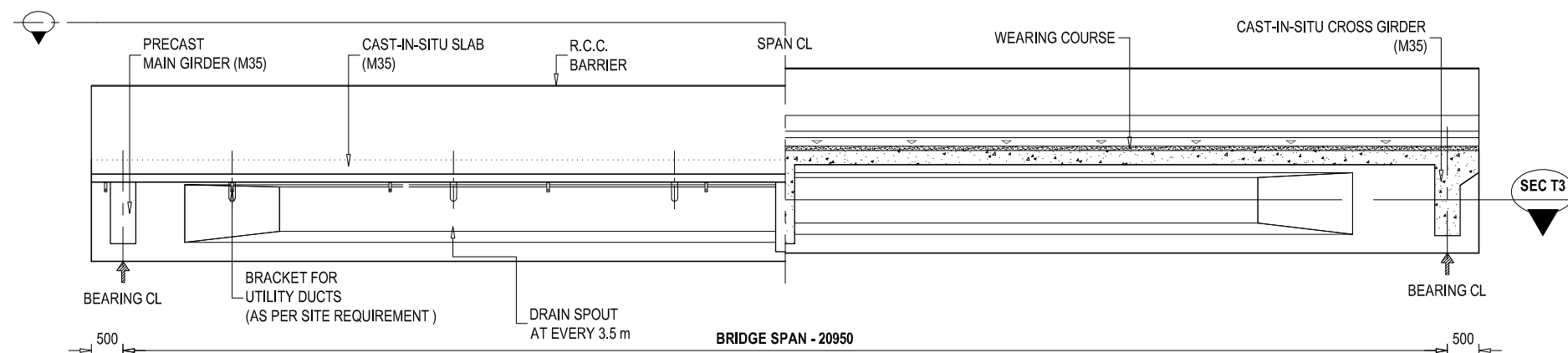
BAR BENDING SCHEDULE OF RCC SEISMIC ARRESTER - MID								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	TU1	1398  150	16	150	3.546	13	1.580	72.85
2	TU2	450  100	12	150	4.200	8	0.889	29.87
TOTAL (KG) :								102.71

EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Drawing Name		Scale:		Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalaya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr. R.D. Nec.No. 6489 CML/VA 	PIER BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI		AS SHOWN		03.06.2023	
		EPTISA Servicios De Ingeniera Madrid, Spain		Checked By	Mr. S.M. 	Reference Drawings		Chainage:		Drawing No.- KDP/DPR/STR/BR/BASA/IDD- 15	
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	Mr. H.B. 	-		256+188		Sheet No. 1/1	



HALF SECTIONAL PLAN VIEW OF SUPERSTRUCTURE AT SEC T1

SCALE - 1 : 100 @ A3 PAPER

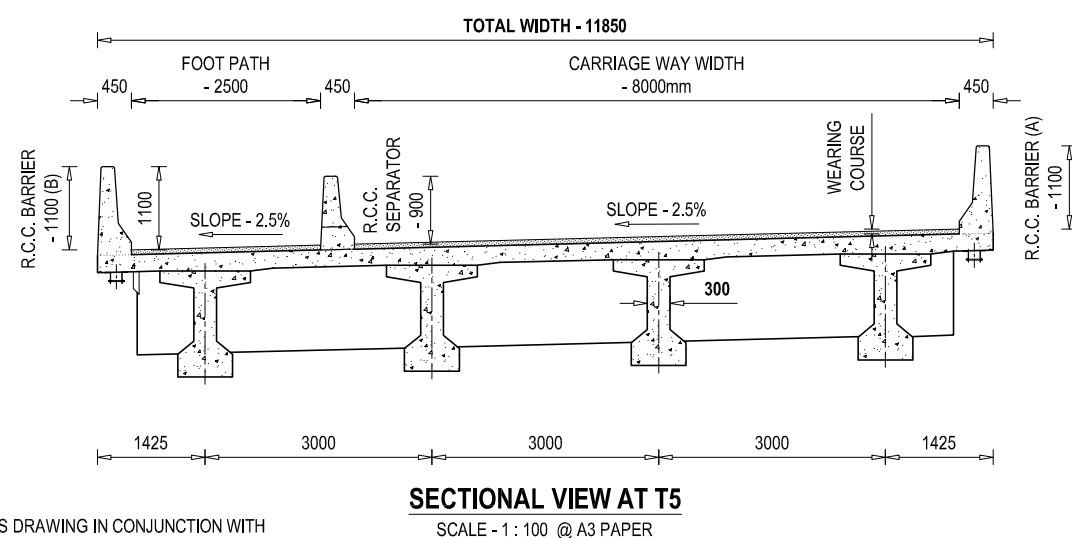
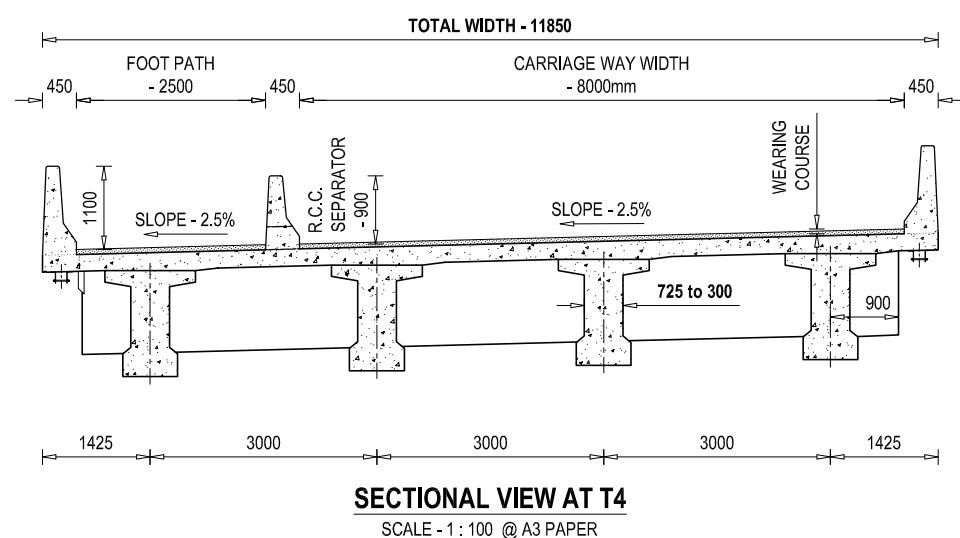
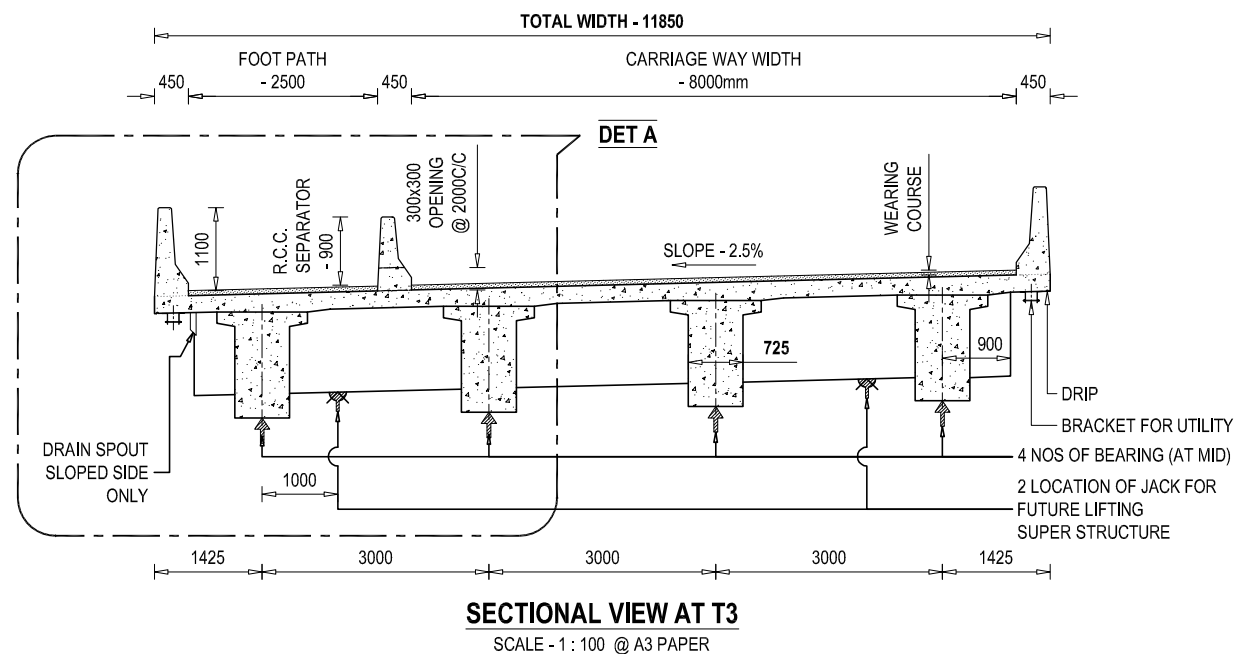


HALF ELEVATION SECTIONAL VIEW OF SUPERSTRUCTURE AT SEC T2

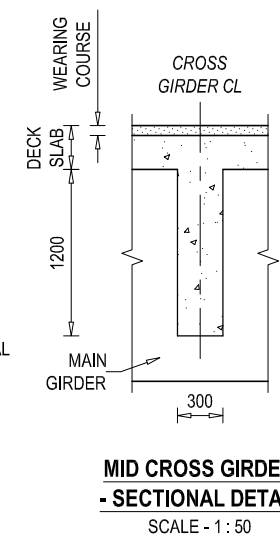
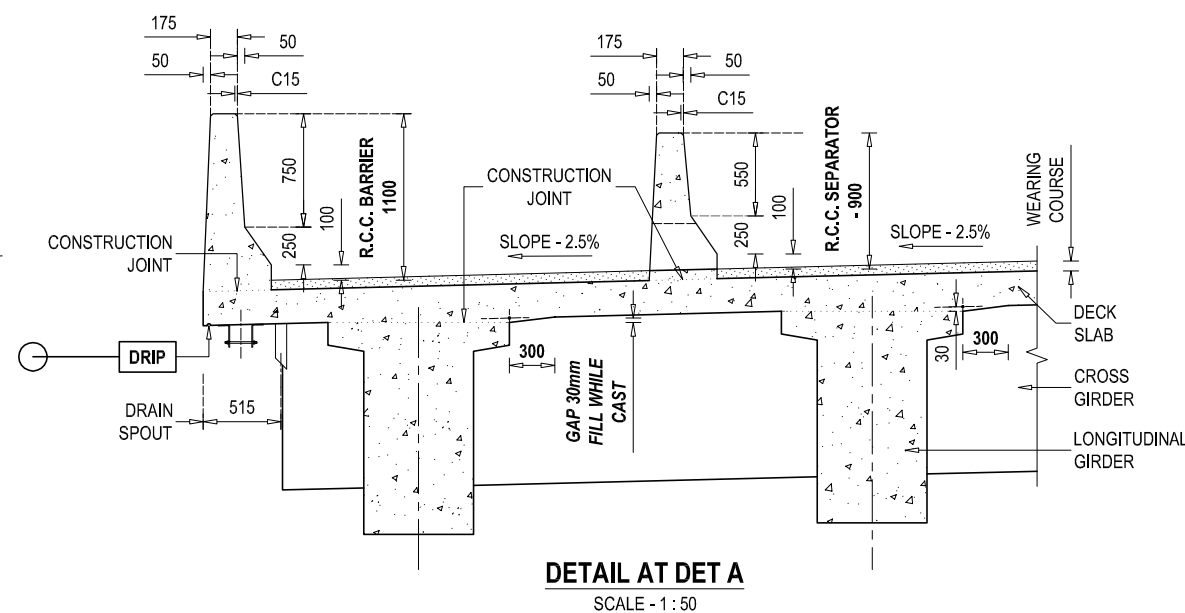
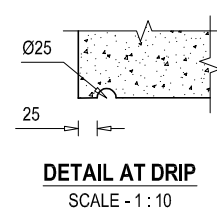
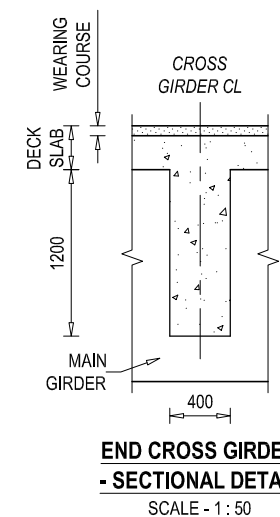
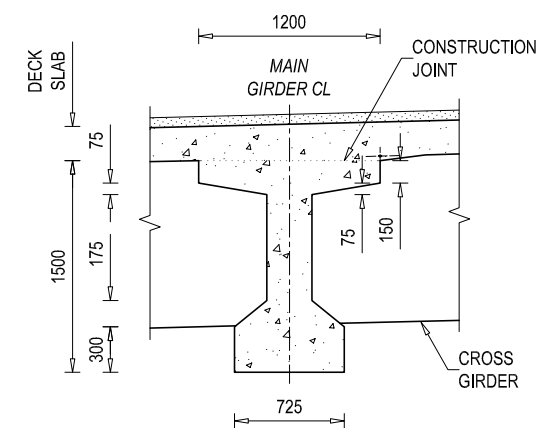
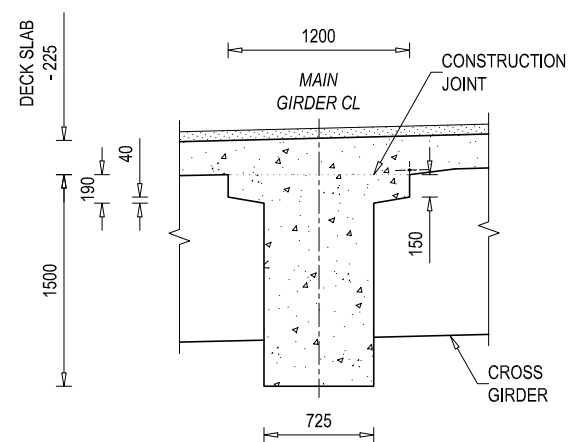
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NOTE
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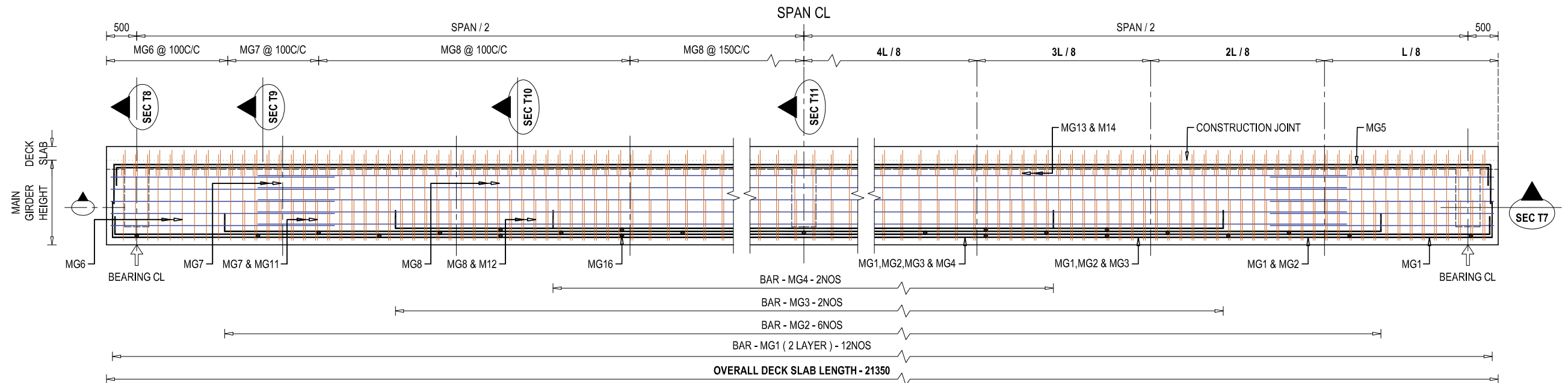
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Signature	Signature	SUPER STRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASA/DD-20	AS SHOWN Chainage: 256+188	20.04.2023
			Checked By	Mr. S.M.			Drawing No.- KDP/DPR/STR/BR/BASA/DD-16
			Approved By	Mr. H.B.			Sheet No. 1/2



NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

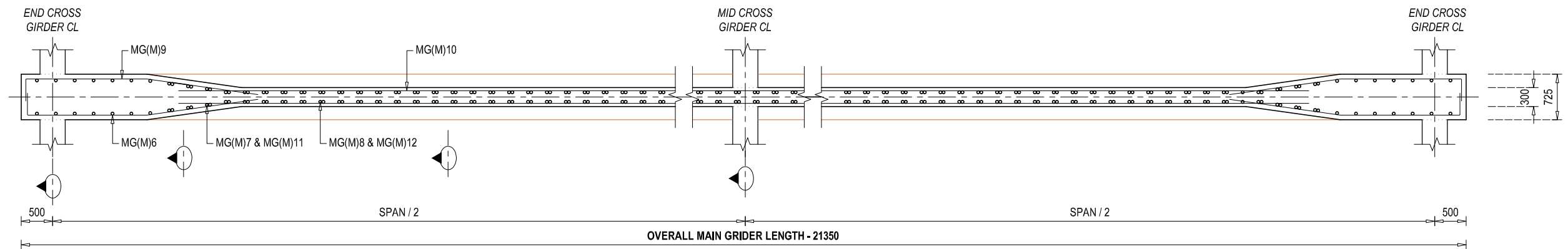


EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS		Designed By Mr. R.D. Nec.No. 6489 CIVIL/VI Signature: 	Drawing Name SUPER STRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI	Scale: AS SHOWN	Date: 20.04.2023				
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalaya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of						Checked By Mr. S.M. Signature: 	Reference Drawings KDP/DPR/STR/BR/BASAI/DD-20	Chainage: 256+188	Drawing No.- KDP/DPR/STR/BR/BASAI/DD-16
		 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India								



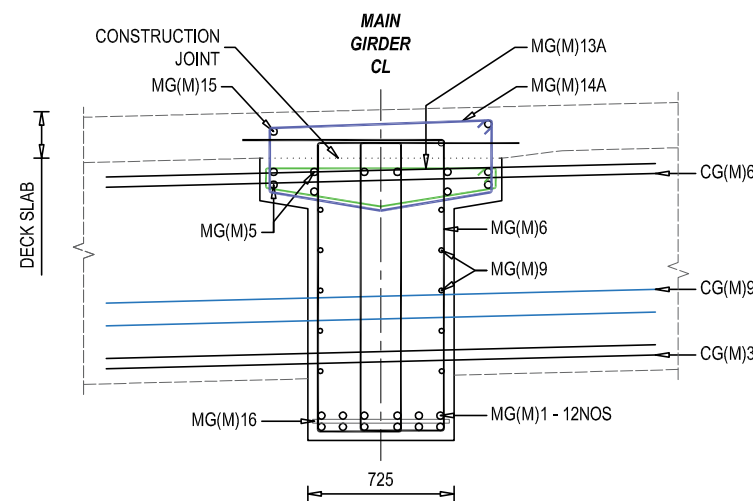
REINFORCEMENT DETAILS OF MAIN GIRDER - SECTIONAL ELEVATION VIEW

SCALE - 1 : 75



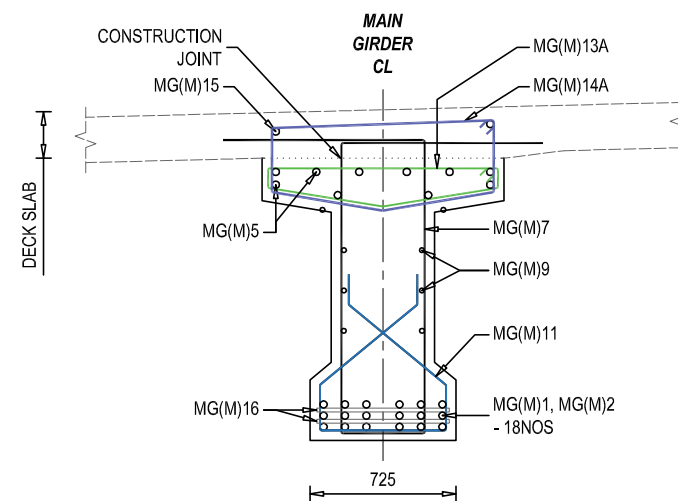
REINFORCEMENT DETAILS OF MAIN GIRDER (MID) - SECTIONAL PLAN VIEW AT T7(M)

