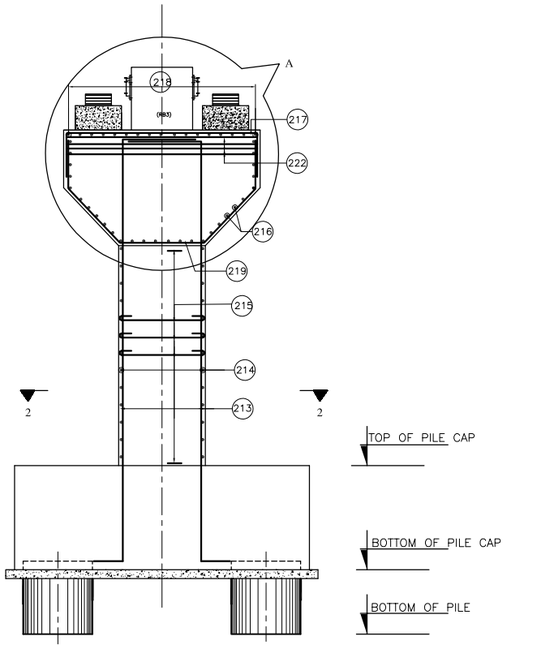
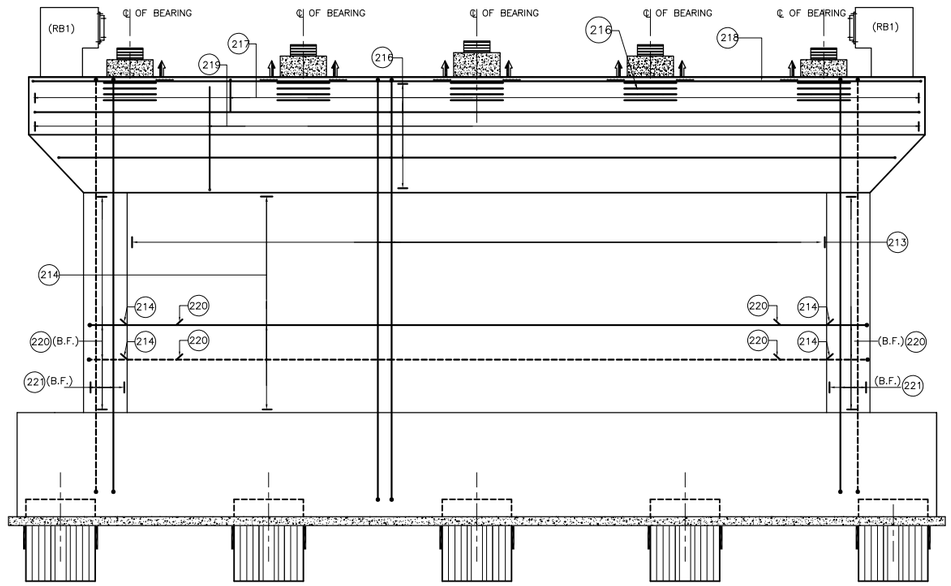
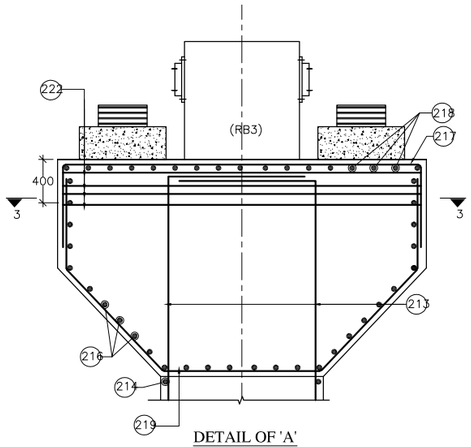


REINFORCEMENT DETAIL OF PIER
SCALE 1:75

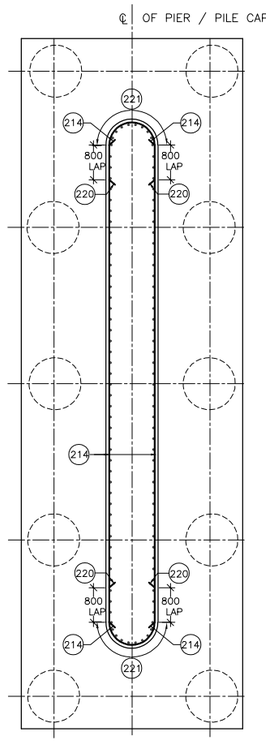


SECTION ON 1-1
SCALE 1:75

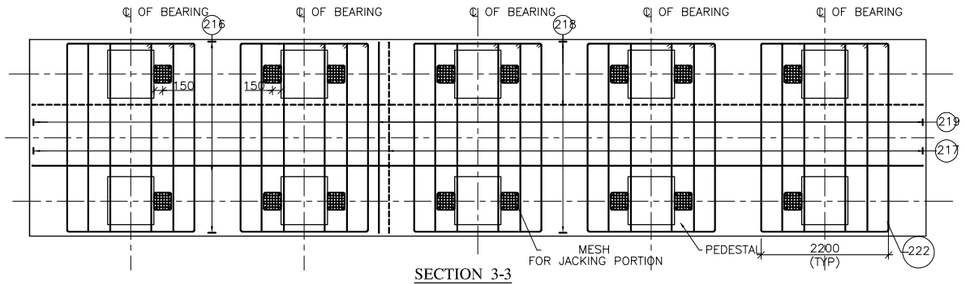


DETAIL OF 'A'
SCALE 1:40

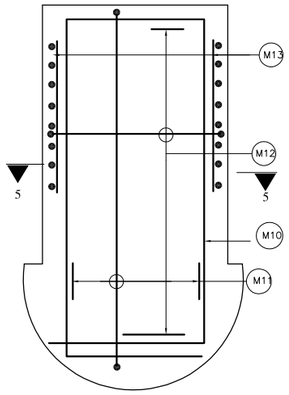
REINFORCEMENT SCHEDULE OF PIER			
BAR MKD.	DIA. OF BARS (mm)	SPACING (mm)	REMARKS
213	32	150 C/C	
214	16	150 C/C	
215	10	250 C/C	HORIZONTALLY & VERTICALLY IN A STAGGERED MANNER
216	12	125 C/C	
217	25	125 C/C	
218	25	125 C/C	
219	12	125 C/C	
220	16	150 C/C	
221	32	150 C/C	
222	12	6 LEGGED STP. IN 4 LAYERS 2200mm WIDTH	
M1	16	150 C/C	
M2	16	150 C/C	
M3	8	50 C/C	2 LAYERS
M4	32	8 NOS.	
M5	25	8 NOS.	
M6	12	9 NOS.	4 LEGGED
M7	12	5 NOS.	4 LEGGED
M8	12	4 NOS.	4 LEGGED
M9	8	50 C/C	
M10	32	5 NOS.	
M11	12	6 NOS.	4 LEGGED
M12	12	8 NOS.	4 LEGGED
M13	8	50 C/C	



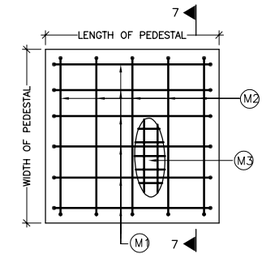
SECTION ON 2-2
SCALE 1:100



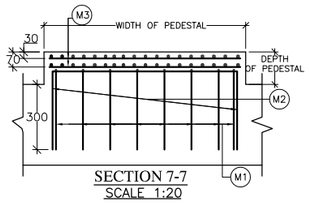
SECTION 3-3
SCALE 1:75



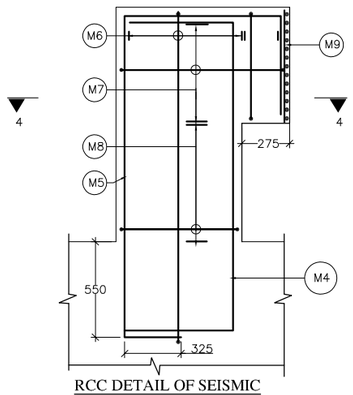
R.C.C DETAIL OF SEISMIC
REACTION BLOCK TYPE RB-3
SCALE 1:15



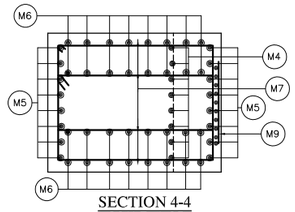
PLAN SHOWING PEDESTAL REINF.
SCALE 1:20



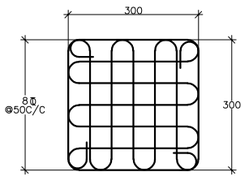
SECTION 7-7
SCALE 1:20



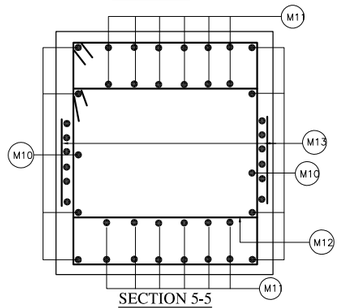
RCC DETAIL OF SEISMIC
REACTION BLOCK TYPE RB-1
SCALE 1:25



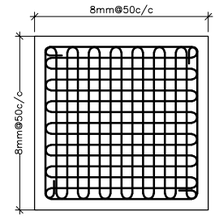
SECTION 4-4
SCALE 1:25



DETAIL OF MESH REINF.
(FOR JACKING POSITION)
SCALE 1:10



SECTION 5-5
SCALE 1:15



DETAIL OF MESH REINF.
(MKD. M3)
SCALE 1:20

208 TO 212 MKD. BARS ARE NOT USED

LEGEND:—
REAR FACE / TOP BAR ----------
FRONT FACE / BOTTOM BAR ——————

NOTES :

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
2. GRADE OF CONCRETE USED :—
   (i) PIER & PIER CAP = M30,
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION FE–500) CONFORMING TO IS: 1786.
4. CLEAR COVER = 50MM. FOR SUBSTRUCTURE.
5. MINIMUM LAP LENGTH FOR REINFORCEMENT BARS SHALL BE AS PER SECTION 15, IRC:112–2011. LAP SHALL BE STAGGERED AND NOT MORE THAN 50% BARS SHALL BE LAPPED AT ANY SECTION.
8. LAP SPLICES SHALL BE PROVIDED ONLY IN THE CENTRAL HALF OF THE MAIN BAR LENGTH. NOT MORE THAN 50% OF THE BARS SHALL BE SPLICED AT ONE SECTION.
9. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH :

CET/BDG/2015/3580/NH–208/FDPR/MJ/GA
(SHEET NO. 01 TO 06)
CET/BDG/2015/3580/NH–208/FDPR/MJ/RCC
(SHEET NO. 01 TO 04, 06 & 07)
CET/BDG/2015/3580/NH–208/FDPR/MJ/MISC.
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

REINFORCEMENT DETAILS OF PIER, PIER CAP AND REACTION BLOCK

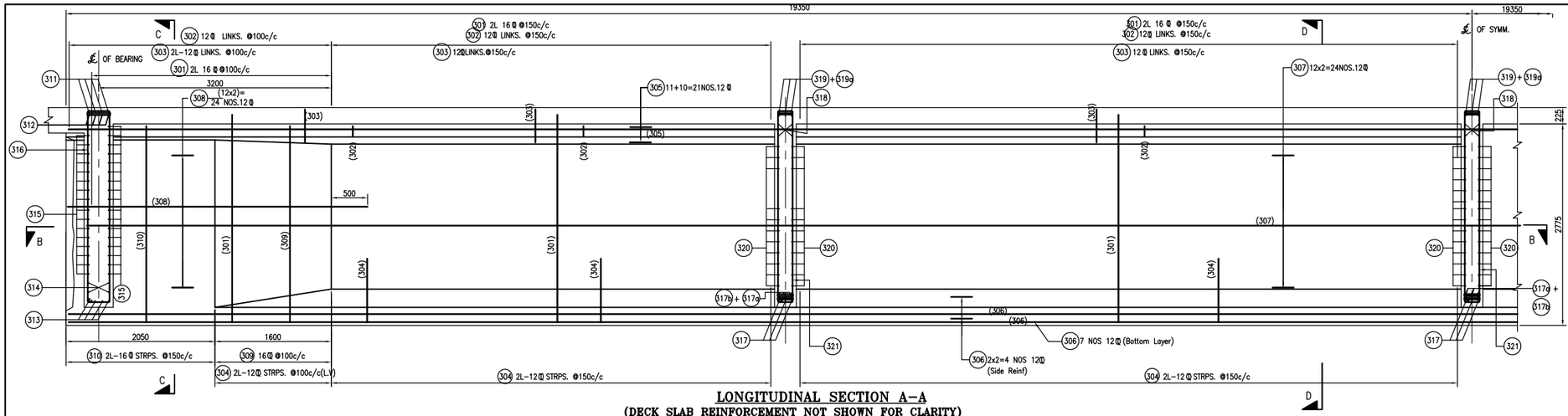
ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

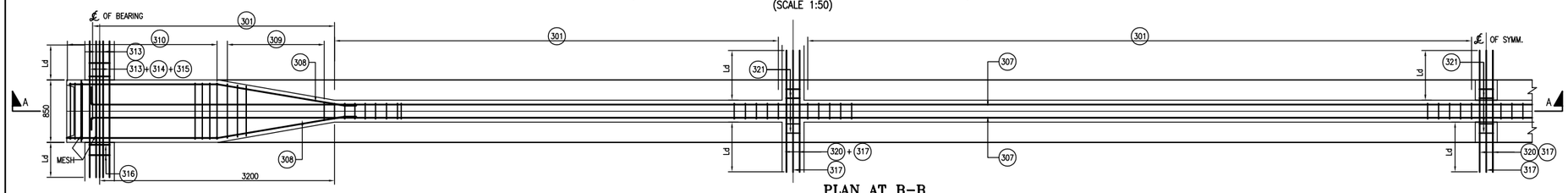
CONSULTANT :

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

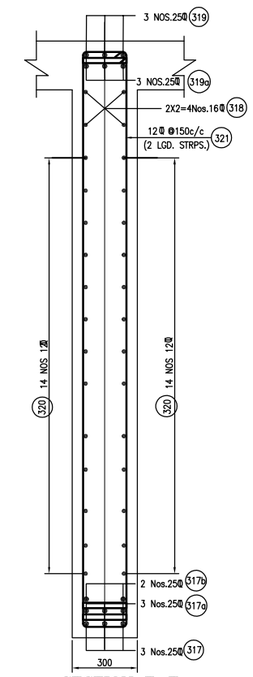
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MJ/RCC		
Revision Mkd. - R0		Sheet No. - 05 of 07	
Drawn By.	Design By.	Checked By.	Approved By.
R.Patra	A.Mukherjee	A. Dey	B.Koner



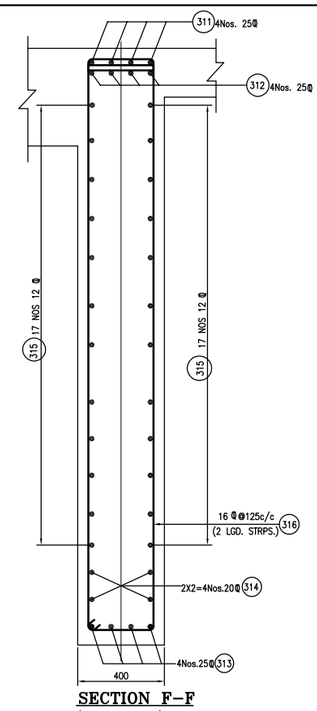
LONGITUDINAL SECTION A–A
(DECK SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)
(SCALE 1:50)



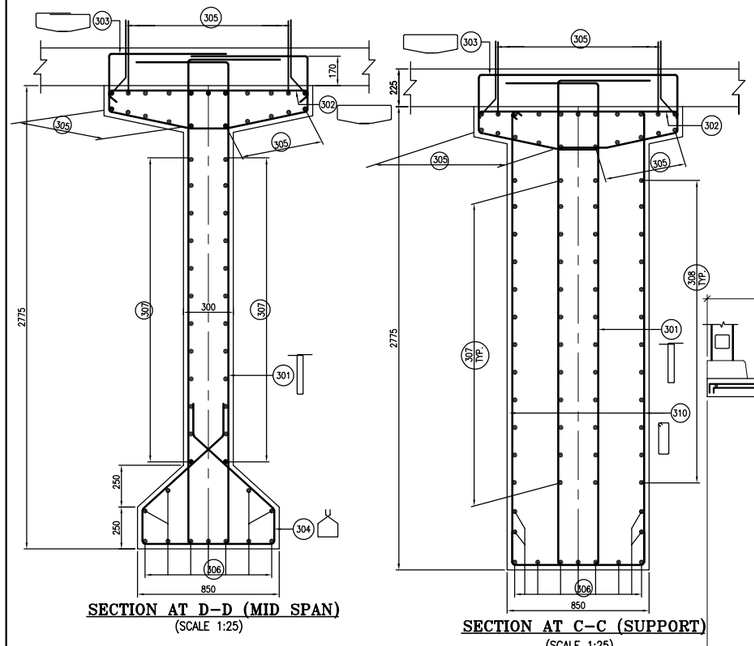
PLAN AT B–B
(SCALE 1:50)



SECTION E–E
(SCALE 1:20)

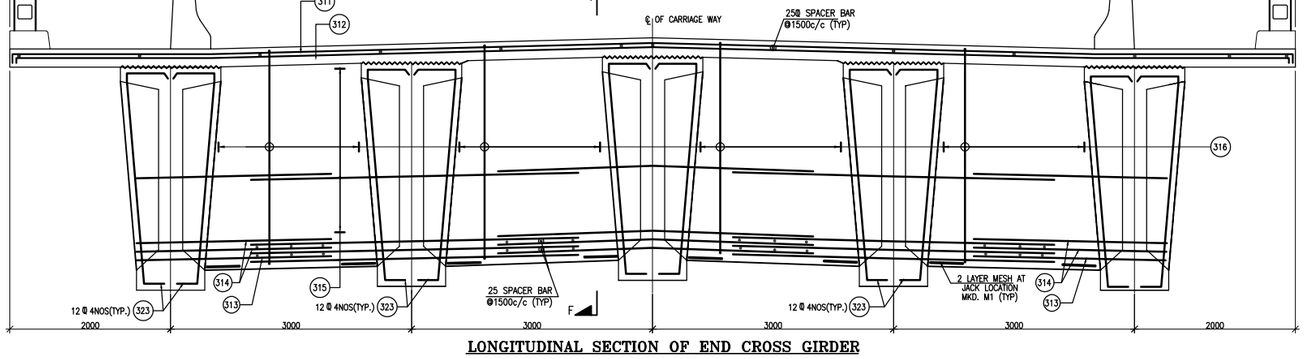


SECTION F–F
(SCALE 1:20)

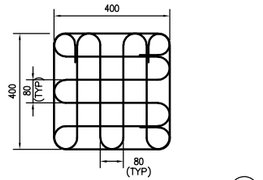


SECTION AT D–D (MID SPAN)
(SCALE 1:25)

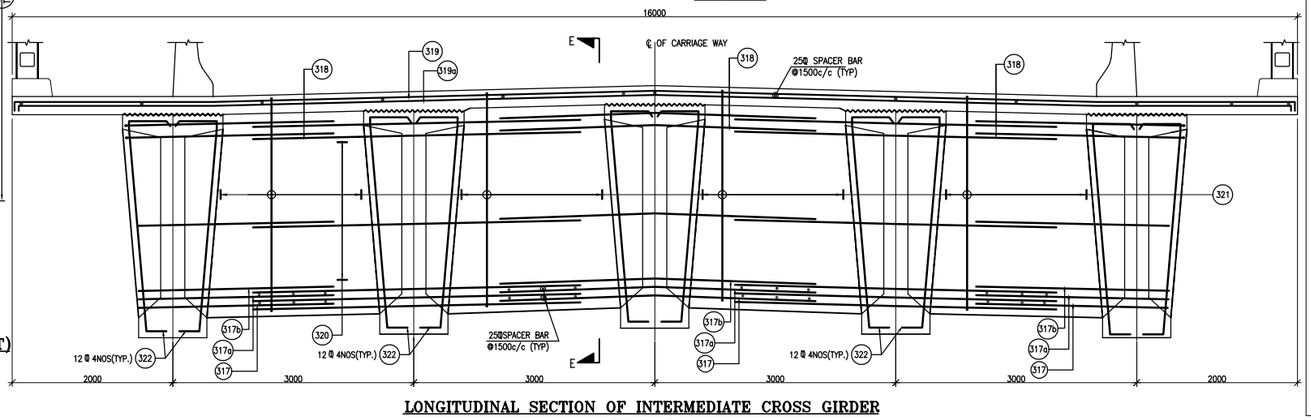
SECTION AT C–C (SUPPORT)
(SCALE 1:25)



LONGITUDINAL SECTION OF END CROSS GIRDER
SCALE 1:50



DETAIL OF MESH MKD. (M1) FOR JACK
(SCALE 1:15)



LONGITUDINAL SECTION OF INTERMEDIATE CROSS GIRDER
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE READ.
3. SPLICING OF REINFORCEMENTS SHALL BE AVOIDED AS FAR AS PRACTICABLE. IN CASE SPLICING OF BARS BECOME UNAVOIDABLE THE ARRANGEMENT SHALL CONFORM TO IRC:2012–2011.
4. GRADE OF CONCRETE:–
   PSC I–GIRDER & CROSS GIRDER M–45.
5. CLEAR COVER:–
   PSC I–GIRDER & CROSS GIRDER – 40mm.
6. STEEL USED SHALL BE H.Y.S.D. BARS CONFORMING TO IS:1786 OF GRADE Fe–500.
7. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.