SCALE - 1 : 75



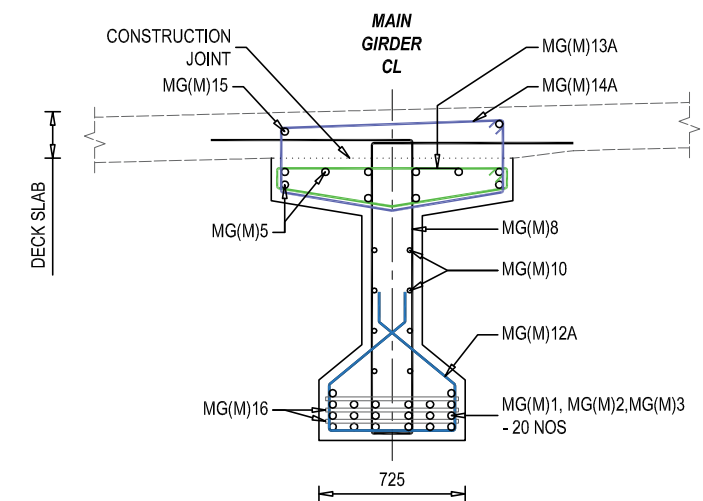
REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T8

SCALE - 1 : 50



REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T9

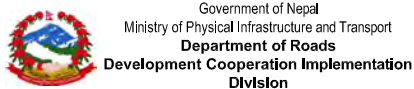
SCALE - 1 : 50



REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T10

SCALE - 1 : 50

NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASA/DD-4



PROJECT NAME
Strategic Road Connectivity & Trade Improvement Project (SRCTIP)
Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges

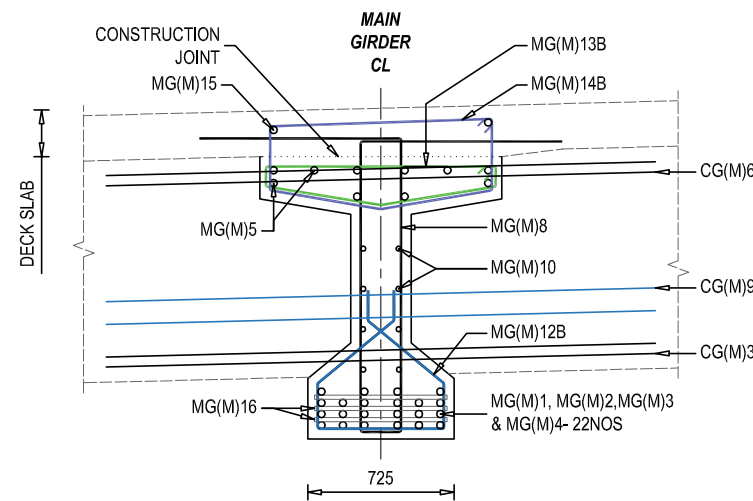
DESIGN CONSULTANTS
Joint Venture of
EPTISA Servicios De Ingeniera Madrid, Spain
STUP Consultants Private Limited Kolkata, India
In Association With
Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited

Designed By Mr. R.D.
Nec.No. 6489 CH/6/7/1
Checked By Mr. S.M.
Approved By Mr. H.B.

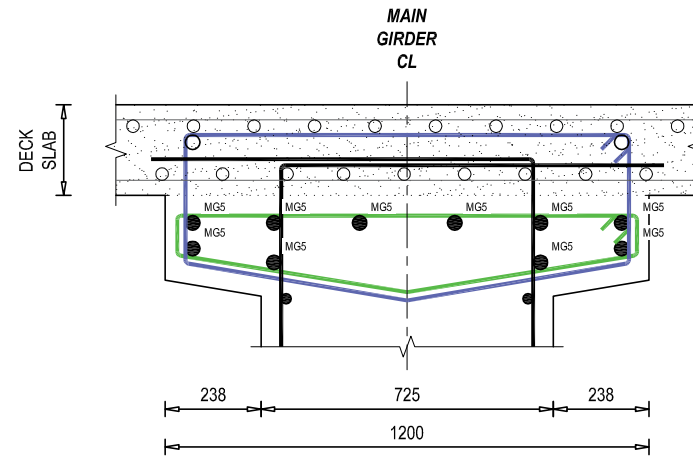
Drawing Name
MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI
Reference Drawings
KDP/DPR/STR/BR/BASA/DD-20

Scale:
AS SHOWN
Chainage:
256+188

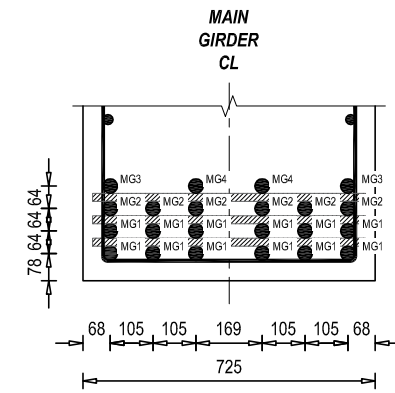
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Drawing No.-
KDP/DPR/STR/BR/BASA/DD-18
Sheet No.1/2



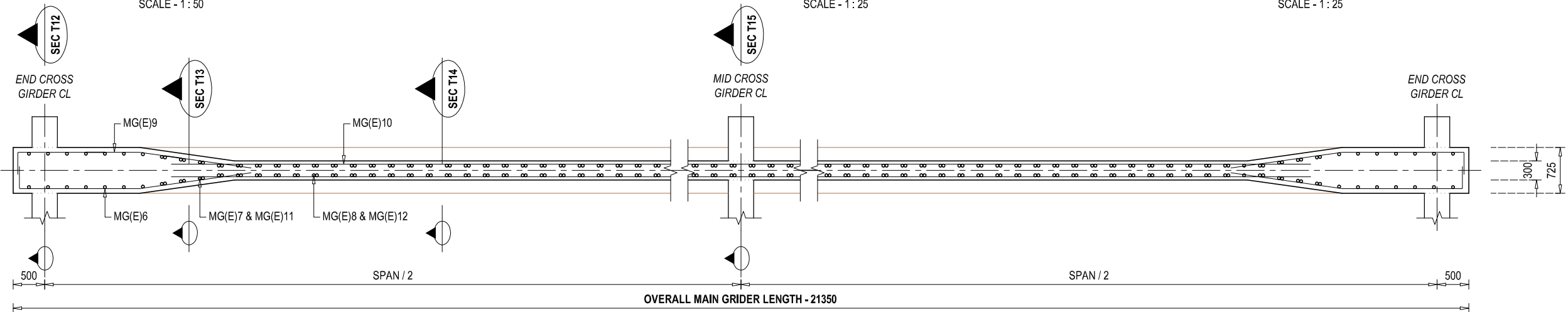
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T11**
SCALE - 1 : 50



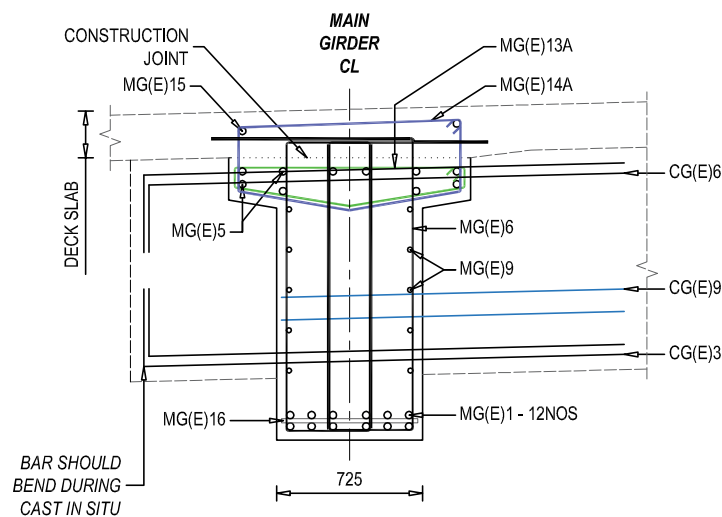
**TOP BAR WEB REINFORCEMENT DETAILS
OF MAIN GIRDER**
SCALE - 1 : 25



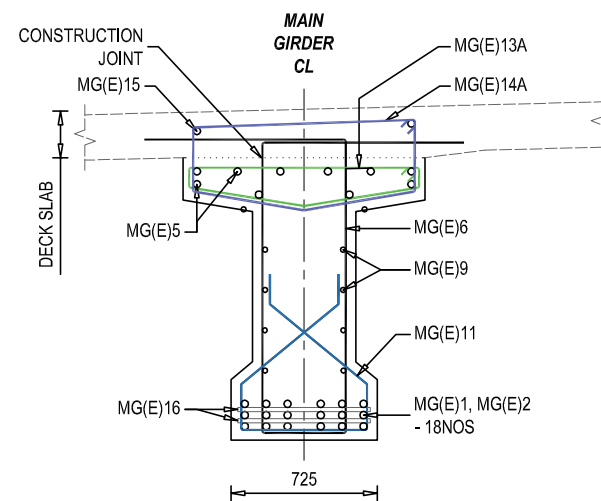
**BOTTOM BAR WEB REINFORCEMENT DETAILS
OF MAIN GIRDER**
SCALE - 1 : 25



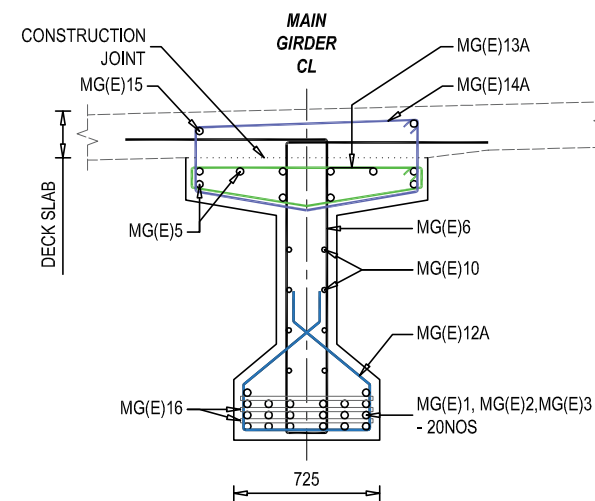
REINFORCEMENT DETAILS OF MAIN GIRDER (END) - SECTIONAL PLAN VIEW AT T7(E)
SCALE - 1 : 75



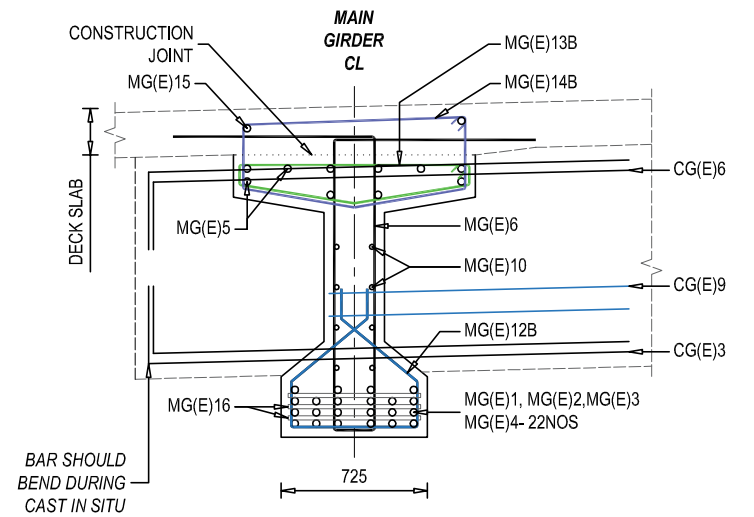
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T12**
SCALE - 1 : 50



**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T13**
SCALE - 1 : 50



**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T14**
SCALE - 1 : 50



**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T15**
SCALE - 1 : 50

NOTE
READ THIS DRAWING IN CONJUNCTION WITH SCALE - 1 : 50
DRG NO. KDP/DPR/STR/BR/BASA/DD-4



Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Development Cooperation Implementation
Division

PROJECT NAME
Strategic Road Connectivity & Trade Improvement Project (SRCTIP)
Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges

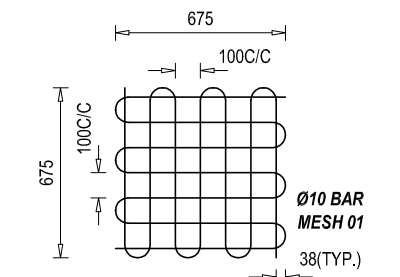
DESIGN CONSULTANTS
Joint Venture of
EPTISA Servicios De Ingeniera Madrid, Spain
STUP Consultants Private Limited Kolkata, India
In Association With
Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited

Designed By Mr. R.D.
Nec.No. 6489 CH/6/70
Checked By Mr. S.M.
Approved By Mr. H.B.

Drawing Name
MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI
Reference Drawings
KDP/DPR/STR/BR/BASA/DD-20

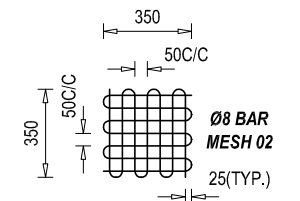
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AS SHOWN
Chainage:
256+188

Date:
20.04.2023
Drawing No.-
KDP/DPR/STR/BR/BASA/DD-18
Sheet No. 2/2



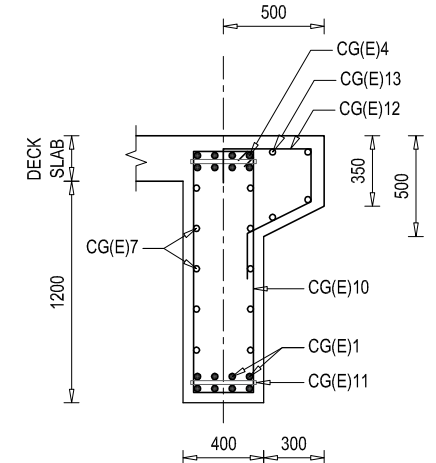
REINFORCEMENT DETAILS OF BEARING MESH

SCALE - 1 : 50

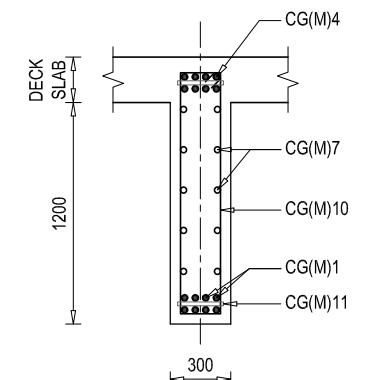


REINFORCEMENT DETAILS OF LIFTING MESH

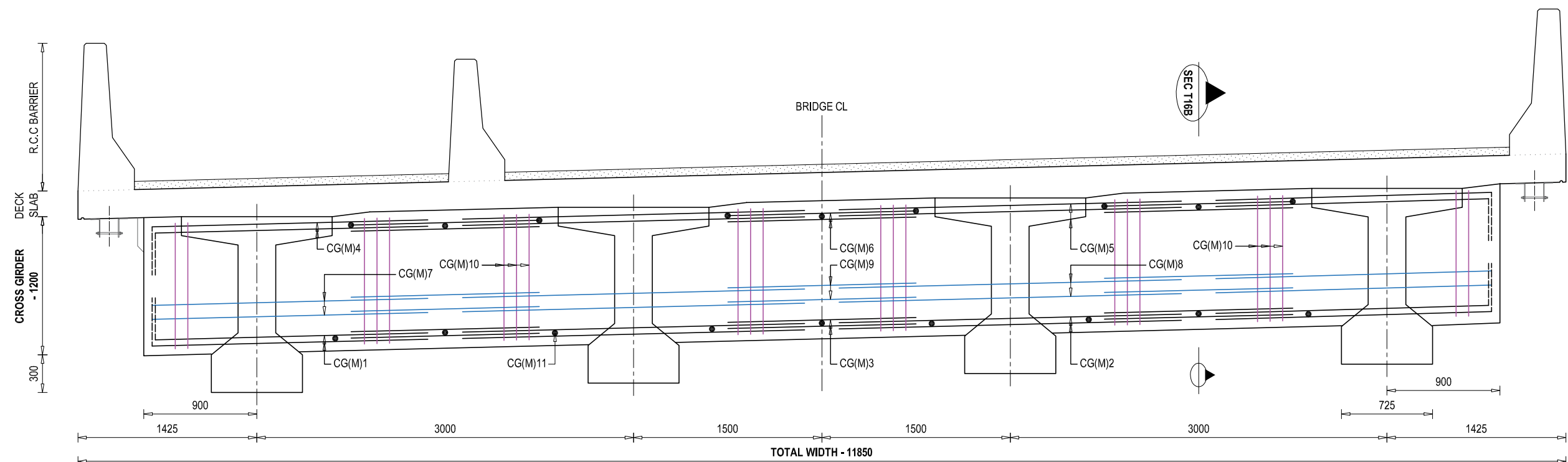
SCALE - 1 : 50



SECTIONAL REINFORCEMENT
DETAILS OF END CROSS
GIRDER - SEC T16A
SCALE - 1 : 50



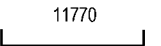
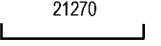
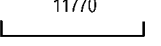
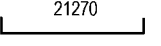
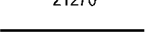
**SECTIONAL REINFORCEMENT
DETAILS OF MID CROSS
GIRDER - SEC T16B**
SCALE - 1 : 50

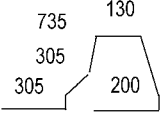
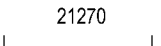


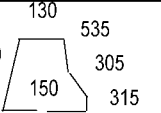
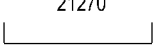
REINFORCEMENT DETAILS OF MID CROSS GIRDER
SCALE - 1 : 50

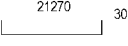
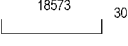
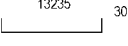
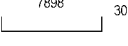
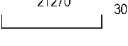
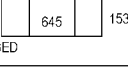
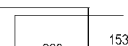
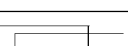
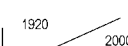
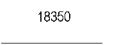
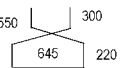
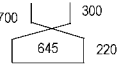
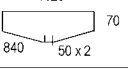
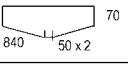
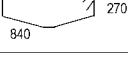
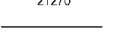
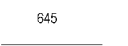
NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