CET/BDG/2015/3580/NH–208/FDPR/MJ/GA
(SHEET NO. 01 TO 06)
CET/BDG/2015/3580/NH–208/FDPR/MJ/RCC
(SHEET NO. 01 TO 05 & 07)
CET/BDG/2015/3580/NH–208/FDPR/MJ/MISC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura — National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

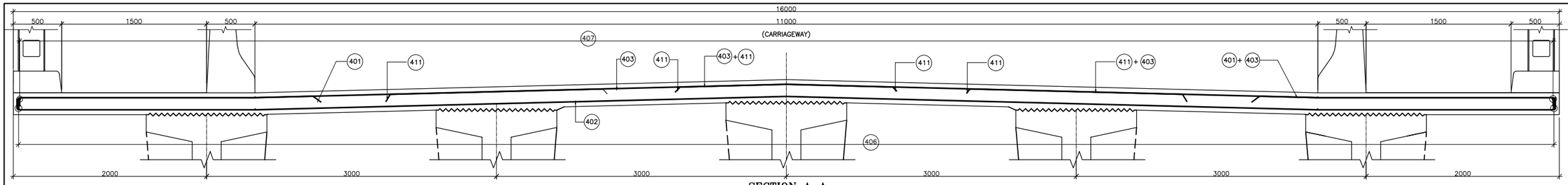
REINFORCEMENT DETAILS OF LONGITUDINAL AND CROSS GIRDER

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

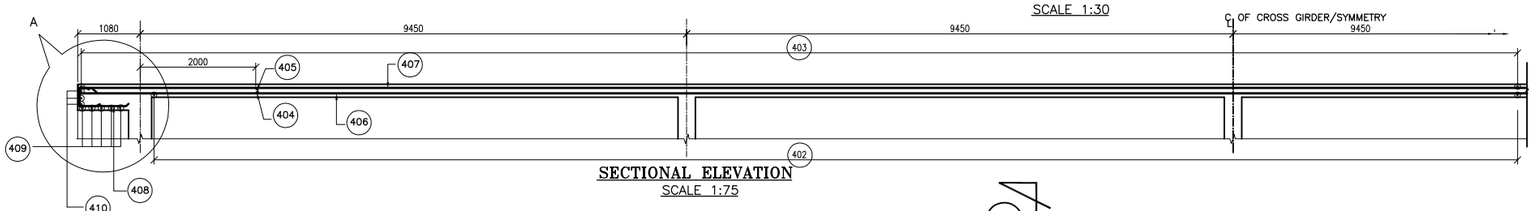
CONSULTANT :
CETEST Engineering Consultants — An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MJ/RCC		
Revision Mkd. - R0		Sheet No. - 06 of 07	
Drawn By.	Design By.	Checked By.	Approved By.
R.Patra	A.Mukherjee	A. Dey	B.Koner



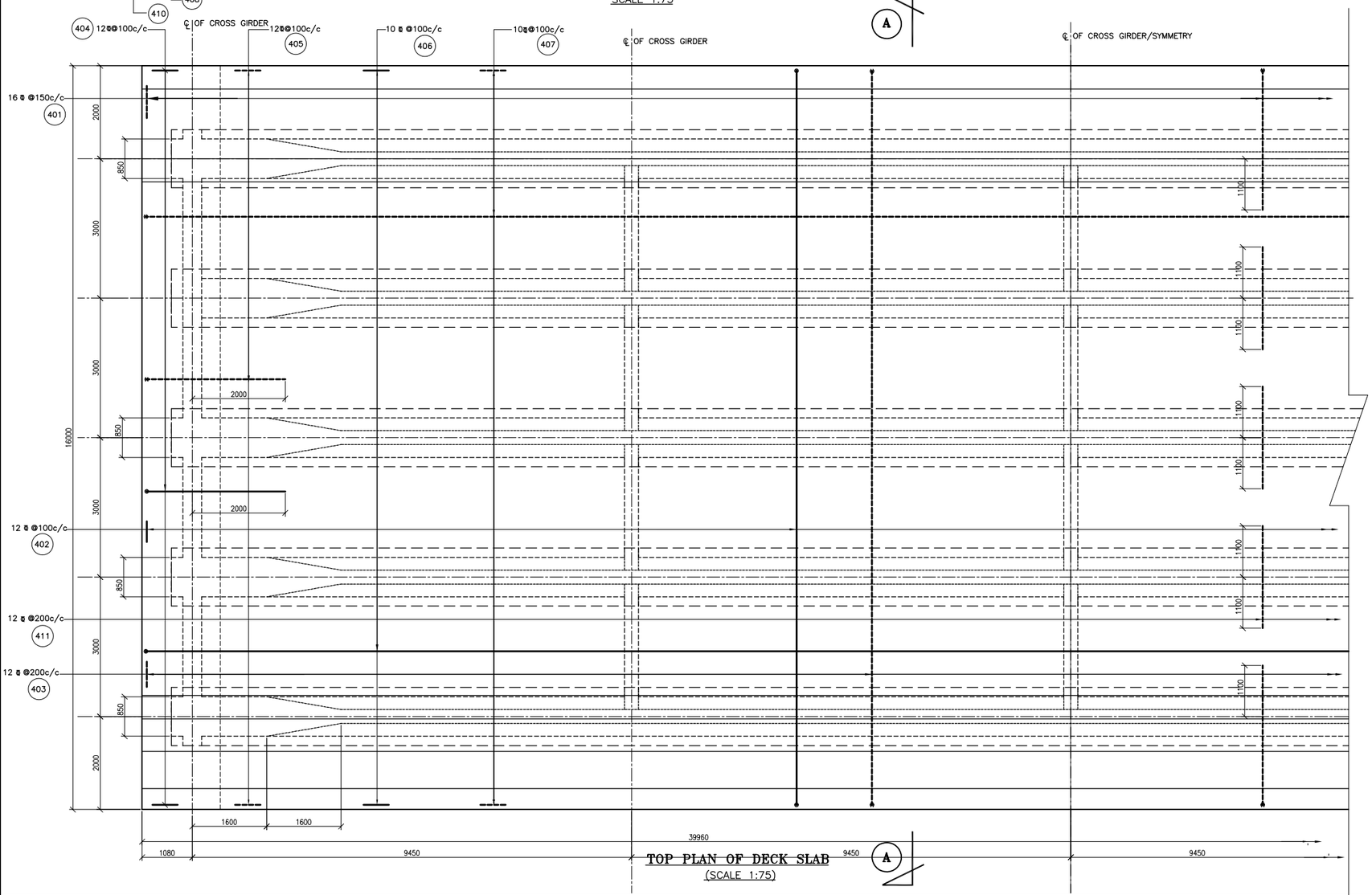
SECTION A–A

SCALE 1:30



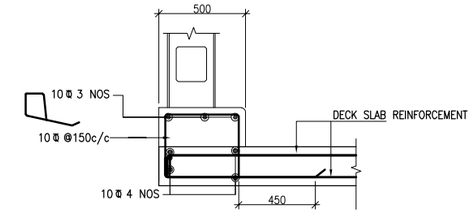
SECTIONAL ELEVATION

SCALE 1:75



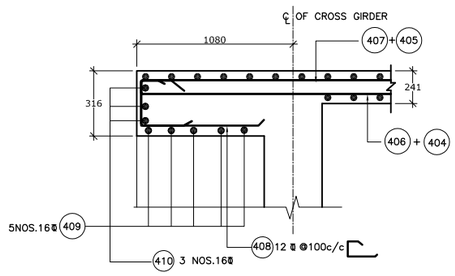
TOP PLAN OF DECK SLAB

(SCALE 1:75)



REINFORCEMENT DETAILS OF KERB

SCALE : 1:25



DETAIL– A

SCALE 1:30

LEGEND:–

REAR FACE BAR/TOP BAR ----------

FRONT FACE BAR/BOTTOM BAR ——————

NOTES :–

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. GRADE OF CONCRETE = M–40.
3. CLEAR COVER = 40 MM.
4. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:

CET/BDG/2015/3580/NH–208/FDPR/MJ/GA
(SHEET NO. 01 TO 06)
CET/BDG/2015/3580/NH–208/FDPR/MJ/RCC
(SHEET NO. 01 TO 06)
CET/BDG/2015/3580/NH–208/FDPR/MJ/MISC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura — National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

REINFORCEMENT DETAILS OF DECK SLAB

ROAD NAME: Kailashahar to Teliamura Section of NH-208

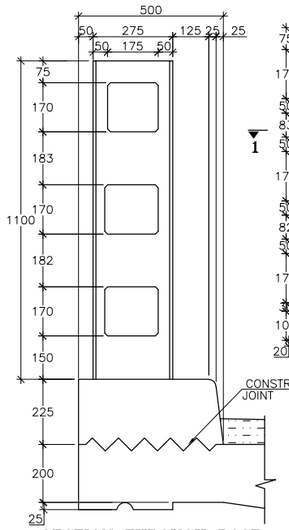
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

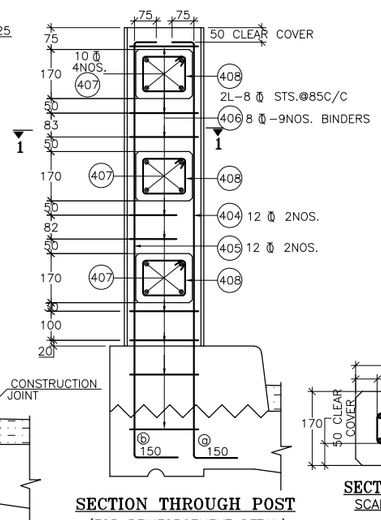
CETEST Engineering Consultants — An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

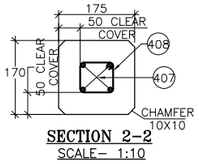
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MJ/RCC		
Revision Mkd. - R0		Sheet No. - 07 of 07	
Drawn By.	Design By.	Checked By.	Approved By.
R.Patra	A.Mukherjee	A. Dey	B.Koner



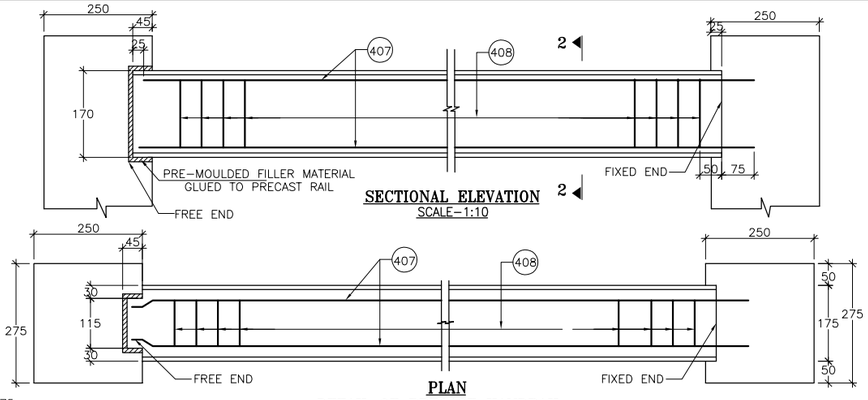
SECTION THROUGH POST
(FOR GENERAL ARRANGEMENT)
SCALE–1:15



SECTION THROUGH POST
(FOR REINFORCEMENT DETAIL)
SCALE–1:15

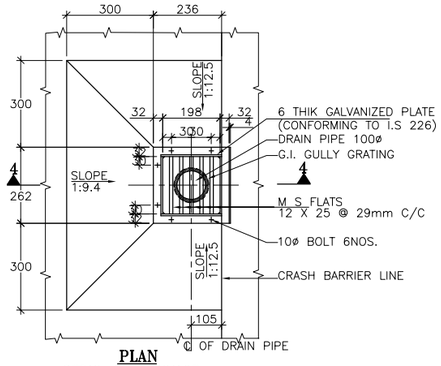


SECTION 2–2
SCALE– 1:10

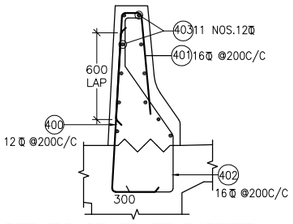


SECTIONAL ELEVATION
SCALE–1:10

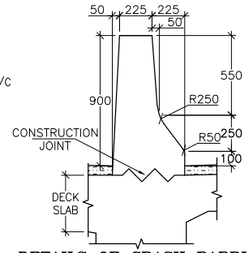
PLAN
DETAIL OF PRECAST HANDRAIL
SCALE–1:10



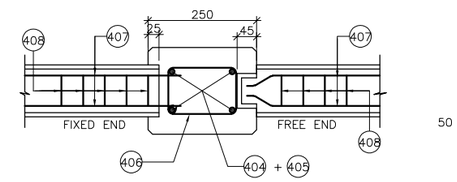
PLAN
DETAIL OF DRAINAGE
SPOUT AND COLLECTION PIT
SCALE– 1:15



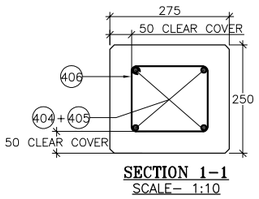
DETAILS OF CRASH BARRIER
(FOR REINFORCEMENT DETAIL)
SCALE–1:30



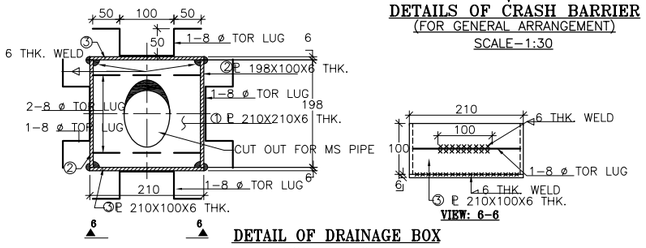
DETAILS OF CRASH BARRIER
(FOR GENERAL ARRANGEMENT)
SCALE–1:30



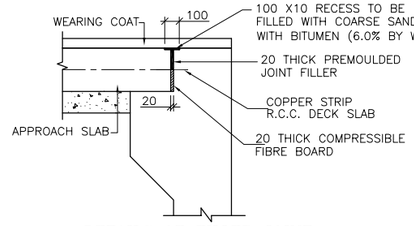
REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST
SCALE–1:10



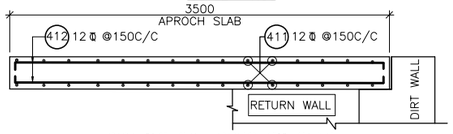
SECTION 1–1
SCALE– 1:10



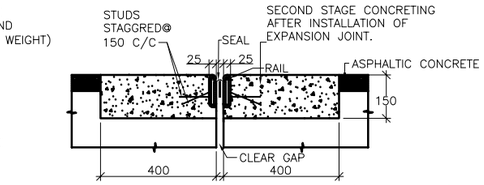
DETAIL OF DRAINAGE BOX
SCALE 1:10



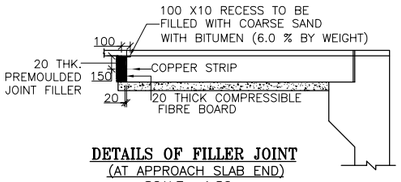
DETAILS OF FILLER JOINT
SCALE– 1:30



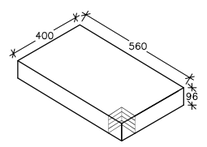
DETAILS OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:40



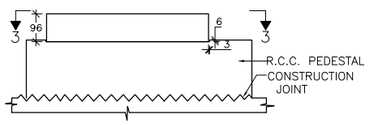
DETAIL OF STRIP TYPE EXPANSION JOINT(40mm GAP)
SCALE 1:15



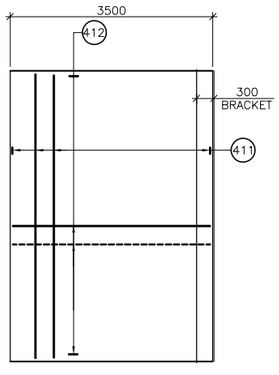
DETAILS OF FILLER JOINT
(AT APPROACH SLAB END)
SCALE– 1:50



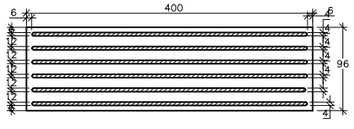
ISOMETRIC VIEW OF
ELASTOMERIC BEARING
SCALE 1:20



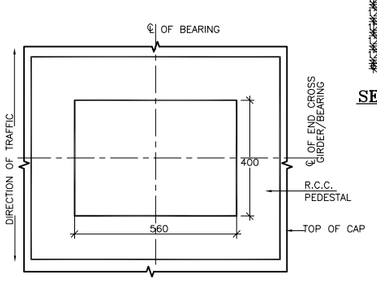
ELEVATION SHOWING BEARING
EALSTOMERIC BEARING OVER R.C.C PEDESTAL
SCALE 1:15



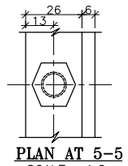
PLAN OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:75



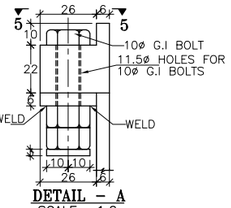
SECTION THROUGH ELASTOMERIC BEARING
SCALE 1:5



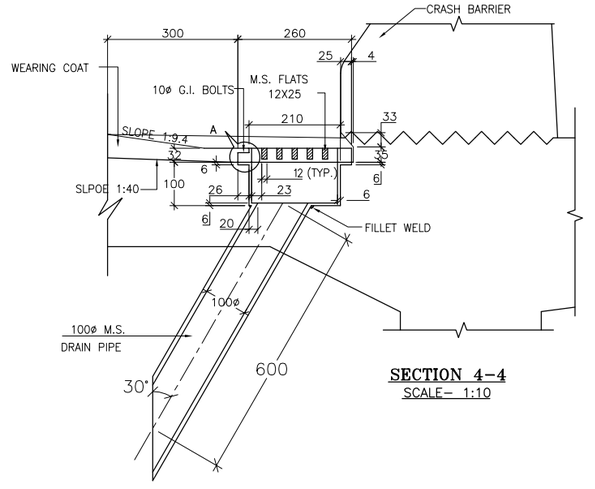
PLAN 3–3
SCALE 1:15



PLAN AT 5–5
SCALE– 1:2



DETAIL – A
SCALE– 1:2



SECTION 4–4
SCALE– 1:10

SPECIAL NOTES FOR ELASTOMERIC BEARINGS

INSTALLATION INSTRUCTIONS :

1. CARE SHALL BE TAKEN IN PACKING ,TRANSPOTATION,STORAGE AND HANDLING TO AVOID ANY MECHANICAL DAMAGE, CONTAMINATION WITH OIL,GREASE AND DIRT,UNDUE EXPOSURE TO SUNLIGHT AND WEATHER.
2. THE BEARINGS SHALL BE PLACED IN A RECESS
3. THE POSITION OF THE BEARINGS SHALL BE ACCURATELY MARKED ON THE AREA WHERE THE BEARINGS SHALL BE SEATED ACCURATELY LEVELED.
4. THE CONCRETE SURFACE SHALL BE FREE FROM ANY LOOSE MATERIAL AND CLEANED OF ANY GREASE,OIL PAINT ETC.THE SURFACE SHALL BE SAND BLASTED,CLEAN OF ALL LAITANCE AND LEVELED TRUE.
5. BEARINGS MUST BE PLACED BETWEEN TRUE HORIZONTAL SURFACES (MAXIMUM TOLERANCE 0.2 PER CENT PERPENDICULAR TO LOAD) AND AT TRUE PLAN POSITION OF THEIR CONTROL LINES MARKED ON RECEIVING SURFACES(MAXIMUM TOLERANCE + 3mm).CONCRETE SURFACES SHALL BE FREE LOCAL IRREGULARITIES(MAXIMUM TOLERANCE+ 1mm IN HEIGHT).
6. THE FROMS AROUND THE BEARINGS SHALL BE SOFT ENOUGH FOR EASY REMOVAL . FROMS SHALL ALSO FIT THE BEARINGS SNUGLY AND PREVENT ANY LEAKAGE OF MORTAR GROUT . ANY MORTAR CONTAMINATING THE BEARING DURING CONCRETING SHALL BE COMPLETELY REMOVED BEFORE SETTING.
7. THE TEMPORARY FORMS SHALL BE REMOVED AFTER THE SUPERSTRUCTURE CONCRETE HAS SET. THE SIDES OF THE BEARINGS SHALL BE CLEANED OF ANY DEPOSIT OF CEMENT SLURRY/CONCRETE.
8. SURFACE OF REACTION BLOCK, USED FOR BEARING INSTALLATION SHOULD BE FAIR FACED.

MAINTENANCE :

1. THE BEARINGS SHALL BE SUBJECTED TO PLANNED MAINTENANCE CARE.
2. THE EXPOSED BEARING SURFACE SHALL BE MAINTANED CLEAN AND FREE FROM CONTAMINATION WITH GREASE OR OIL,ETC.
3. ANNUAL ROUTINE MAINTENANCE INSPECTION OR SPECIAL MAINTENANCE INSPECTION OF ALL BEARINGS SHALL BE MADE TO CHECK FOR ANY SURFACE CRACKING OR SIGNS OF DAMAGE, DETERIORATION OR DISTRESS.
4. DAMAGED BEARINGS SHALL BE REPLACED IMMEDIATELY. TO AVOID DIFFERENCES IN STIFFNESS, ALL ADJACENT BEARINGS ON THE SAME LINE OF SUPPORT SHALL ALSO BE REPLACED AND UNIFORM SEATING OF THE MAIN GIRDERS OVER ALL THE NEW BEARINGS SHALL BE ENSURED.

RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.
2. BEARING TYPE B1,B2 & B3 SHOULD BE PLACED ON PIER AND ABUTMENT AS PER THEIR POSITIONS MARKED IN GENERAL ARRANGEMENT DRAWINGS.
3. SPECIFICATIONS INCLUDING PERMISSIBLE TOLERANCES FOR THE ELASTOMERIC BEARINGS SHALL BE IN ACCORDANCE WITH IRC:83(PART II)2015 STANDARD SPECIFICATIONS AND CODE OF PRACTICE FOR ROAD BRIDGES SECTION IX PART II–ELASTOMERIC BEARINGS.
4. RAW MATERIAL CHLOROPRENE (CR) SHALL ONLY BE USED IN MANUFCATURE OF BEARINGS.
5. GRADES OF RAW ELASTOMER OF PROVEN USE IN ELASTOMERIC BEARINGS, WITH LOW CRYSTALLISATION RATES AND ADEQUATE SHELF LIFE (E.G.NEOPRENE WRT. BAYPRENE 110 OR EQUIVALENT) SHALL BE USED. NO RECLAIMED RUBBER OR VULCANISED WASTES SHALL BE USED. THE RAW ELASTOMER CONTENT OF THE COMPOUND SHALL NOT BE LOWER THAN 60 PER CENT. THE ASH CONTANT SHALL NOT EXCEED 5 PER CENT.(AS PER TESTS CONDUCTED IN ACCORDANCE WITH ASTM D–297).EPDM AND OTHER SIMILAR CANDIDATE ELASTOMERS FOR BRIDGS BEARING USE SHALL NOT BE PERMITTED.
6. FABRICATION, TESTING AND ACCEPTANCE OF BEARINGS SHALL BE IN ACCORDANCE WITH IRC:83(PART II) 1987.
7. BEARINGS SHALL BE HANDLED CAREFULLY. THESE SHALL BE PROCTED FROM BRIGHT SUN LIGHT AND EXTREME COLD. THESE SHALL BE STORED NEATLY UNDER COVER TILL INSTALLATION.
8. BEARINGS & EXPANSION JOINTS SHALL BE PROCURED ONLY FROM PREQUALIFIED MANUFACTURERS.

NOTES OF DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR//GA (SHEET NO. 01 TO 06)
CET/BDG/2015/3580/NH–208/FDPR/RCC (SHEET NO. 01 TO 07)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN
DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura
National Highways & Infrastructure Development Corporation Ltd.