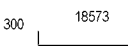
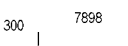
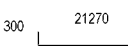
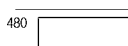
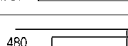
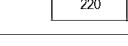
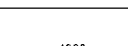
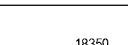
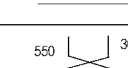
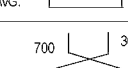
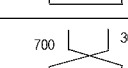
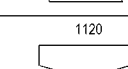
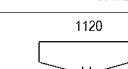
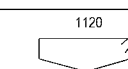
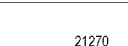
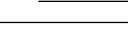
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS			Designed By	Mr. R.D.	Drawing Name CROSS GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalaya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of						AS SHOWN	20.04.2023
		 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkata, India		Checked By	Mr. S.M.			
			In Association With Udaya Consultancy, Geocom International, Sundar K/Iti Consultant and Rays Consultant Private Limited		Approved By	Mr. H.B.		Reference Drawings KDP/DPR/STR/BR/BASAI/DD-20	Chainage: 256+188

BAR BENDING SCHEDULE OF DECK SLAB (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	DS01	150  150	16	150	12.070	143	1.580	2727.52
2	DS02	150  150	10	150	21.570	76	0.617	1011.93
3	DS03	150  150	16	150	12.070	143	1.580	2727.52
5	DS04	150  150	10	150	21.570	76	0.617	1011.93
6	DS05	 21270	16		21.270	8	1.580	268.89
TOTAL (KG) :								7747.79

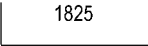
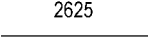
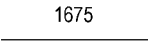
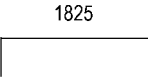
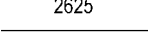
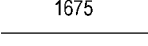
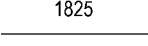
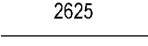
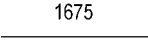
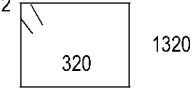
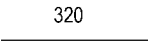
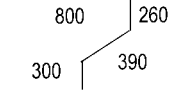
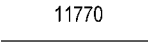
BAR BENDING SCHEDULE OF R.C.C BARRIER (A) (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RC-A1	 200	16	150	3.170	143	1.580	716.34
2	RC-A2	150  150	10	150	21.570	20	0.617	266.30
TOTAL (KG) :								982.64

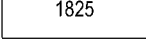
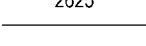
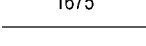
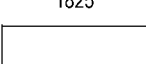
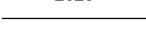
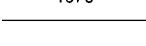
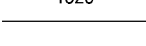
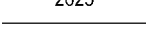
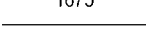
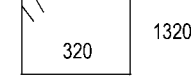
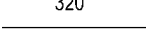
BAR BENDING SCHEDULE OF R.C.C SEPARATOR (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RS1	 1110	16	150	2.695	143	1.580	609.00
2	RS2	150  150	10	150	21.570	17	0.617	226.35
TOTAL (KG) :								835.36

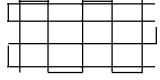
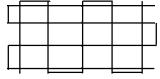
BAR BENDING SCHEDULE OF END MAIN GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MG(E)1	300  300	32		21.870	12	6.321	1658.88
2	MG(E)2	300  300	32		19.173	6	6.321	727.15
3	MG(E)3	300  300	32		13.835	2	6.321	174.90
4	MG(E)4	300  300	32		8.498	2	6.321	107.43
5	MG(E)5	300  300	12		21.870	10	0.889	194.40
6	MG(E)6	480  4 LEGGED	12	100	9.660	42	0.889	360.64
7	MG(E)7	480  AVG.	12	100	5.325	32	0.889	151.47
8	MG(E)8A	480  1530	12	100	4.680	92	0.889	382.72
9	MG(E)8B	480  1530	12	150	4.680	37	0.889	153.92
10	MG(E)9	370  2000	12	200	4.290	32	0.889	122.03
11	MG(E)10	 18350	12	200	18.350	32	0.889	521.96
12	MG(E)11	550  AVG.	12	100	2.785	32	0.889	79.22
13	MG(E)12A	700  220	12	150	3.085	92	0.889	252.28
14	MG(E)12B	700  220	12	150	3.085	37	0.889	101.46
15	MG(E)13A	 70	12	100	3.040	162	0.889	437.76
16	MG(E)13B	 70	12	150	3.040	37	0.889	99.98
17	MG(E)14A	 270	12	100	3.440	162	0.889	495.36
18	MG14B	 270	12	150	3.440	37	0.889	113.14
19	MG(E)15	 21270	12		21.270	2	0.889	37.81
19	MG(E)16	 645	32	1500	0.645	45	6.321	183.47
TOTAL :							6355.98	

BAR BENDING SCHEDULE OF MID MAIN GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MG(M)1	300  300	32		21.870	12	6.321	1658.88
2	MG(M)2	300  300	32		19.173	6	6.321	727.15
3	MG(M)3	300  300	32		13.835	2	6.321	174.90
4	MG(M)4	300  300	32		8.498	2	6.321	107.43
5	MG(M)5	300  300	12		21.870	10	0.889	194.40
6	MG(M)6	480  4 LEGGED	12	100	9.660	42	0.889	360.64
7	MG(M)7	480  AVG.	12	100	5.325	32	0.889	151.47
8	MG(M)8A	480  1530	12	100	4.680	92	0.889	382.72
9	MG(M)8B	480  1530	12	150	4.680	37	0.889	153.92
10	MG(M)9	370  2000	12	200	4.290	32	0.889	122.03
11	MG(M)10	 18350	12	200	18.350	32	0.889	521.96
12	MG(M)11	550  AVG.	12	100	2.785	32	0.889	79.22
13	MG(M)12A	700  220	12	150	3.085	92	0.889	252.28
14	MG(M)12B	700  220	12	150	3.085	37	0.889	101.46
15	MG(M)13A	 70	12	100	3.040	162	0.889	437.76
16	MG(M)13B	 70	12	150	3.040	37	0.889	99.98
17	MG(M)14A	 270	12	100	3.440	162	0.889	495.36
18	MG14B	 270	12	150	3.440	37	0.889	113.14
19	MG(M)15	 21270	12		21.270	2	0.889	37.81
19	MG(M)16	 645	32	1500	0.645	45	6.321	183.47
TOTAL :							6355.98	

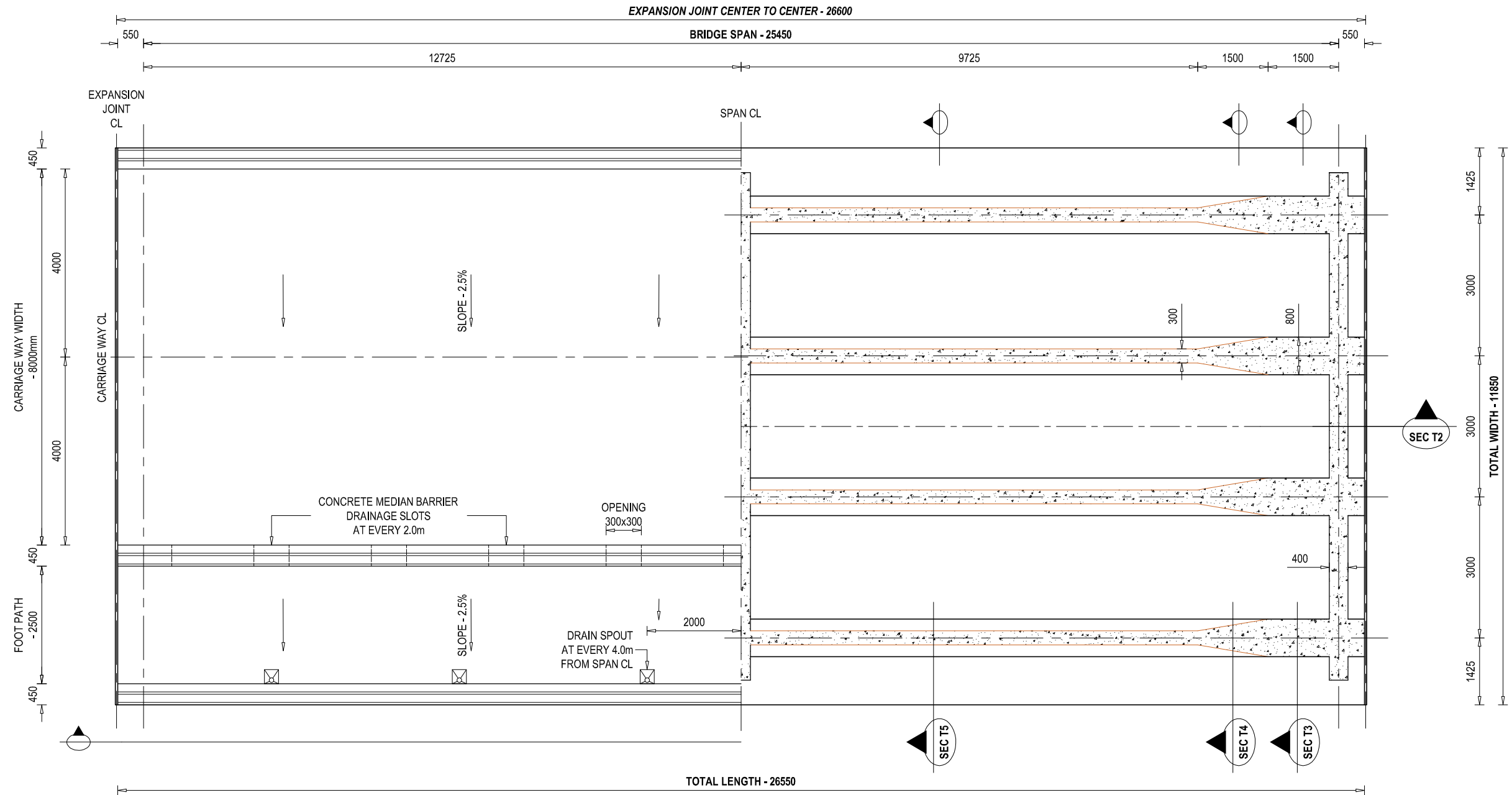
EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Designed By	Mr. R.D.		Drawing Name	Scale:	AS SHOWN	Date:	20.04.2023
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		EPTISA EPTISA Servicios De Ingenieria Madrid, Spain	STUP Consultants Private Limited Kolkata, India								
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited				Approved By	Mr. H.B.		Reference Drawings	Chainage:	256+188	Sheet No. 1/2	

BAR BENDING SCHEDULE OF END CROSS GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CG(E)1	300 	20		2.125	8	2.469	41.98
2	CG(E)2		20		2.625	8	2.469	51.85
3	CG(E)3		20		1.675	8	2.469	33.09
4	CG(E)4	300 	20		2.125	8	2.469	41.98
5	CG(E)5		20		2.625	8	2.469	51.85
6	CG(E)6		20		1.675	8	2.469	33.09
7	CG(E)7		12	150	1.825	8	0.889	12.98
8	CG(E)8		12	150	2.625	8	0.889	18.67
9	CG(E)9		12	150	1.675	8	0.889	11.91
10	CG(E)10	50 x 2 	12	200	1.740	39	0.889	60.32
11	CG(E)11		20	1000	0.320	18	2.469	14.22
12	CG(E)12		16	150	1.750	79	1.580	218.47
13	CG(E)13		12		11.770	6	0.889	62.77
TOTAL :								653.17

BAR BENDING SCHEDULE OF MID CROSS GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CG(M)1	300 	20		1.920	8	2.469	37.93
2	CG(M)2		20		2.945	8	2.469	58.17
3	CG(M)3		20		1.995	8	2.469	39.41
4	CG(M)4	300 	20		1.920	8	2.469	37.93
5	CG(M)5		20		2.625	8	2.469	51.85
6	CG(M)6		20		1.675	8	2.469	33.09
7	CG(M)7		12	150	1.620	8	0.889	11.52
8	CG(M)8		12	150	2.625	8	0.889	18.67
9	CG(M)9		12	150	1.675	8	0.889	11.91
10	CG(M)10	50 x 2 	12	200	1.740	39	0.889	60.32
11	CG(M)11		20	1000	0.320	18	2.469	14.22
TOTAL :								375.01

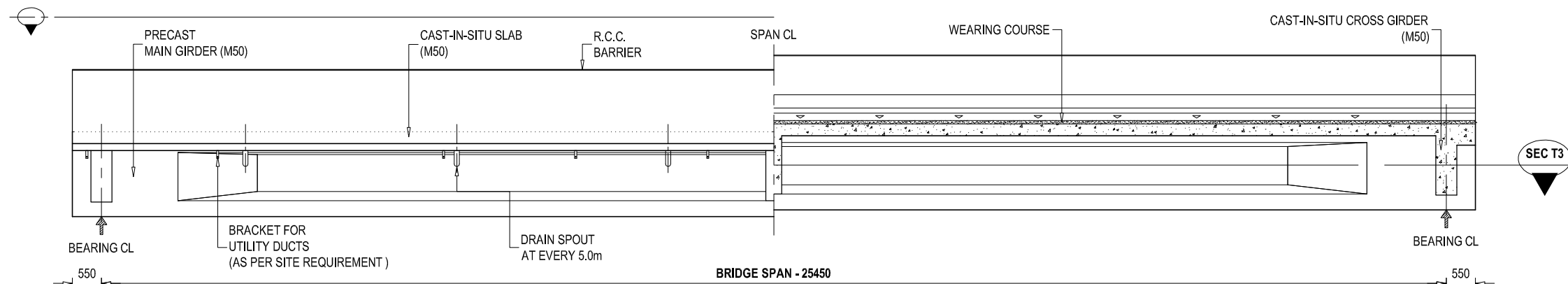
BAR BENDING SCHEDULE OF MESH (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MESH 01	675 	10		9.450	8	0.617	46.67
2	MESH 02	350 	8		4.900	4	0.395	7.74
TOTAL :								54.41

EMPLOYER		PROJECT NAME		DESIGN CONSULTANTS		Drawing Name		Scale:		Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr. R.D.	 Signature	SUPER STRUCTURE BAR BENDING DETAILS OF BRIDGE OVER RIVER BASAI	AS SHOWN	20.04.2023		
		 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkata, India	Checked By	Mr. S.M.				 Signature	Reference Drawings	Chainage: 256+188
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	Mr. H.B.	 Signature	Sheet No. 2/2				



HALF SECTIONAL PLAN VIEW OF SUPERSTRUCTURE AT SEC T1

SCALE - 1 : 100 @ A3 PAPER

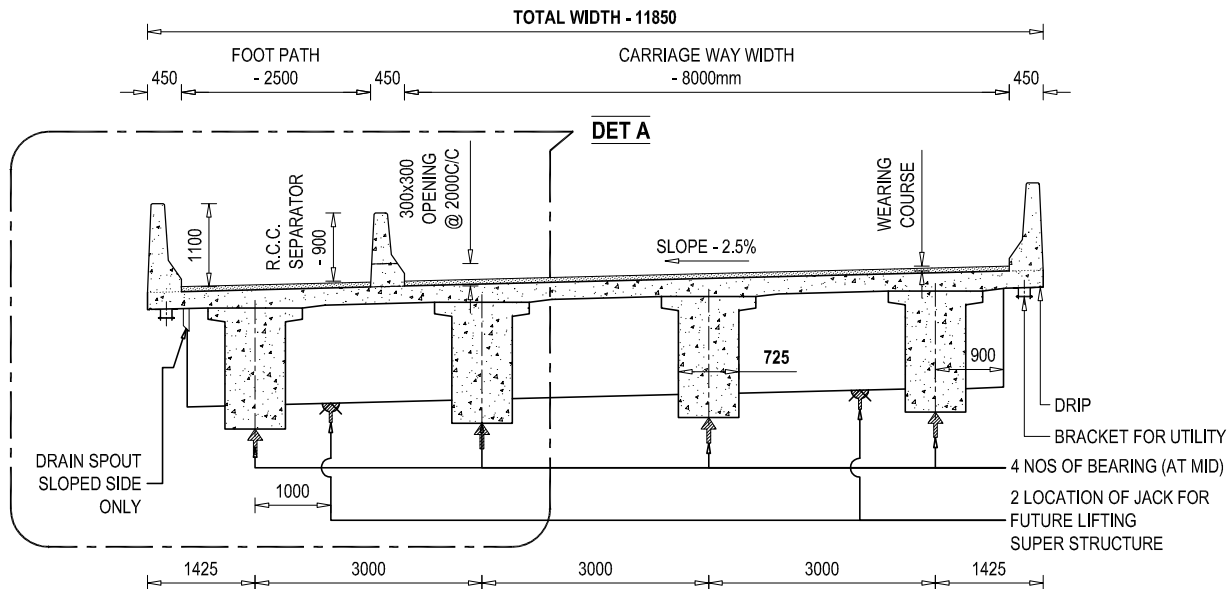


HALF ELEVATION SECTIONAL VIEW OF SUPERSTRUCTURE AT SEC T2

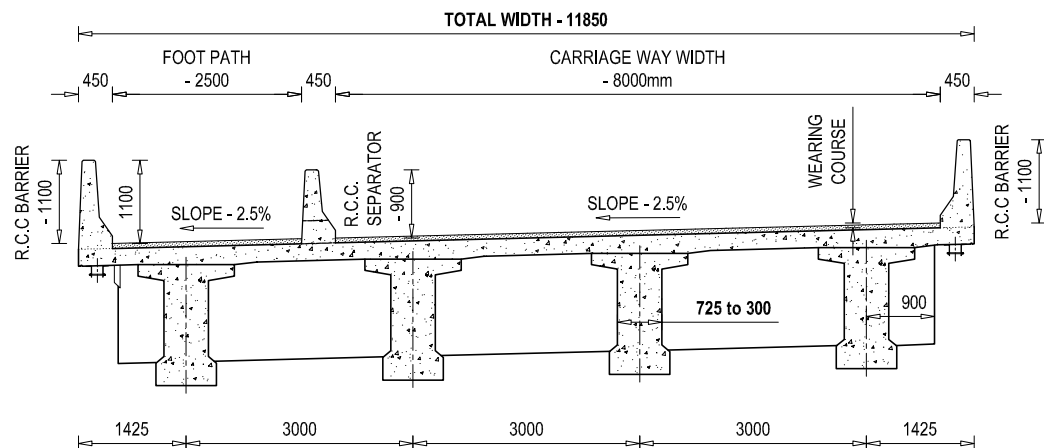
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NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

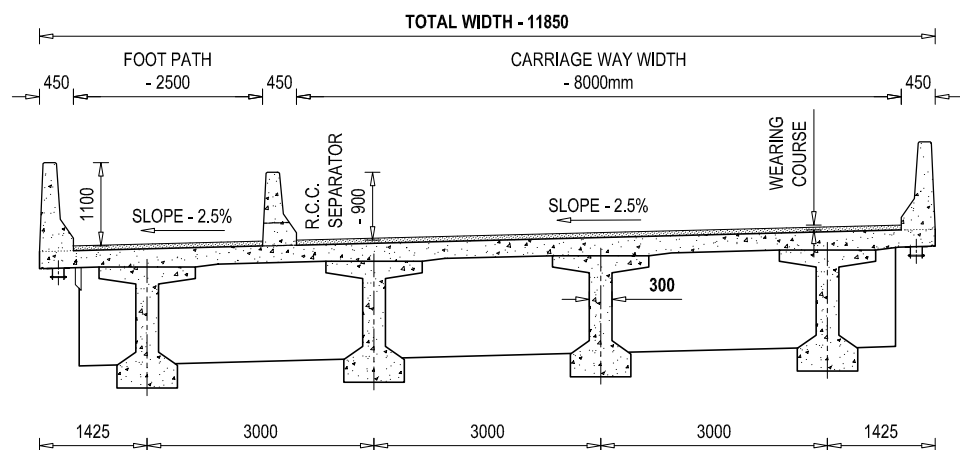
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CIVIL/70	SUPER STRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI	SCALE: AS SHOWN	19.04.2023
			Checked By Mr. S.M.	Reference Drawings KDP/DPR/STR/BR/BASAI/DD-25	Chainage: 256+188	Drawing No. KDP/DPR/STR/BR/BASAI/DD-21
			Approved By Mr. H.B.			Sheet No. 1 / 2