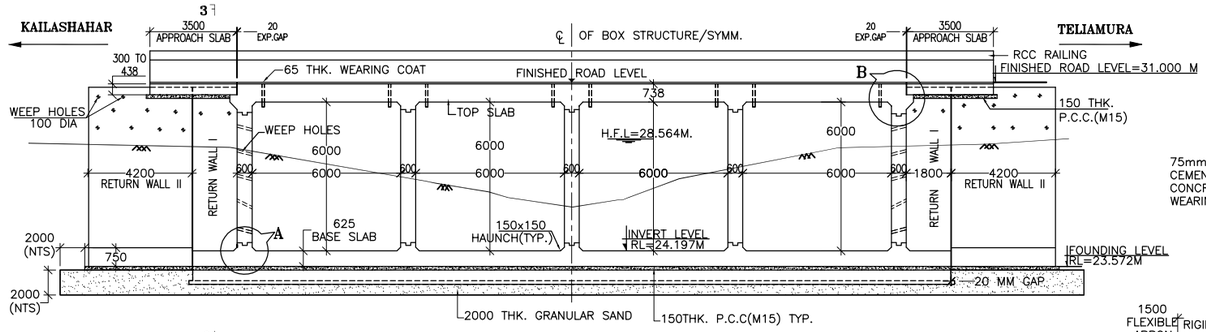
PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

MISCELLANEOUS DETAILS

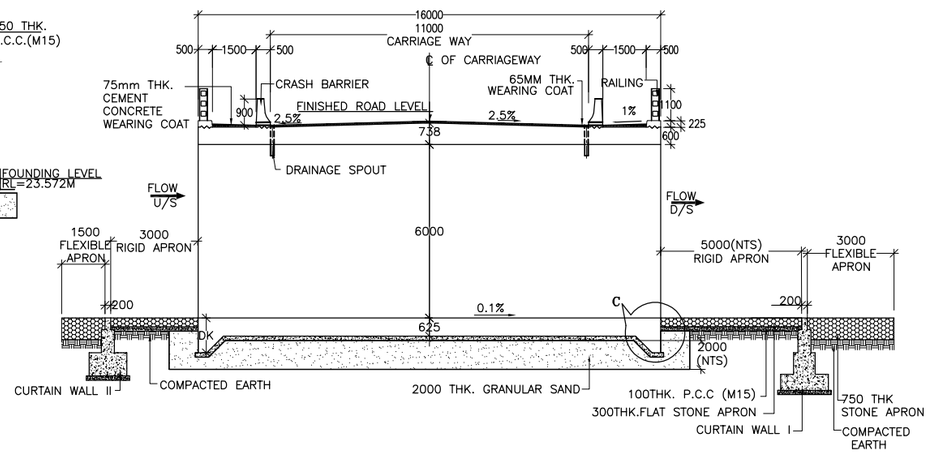
ROAD NAME: Kailashahar to Teliamura Section of NH-208
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MJ/MISC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
S.Dalui	-	A. Dey	B.Koner

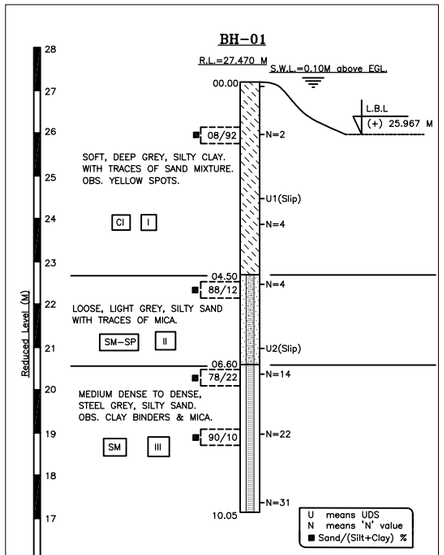


SECTION 2–2
(SCALE–1:175)

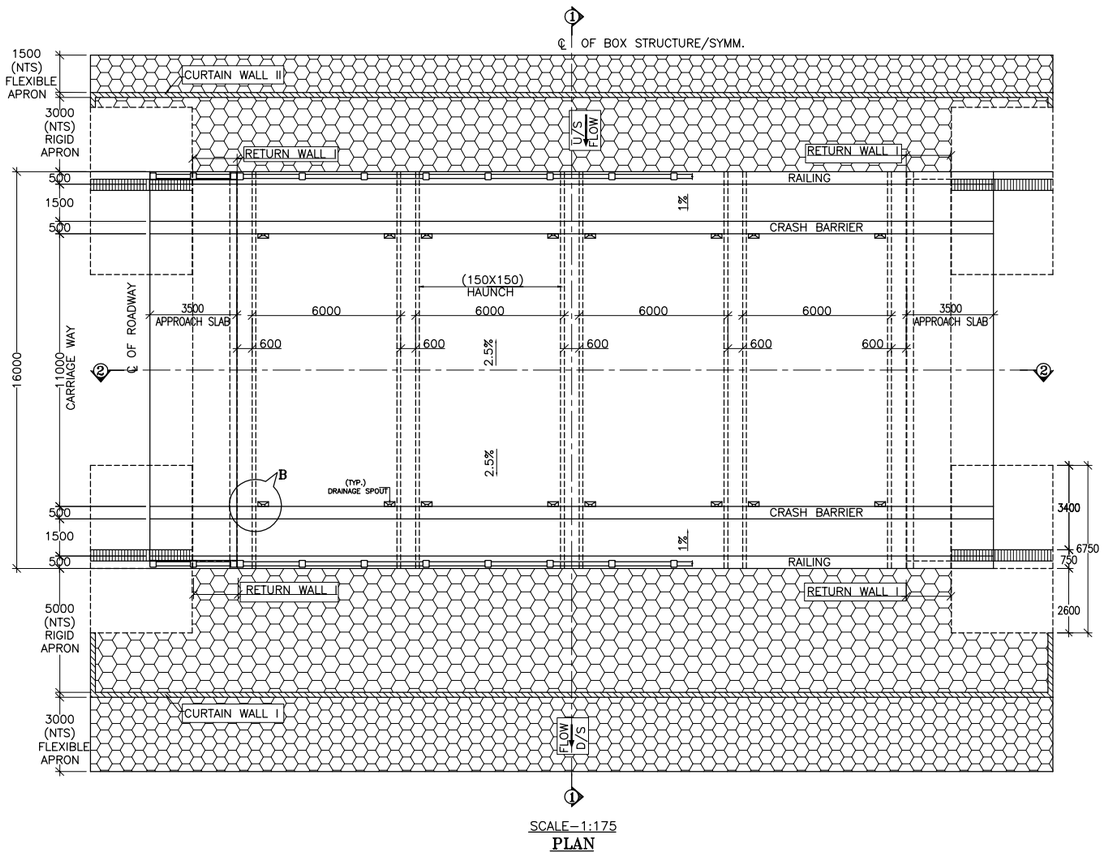


SECTION 1–1
(SCALE–1:150)

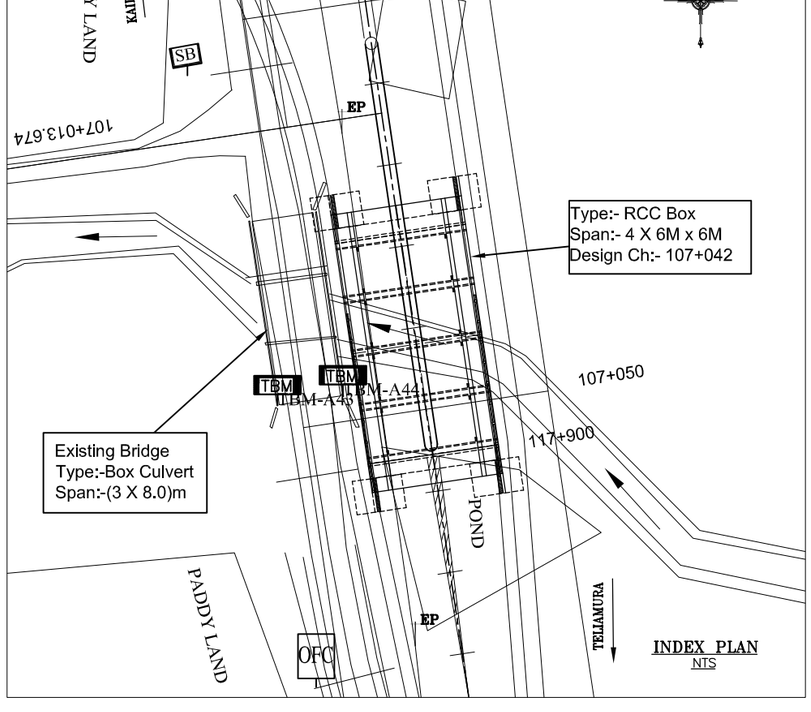
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm e = BASE SLAB THICKNESS



SOIL PROFILE
SCALE–(NTS)



SCALE–1:175
PLAN



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :–
   BOX STRUCTURE – M30
   RETURN WALL – M30
   APPROACH SLAB – M30
   RAILING – M30
   CURTAIN WALL – M20
   LEVELING COURSE(P.C.C) – M15
   CRASH BARRIER– M40 & KERB–M30
3. GRADE OF STEEL Fe–500 AS PER I.S.–1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL γ=2.0t/m^3 , ϕ=30°.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. 2M SAND FILLING SHOULD BE PROVIDED BELOW THE RAFT FOUNDATION IN ORDER TO ATTAIN THE BEARING CAPACITY–10 T/Sqm
9. MAXIMUM SCOUR LEVEL–24.360 M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :–
    CET/BDG/2015/3580/NH–208/FDPR/MN/GA
    (SHEET NO 02 OF 02)
    CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
    (SHEET NO 01 OF 01)
    CET/BDG/2015/3580/NH–208/FDPR/MN/MISC
    (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN
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National Highways & Infrastructure Development Corporation Ltd.

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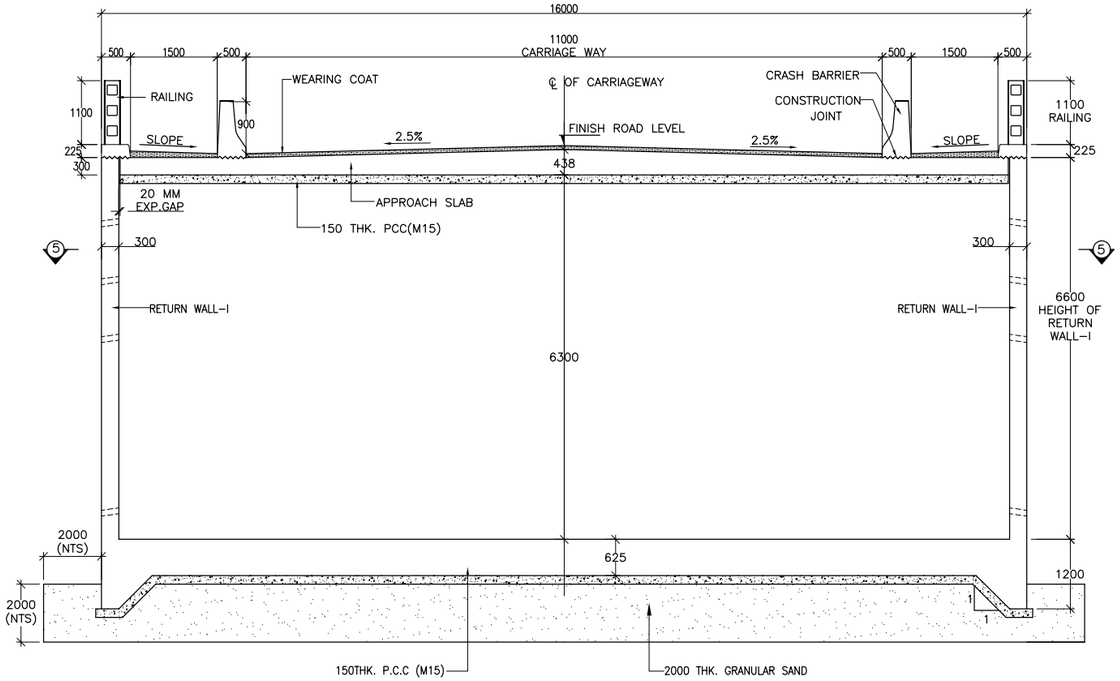
GENERAL ARRANGEMENT OF FOUR CELL R.C.C BOX BRIDGE 4X6.0M X 6.0M (AT CHAINAGE- 107.042KM)

ROAD NAME: Kailashahar to Teliamura Section of NH-208

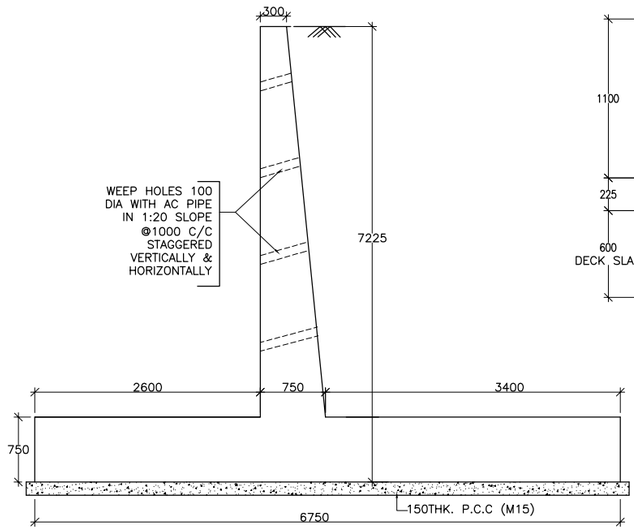
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

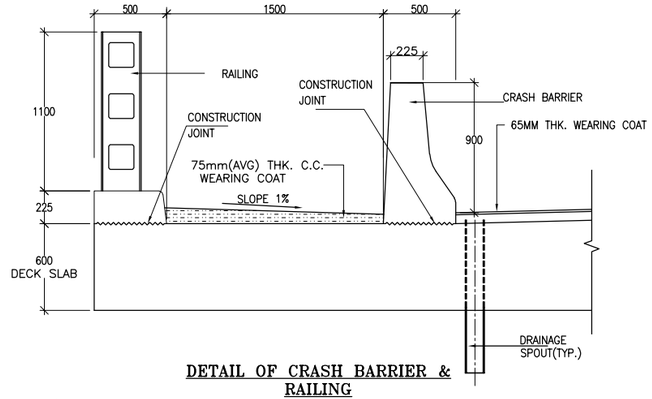
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 01 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R.M	A.D	B.K



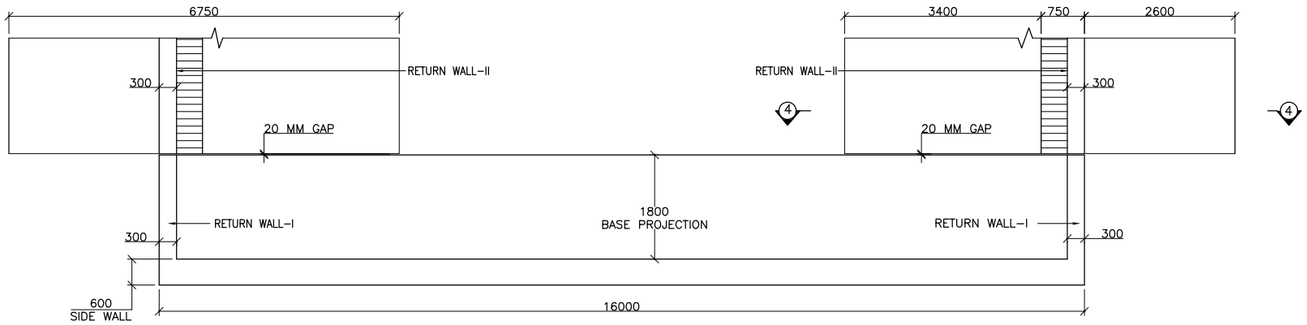
SECTION 3-3
(SCALE-1:75)



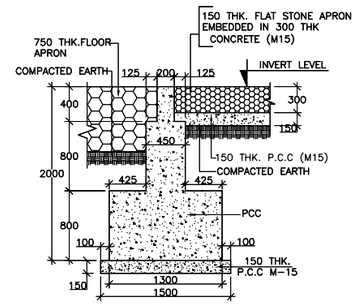
SECTION 4-4
(SHOWING RETURN WALL- II)
(SCALE-1:50)



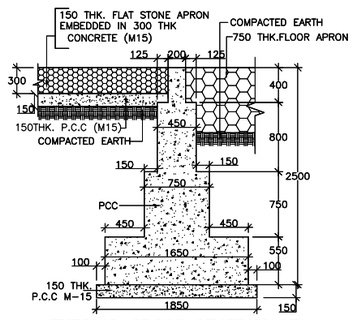
DETAIL OF CRASH BARRIER & RAILING
SCALE - 1:30



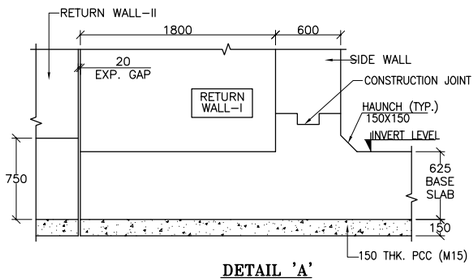
SECTIONAL PLAN 5-5
SCALE:- 1:75



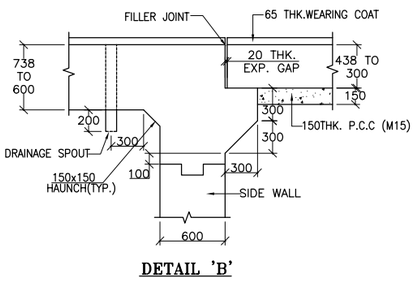
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-II (U/S)
(SCALE 1:50)



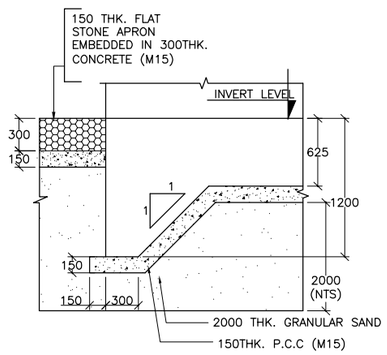
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-I (D/S)
(SCALE 1:50)



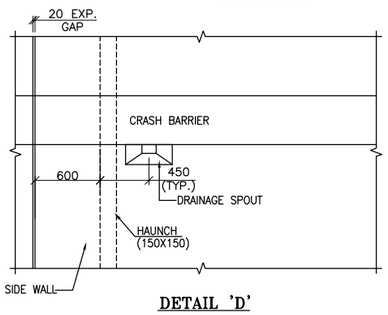
DETAIL 'A'
SCALE-1:40



DETAIL 'B'
SCALE-1:40



DETAIL 'C'
(SCALE-1:40)



DETAIL 'D'
(SCALE-1:40)

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.:-
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA
   (SHEET NO 01 OF 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
   (SHEET NO 01 OF 01)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
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MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

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National Highways & Infrastructure Development Corporation Ltd.

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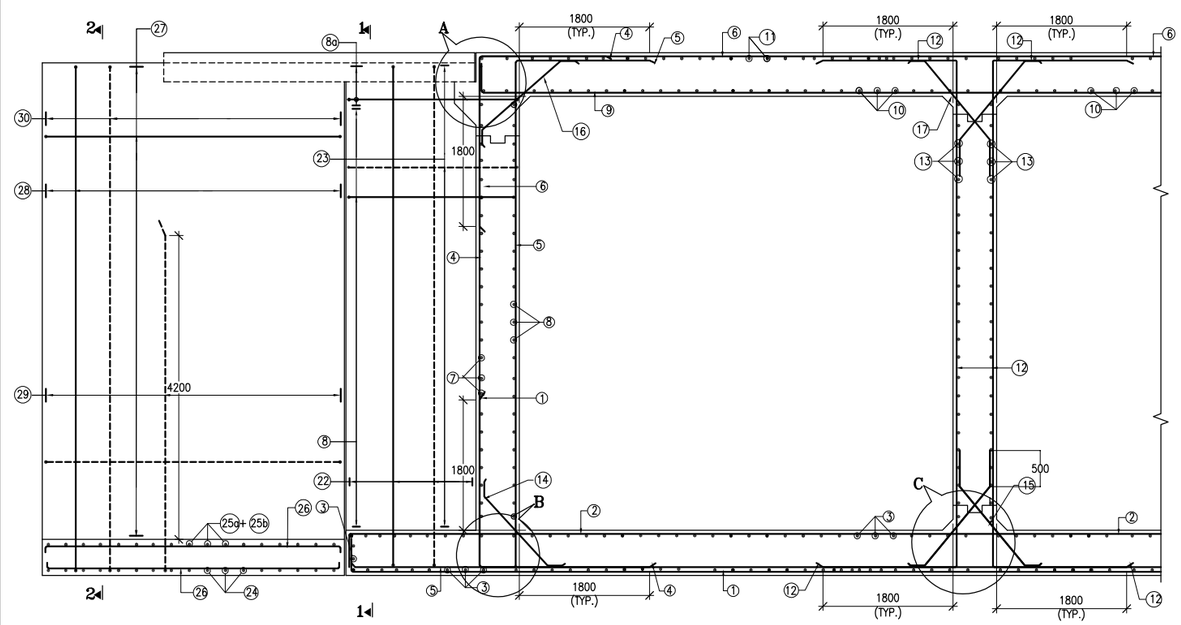
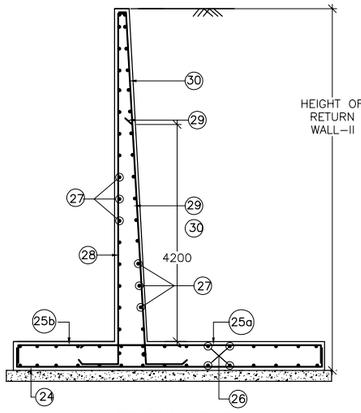
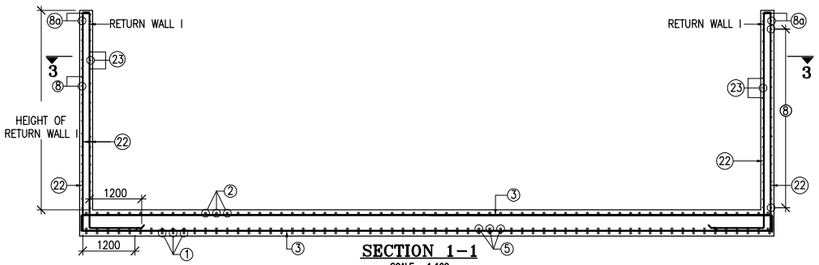
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 02 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R.M	A.D	B.K



REINFORCEMENT DETAIL OF FOUR CELL BOX CULVERT
SCALE : 1:60

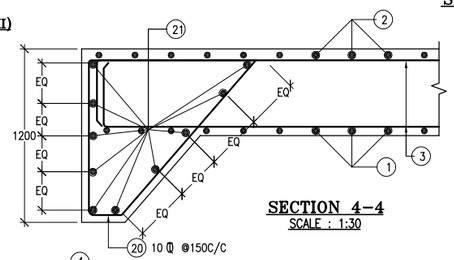


SECTION 2-2
(SHOWING RETURN WALL- II)
(SCALE-1:60)