SECTIONAL VIEW AT T3
SCALE - 1 : 100 @ A3 PAPER

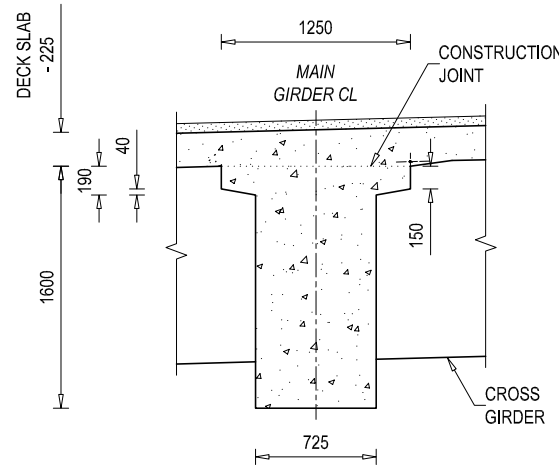


SECTIONAL VIEW AT T4
SCALE - 1 : 100 @ A3 PAPER

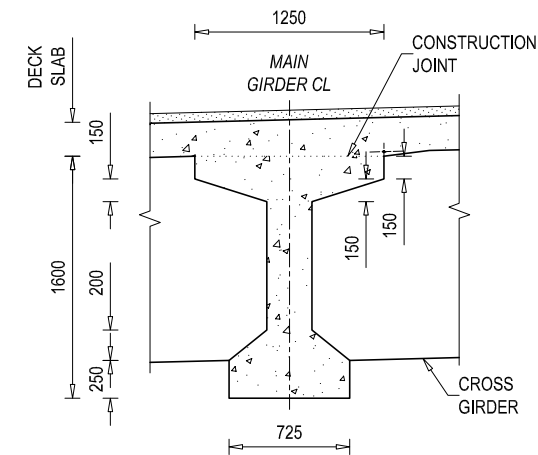


SECTIONAL VIEW AT T5
SCALE - 1 : 100 @ A3 PAPER

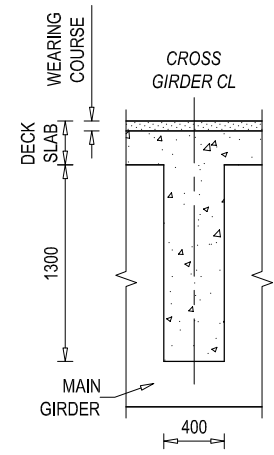
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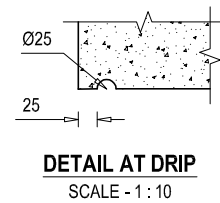
LONGITUDINAL GIRDER - SECTIONAL DETAIL AT END
SCALE - 1 : 50 @ A3 PAPER



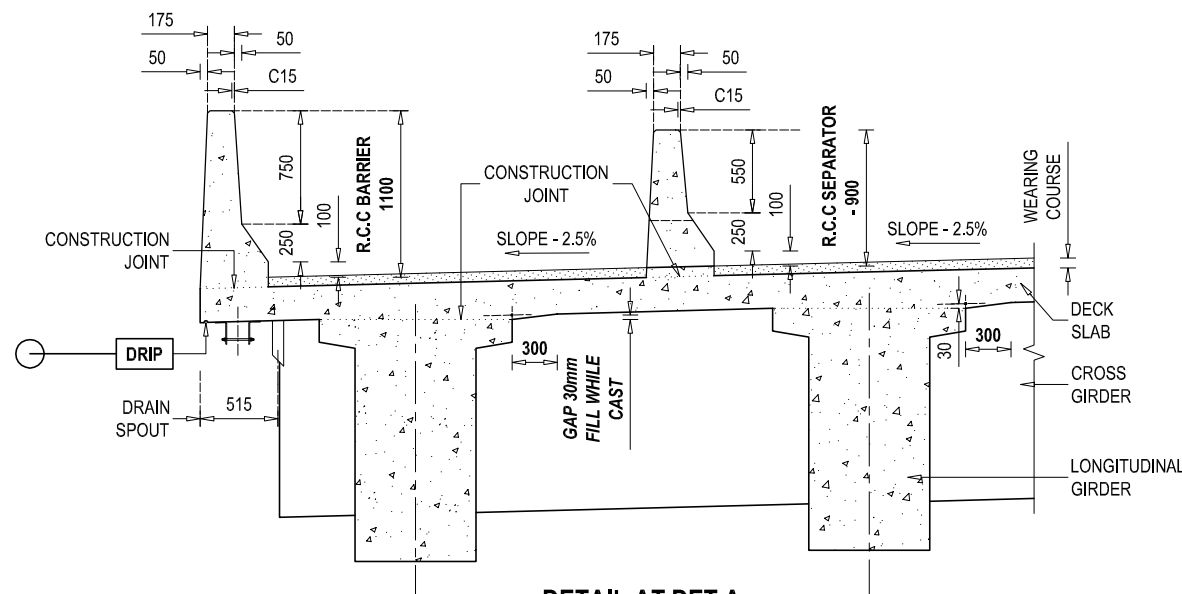
LONGITUDINAL GIRDER - SECTIONAL DETAIL AT MID
SCALE - 1 : 50 @ A3 PAPER



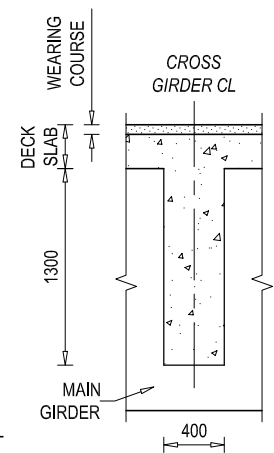
END CROSS GIRDER - SECTIONAL DETAIL
SCALE - 1 : 50



DETAIL AT DRIP
SCALE - 1 : 10



DETAIL AT DET A
SCALE - 1 : 50

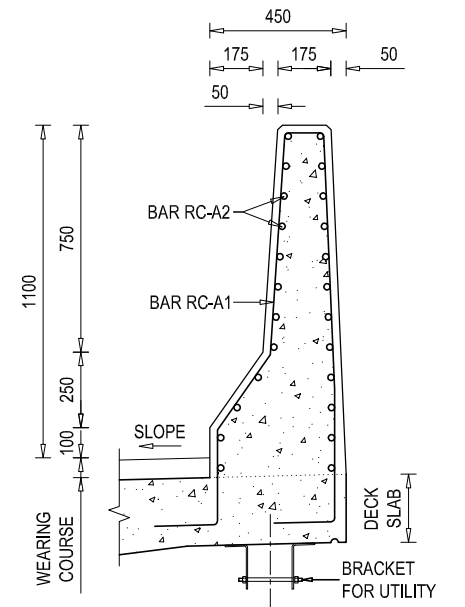


MID CROSS GIRDER - SECTIONAL DETAIL
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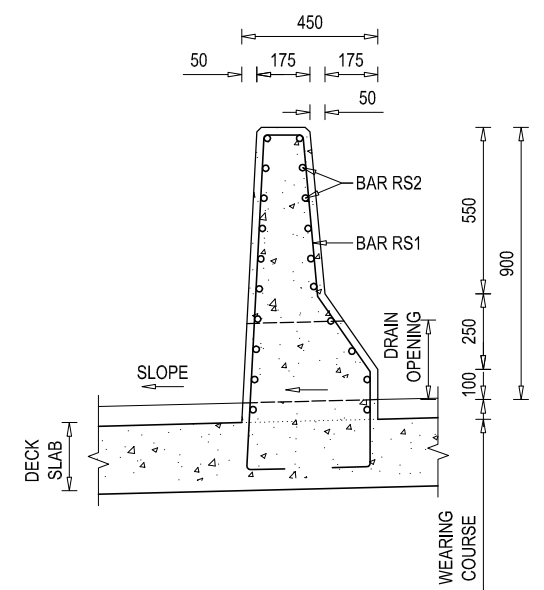
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. R.D.	SUPER STRUCTURE DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-25	SCALE: AS SHOWN Chainage: 256+188	19.04.2023
			Checked By			Drawing No. KDP/DPR/STR/BR/BASAI/DD-21
			Approved By			Sheet No. 2 / 2

LEGEND FOR REINFORCEMENT BAR

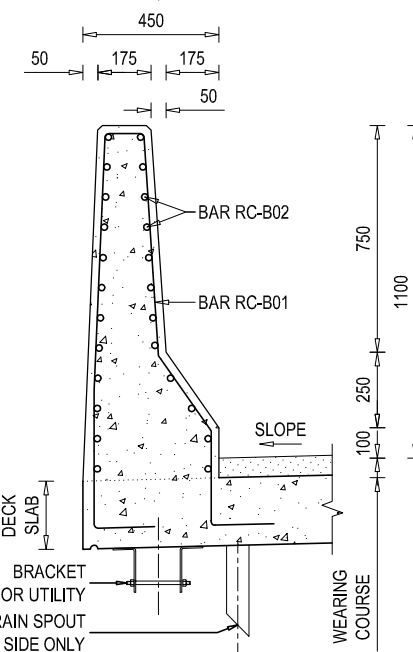
CODE	FULL FORM		
DS	- DECK SLAB	CG	- CROSS GIRDER
RB	- R.C.C BARRIER	AS	- APPROACH SLAB
RS	- R.C.C SEPARATOR	ST	- STOPPER
MG	- MAIN GIRDER	**	- ***
TOP BAR OR NEAR FACE REINFORCEMENT BOTTOM BAR OR FAR FACE REINFORCEMENT			



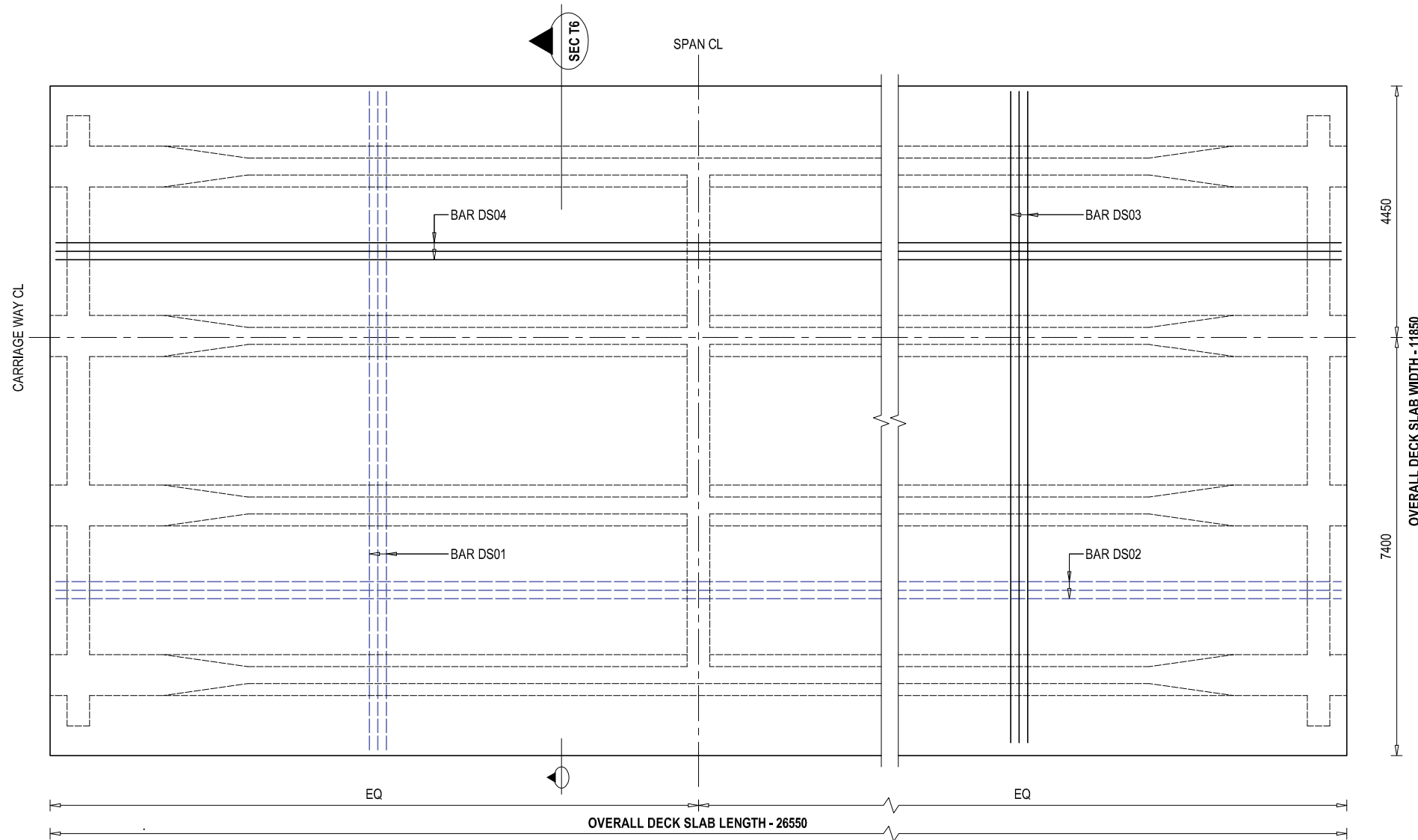
REINFORCEMENT DETAILS OF R.C.C BARRIER (A)- SECTIONAL VIEW
 SCALE - 1 : 25



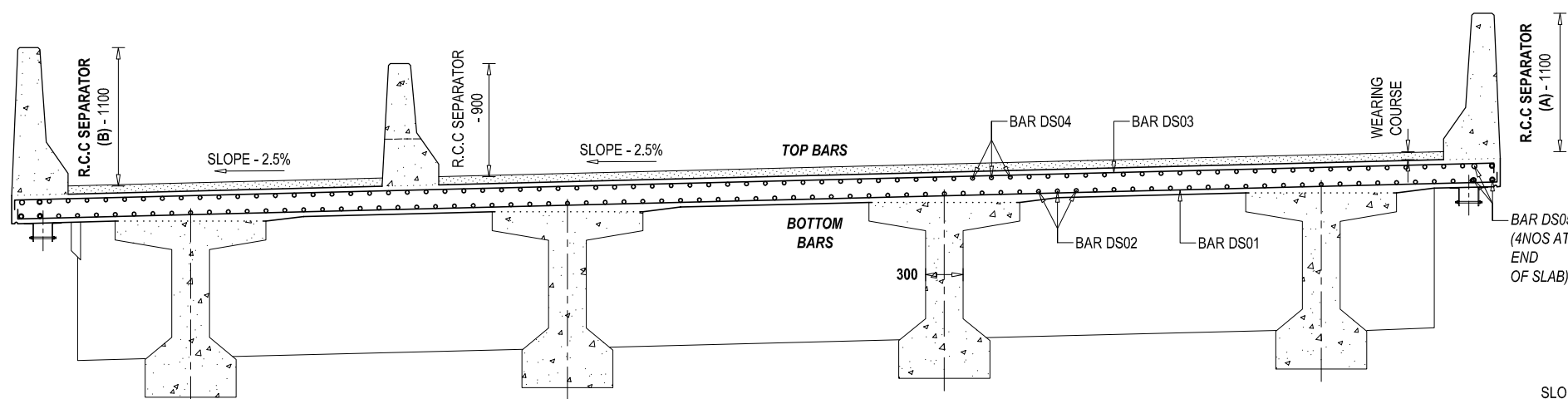
REINFORCEMENT DETAILS OF R.C.C SEPARATOR - SECTIONAL VIEW
 SCALE - 1 : 25



REINFORCEMENT DETAILS OF R.C.C BARRIER (B)- SECTIONAL VIEW
 SCALE - 1 : 25



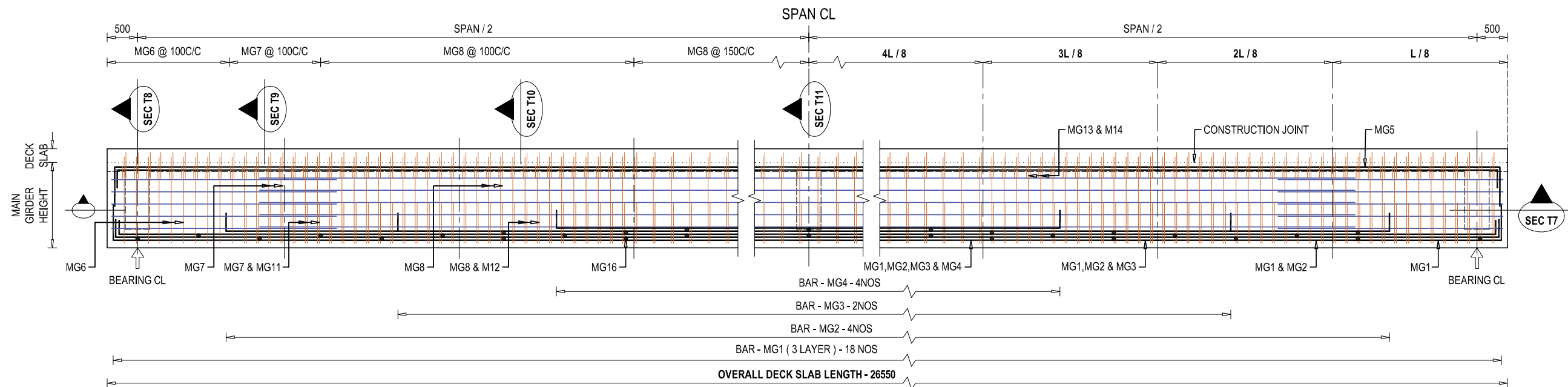
REINFORCEMENT DETAILS OF DECK SLAB - PLAN VIEW
 SCALE - 1 : 100



REINFORCEMENT DETAILS OF DECK SLAB - SECTIONAL VIEW AT T6
 SCALE - 1 : 50

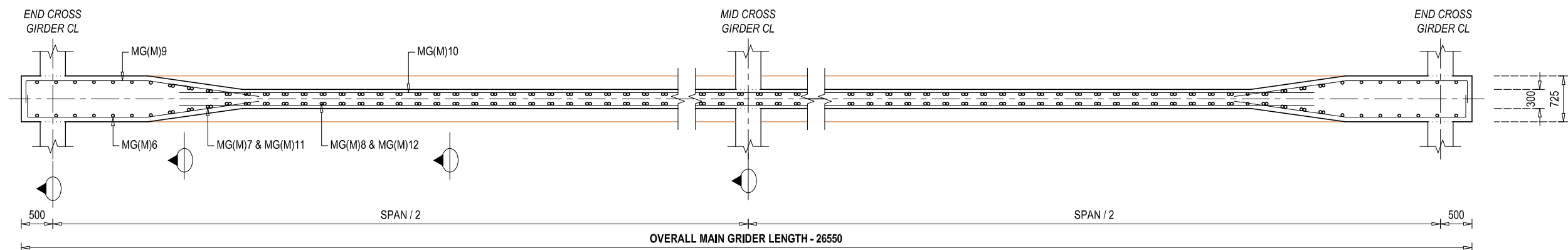
NOTE
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 DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Checked By	Mr. S.M.	DECK SLAB DETAILS OF BRIDGE OVER RIVER BASAI	SCALE: AS SHOWN Chainage: 256+188	19.04.2023
			Approved By	Mr. H.B.	Reference Drawings		Drawing No. KDP/DPR/STR/BR/BASAI/DD-22
					KDP/DPR/STR/BR/BASAI/DD-25		Sheet No. 1 / 1



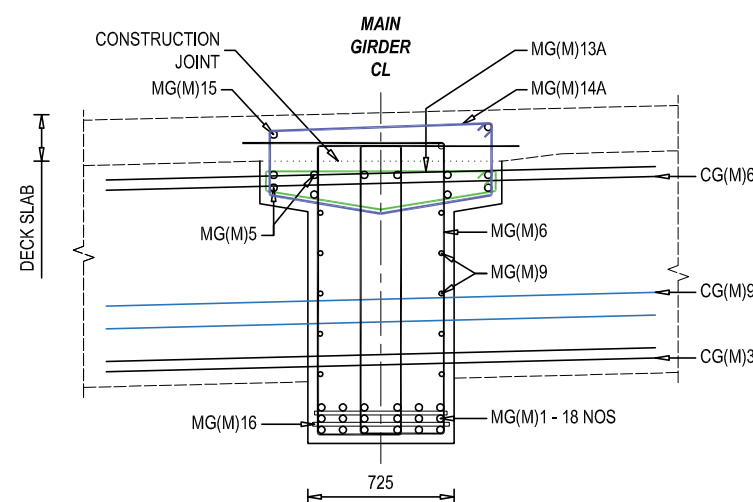
REINFORCEMENT DETAILS OF MAIN GIRDER - SECTIONAL ELEVATION VIEW

SCALE - 1 : 75



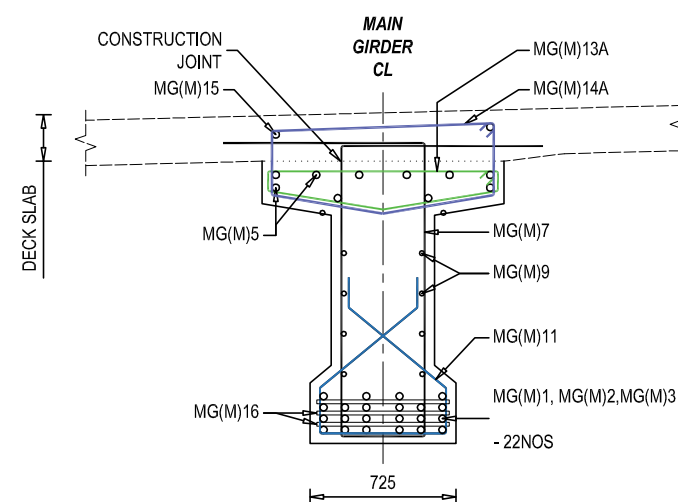
REINFORCEMENT DETAILS OF MAIN GIRDER (MID) - SECTIONAL PLAN VIEW AT T7(M)

SCALE - 1 : 75



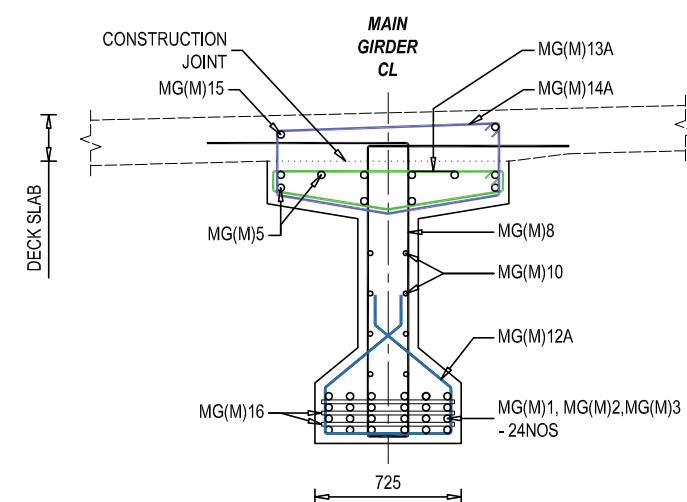
REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T8

SCALE - 1 : 50



REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T9

SCALE - 1 : 50

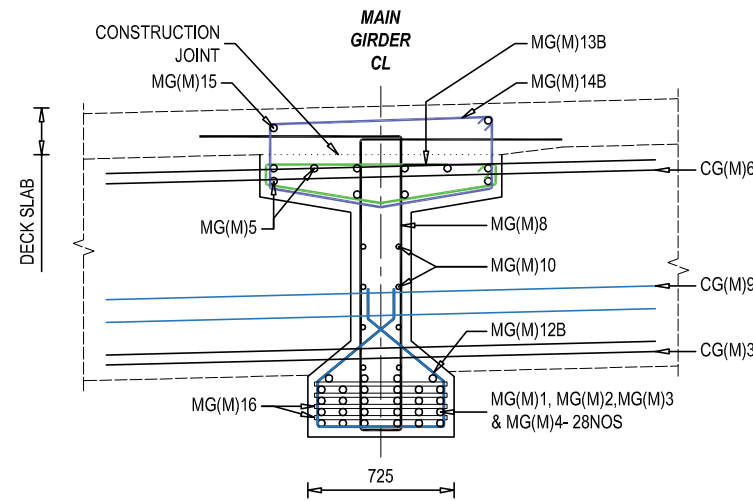


REINFORCEMENT DETAILS OF MAIN GIRDER SECTIONAL VIEW AT T10

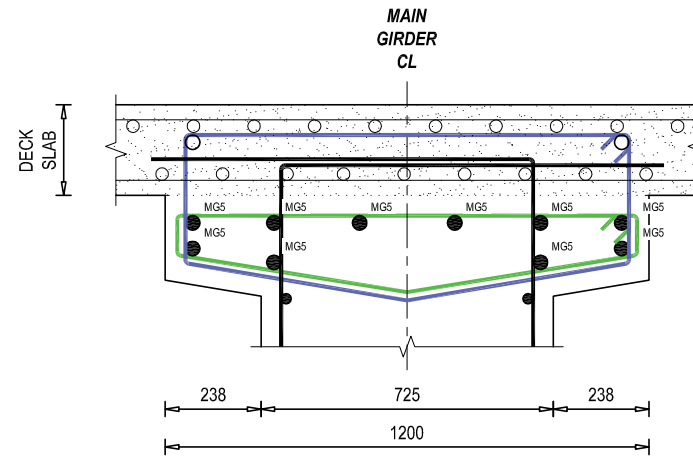
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NOTE
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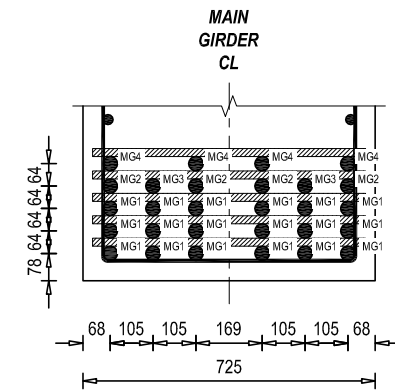
EMPLOYER Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	PROJECT NAME Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathahiya Road Section (130 KM) of Mahendra Highway and Bridges	DESIGN CONSULTANTS Joint Venture of EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Designed By Mr. R.D. Nec.No. 6489 CH/6/7/ Checked By Mr. S.M. Approved By Mr. H.B.	Drawing Name MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-25	Scale: SCALE: AS SHOWN Chainage: 256+188	Date: 19.04.2023 Drawing No. KDP/DPR/STR/BR/BASAI/DD-23 Sheet No. 1 / 2
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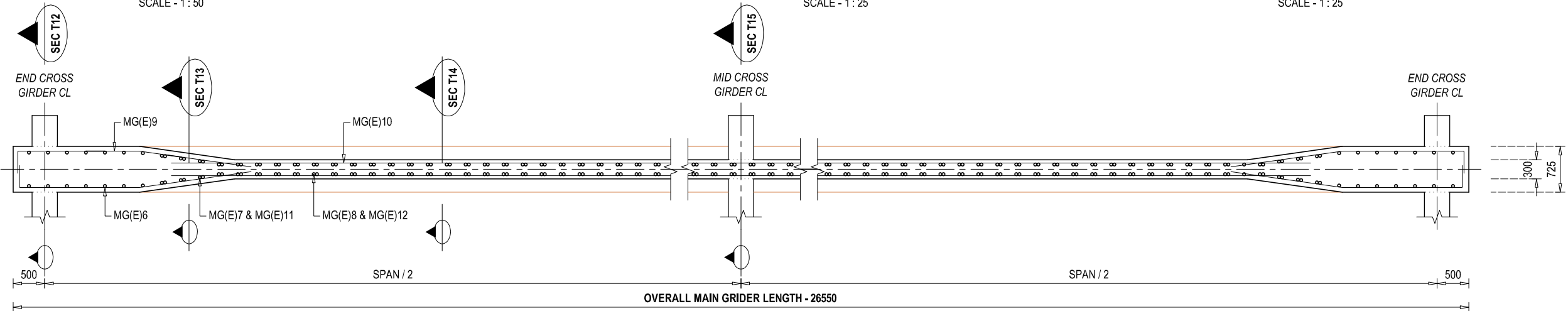
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T11**
SCALE - 1 : 50



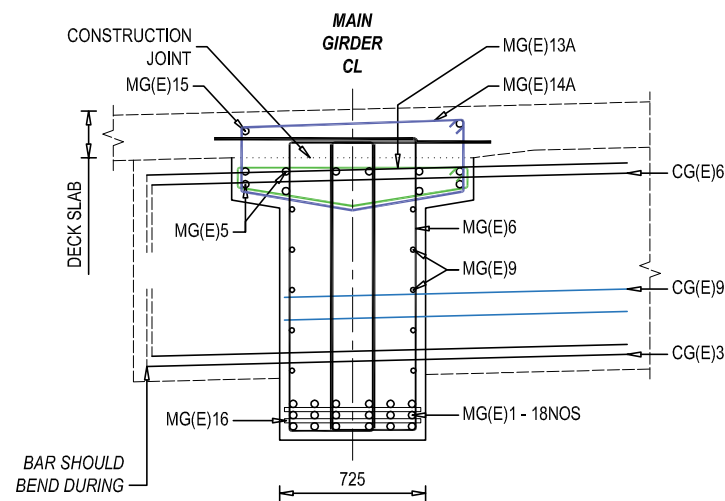
**TOP BAR WEB REINFORCEMENT DETAILS
OF MAIN GIRDER**
SCALE - 1 : 25



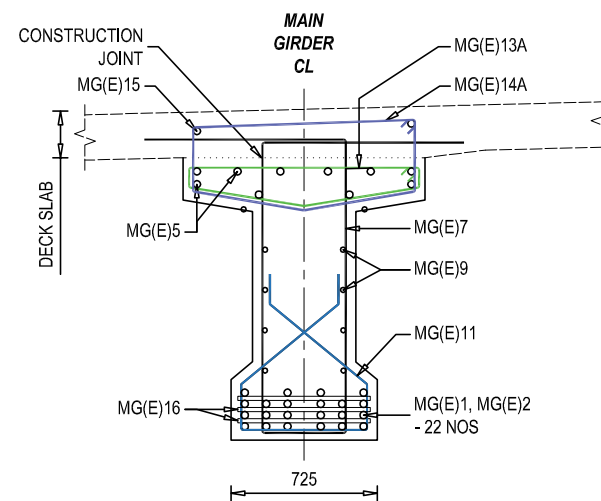
**BOTTOM BAR WEB REINFORCEMENT DETAILS
OF MAIN GIRDER**
SCALE - 1 : 25



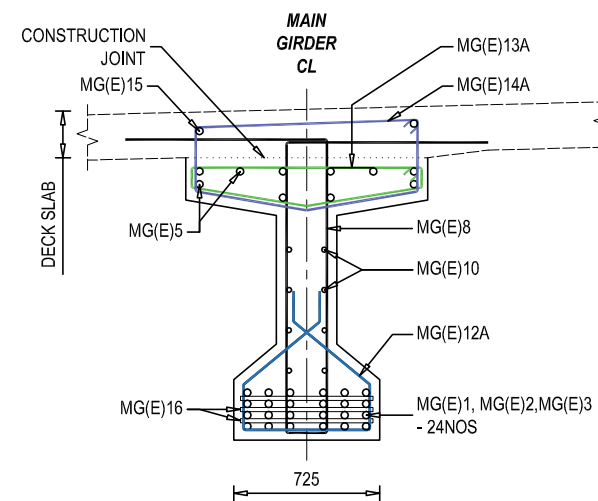
REINFORCEMENT DETAILS OF MAIN GIRDER (END) - SECTIONAL PLAN VIEW AT T7(E)
SCALE - 1 : 75



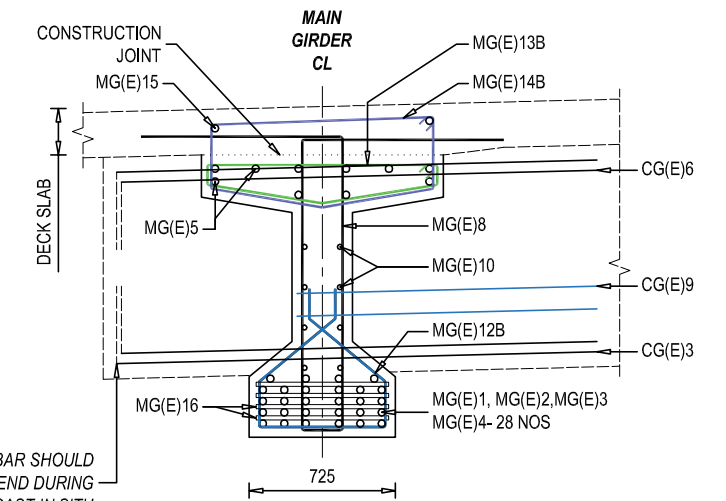
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T12**
SCALE - 1 : 50



**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T13**
SCALE - 1 : 50



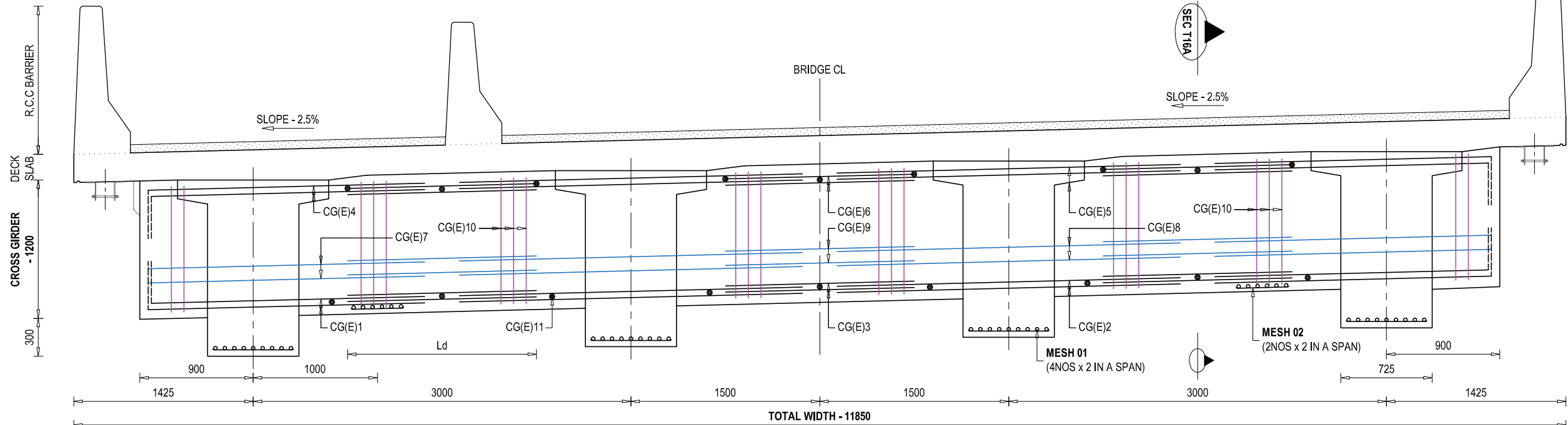
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T14**
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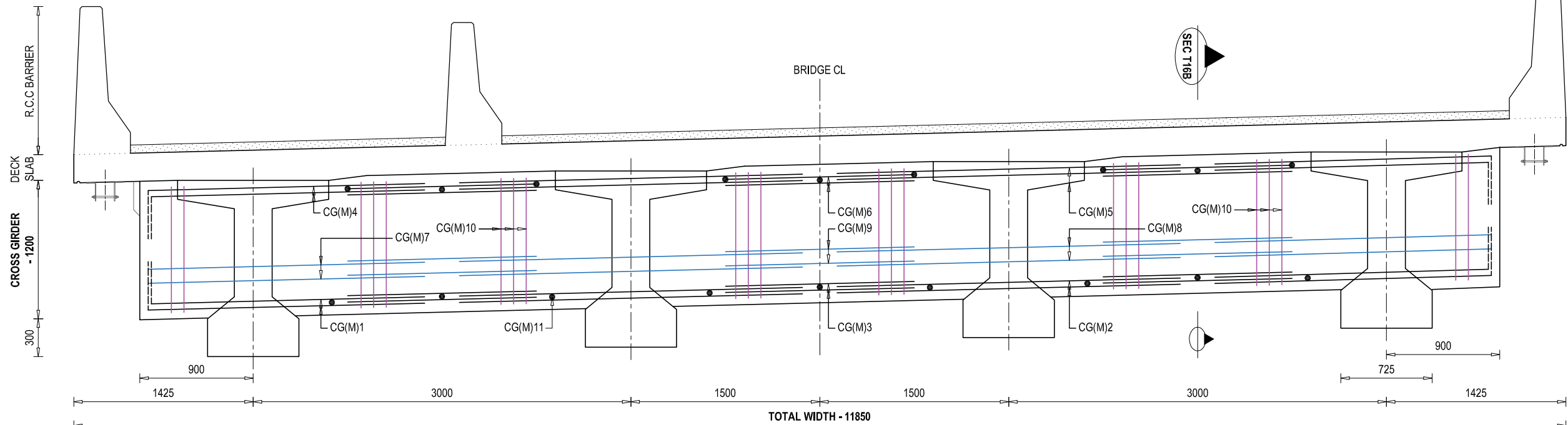
**REINFORCEMENT DETAILS OF MAIN GIRDER
SECTIONAL VIEW AT T15**
SCALE - 1 : 50

NOTE
READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CH/6/70 Mr. S.M. Mr. H.B.	MAIN GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-25	SCALE: AS SHOWN Chainage: 256+188	19.04.2023 Drawing No. KDP/DPR/STR/BR/BASAI/DD-23 Sheet No. 2 / 2