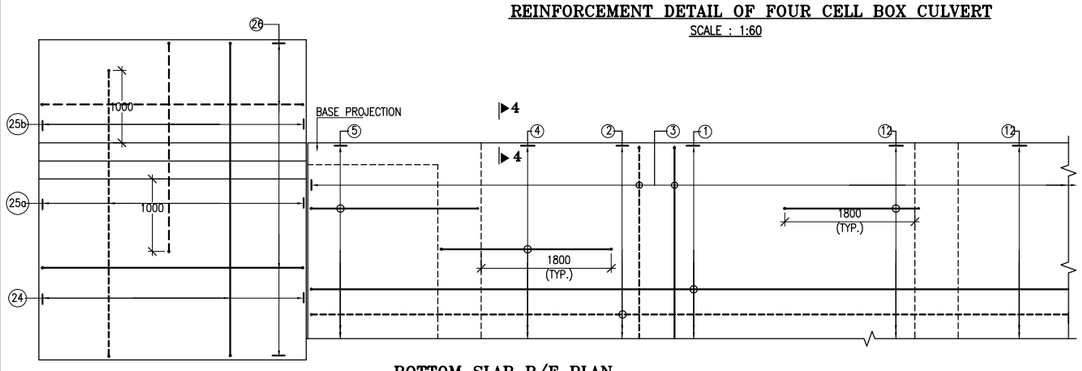


SECTION 1-1
SCALE : 1:100

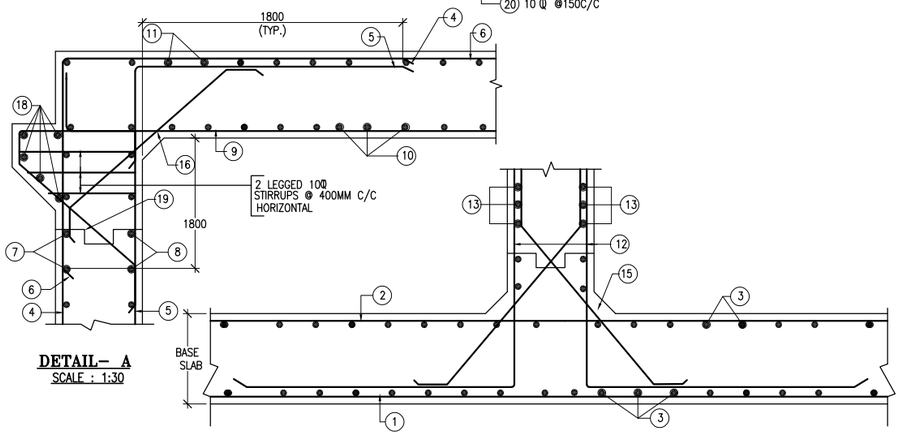
SECTIONAL PLAN 3-3
SCALE : 1:100



SECTION 4-4
SCALE : 1:30

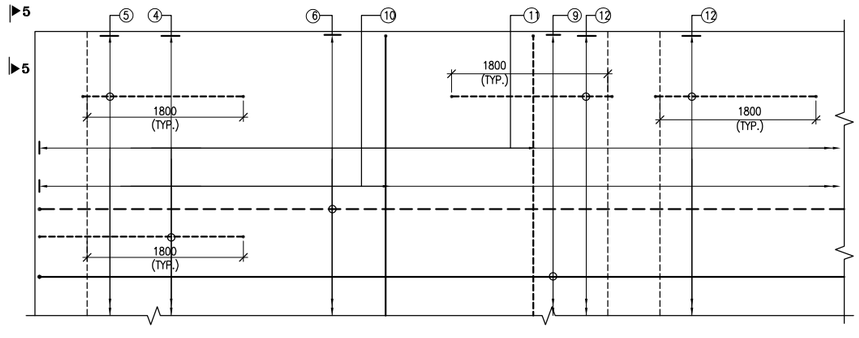


BOTTOM SLAB R/F PLAN
(HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:60

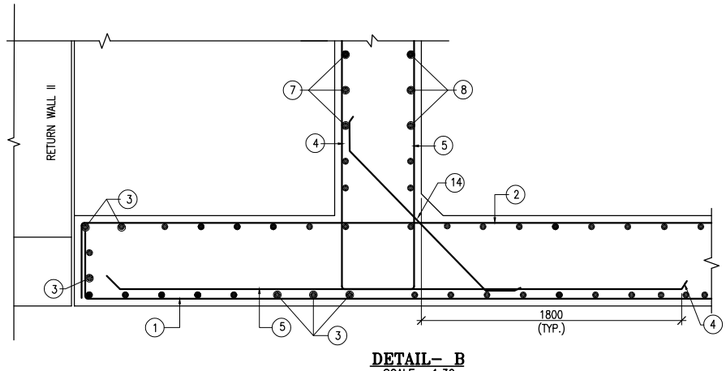


DETAIL- A
SCALE : 1:30

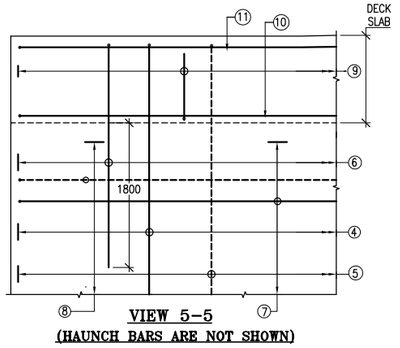
DETAIL- C
SCALE : 1:30



TOP SLAB R/F PLAN
(KERB, BRACKET & HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:50



DETAIL- B
SCALE : 1:30



VIEW 5-5
(HAUNCH BARS ARE NOT SHOWN)
SCALE : 1:30

SCHEDULE OF REINFORCEMENT

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)	SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
1.	①	16	150	21.	⑳	10	150
2.	②	16	150	22.	㉑	10	10(Nos)
3.	③	12	200	23.	㉒	12	200
4.	④	20	150	24.	㉓	20	150
5.	⑤	20	150	25.	㉔	20	150
6.	⑥	16	150	26.	㉕a	20	150
7.	⑦	12	200	27	㉕b	16	150
8.	⑧	12	200	28	㉖	12	125
9.	⑧a	12	5(Nos)	29	㉗	12	225
10.	⑨	16	150	30	㉘	12	150
11.	⑩	12	200	31.	㉙	25	100
12.	⑪	20	150	32.	㉚	25	100
13.	⑫	16	150				
14.	⑬	12	200				
15.	⑭	12	200				
16.	⑮	12	200				
17.	⑯	12	200				
18.	⑰	12	200				
19.	⑱	12	5(Nos)				
20.	⑲	12	200				

LEGEND:-

REAR FACE / TOP FACE / EARTH FACE BAR ----------

FRONT FACE / BOTTOM FACE / OPPOSITE TO EARTH FACE BAR ——————

NOTES :

1. ALL DIMENSIONS ARE IN MM.
2. CONC. GRADE SHALL BE M-30 & M-25 WHERE APPLICABLE.
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe-500) CONFORMING TO IS: 1786.
4. CLEAR COVER =TOP SLAB 40MM, SIDE WALL 50MM, BOTTOM SLAB 75.
5. LAP LENGTH & DEVELOPMENT LENGTH (Ld) OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH RELEVANT CLAUSE IRC : 112-2011.
6. WELDING OF BARS SHALL NOT BE PERMITTED.
7. SHARP EDGES OF CONCRETE WILL NOT BE PERMITTED.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA (SHEET NO. 01 & 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC (SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

REINFORCEMENT DETAILS OF 4X6.0M X6.0M RCC BOX BRIDGE

ROAD NAME: Kailashahar to Teliamura Section of NH-208

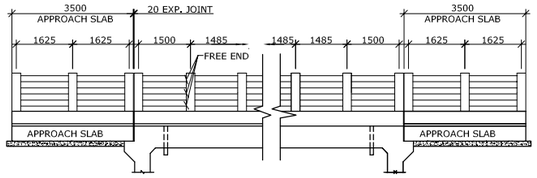
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

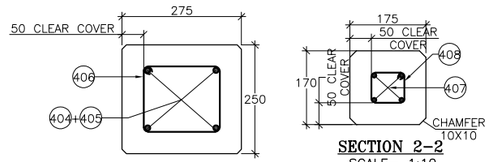
CETEST Engineering Consultants An ISO 9001, 14001 & OHSAS18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No. CET/BDG/2015/3580/NH-208/FDPR/MN/RCC			
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R.M	A.D	B.K

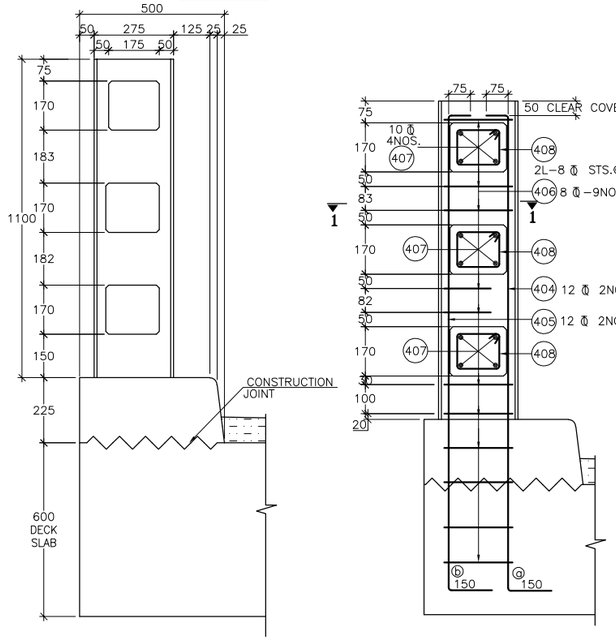


GENERAL ARRANGEMENT OF R.C.C. RAILING
4X6.0X6.0 BOX BRIDGE)
SCALE – 1:125



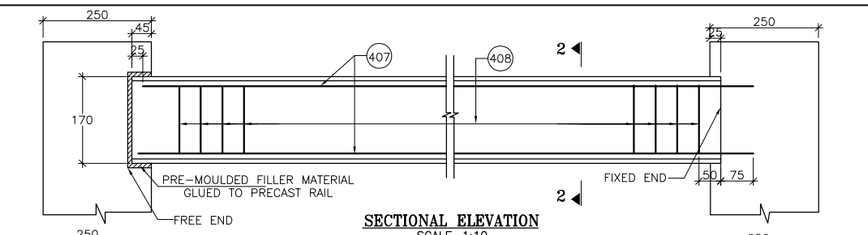
SECTION 1–1
SCALE– 1:10

SECTION 2–2
SCALE– 1:10

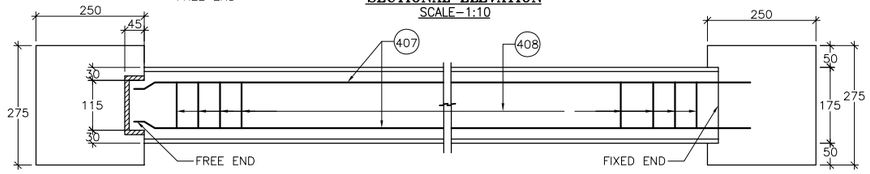


SECTION THROUGH POST
(FOR GENERAL ARRANGEMENT)
SCALE–1:15

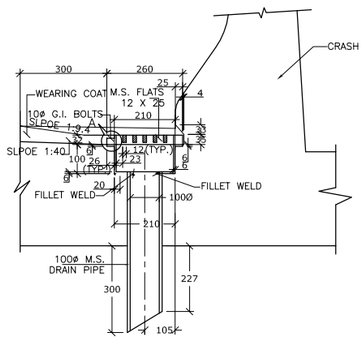
SECTION THROUGH POST
(FOR REINFORCEMENT DETAIL)
SCALE–1:15



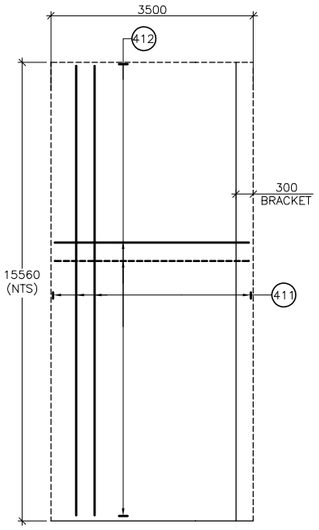
SECTIONAL ELEVATION
SCALE–1:10



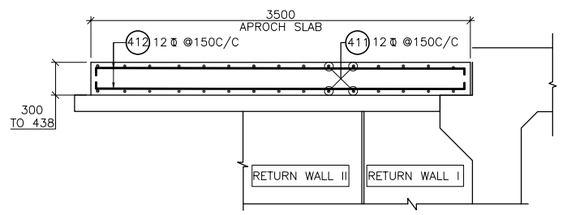
PLAN
DETAIL OF PRECAST HANDRAIL
SCALE–1:10



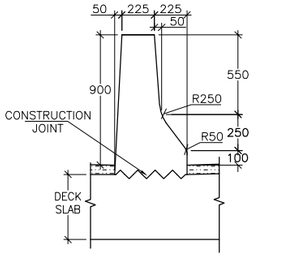
SECTION 3–3
SCALE– 1:15



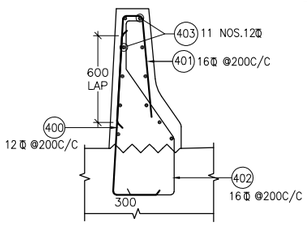
PLAN OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:75



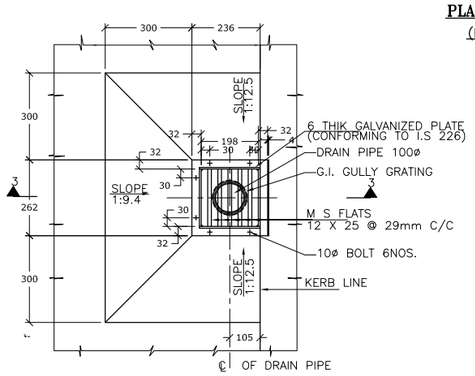
DETAILS OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:40



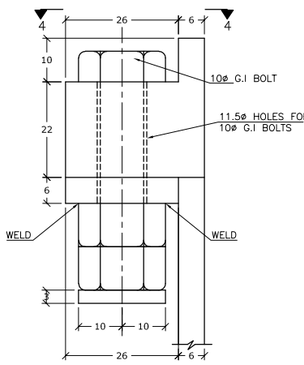
DETAILS OF CRASH BARRIER
(FOR GENERAL ARRANGEMENT)
SCALE–1:30



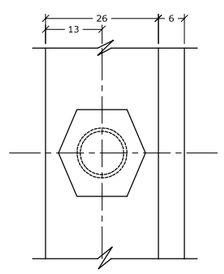
RCC OF CRASH BARRIER
SCALE–1:30



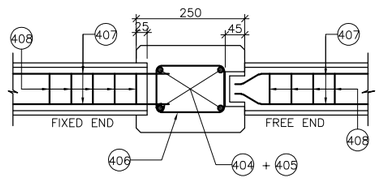
PLAN
DETAIL OF DRAINAGE
SPOUT AND COLLECTION PIT
SCALE– 1:15



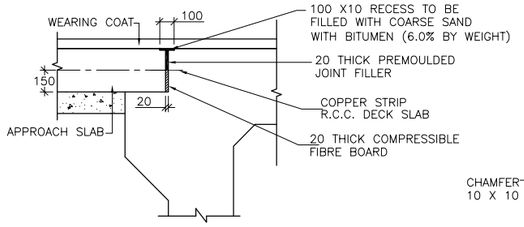
DETAIL – A
SCALE– 1:1



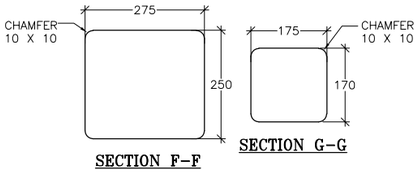
PLAN AT 4–4
SCALE– 1:1



REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST
SCALE–1:10



DETAILS OF FILLER JOINT
SCALE– 1:30



SECTION F–F
SECTION G–G

DETAILS OF HANDRAIL & POST
SCALE–1:10

NOTE :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.

NOTES FOR RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES FOR DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR/MN/GA
(SHEET NO. 01 & 02)

CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

DETAILS OF DRAINAGE SPOUT, EXP. GAP RCC RAILING & CRASH BARRIER

ROAD NAME: Kailashahar to Teliamura Section of NH-208

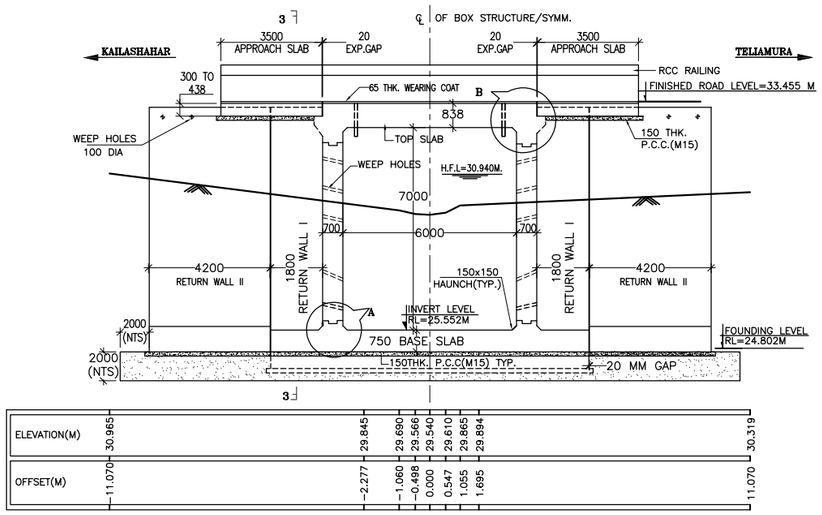
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

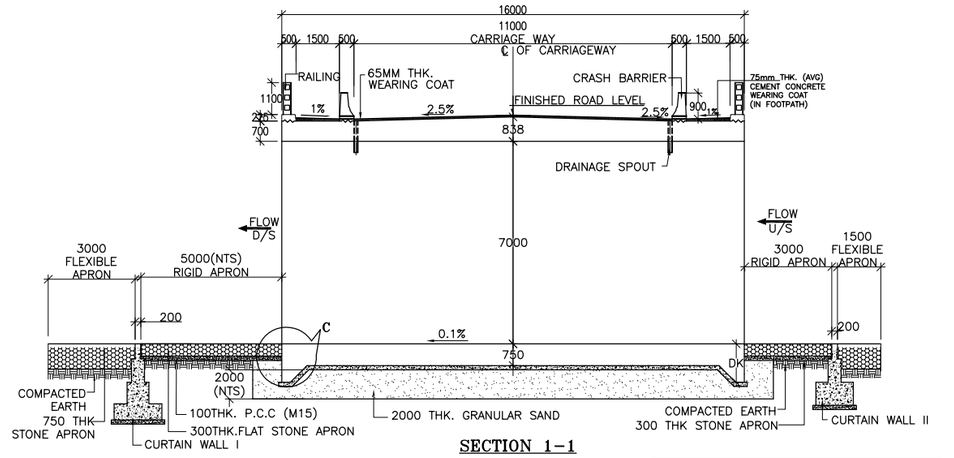
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/MISC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R.M	A.D	B.K

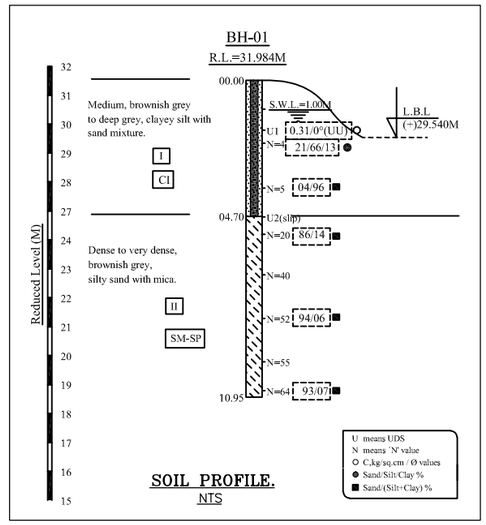


SECTION 2-2
(SCALE-1:150)

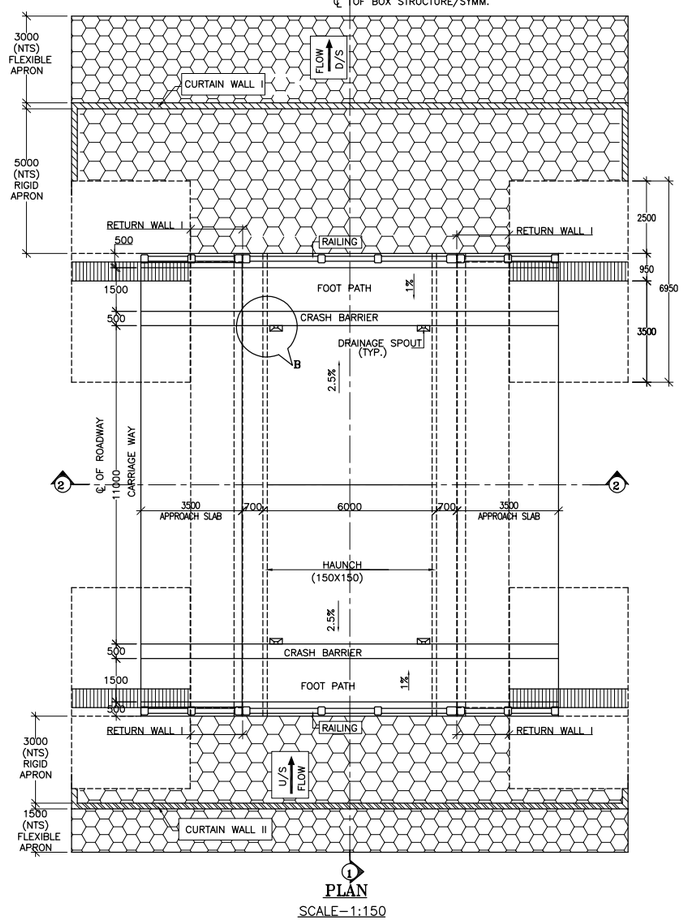


SECTION 1-1
(SCALE-1:150)

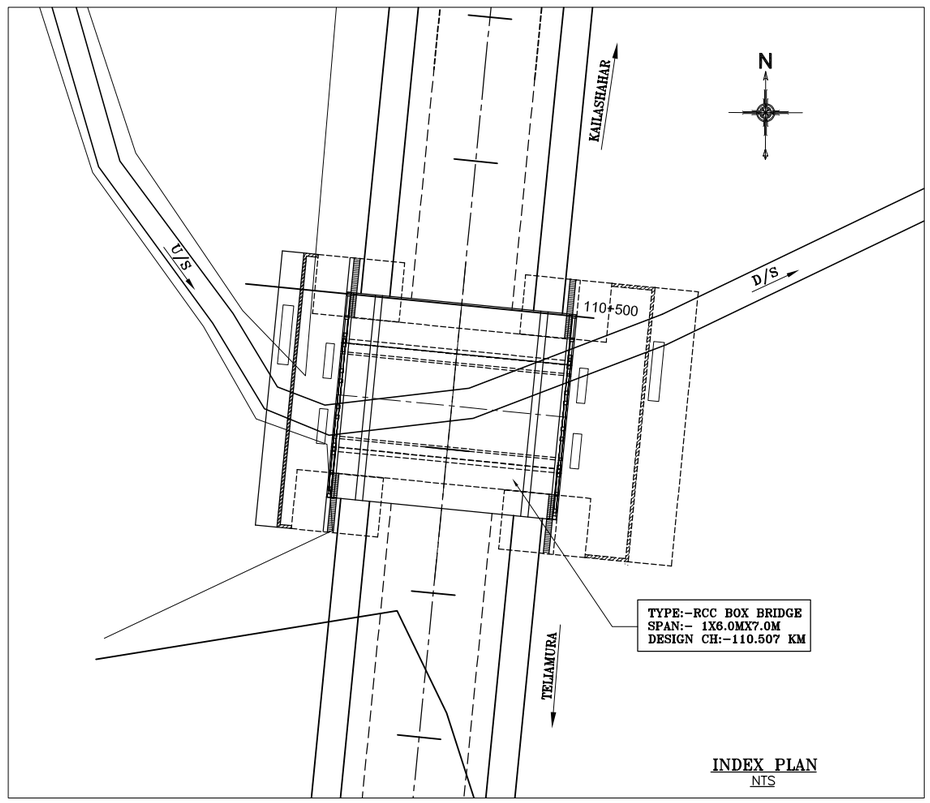
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm
	e = BASE SLAB THICKNESS



SOIL PROFILE.
NTS



PLAN
SCALE-1:150



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :-
   BOX STRUCTURE - M30
   RETURN WALL - M30
   APPROACH SLAB - M30
   RCC RAILING - M30
   CURTAIN WALL - M20
   LEVELING COURSE(P.C.C) - M15
   CRASH BARRIER- M40 & KERB-M30
3. GRADE OF STEEL Fe-500 AS PER I.S.-1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL γ=2.0t/m^3 , ø=30°.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. 2.0M SAND FILLING SHOULDBE PROIDED BELOW THE RAFT FOUNDATION IN ODER TO ATTAIN A BEARING CAPACITY 15T/SQM.
9. NORMAL SCOUR LEVEL-28.620 M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :-

CET/BDG/2015/3580/NH-208/FDPR/MN/GA
(SHEET NO 02 OF 02)
CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
(SHEET NO 01 OF 01)
CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
(SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