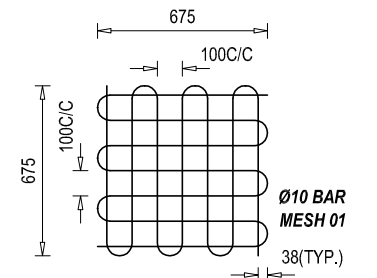


REINFORCEMENT DETAILS OF END CROSS GIRDER
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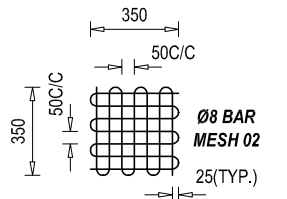


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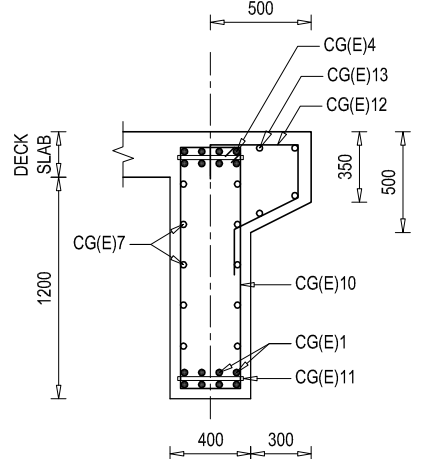
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READ THIS DRAWING IN CONJUNCTION WITH
DRG NO. KDP/DPR/STR/BR/BASAI/DD-4



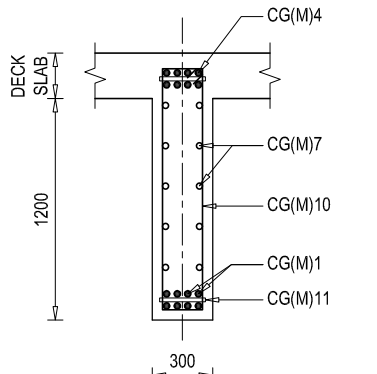
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REINFORCEMENT DETAILS OF LIFTING MESH
SCALE - 1 : 50

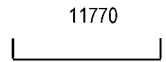
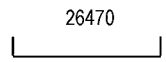
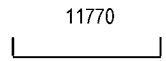
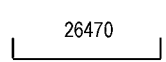
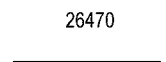


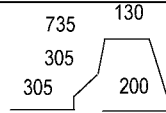
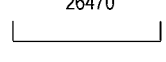
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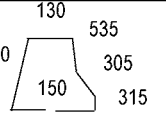
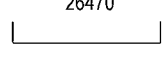


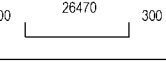
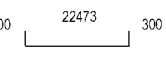
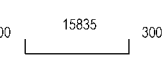
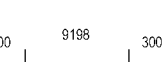
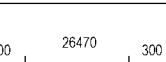
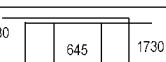
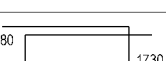
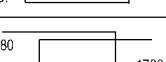
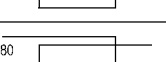
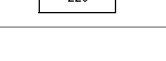
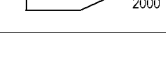
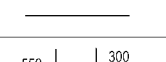
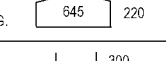
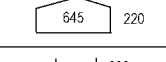
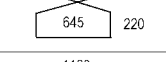
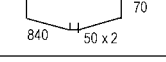
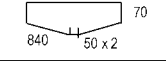
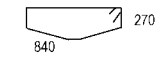
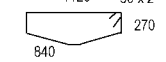
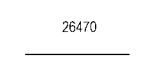
SECTIONAL REINFORCEMENT DETAILS OF MID CROSS GIRDER - SEC T16B
SCALE - 1 : 50

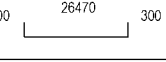
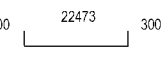
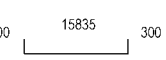
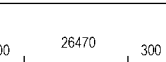
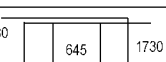
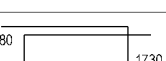
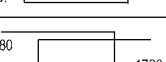
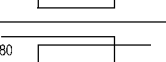
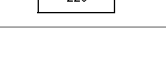
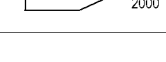
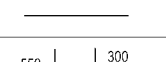
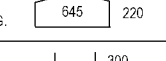
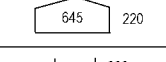
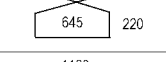
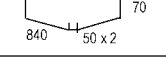
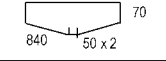
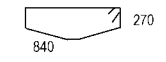
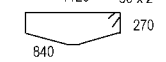
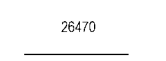
EMPLOYER Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	PROJECT NAME Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	DESIGN CONSULTANTS Joint Venture of EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Designed By Mr. R.D. Nec.No. 6489 CH/6/7/1 Signature Checked By Mr. S.M. Signature Approved By Mr. H.B. Signature	Drawing Name CROSS GIRDER REINFORCEMENT DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings KDP/DPR/STR/BR/BASAI/DD-25	Scale: SCALE: AS SHOWN Chainage: 256+188	Date: 19.04.2023 Drawing No. KDP/DPR/STR/BR/BASAI/DD-24 Sheet No. 1 / 1
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BAR BENDING SCHEDULE OF DECK SLAB (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	DS01	150  150	16	150	12.070	178	1.580	3395.10
2	DS02	150  150	10	150	26.770	76	0.617	1255.88
3	DS03	150  150	16	150	12.070	80	1.580	1525.89
5	DS04	150  150	10	150	26.770	174	0.617	2875.30
6	DS05	 26470	16		26.470	8	1.580	334.63
TOTAL (KG) :								9386.79

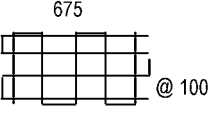
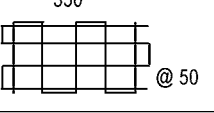
BAR BENDING SCHEDULE OF R.C.C BARRIER (A) (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RC-A1	 200	16	150	3.170	178	1.580	891.67
2	RC-A2	150  150	10	150	26.770	20	0.617	330.49
TOTAL (KG) :								1222.16

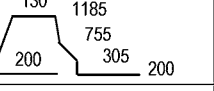
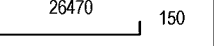
BAR BENDING SCHEDULE OF R.C.C SEPARATOR (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RS1	 1110	16	150	2.695	178	1.580	758.06
2	RS2	150  150	10	150	26.770	17	0.617	280.92
TOTAL (KG) :								1038.98

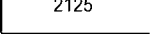
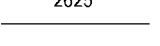
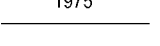
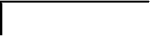
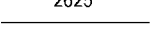
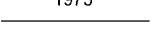
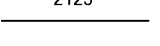
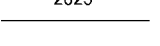
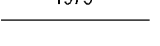
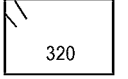
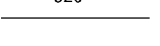
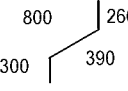
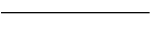
BAR BENDING SCHEDULE OF END MAIN GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MG(E)1	300  300	32		27.070	18	6.321	3079.96
2	MG(E)2	300  300	32		23.073	4	6.321	583.38
3	MG(E)3	300  300	32		16.435	2	6.321	207.77
4	MG(E)4	300  300	32		9.798	4	6.321	247.73
5	MG(E)5	300  300	12		27.070	10	0.889	240.62
6	MG(E)6	480  4 LEGGED	12	100	10.460	42	0.889	390.51
7	MG(E)7	480  AVG. 435	12	100	5.725	32	0.889	162.84
8	MG(E)8A	480  220	12	100	5.080	130	0.889	587.02
9	MG(E)8B	480  220	12	150	5.080	46	0.889	207.72
10	MG(E)9	370  2000	12	200	4.290	36	0.889	137.28
11	MG(E)10	 23550	12	200	23.550	18	0.889	376.80
12	MG(E)11	550  AVG. 645	12	100	2.785	32	0.889	79.22
13	MG(E)12A	700  645	12	150	3.085	130	0.889	356.49
14	MG(E)12B	700  645	12	150	3.085	46	0.889	126.14
15	MG(E)13A	 70	12	100	3.040	201	0.889	543.15
16	MG(E)13B	 70	12	150	3.040	46	0.889	124.30
17	MG(E)14A	 50 x 2	12	100	3.440	201	0.889	614.61
18	MG14B	 50 x 2	12	150	3.440	46	0.889	140.66
19	MG(E)15	 26470	12		26.470	2	0.889	47.06
19	MG(E)16	 645	32	1500	0.645	72	6.321	293.55
TOTAL (KG) :								8546.81

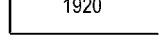
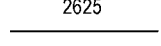
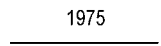
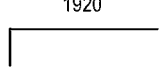
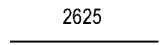
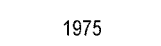
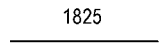
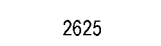
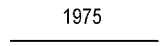
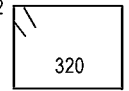
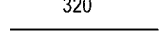
BAR BENDING SCHEDULE OF MID MAIN GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MG(M)1	300  300	32		27.070	18	6.321	3079.96
2	MG(M)2	300  300	32		23.073	4	6.321	583.38
3	MG(M)3	300  300	32		16.435	2	6.321	207.77
4	MG(M)4	300  300	32		9.798	4	6.321	247.73
5	MG(M)5	300  300	12		27.070	10	0.889	240.62
6	MG(M)6	480  4 LEGGED	12	100	10.460	42	0.889	390.51
7	MG(M)7	480  AVG. 435	12	100	5.725	32	0.889	162.84
8	MG(M)8A	480  220	12	100	5.080	130	0.889	587.02
9	MG(M)8B	480  220	12	150	5.080	46	0.889	207.72
10	MG(M)9	370  2000	12	200	4.290	36	0.889	137.28
11	MG(M)10	 23550	12	200	23.550	18	0.889	376.80
12	MG(M)11	550  AVG. 645	12	100	2.785	32	0.889	79.22
13	MG(M)12A	700  645	12	150	3.085	130	0.889	356.49
14	MG(M)12B	700  645	12	150	3.085	46	0.889	126.14
15	MG(M)13A	 70	12	100	3.040	201	0.889	543.15
16	MG(M)13B	 70	12	150	3.040	46	0.889	124.30
17	MG(M)14A	 50 x 2	12	100	3.440	201	0.889	614.61
18	MG14B	 50 x 2	12	150	3.440	46	0.889	140.66
19	MG(M)15	 26470	12		26.470	2	0.889	47.06
19	MG(M)16	 645	32	1500	0.645	72	6.321	293.55
TOTAL (KG) :								8546.81

 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	PROJECT NAME Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhakebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	DESIGN CONSULTANTS		Designed By Mr. R.D. Nec.No. 6489 CIVIL/AC Signature	Drawing Name SUPER STRUCTURE BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	Scale: SCALE: AS SHOWN	Date: 19.04.2023
		Joint Venture of					
		EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkata, India		Approved By Mr. H.B. Signature	Reference Drawings -	Chainage: 256+188	Drawing No. KDP/DPR/STR/BR/BASAI/DD-25
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited					

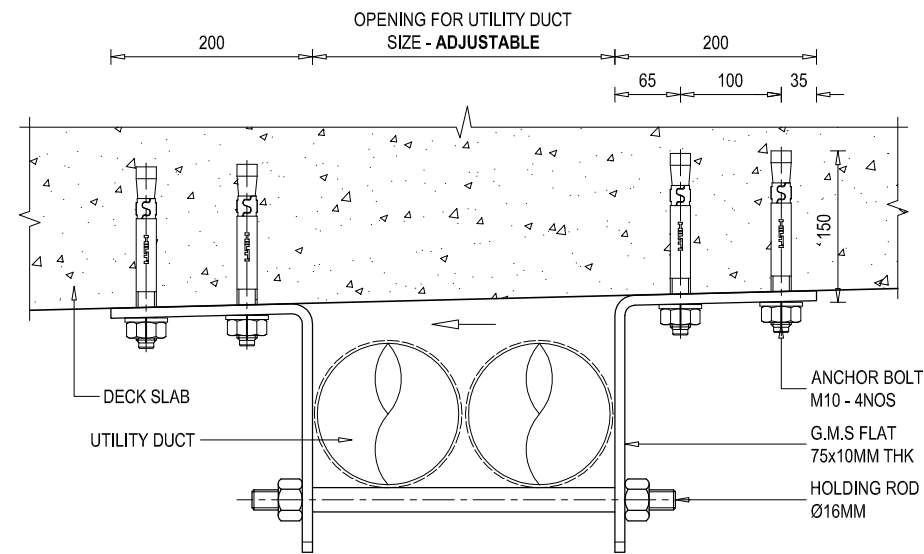
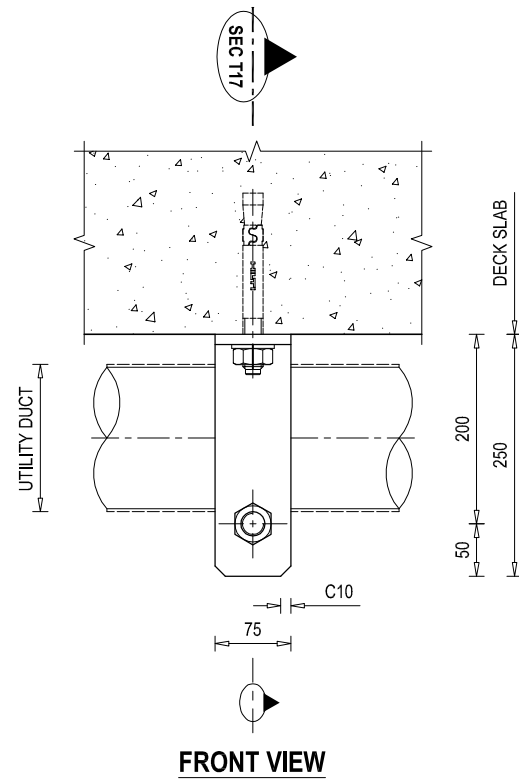
BAR BENDING SCHEDULE OF MESH (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	MESH 01	675  @ 100	10		9.450	8	0.617	46.67
2	MESH 02	350  @ 50	10		4.900	4	0.617	12.10
TOTAL (KG) :								58.77

BAR BENDING SCHEDULE OF R.C.C BARRIER (B) (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	RC-B1		16	150	4.070	178	1.580	1144.83
2	RC-B2		10	150	26.770	18	0.617	297.44
TOTAL (KG) :								1442.27

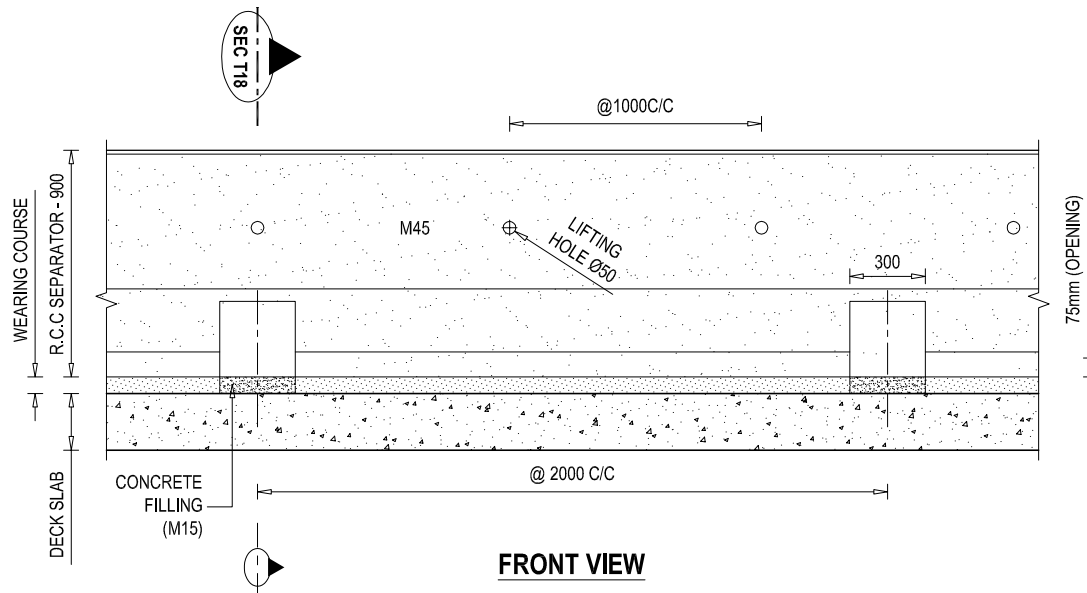
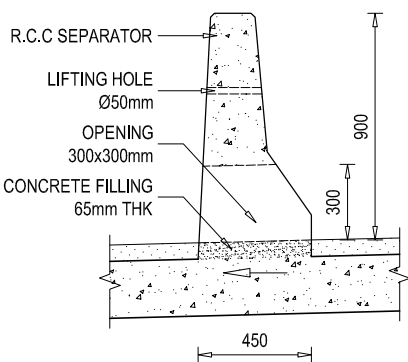
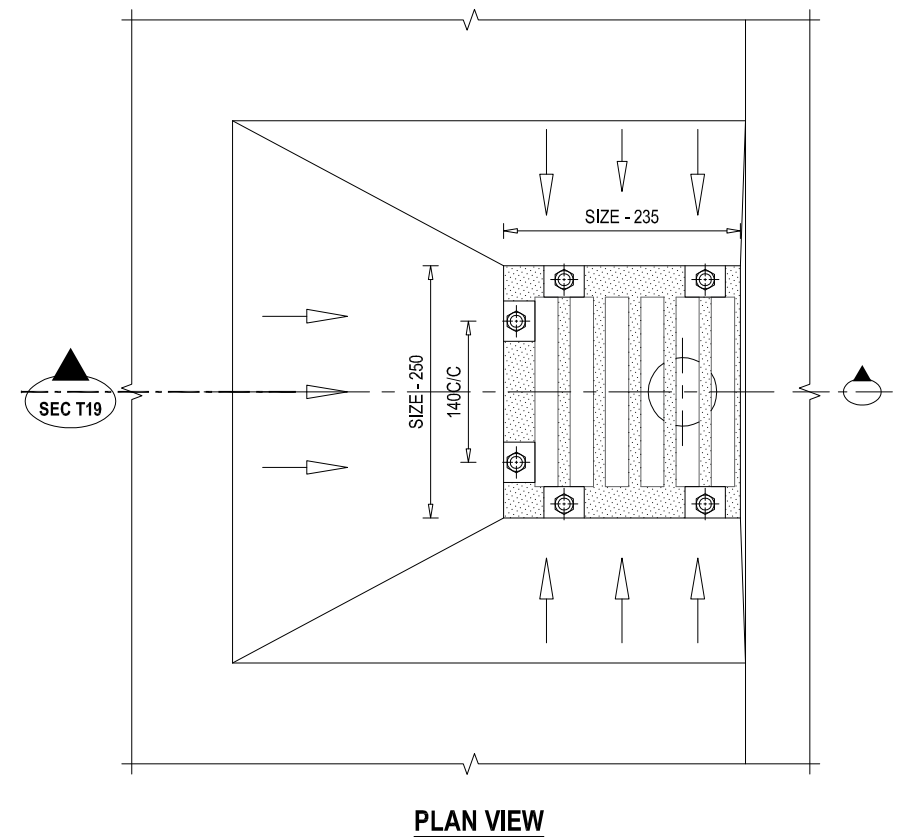
BAR BENDING SCHEDULE OF END CROSS GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CG(E)1		20		2.425	8	2.469	47.90
2	CG(E)2		20		2.625	8	2.469	51.85
3	CG(E)3		20		1.975	8	2.469	39.01
4	CG(E)4		20		2.425	8	2.469	47.90
5	CG(E)5		20		2.625	8	2.469	51.85
6	CG(E)6		20		1.975	8	2.469	39.01
7	CG(E)7		12	150	2.125	10	0.889	18.89
8	CG(E)8		12	150	2.625	10	0.889	23.33
9	CG(E)9		12	150	1.975	10	0.889	17.56
10	CG(E)10	50 x 2  1570	12	200	1.990	39	0.889	68.99
11	CG(E)11		20	1000	0.320	18	2.469	14.22
12	CG(E)12		16	150	1.750	79	1.580	218.47
13	CG(E)13		12		11.770	6	0.889	62.77
TOTAL (KG) :								701.76
TOTAL NOS OF CROSS GIRDER :								2.00
TOTAL WEIGHT (KG) :								1403.52