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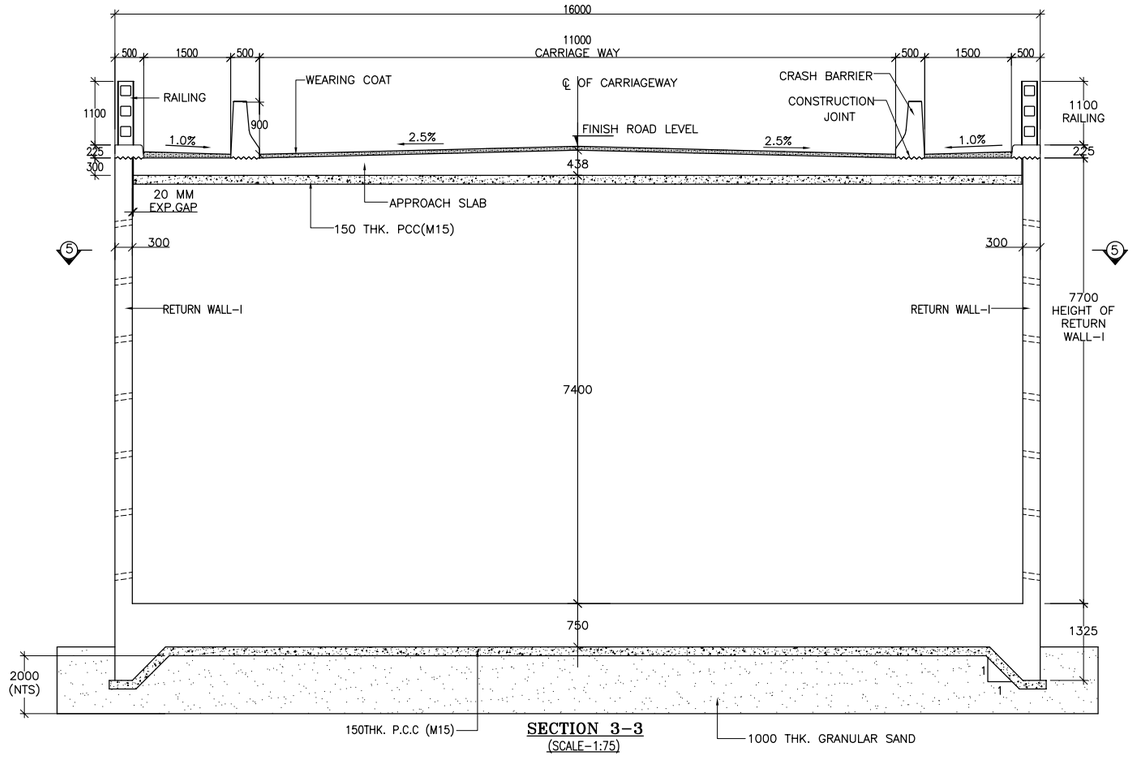
GENERAL ARRANGEMENT OF R.C.C BOX BRIDGE 1X6.0M X7.0M (AT CHAINAGE-110.507)

ROAD NAME: Kailashahar to Teliamura Section of NH-208

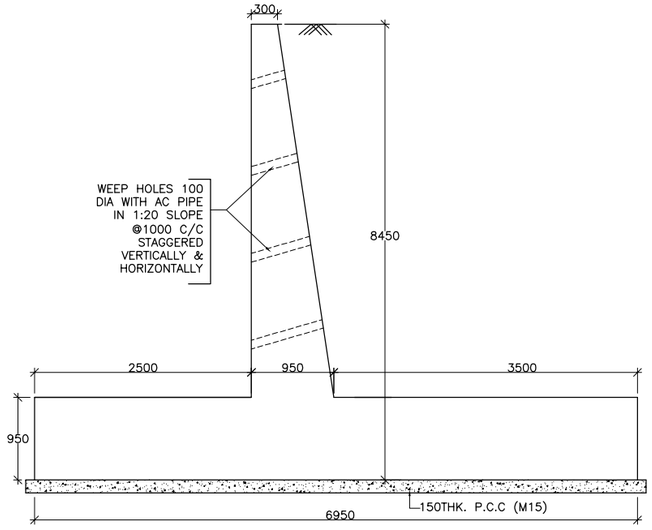
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

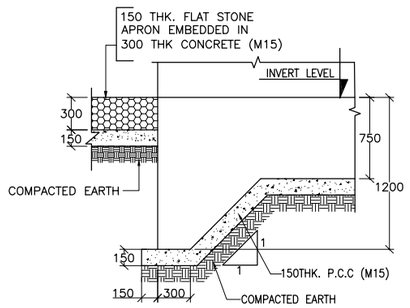
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 01 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
S.D	S.B	A. D	B.K



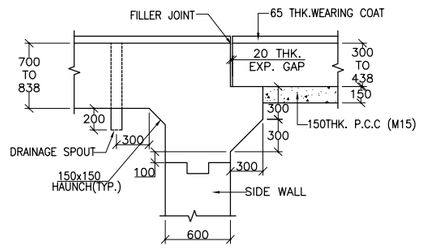
SECTION 3-3
(SCALE-1:75)



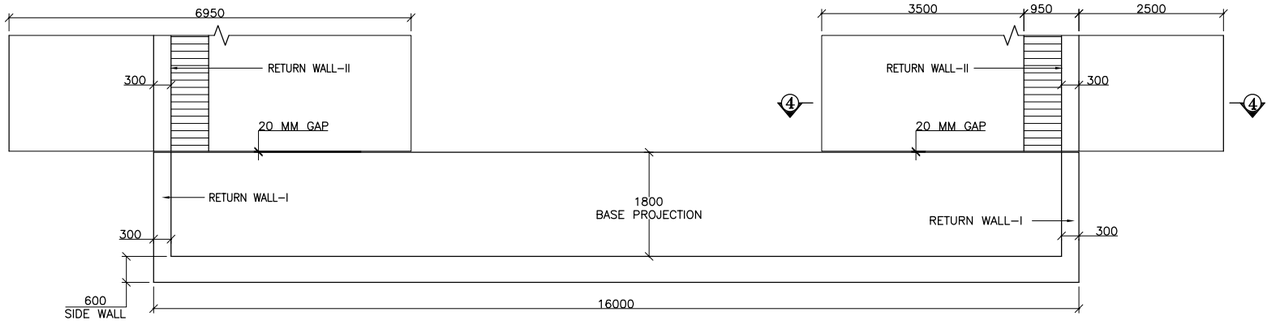
SECTION 4-4
(SHOWING RETURN WALL- II)
(SCALE-1:50)



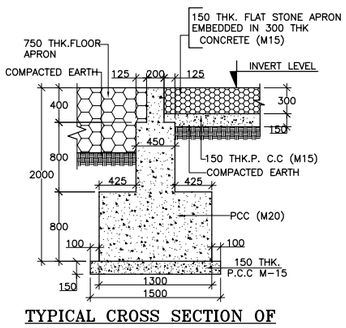
DETAIL 'C'
(SCALE-1:40)



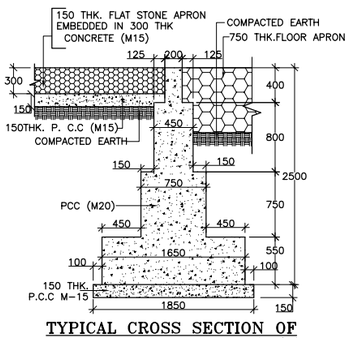
DETAIL 'B'
SCALE-1:40



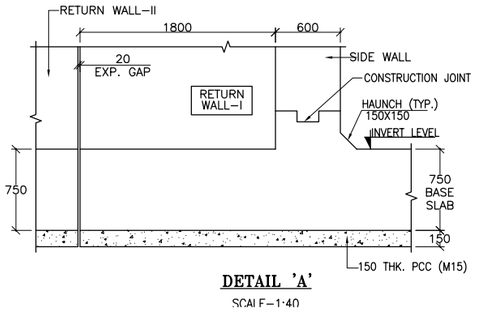
SECTIONAL PLAN 5-5
SCALE:- 1:75



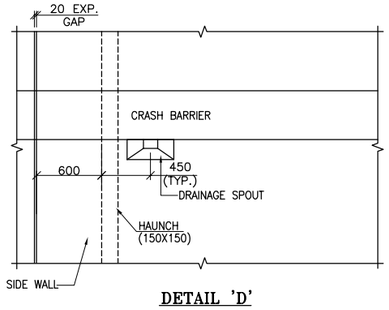
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-II (U/S)
(SCALE 1:50)



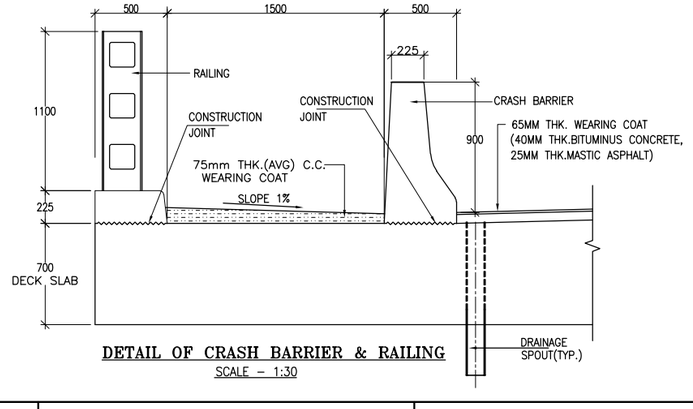
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-I (D/S)
(SCALE 1:50)



DETAIL 'A'
SCALE-1:40



DETAIL 'D'
(SCALE-1:40)



DETAIL OF CRASH BARRIER & RAILING
SCALE - 1:30

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.:-
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA
   (SHEET NO 01 OF 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
   (SHEET NO 01 OF 01)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
   (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

GENERAL ARRANGEMENT OF R.C.C BOX CULVERT 1X6.0M X7.0M

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

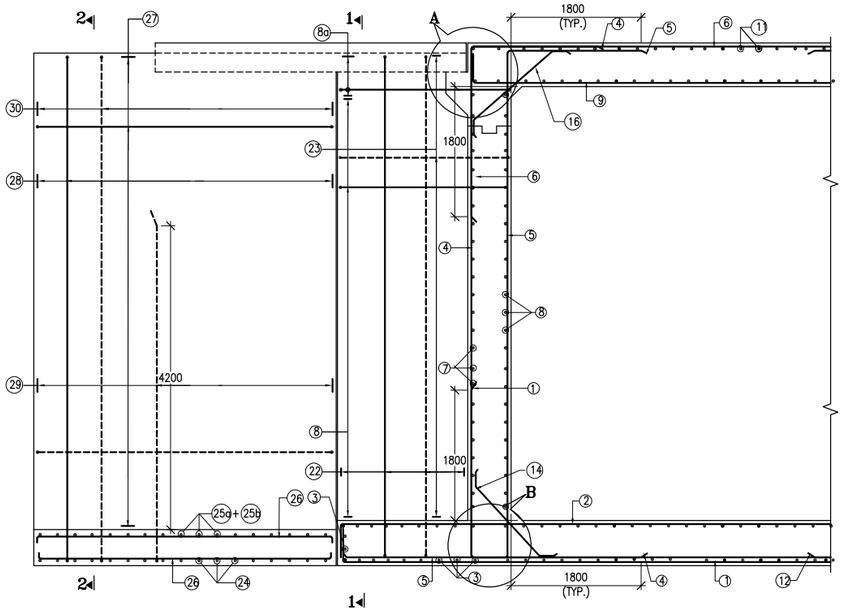
CETEST Engineering Consultants — An ISO 9001, 14001 & OHSAS18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

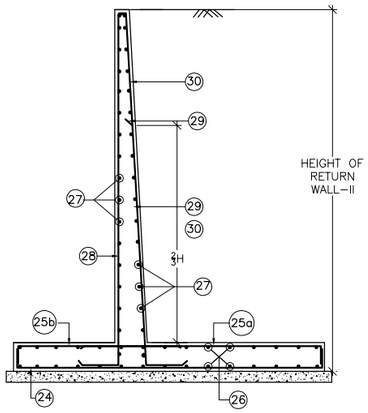
Dwg. No. CET/BDG/2015/3580/NH-208/FDPR/MN/GA

Revision Mkd. - R0 | Sheet No. - 02 of 02

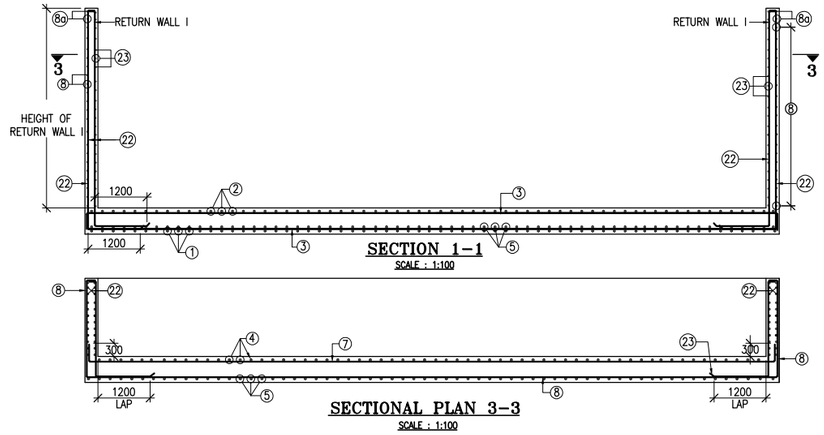
Drawn By.	Design By.	Checked By.	Approved By.
S.D	S.B	A. D	B.K



REINFORCEMENT DETAIL OF FOUR CELL BOX CULVERT
SCALE : 1:60

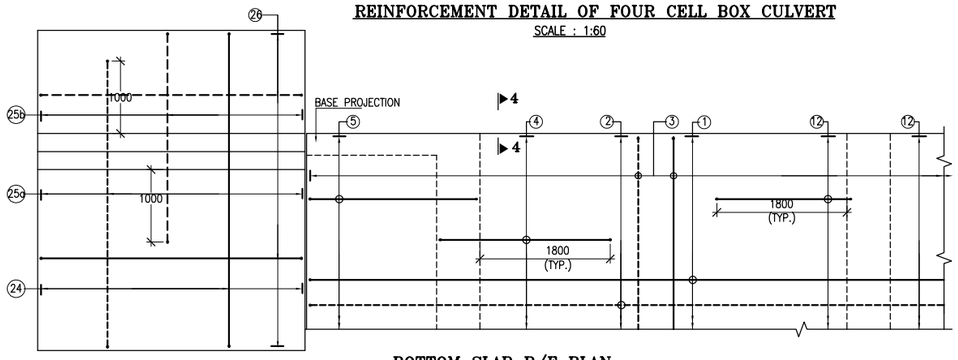


SECTION 2–2
(SHOWING RETURN WALL– II)
(SCALE–1:60)

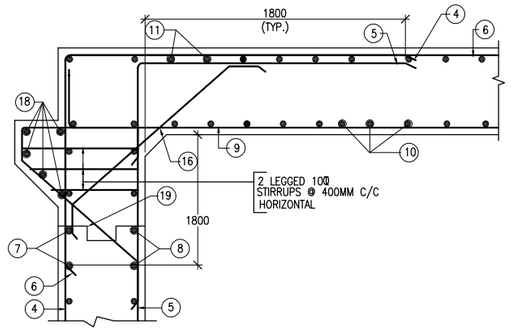


SECTION 1–1
SCALE : 1:100

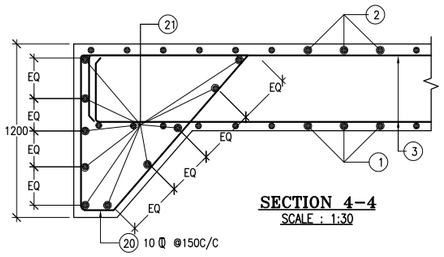
SECTIONAL PLAN 3–3
SCALE : 1:100



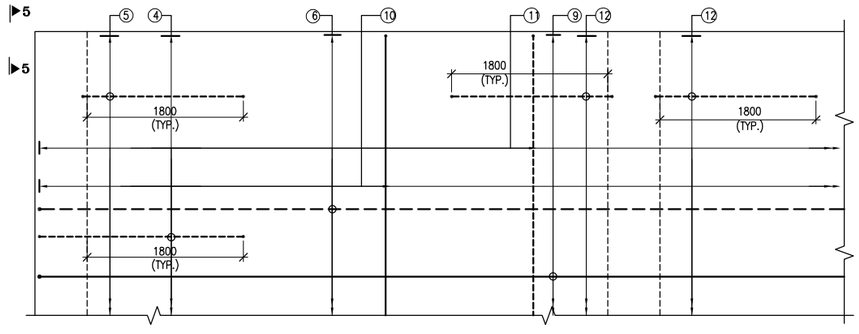
BOTTOM SLAB R/F PLAN
(HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:60



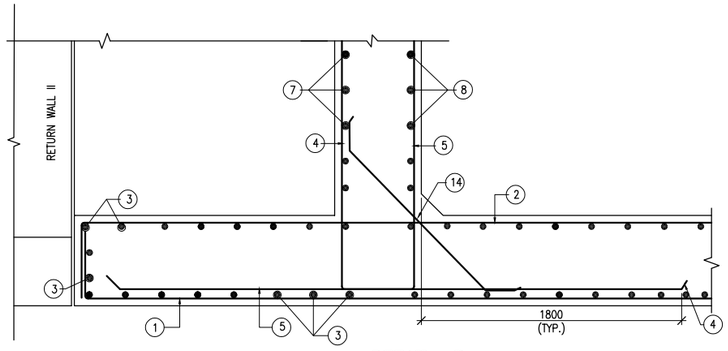
DETAIL– A
SCALE : 1:30



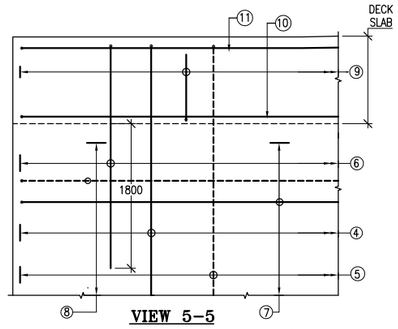
SECTION 4–4
SCALE : 1:30



TOP SLAB R/F PLAN
(KERB, BRACKET & HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:50



DETAIL– B
SCALE : 1:30



VIEW 5–5
(HAUNCH BARS ARE NOT SHOWN)
SCALE : 1:30

SCHEDULE OF REINFORCEMENT

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
1.	①	16	150
2.	②	16	150
3.	③	12	200
4.	④	20	150
5.	⑤	20	150
6.	⑥	16	150
7.	⑦	12	200
8.	⑧	12	200
9.	⑧a	12	5(Nos)
10.	⑨	16	150
11.	⑩	12	200
12.	⑪	20	150
13.	⑫	16	150
14.	⑬	12	200
15.	⑭	12	200
16.	⑮	12	200
17.	⑯	12	200
18.	⑰	12	200
19.	⑱	12	5(Nos)
20.	⑲	12	200

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
21.	⑳	10	150
22.	㉑	10	10(Nos)
23.	㉒	12	200
24.	㉓	20	150
25.	㉔	20	125
26.	25a	20	125
27	25b	20	125
28	㉖	12	200
29	㉗	20	150
30	㉘	20	150
31.	㉙	32	125
32.	㉚	32	200

LEGEND:–
REAR FACE / TOP FACE / EARTH FACE BAR ----------
FRONT FACE / BOTTOM FACE / OPPOSITE TO EARTH FACE BAR ——————

NOTES :
1. ALL DIMENSIONS ARE IN MM.
2. CONC. GRADE SHALL BE M–30 & M–25 WHERE APPLICABLE.
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe–500) CONFORMING TO IS: 1786.
4. CLEAR COVER =TOP SLAB 40MM, SIDE WALL 50MM, BOTTOM SLAB 75.
5. LAP LENGTH & DEVELOPMENT LENGTH (Ld) OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH RELEVANT CLAUSE IRC : 112–2011.
6. WELDING OF BARS SHALL NOT BE PERMITTED.
7. SHARP EDGES OF CONCRETE WILL NOT BE PERMITTED.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:
   CET/BDG/2015/3580/NH–208/FDPR/MN/GA (SHEET NO. 01 & 02)
   CET/BDG/2015/3580/NH–208/FDPR/MN/MISC (SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
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SCALE: AS SHOWN
DATE: Nov,2019
CLIENT: Public Works Department Government of Tripura
National Highways & Infrastructure Development Corporation Ltd.
PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)
REINFORCEMENT DETAILS OF 1X6.0MX7.0M RCC BOX BRIDGE
ROAD NAME: Kailashahar to Teliamura Section of NH-208
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/RCC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
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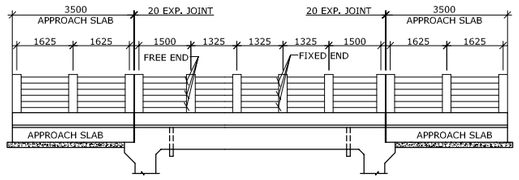
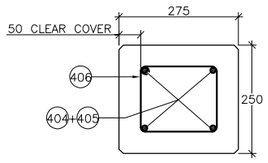


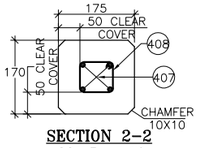
GENERAL ARRANGEMENT OF R.C.C. RAILING (1X6.0X7.0) BOX BRIDGE)

SCALE – 1:125



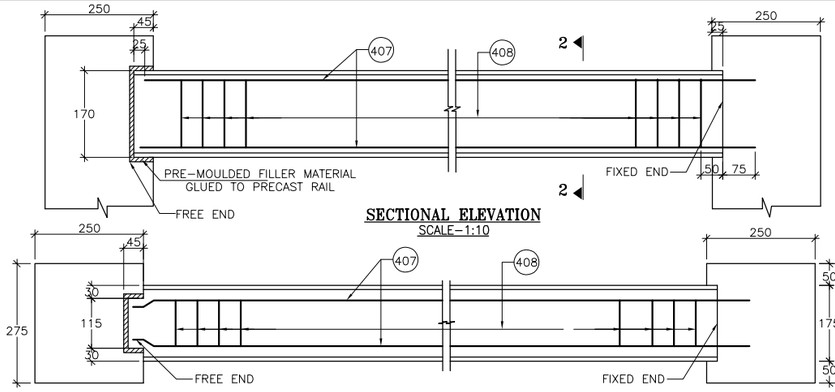
SECTION 1–1

SCALE– 1:10



SECTION 2–2

SCALE– 1:10



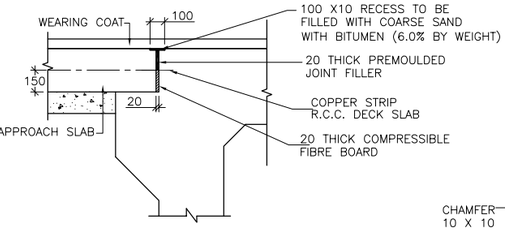
SECTIONAL ELEVATION

SCALE–1:10

PLAN

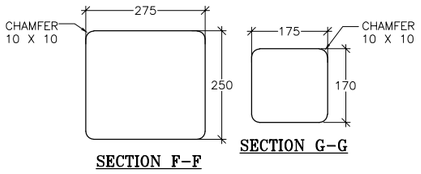
DETAIL OF PRECAST HANDRAIL

SCALE–1:10



DETAILS OF FILLER JOINT

SCALE– 1:30

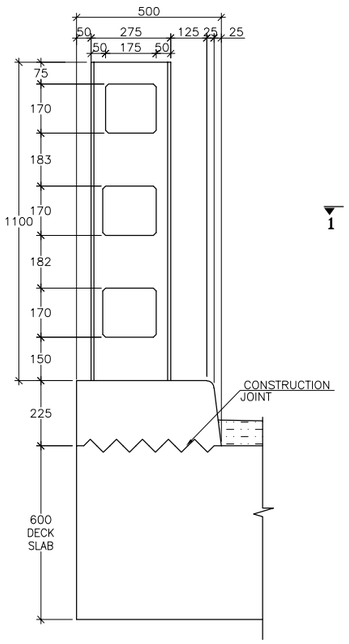


SECTION F–F

SECTION G–G

DETAILS OF HANDRAIL & POST

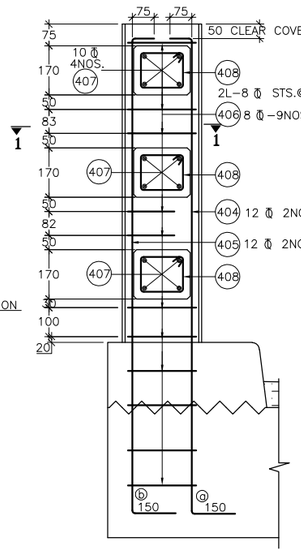
SCALE–1:10



SECTION THROUGH POST

(FOR GENERAL ARRANGEMENT)