BAR BENDING SCHEDULE OF MID CROSS GIRDER (1SPAN)								
S.No.	BAR MARK	DESCRIPTION OF BAR	BAR DIA.(MM)	SPACING (MM)	BAR LENGTH (M)	No. OF BARS	UNIT WEIGHT (Kg/m)	TOTAL WEIGHT (Kg)
1	CG(M)1		20		2.220	8	2.469	43.85
2	CG(M)2		20		2.945	8	2.469	58.17
3	CG(M)3		20		2.295	8	2.469	45.33
4	CG(M)4		20		2.220	8	2.469	43.85
5	CG(M)5		20		2.625	8	2.469	51.85
6	CG(M)6		20		1.975	8	2.469	39.01
7	CG(M)7		12	150	1.920	10	0.889	17.07
8	CG(M)8		12	150	2.625	10	0.889	23.33
9	CG(M)9		12	150	1.975	10	0.889	17.56
10	CG(M)10	50 x 2  1570	12	200	1.990	39	0.889	68.99
11	CG(M)11		20	1000	0.320	18	2.469	14.22
TOTAL (KG) :								423.24

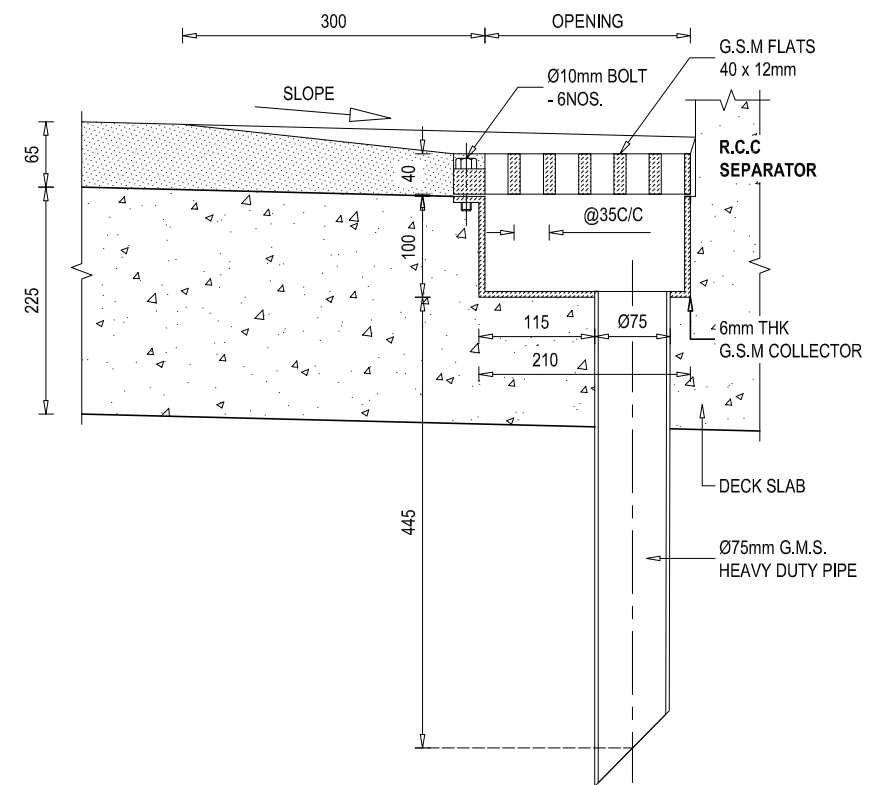
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Mr. R.D.	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of	Checked By	Mr. S.M.	SUPER STRUCTURE BAR BENDING SCHEDULE OF BRIDGE OVER RIVER BASAI	SCALE: AS SHOWN	19.04.2023
		 EPTISA Servicios De Ingeniera Madrid, Spain	Approved By	Mr. H.B.	Reference Drawings	Chainage:	Drawing No. KDP/DPR/STR/BR/BASAI/DD-25
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited				256+188	Sheet No. 2 / 2



**DETAILS OF GALVANIZED MILD STEEL (G.M.S)
UTILITY DUCT CLAMP**
SCALE - 1 : 10

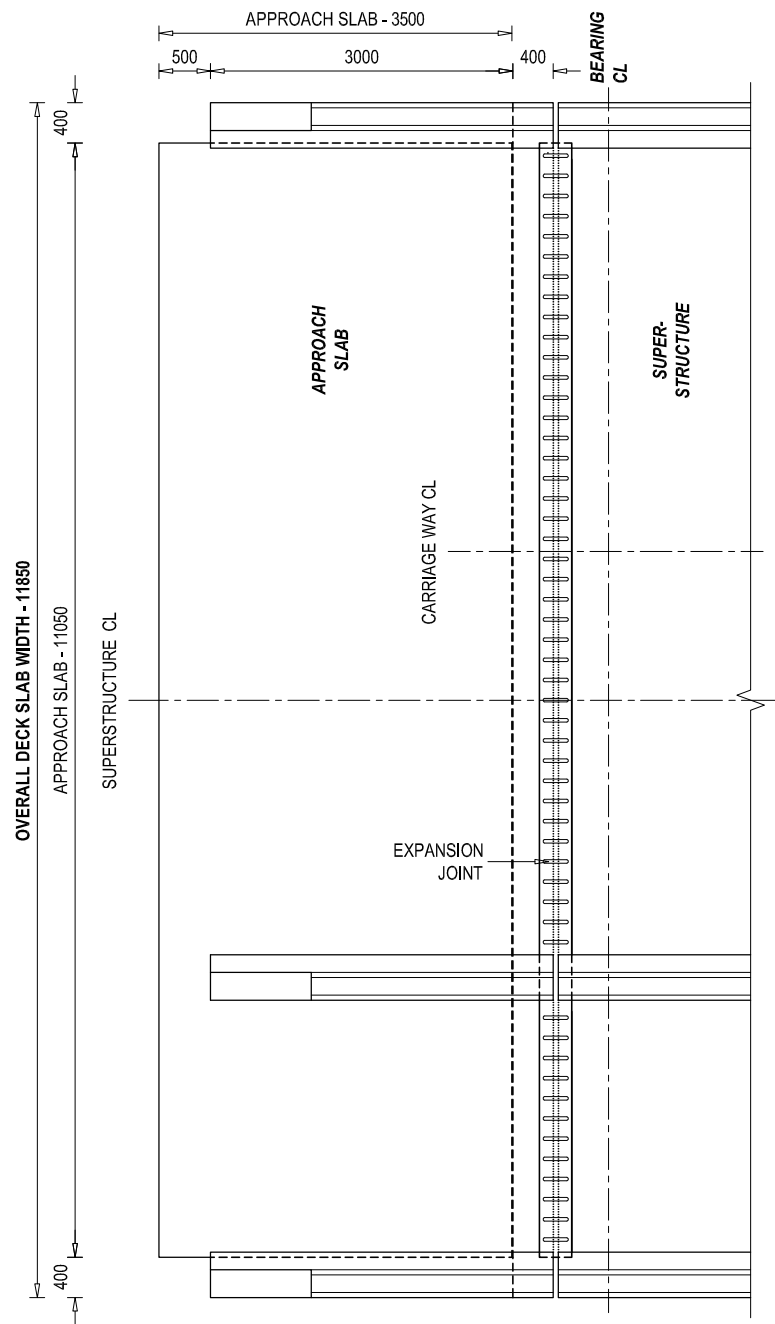


**DETAIL ELEVATION VIEW AT R.C.C SEPARATOR
& IT'S DRAIN OPENING**
SCALE - 1 : 40

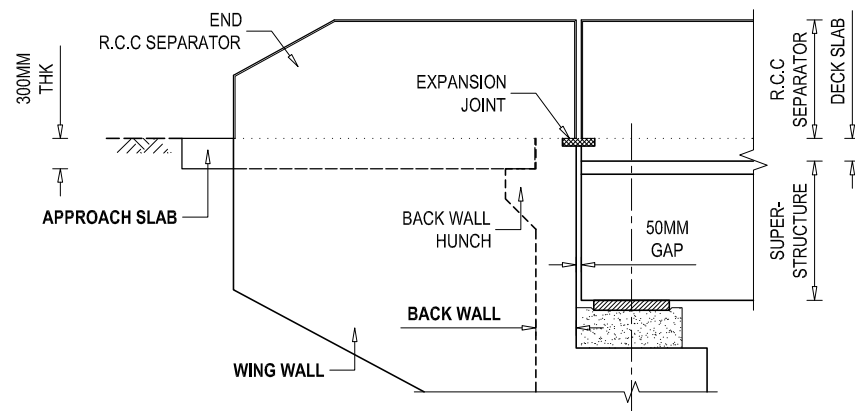


**DETAILS OF GALVANIZED MILD STEEL (G.M.S)
DRAINAGE SPOUT**
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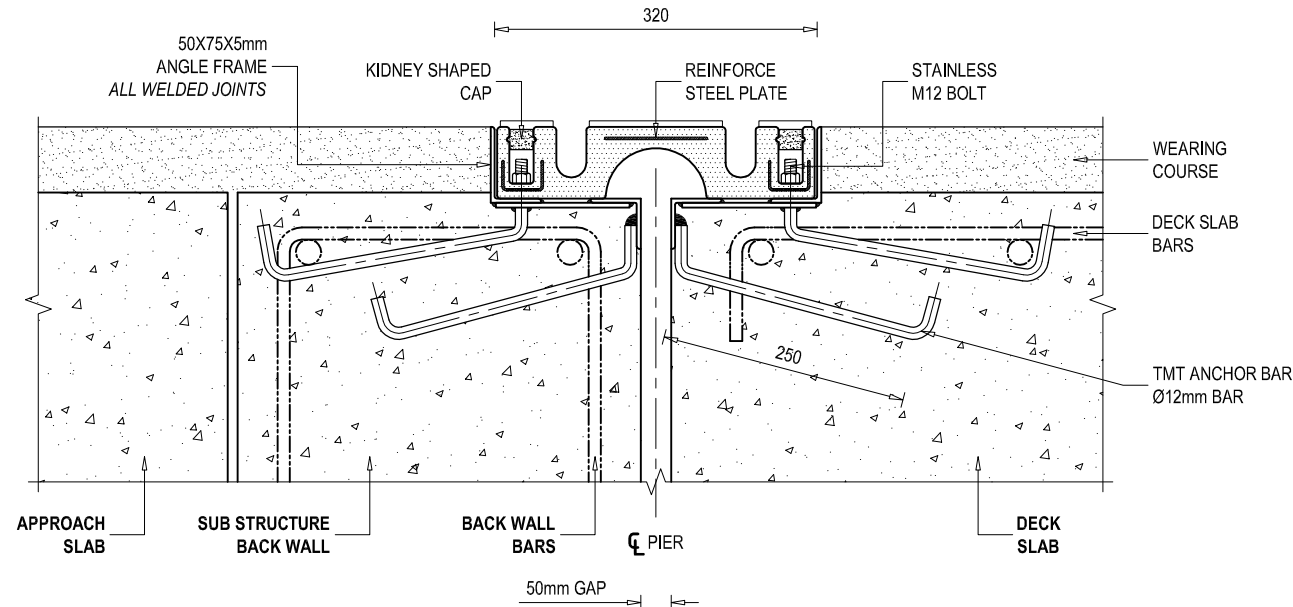
EMPLOYER Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	PROJECT NAME Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	DESIGN CONSULTANTS Joint Venture of EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Designed By Mr. R.D. Nec.No. 6489 Q/IL/14/ Checked By Mr. S.M. Approved By Mr. H.B.	Drawing Name MISCELLANEOUS DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings	Scale: AS SHOWN Chainage: 256+188	Date: 20.04.2023 Drawing No:- KDP/DPR/STR/BR/BASAI/DD-26 Sheet No.1 /2
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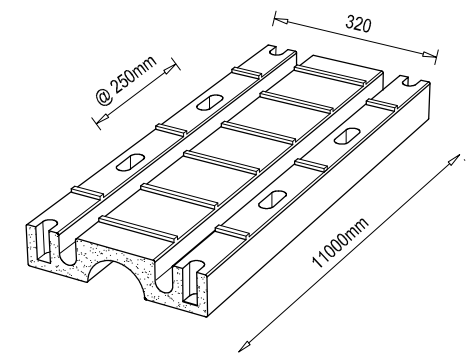
**PLAN VIEW AT EXPANSION JOINT, END R.C.C
SEPARATOR & APPROACH SLAB**



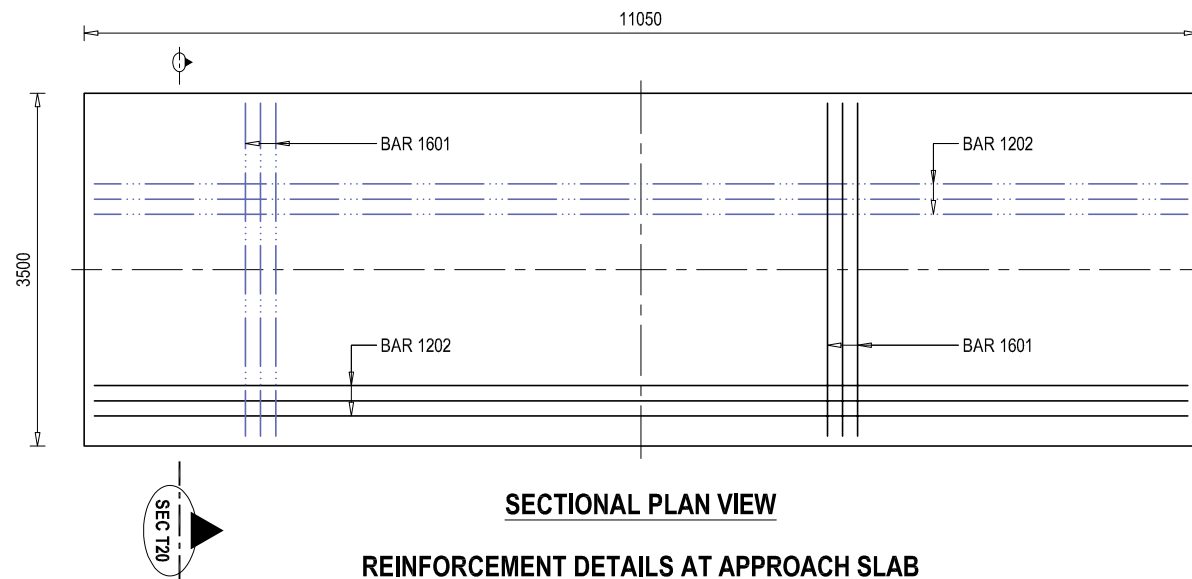
ELEVATION VIEW



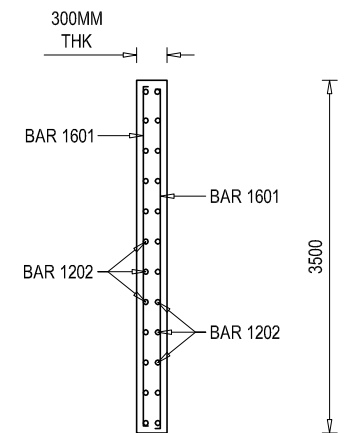
SEAL TYPE EXPANSION JOINTS ARRANGEMENT IN A CARRIAGEWAY
SCALE - 1 : 10 @ A3 PAPER



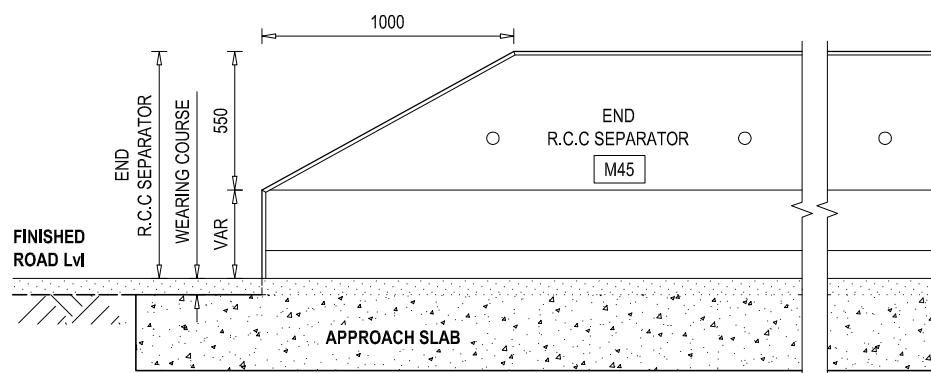
**EXPANSION JOINT ISOMETRIC VIEW
- SEAL TYPE**
SCALE - NON



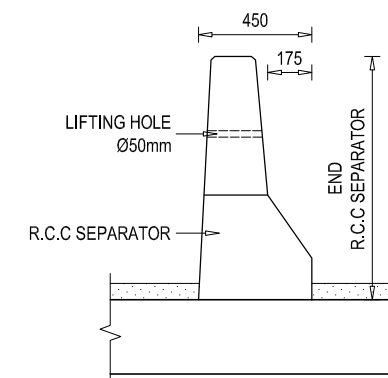
SECTIONAL PLAN VIEW
REINFORCEMENT DETAILS AT APPROACH SLAB
SCALE - 1 : 100 @ A3 PAPER