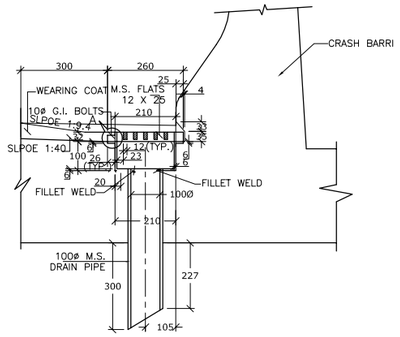
SCALE–1:15



SECTION THROUGH POST

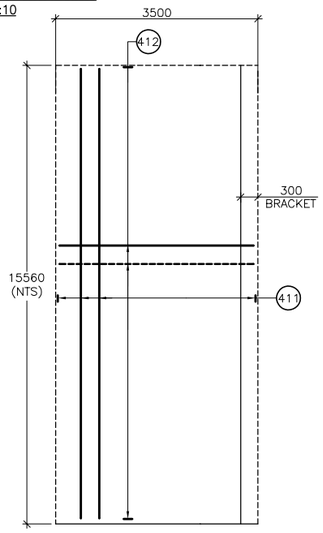
(FOR REINFORCEMENT DETAIL)

SCALE–1:15



SECTION 3–3

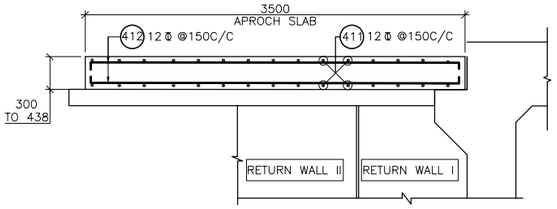
SCALE– 1:15



PLAN OF APPROACH SLAB

(REINFORCEMENT DETAIL)

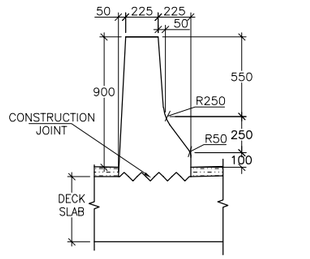
SCALE 1:75



DETAILS OF APPROACH SLAB

(REINFORCEMENT DETAIL)

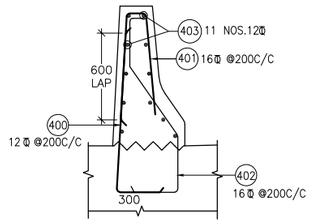
SCALE 1:40



DETAILS OF CRASH BARRIER

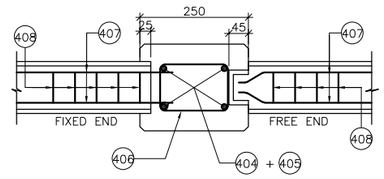
(FOR GENERAL ARRANGEMENT)

SCALE–1:30



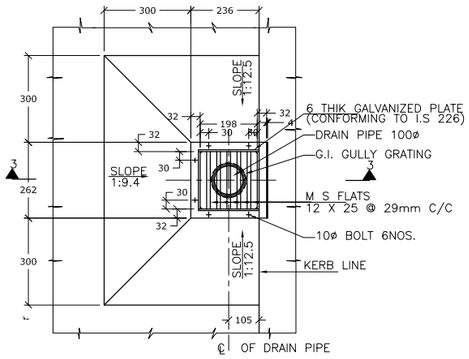
RCC OF CRASH BARRIER

SCALE–1:30



REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST

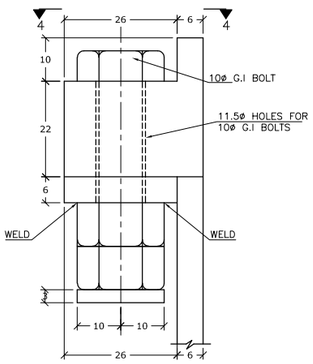
SCALE–1:10



PLAN

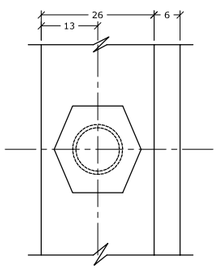
DETAIL OF DRAINAGE SPOUT AND COLLECTION PIT

SCALE– 1:15



DETAIL – A

SCALE– 1:1



PLAN AT 4–4

SCALE– 1:1

NOTE :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.

NOTES FOR RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES FOR DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR/MN/GA
(SHEET NO. 01 & 02)

CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
(SHEET NO. 01 OF 01)

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SCALE: AS SHOWN

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DETAILS OF DRAINAGE SPOUT, EXP. GAP RCC RAILING & CRASH BARRIER

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

CETEST Engineering Consultants — An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
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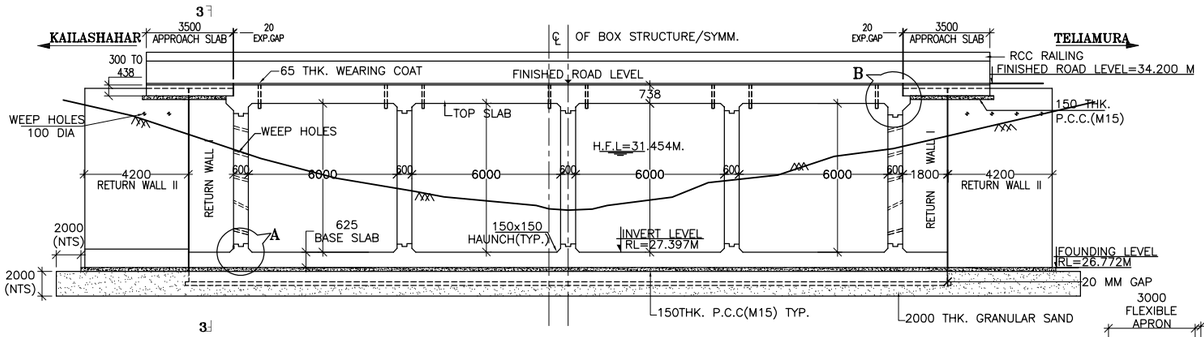
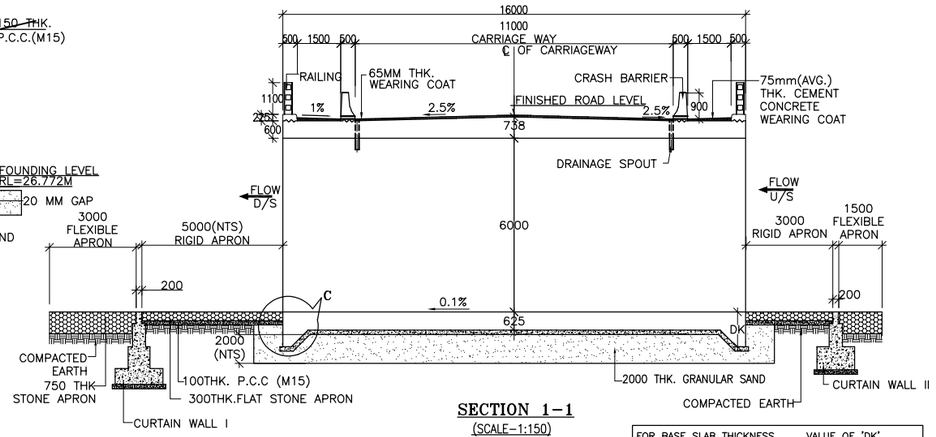


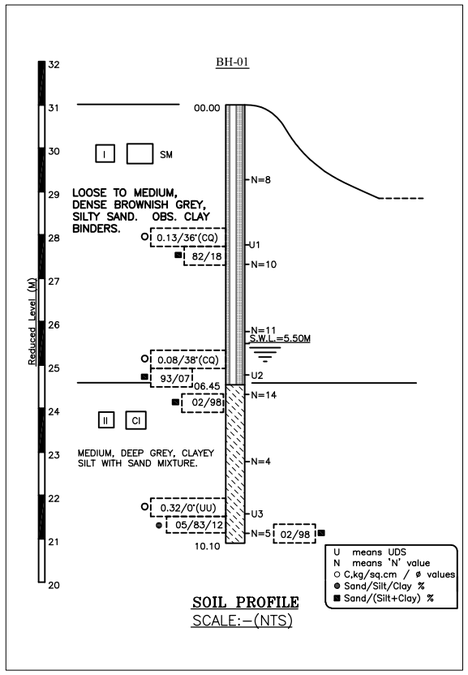
Elevation in Metre	32.521	30.864	29.851	29.625	29.278	29.139	29.093	29.128	29.278	29.612	30.197	30.502	31.259	31.566
Offset in Metre	16.454	11.221	6.234	5.010	1.285	0.779	0.000	0.973	1.580	4.195	5.657	8.463	10.728	13.120

SECTION 2–2
(SCALE–1:175)

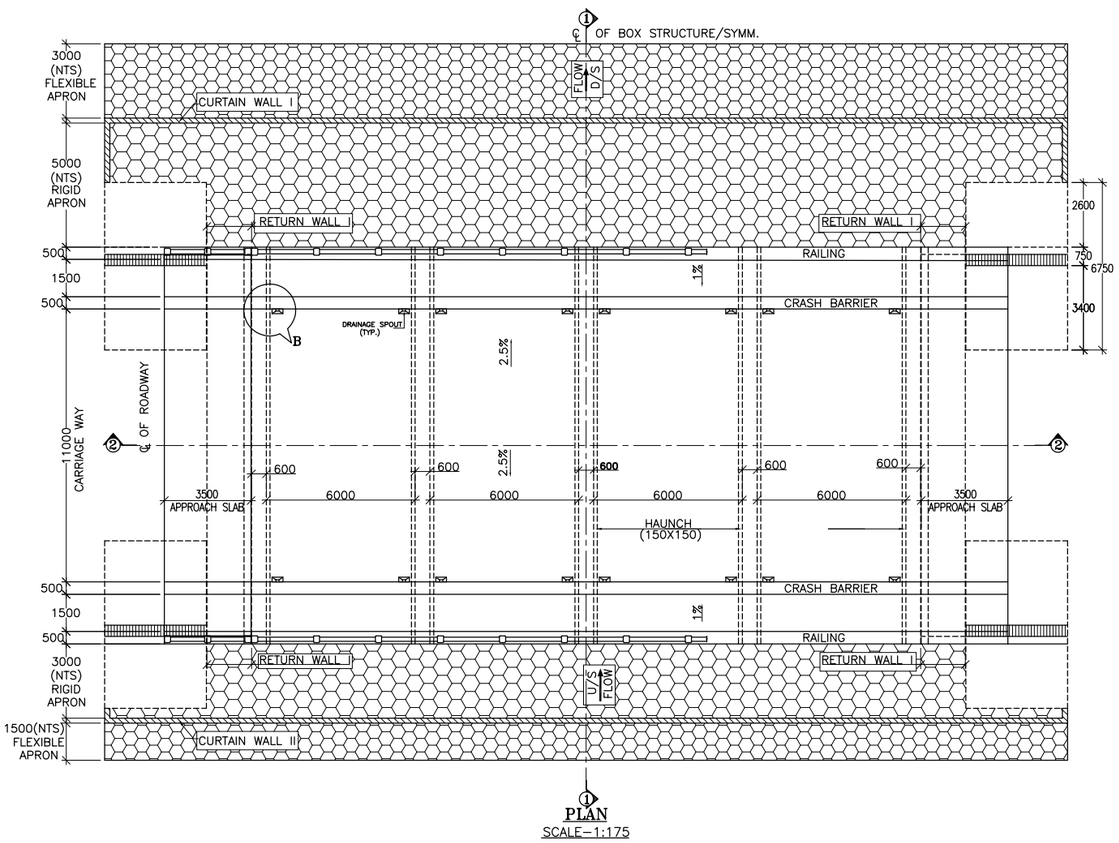


SECTION 1–1
(SCALE–1:150)

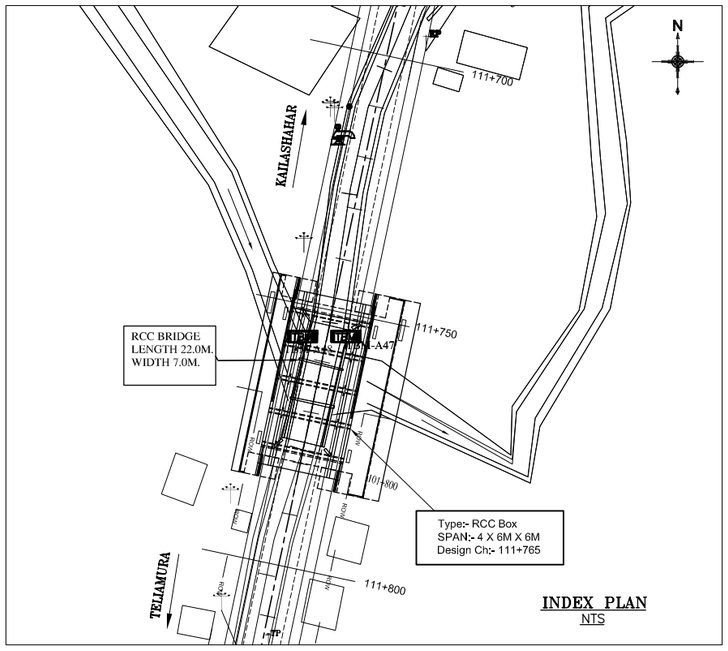
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm
	e = BASE SLAB THICKNESS



SOIL PROFILE
SCALE:–(NTS)



PLAN
SCALE–1:175



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :–
   BOX STRUCTURE – M30
   RETURN WALL – M30
   APPROACH SLAB – M30
   RAILING – M30
   CURTAIN WALL – M20
   LEVELING COURSE(P.C.C) – M15
   CRASH BARRIER– M40 & KERB–M30
3. GRADE OF STEEL Fe–500 AS PER I.S.–1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL γ=2.0t/m^3 , ø=30°.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. 2M SAND FILLING SHOULD BE PROVIDED BELOW THE RAFT FOUNDATION IN ORDER TO ATTAIN THE BEARING CAPACITY–10 T/Sqm
9. MAXIMUM SCOUR LEVEL–27.342 M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :–

    CET/BDG/2015/3580/NH–208/FDPR/MN/GA
    (SHEET NO 02 OF 02)
    CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
    (SHEET NO 01 OF 01)
    CET/BDG/2015/3580/NH–208/FDPR/MN/MISC
    (SHEET NO 01 OF 01)

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GENERAL ARRANGEMENT OF FOUR CELL R.C.C BOX BRIDGE (4X6.0M X 6.0M) (AT CHAINAGE- 111.765KM)

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

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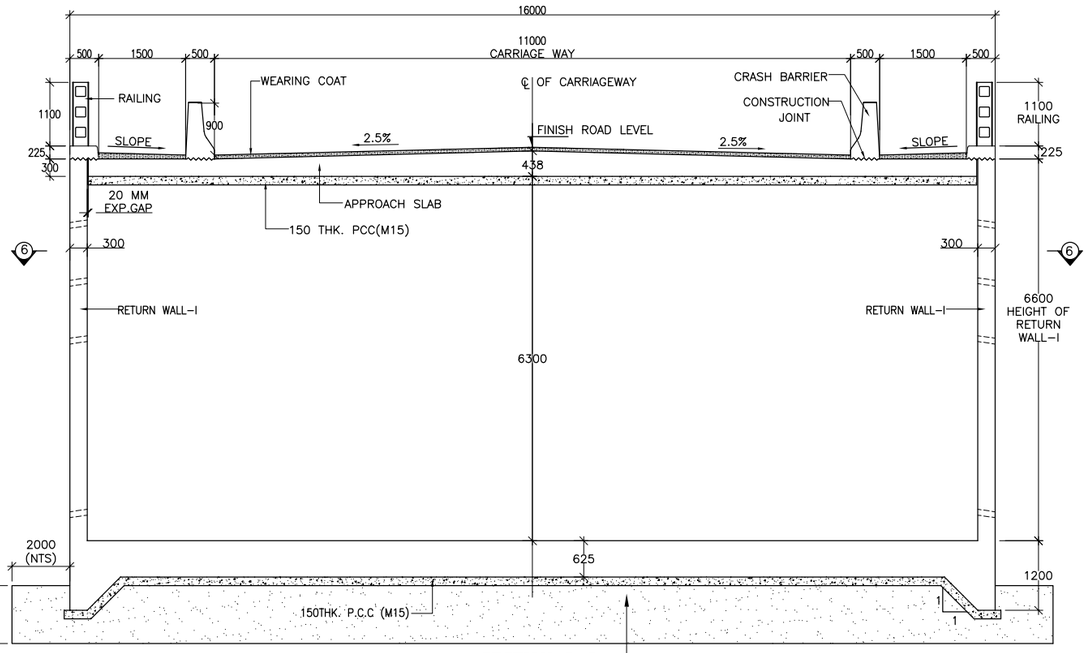
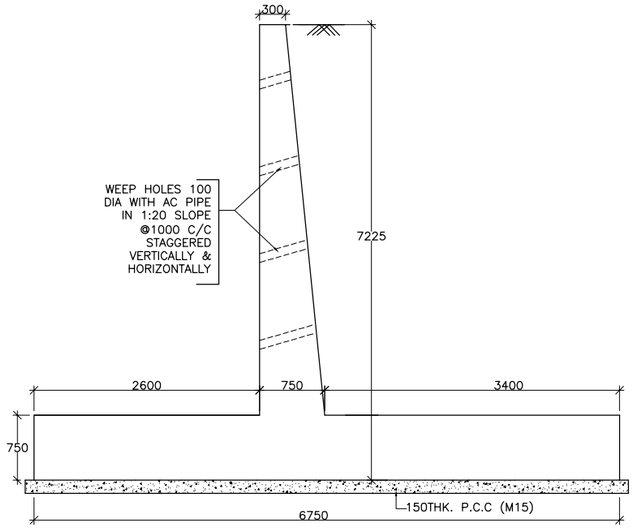
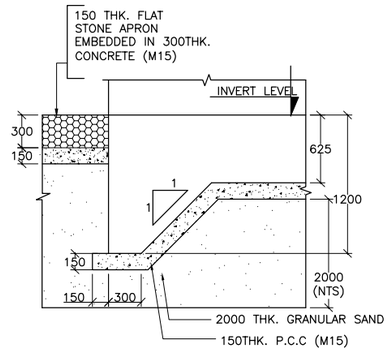
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R. M	A. D	B.K



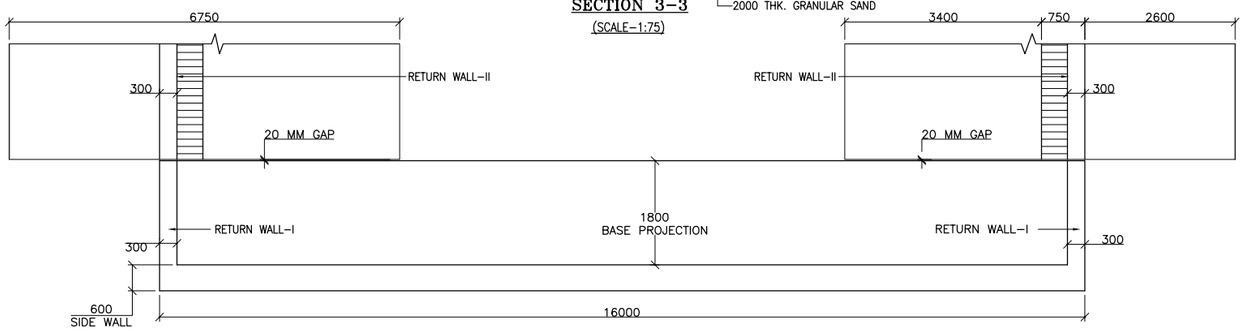
SECTION 3–3
(SCALE–1:75)



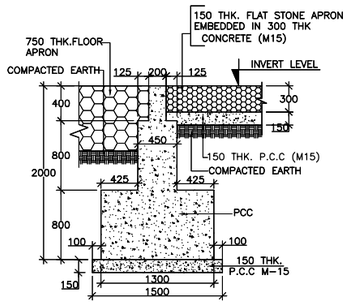
SECTION 4–4
(SHOWING RETURN WALL– II)
(SCALE–1:50)



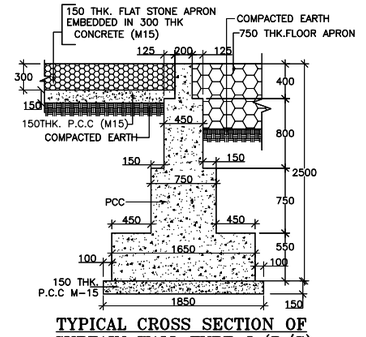
DETAIL 'C'
(SCALE–1:40)



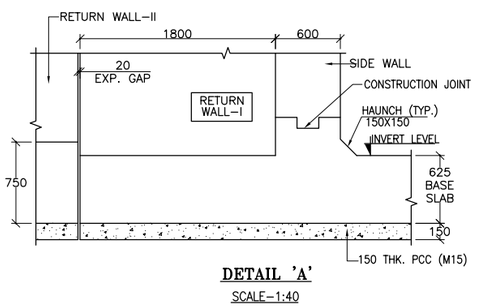
SECTIONAL PLAN 6–6
SCALE:– 1:75



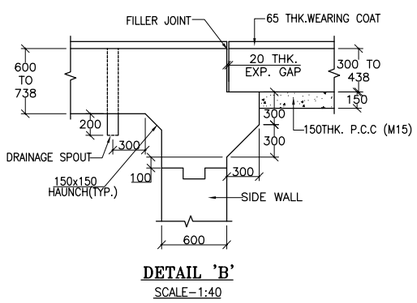
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE–II (U/S)
(SCALE 1:50)



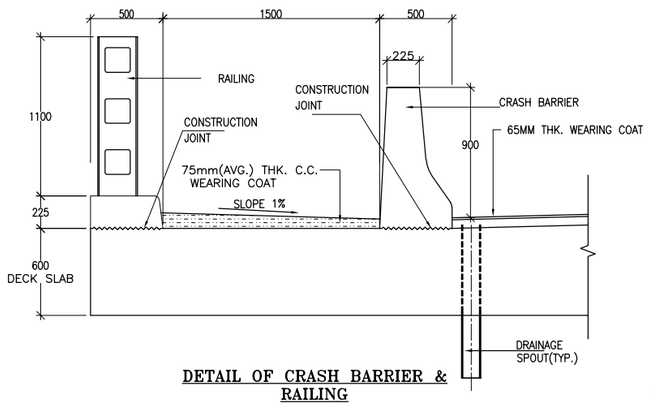
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE–I (D/S)
(SCALE 1:50)



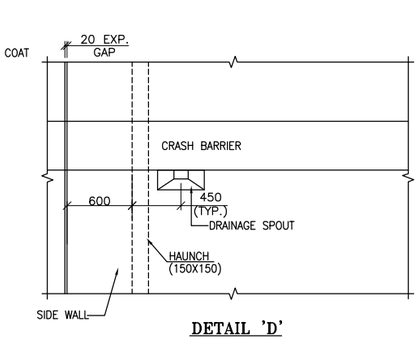
DETAIL 'A'
SCALE–1:40



DETAIL 'B'
SCALE–1:40



DETAIL OF CRASH BARRIER & RAILING
SCALE – 1:30



DETAIL 'D'
(SCALE–1:40)

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.:–
   CET/BDG/2015/3580/NH–208/FDPR/MN/GA
   (SHEET NO 01 OF 02)
   CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
   (SHEET NO 01 OF 01)
   CET/BDG/2015/3580/NH–208/FDPR/MN/MISC
   (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

GENERAL ARRANGEMENT OF FOUR CELL R.C.C BOX BRIDGE 4X6.0 MX 6.0M

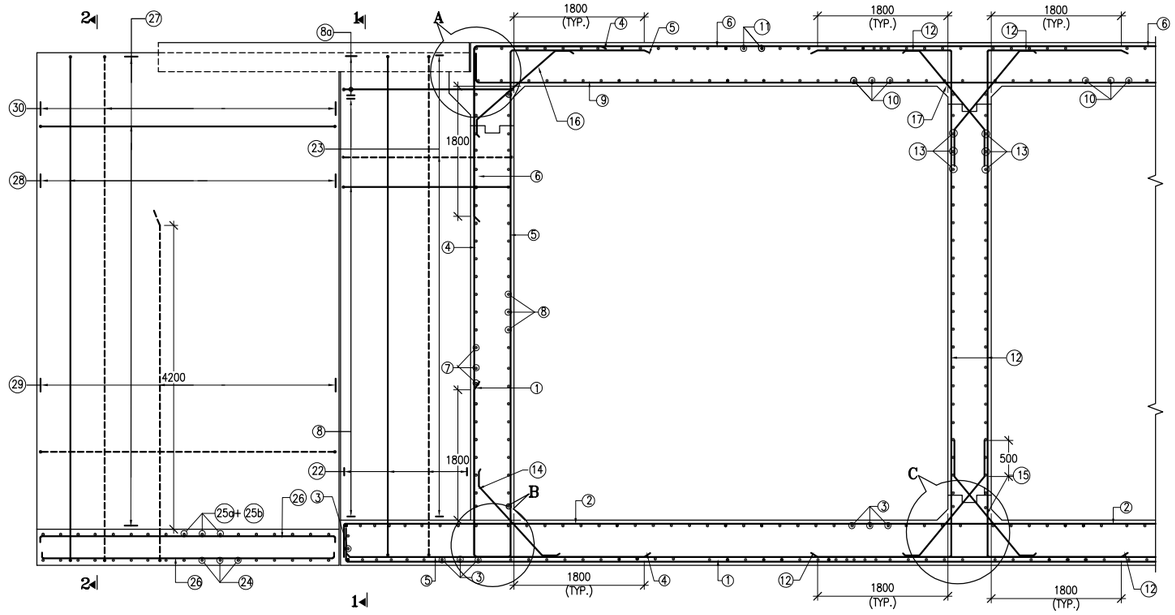
ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

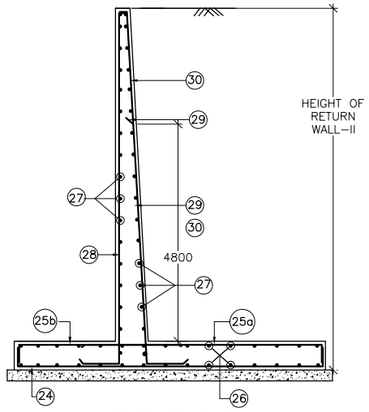
CONSULTANT :

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

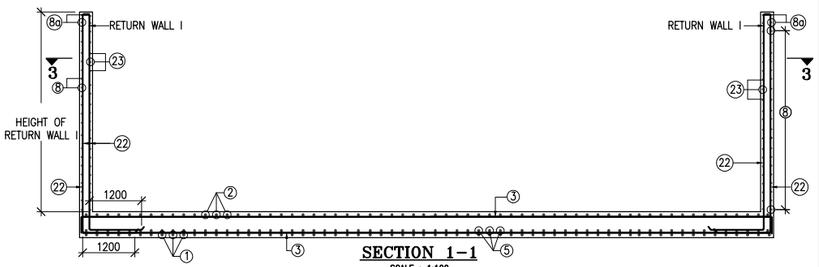
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 02 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R. M	A. D	B.K



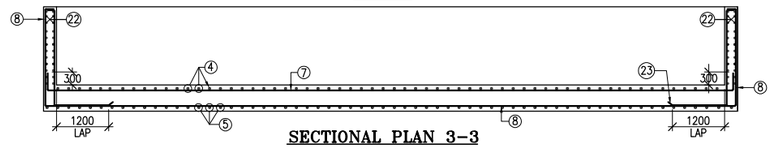
REINFORCEMENT DETAIL OF FOUR CELL BOX CULVERT
SCALE : 1:60



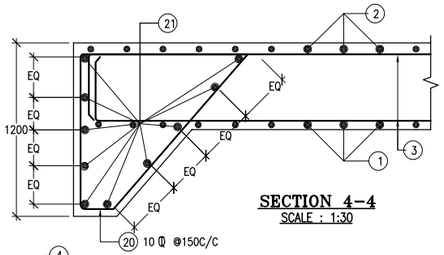
SECTION 2–2
(SHOWING RETURN WALL– II)
(SCALE–1:60)



SECTION 1–1
SCALE : 1:100



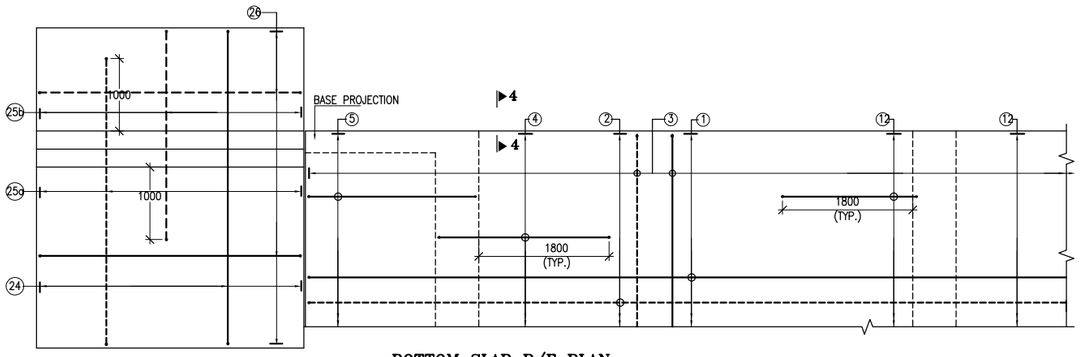
SECTIONAL PLAN 3–3
SCALE : 1:100



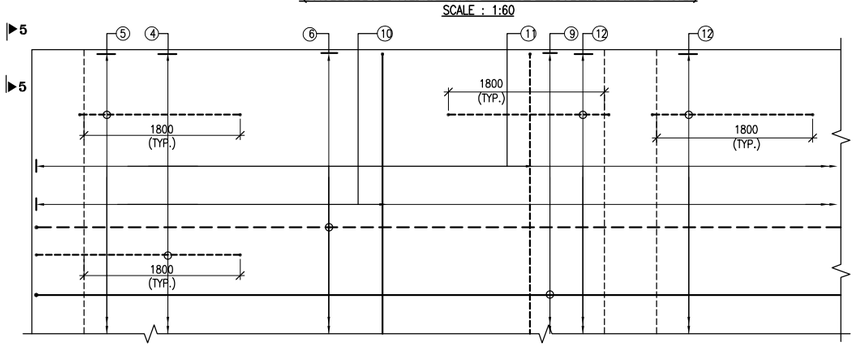
SECTION 4–4
SCALE : 1:30

SCHEDULE OF REINFORCEMENT

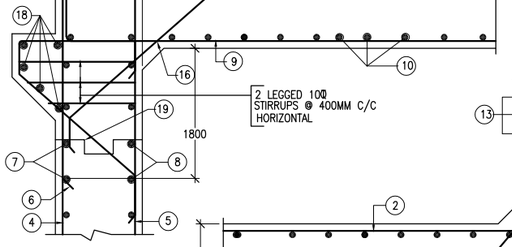
SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
1.	①	16	150
2.	②	16	150
3.	③	12	200
4.	④	20	150
5.	⑤	20	150
6.	⑥	16	150
7.	⑦	12	200
8.	⑧	12	200
9.	⑧a	12	5(Nos)
10.	⑨	16	150
11.	⑩	12	200
12.	⑪	20	150
13.	⑫	16	150
14.	⑬	12	200
15.	⑭	12	200
16.	⑮	12	200
17.	⑯	12	200
18.	⑰	12	200
19.	⑱	12	5(Nos)
20.	⑲	12	200
21.	⑳	10	150
22.	㉑	10	10(Nos)
23.	㉒	12	200
24.	㉓	20	150
25.	㉔	20	150
26.	㉕a	20	150
27	㉕b	16	150
28	㉖	12	125
29	㉗	12	225
30	㉘	12	150
31.	㉙	25	100
32.	㉚	25	100



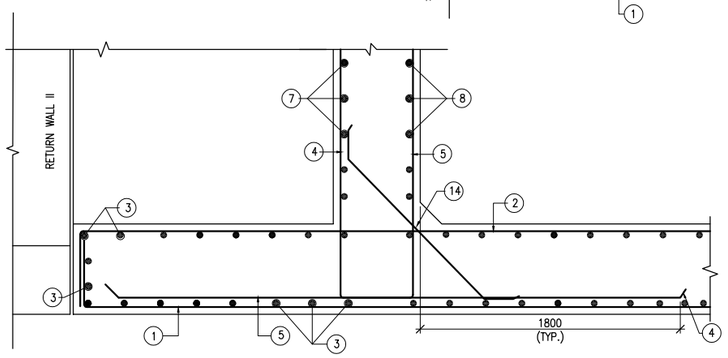
BOTTOM SLAB R/F PLAN
(HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:60



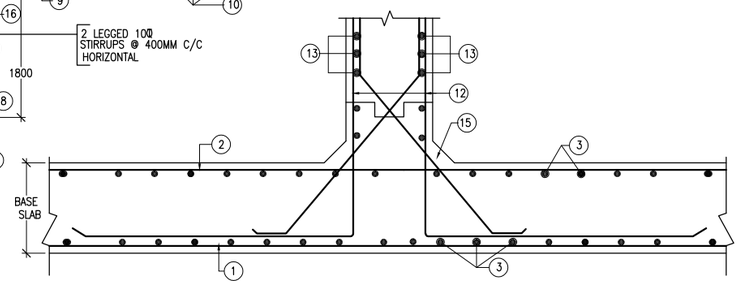
TOP SLAB R/F PLAN
(KERB, BRACKET & HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:50



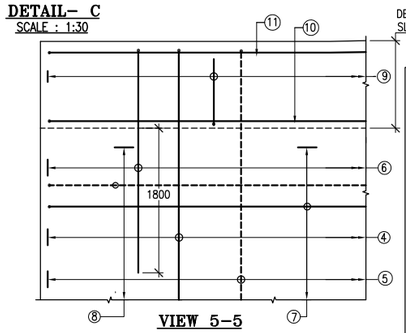
DETAIL– A
SCALE : 1:30



DETAIL– B
SCALE : 1:30



DETAIL– C
SCALE : 1:30



VIEW 5–5
(HAUNCH BARS ARE NOT SHOWN)
SCALE : 1:30

LEGEND:–

REAR FACE / TOP FACE / EARTH FACE BAR ----------

FRONT FACE / BOTTOM FACE / OPPOSITE TO EARTH FACE BAR ——————

NOTES :

1. ALL DIMENSIONS ARE IN MM.
2. CONC. GRADE SHALL BE M–30 & M–25 WHERE APPLICABLE.
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe–500) CONFORMING TO IS: 1786.
4. CLEAR COVER =TOP SLAB 40MM, SIDE WALL 50MM, BOTTOM SLAB 75.
5. LAP LENGTH & DEVELOPMENT LENGTH (Ld) OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH RELEVANT CLAUSE IRC : 112–2011.
6. WELDING OF BARS SHALL NOT BE PERMITTED.
7. SHARP EDGES OF CONCRETE WILL NOT BE PERMITTED.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:
   CET/BDG/2015/3580/NH–208/FDPR/MN/GA (SHEET NO. 01 & 02)
   CET/BDG/2015/3580/NH–208/FDPR/MN/MISC (SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

REINFORCEMENT DETAILS OF 4X6.0M X6.0MRCC BOX BRIDGE

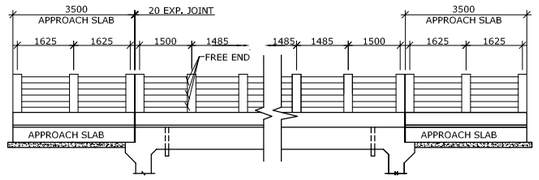
ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

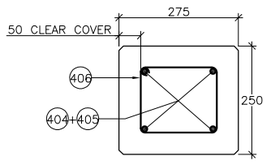
CONSULTANT :

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

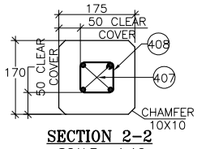
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/RCC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	R. M	A. D	B.K



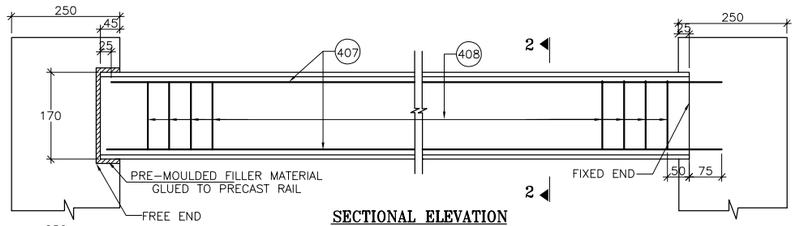
GENERAL ARRANGEMENT OF R.C.C. RAILING
4X6.0X6.0 BOX BRIDGE)
SCALE – 1:125



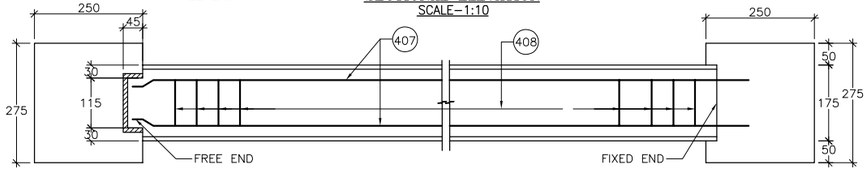
SECTION 1–1
SCALE– 1:10



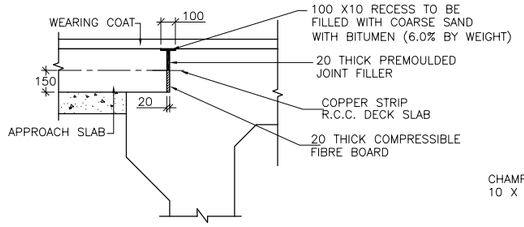
SECTION 2–2
SCALE– 1:10



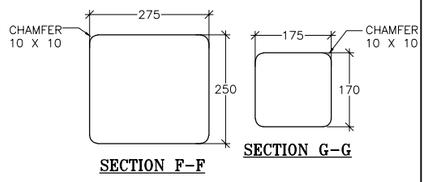
SECTIONAL ELEVATION
SCALE–1:10



PLAN
DETAIL OF PRECAST HANDRAIL
SCALE–1:10

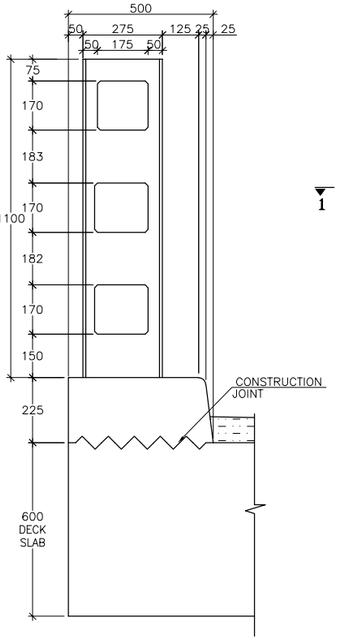


DETAILS OF FILLER JOINT
SCALE– 1:30

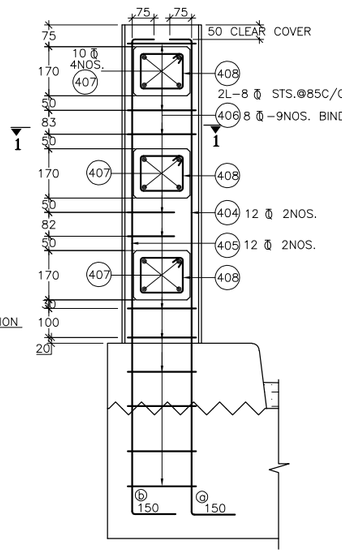


SECTION F–F
SECTION G–G

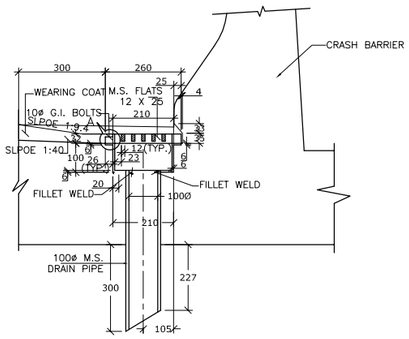
DETAILS OF HANDRAIL & POST
SCALE–1:10



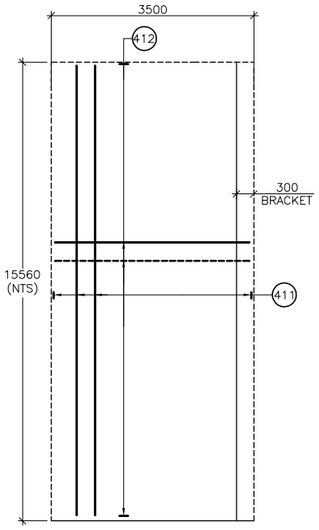
SECTION THROUGH POST
(FOR GENERAL ARRANGEMENT)
SCALE–1:15



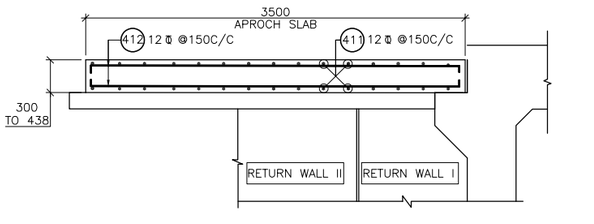
SECTION THROUGH POST
(FOR REINFORCEMENT DETAIL)
SCALE–1:15



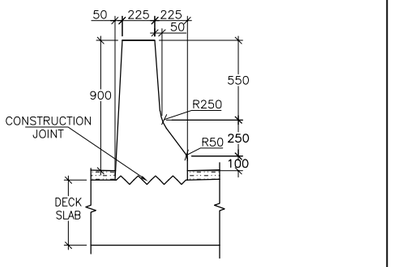
SECTION 3–3
SCALE– 1:15



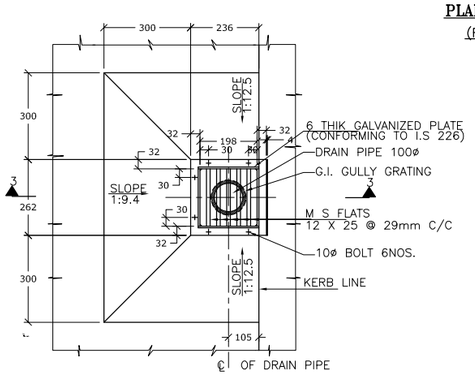
PLAN OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:75



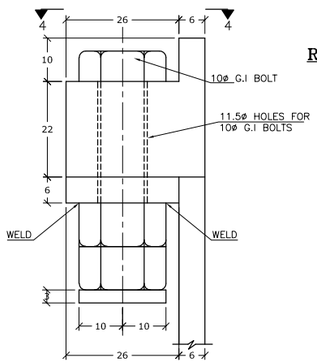
DETAILS OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:40



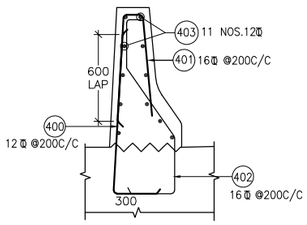
DETAILS OF CRASH BARRIER
(FOR GENERAL ARRANGEMENT)
SCALE–1:30



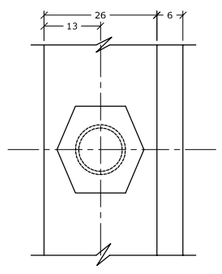
PLAN
DETAIL OF DRAINAGE
SPOUT AND COLLECTION PIT
SCALE– 1:15



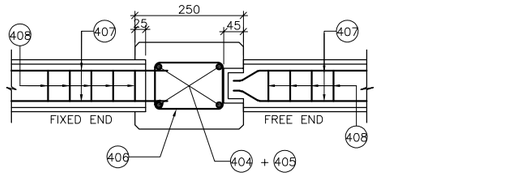
DETAIL – A
SCALE– 1:1



RCC OF CRASH BARRIER
SCALE–1:30



PLAN AT 4–4
SCALE– 1:1



REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST
SCALE–1:10

NOTE :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.