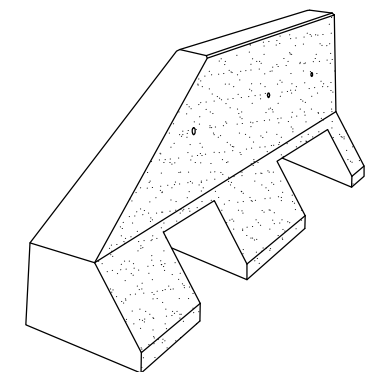
SECTIONAL ELEVATION VIEW AT SEC T20



ELEVATION VIEW OF END R.C.C SEPARATOR
SCALE - 1 : 40 @ A3 PAPER

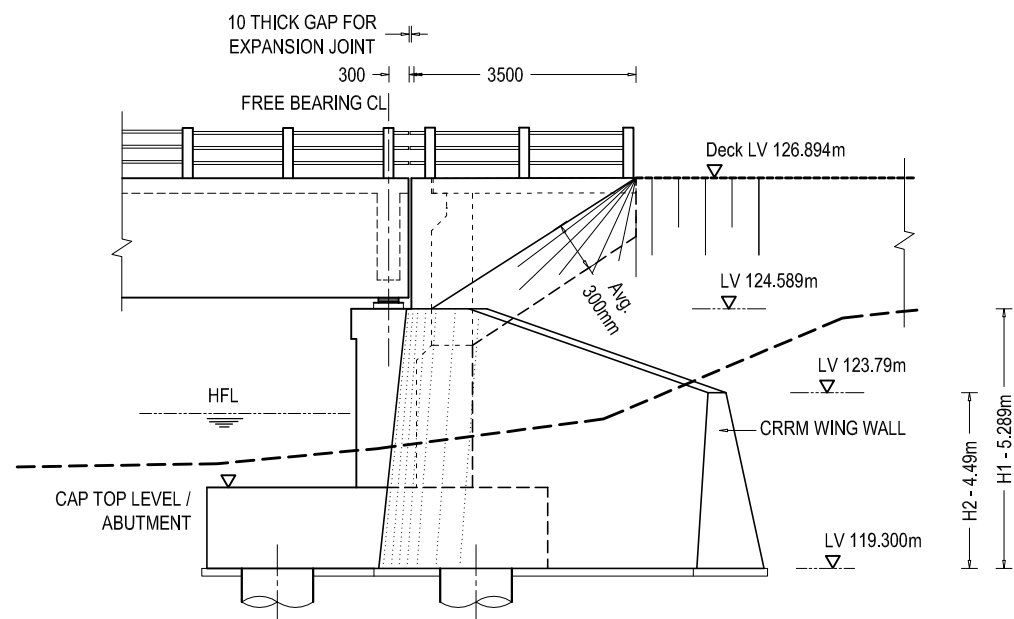
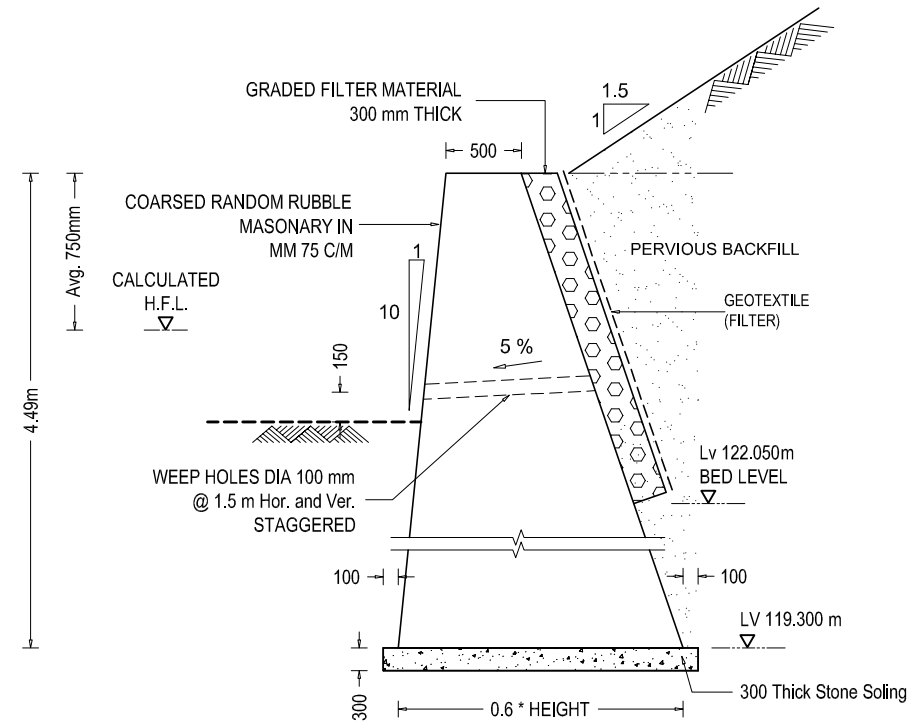
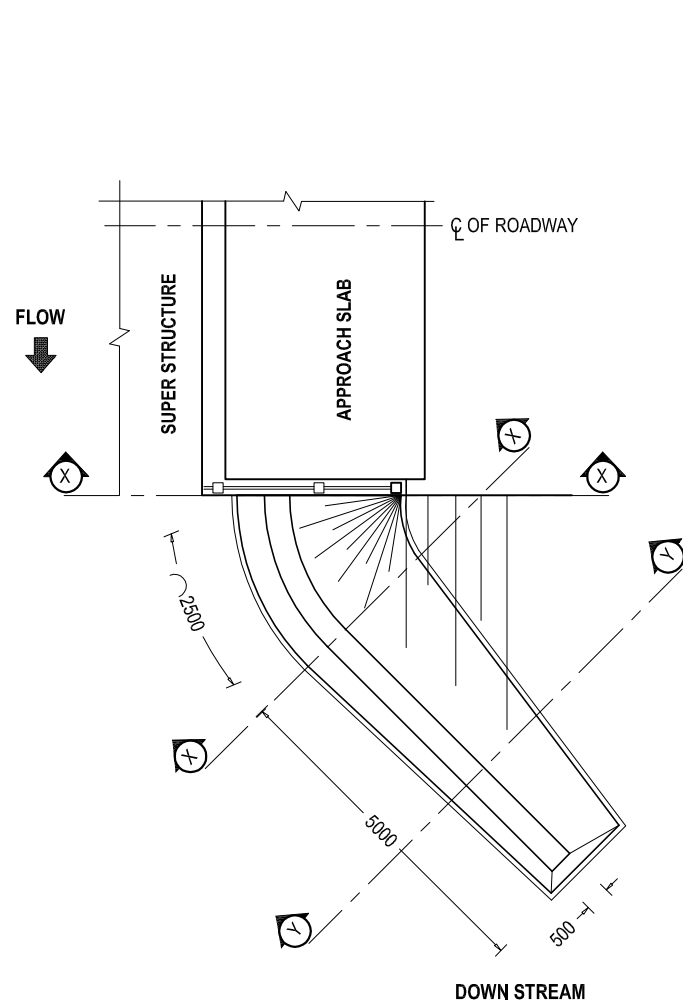


SIDE VIEW
SCALE - 1 : 40 @ A3 PAPER

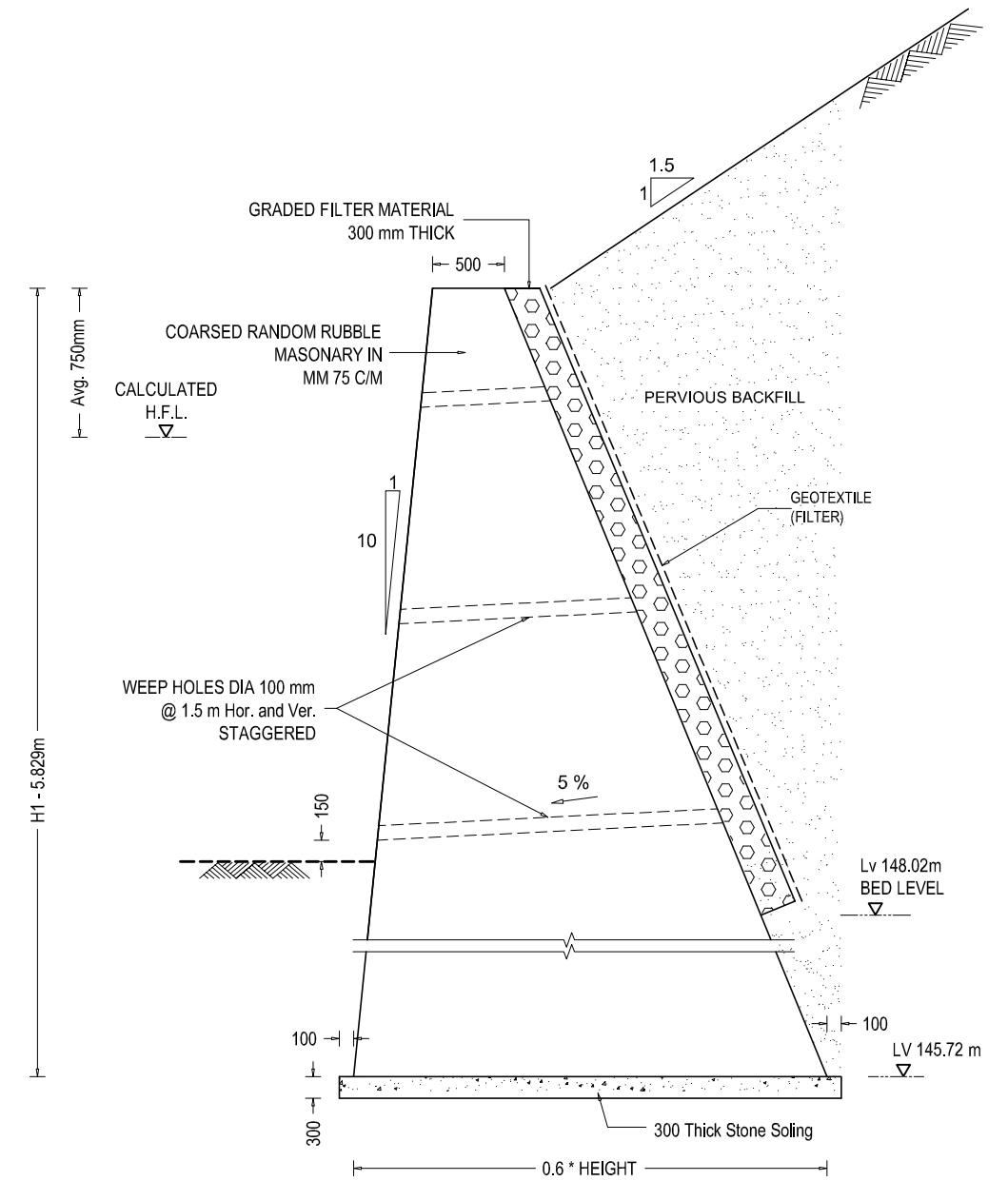


END R.C.C SEPARATOR ISOMETRIC VIEW
SCALE - NON

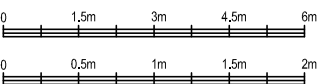
EMPLOYER Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	PROJECT NAME Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	DESIGN CONSULTANTS Joint Venture of EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Designed By Mr. R.D. Nec.No. 6489 Q/IL/14/ Checked By Mr. S.M. Approved By Mr. H.B.	Drawing Name MISCELLANEOUS DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings	Scale: AS SHOWN Chainage: 256+188	Date: 20.04.2023 Drawing No:- KDP/DPR/STR/BR/BASAI/DD-26 Sheet No.2/2
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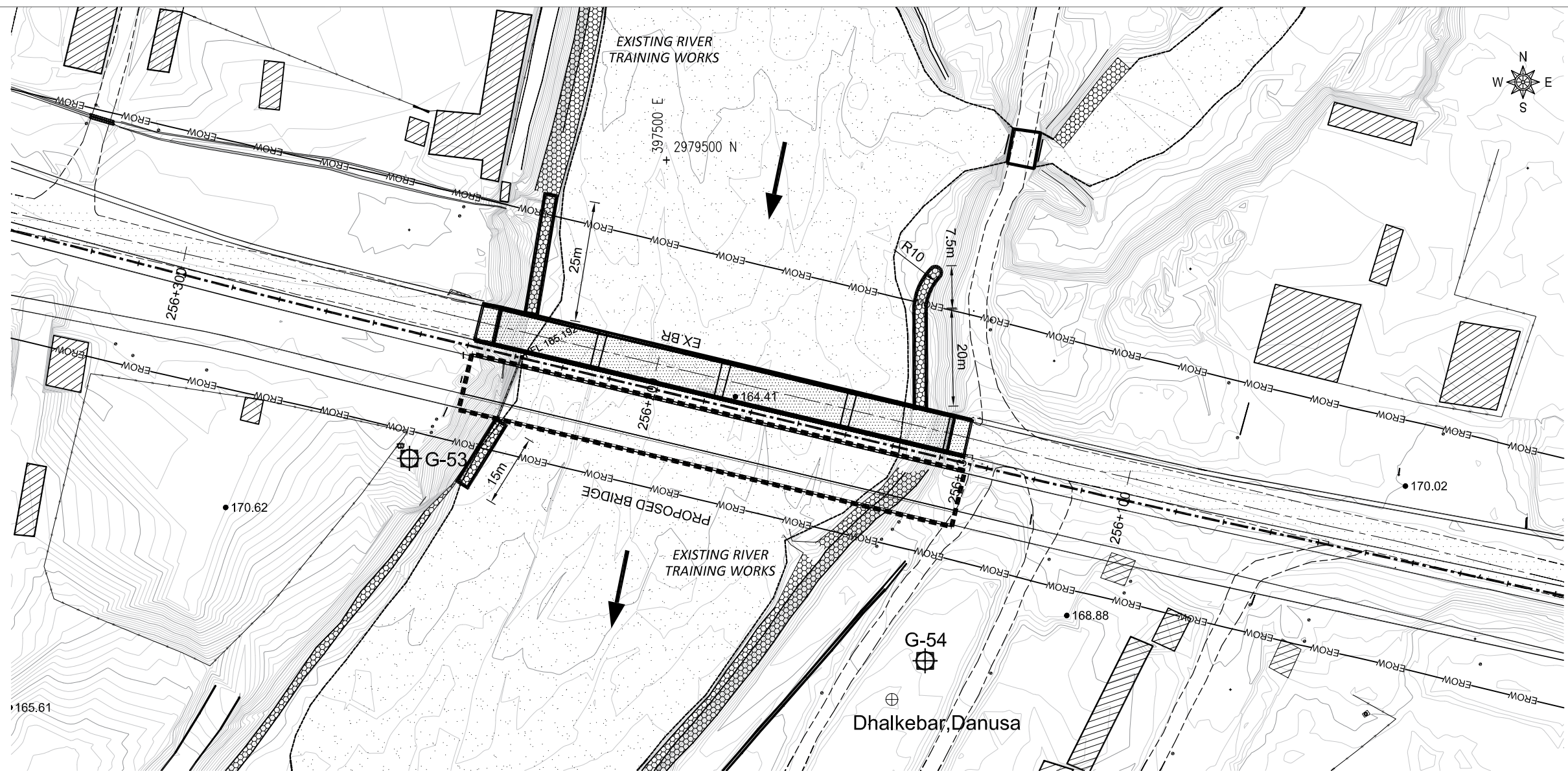
WING WALL ELEVATION



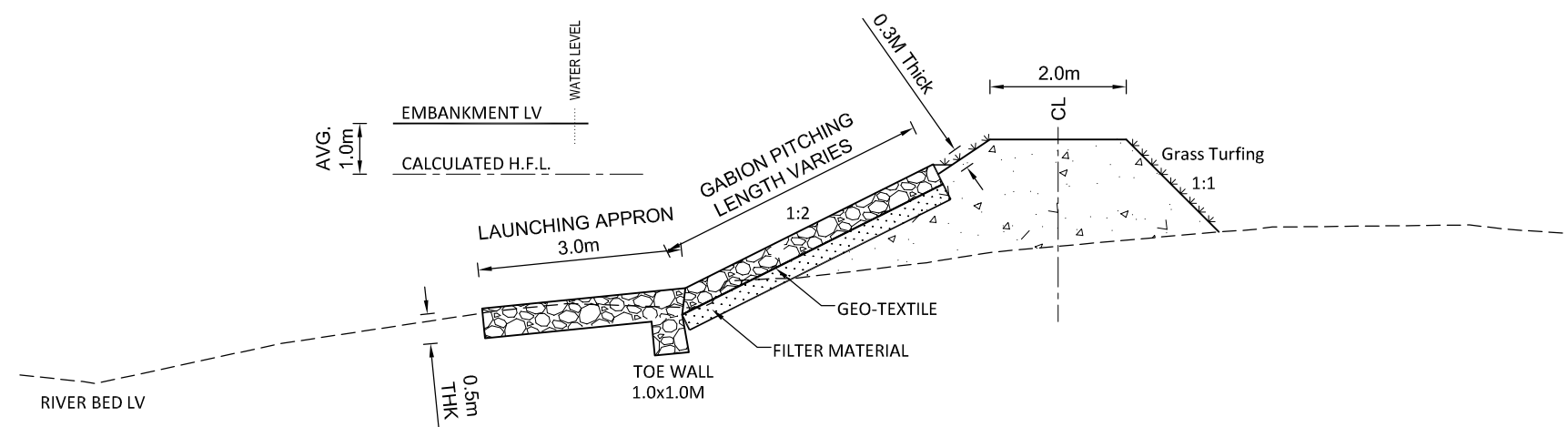
STONE MASONRY WING WALL SECTION X - X



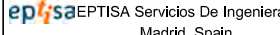
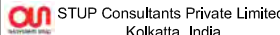
EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathalya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No. 6489 CIVIL/1A/ Mr. S.M. Mr. H.B.	WING WALL DETAILS OF BRIDGE OVER RIVER BASAI Reference Drawings	AS SHOWN Chainage: 256+188	20.04.2023 Drawing No- KDP/DPR/STR/BR/BASAI/DD-27 Sheet No. 1 / 1



TOPOGRAPHIC MAP



SECTION OF EMBANKMENT

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kirti Consultant and Rays Consultant Private Limited	Mr. R.D. Nec.No.2489 CIVIL/24	RIVER TRAINING WORKS OF BRIDGE OVER RIVER BASAI	AS SHOWN	20.04.2023
			Mr. S.M.	Reference Drawings	Chainage: 256+188	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 28
			Mr. H.B.			Sheet No.1/1

Bearing Design Data for 21.4m Span and 11.85m width

Load Condition	Items	Under	On each Neoprene Bearing	Unit
Under No Live Load	V	NO EQ.	51.94	Ton
		EQ.	59.74	Ton
	H _L	NO EQ.	-	Ton
		EQ.	11.69	Ton
	H _T	NO EQ.	-	Ton
		EQ.	11.69	Ton
	θ	NO EQ.	0.00228	radian
		EQ.	0.00262	radian
	Δ		13.268	mm
Under Maximum Live Load	V	NO EQ.	93.00	Ton
		EQ.	102.02	Ton
	H _L	NO EQ.	-	Ton
		EQ.	0.00	Ton
	H _T	NO EQ.	-	Ton
		EQ.	0.00	Ton
	θ	NO EQ.	0.0036591	radian
		EQ.	0.00421	radian
	Δ		22.17	mm

Bearing Design Data for 26.6m Span and 11.85m width

Load Condition	Items	Under	On each Neoprene Bearing	Unit
Under No Live Load	V	NO EQ.	64.62	Ton
		EQ.	74.31	Ton
	H _L	NO EQ.	-	Ton
		EQ.	14.54	Ton
	H _T	NO EQ.	-	Ton
		EQ.	14.54	Ton
	θ	NO EQ.	0.00250	radian
		EQ.	0.00288	radian
	Δ		14.57	mm
Under Maximum Live Load	V	NO EQ.	109.10	Ton
		EQ.	120.12	Ton
	H _L	NO EQ.	-	Ton
		EQ.	0.00	Ton
	H _T	NO EQ.	-	Ton
		EQ.	0.00	Ton
	θ	NO EQ.	0.00388275	radian
		EQ.	0.00447	radian
	Δ		24.23	mm

EMPLOYER	PROJECT NAME	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlalaya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India	Mr. R.D. Nec.No.5489 CIVIL/TA	Mr. S.M.	Mr. H.B.	BEARING DESIGN DATA OF BRIDGE OVER RIVER BASAI	AS SHOWN	20.04.2023
		In Association With Udaya Consultancy, Geocom International, Sundar Krti Consultant and Rays Consultant Private Limited				Reference Drawings	Chainage: 256+188	Drawing No.- KDP/DPR/STR/BR/BASAI/DD- 29
								Sheet No.1/1