NOTES FOR RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES FOR DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR/MN/GA
(SHEET NO. 01 & 02)
CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

DETAILS OF DRAINAGE SPOUT, EXP. GAP RCC RAILING & CRASH BARRIER

ROAD NAME: Kailashahar to Teliamura Section of NH-208

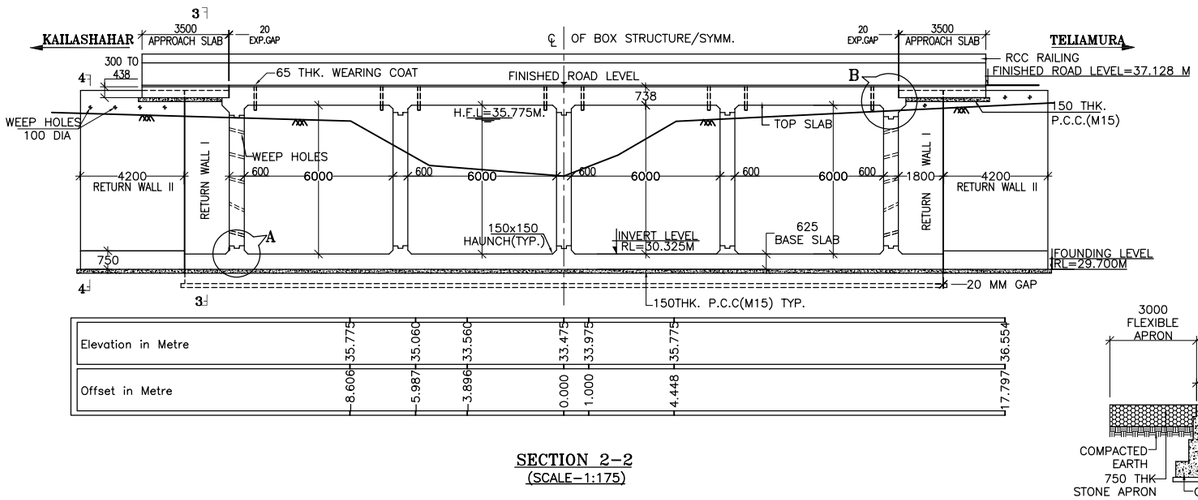
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

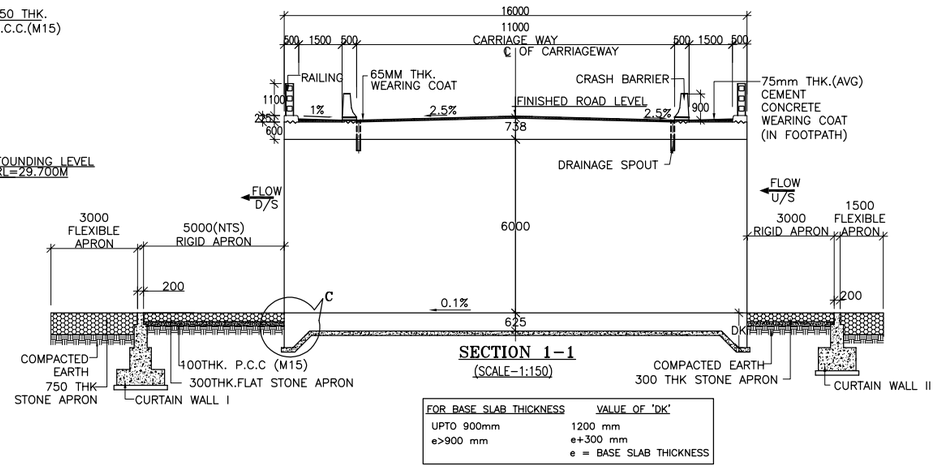
CETEST Engineering Consultants — An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/MISC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
T.G	-	A. D	B.K

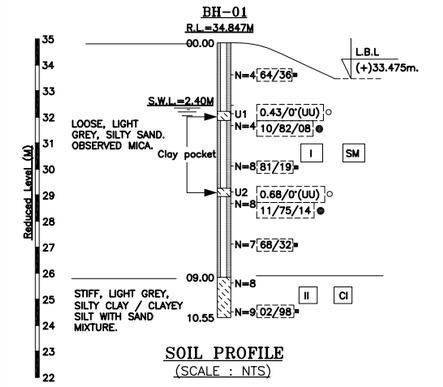


SECTION 2-2
(SCALE-1:175)

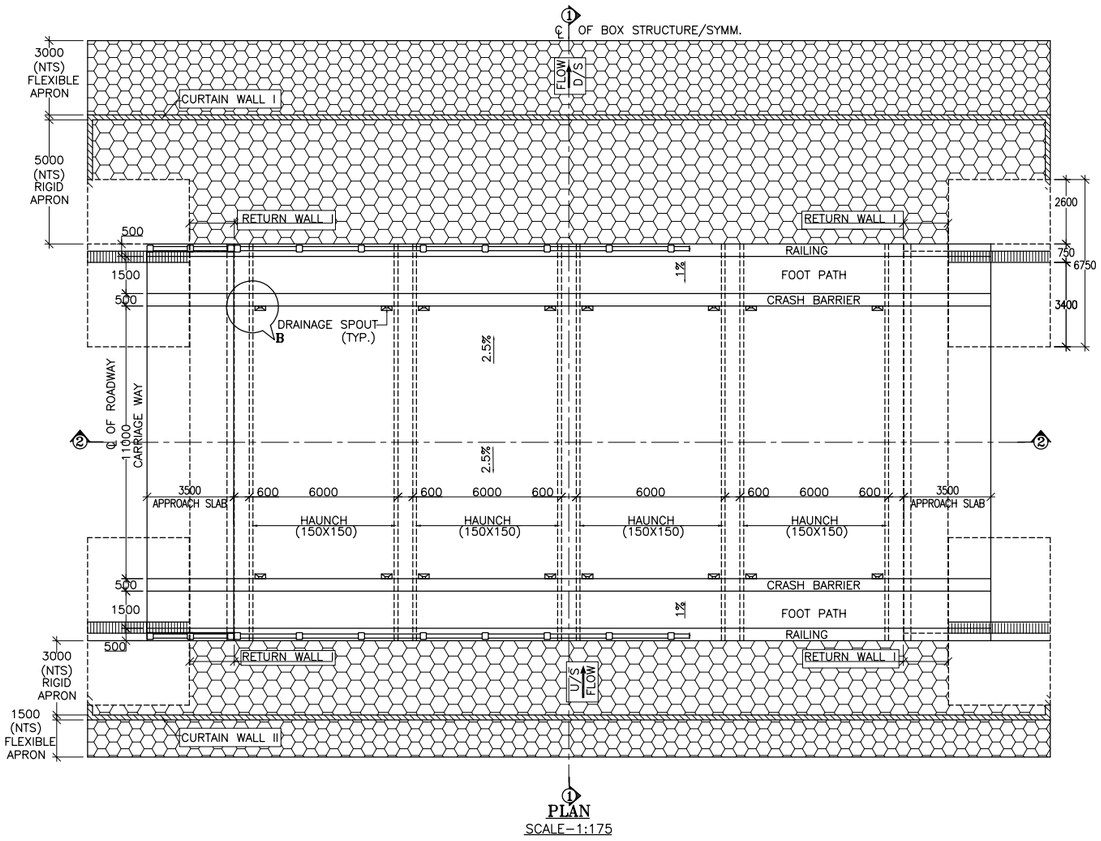


SECTION 1-1
(SCALE-1:150)

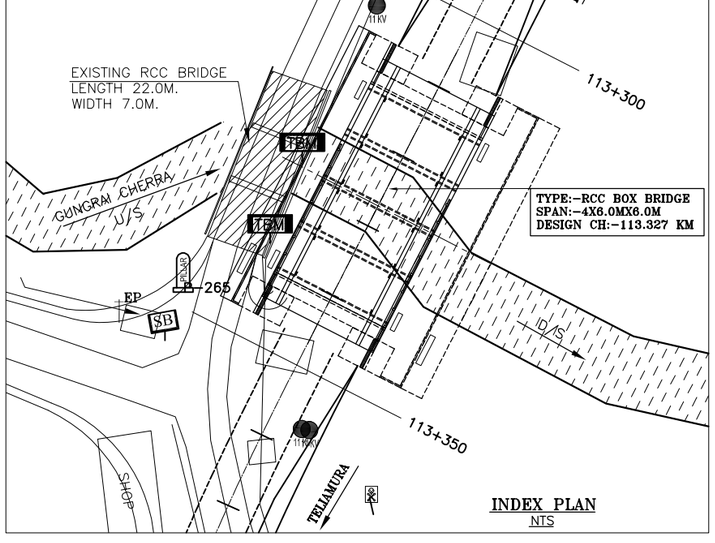
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm
	e = BASE SLAB THICKNESS



SOIL PROFILE
(SCALE : NTS)



PLAN
SCALE-1:175



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :-
   BOX STRUCTURE - M30
   RETURN WALL - M30
   APPROACH SLAB - M30
   RCC RAILING - M30
   CURTAIN WALL - M20
   LEVELING COURSE(P.C.C) - M15
   CRASH BARRIER- M40 & KERB-M30
3. GRADE OF STEEL Fe-500 AS PER I.S.-1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL $\gamma=2.0t/m^3$, $\phi=30°$.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. THE SOIL BELOW FOUNDATION LEVEL SHOULD BE WELL COMPACTED TO ACHIEVE MINIMUM BEARING CAPACITY OF 10t/SQM.
9. MAXIMUM SCOUR LEVEL-32.061 M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :-

    CET/BDG/2015/3580/NH-208/FDPR/MN/GA
    (SHEET NO 02 OF 02)
    CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
    (SHEET NO 01 OF 01)
    CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
    (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura — National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

GENERAL ARRANGEMENT OF R.C.C BOX BRIDGE (4X6.0M X 6.0M) (AT CHAINAGE- 113.327KM)

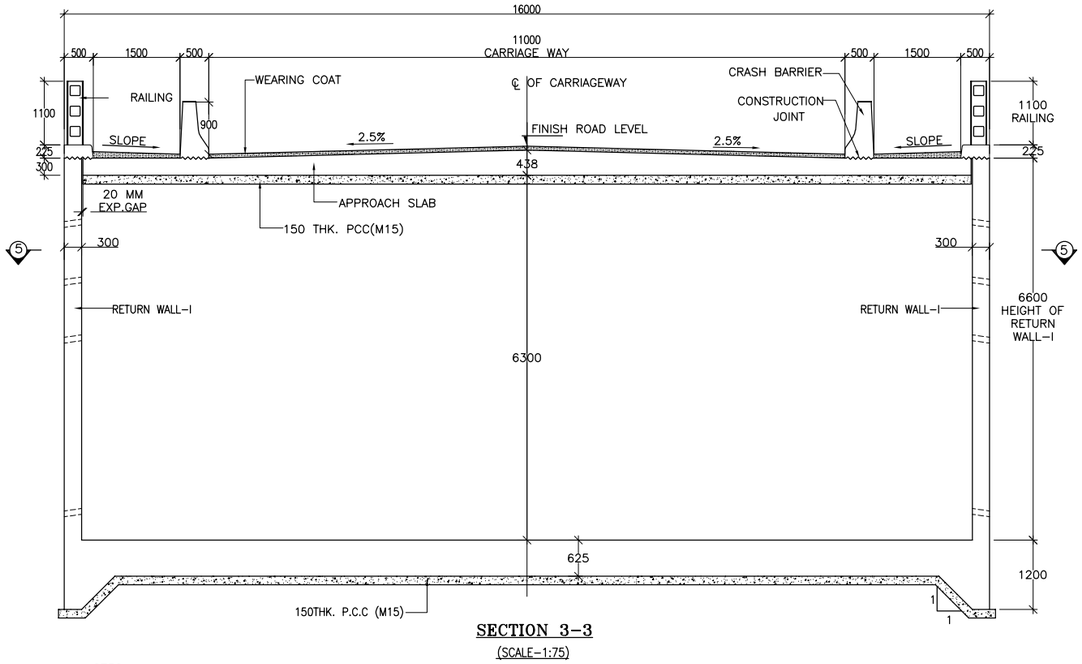
ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

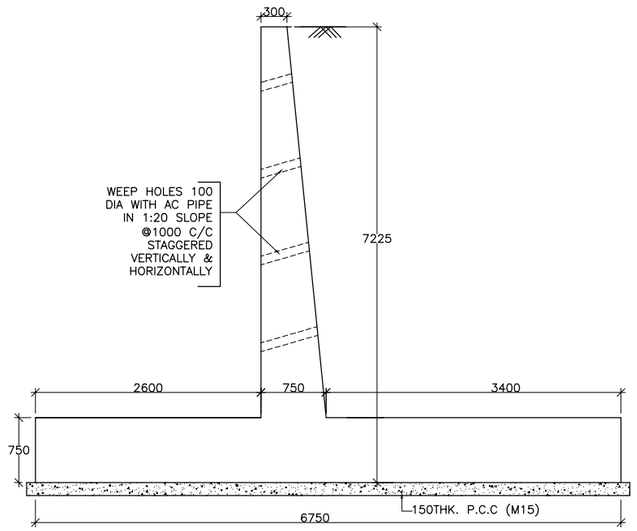
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 01 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
S.R	A. M	A. D	B.K



SECTION 3-3

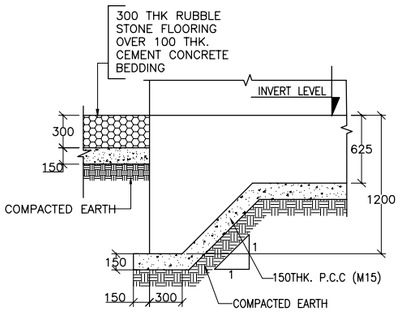
(SCALE-1:75)



SECTION 4-4

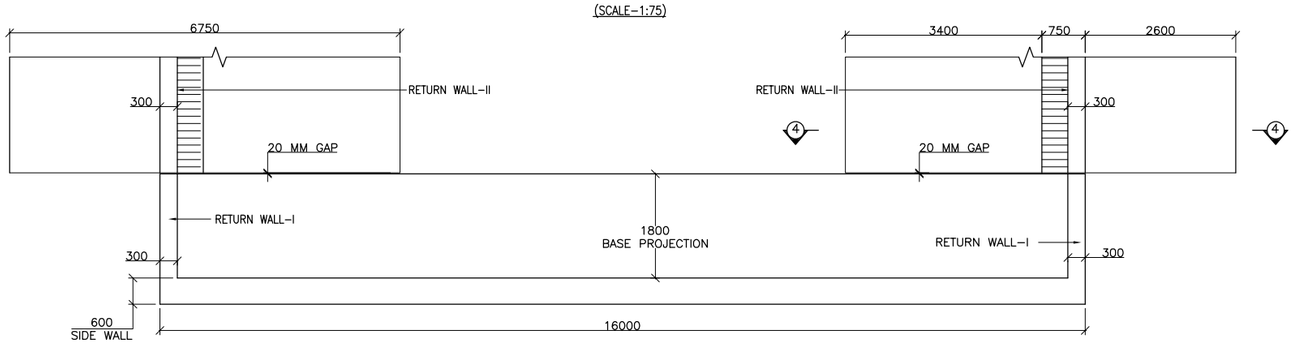
(SHOWING RETURN WALL- II)

(SCALE-1:50)



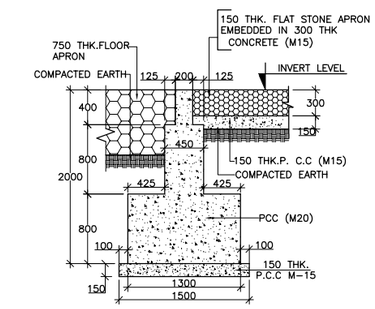
DETAIL 'C'

(SCALE-1:40)



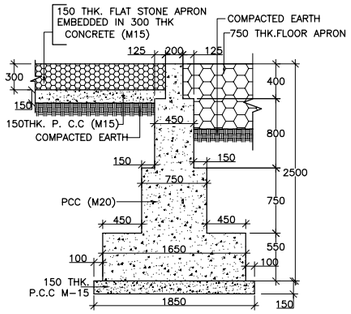
SECTIONAL PLAN 5-5

SCALE:- 1:75



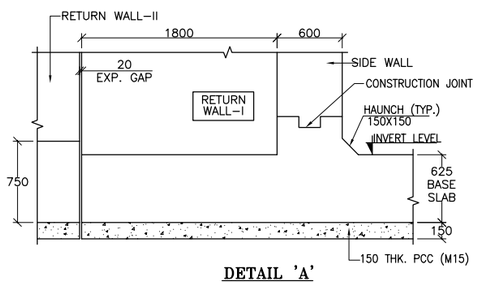
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-II (U/S)

(SCALE 1:50)



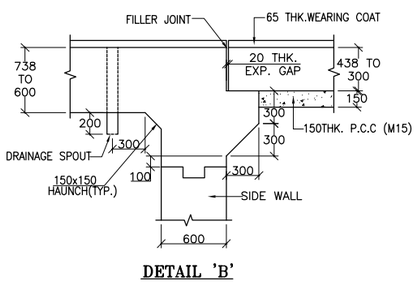
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-I (D/S)

(SCALE 1:50)



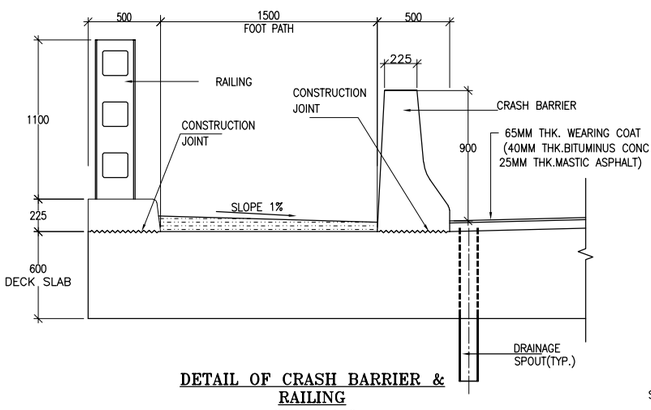
DETAIL 'A'

SCALE-1:40



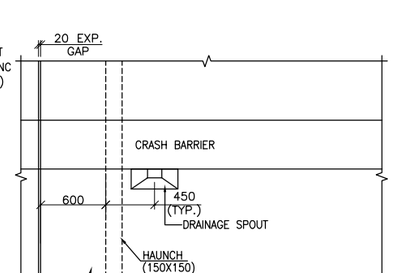
DETAIL 'B'

SCALE-1:40



DETAIL OF CRASH BARRIER & RAILING

SCALE - 1:30



DETAIL 'D'

(SCALE-1:40)

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.:-
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA
   (SHEET NO 01 OF 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
   (SHEET NO 01 OF 01)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
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MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

GENERAL ARRANGEMENT OF R.C.C BOX BRIDGE (4X6.0M X 6.0M)

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

CETEST Engineering Consultants An ISO 9001, 14001 & OHSAS18001 Certified Company

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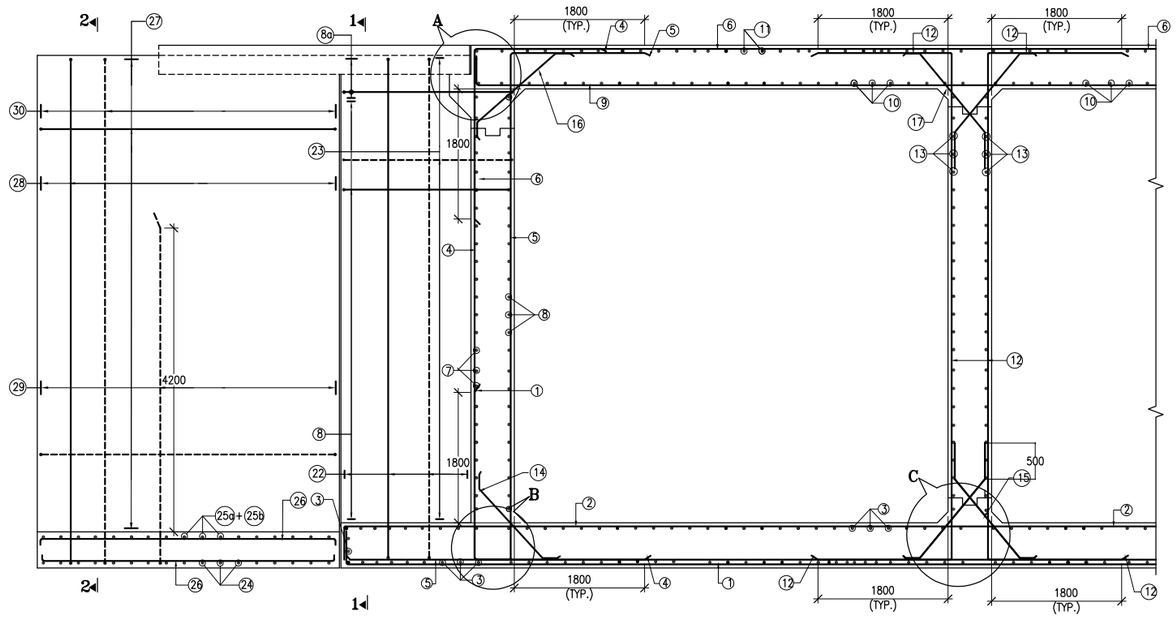
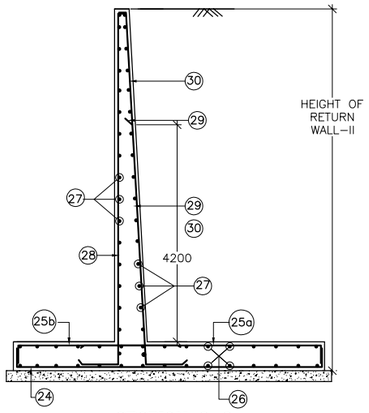
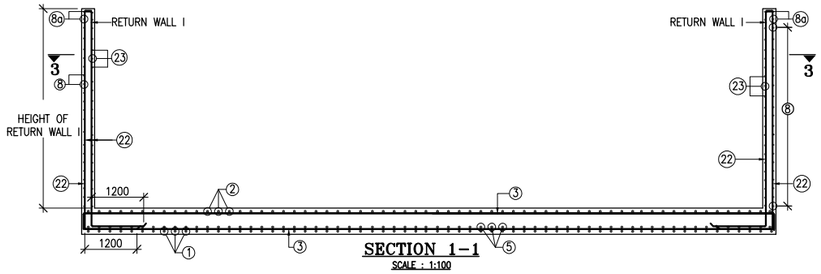
S.R	A. M	A. D	B.K



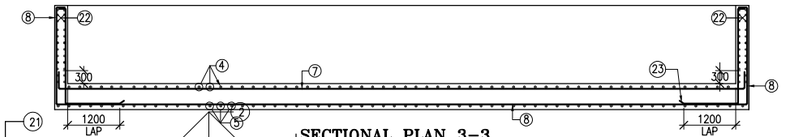
REINFORCEMENT DETAIL OF FOUR CELL BOX CULVERT
SCALE : 1:60



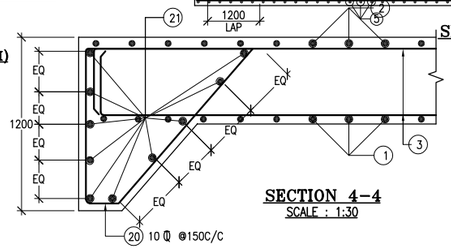
SECTION 2-2
(SHOWING RETURN WALL- II)
(SCALE-1:60)



SECTION 1-1
SCALE : 1:100



SECTIONAL PLAN 3-3
SCALE : 1:100

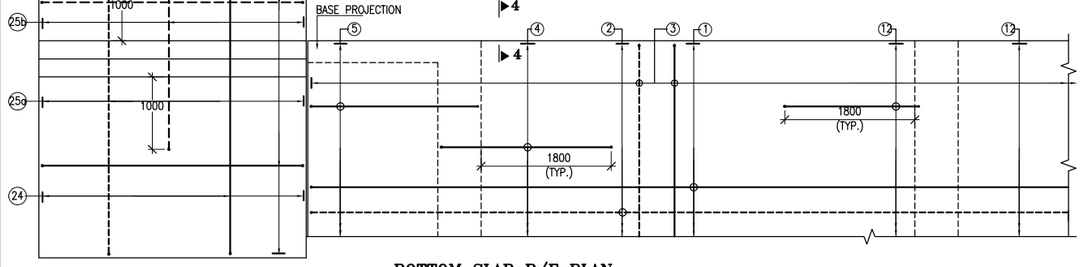


SECTION 4-4
SCALE : 1:30

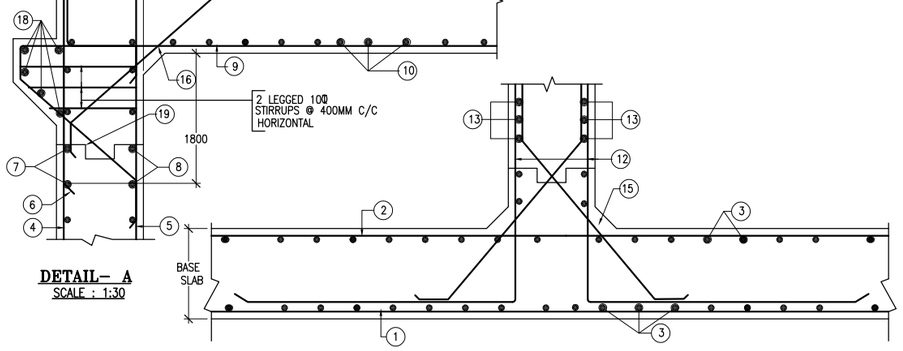
SCHEDULE OF REINFORCEMENT

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
1.	①	16	150
2.	②	16	150
3.	③	12	200
4.	④	20	150
5.	⑤	20	150
6.	⑥	16	150
7.	⑦	12	200
8.	⑧	12	200
9.	⑧a	12	5(Nos)
10.	⑨	16	150
11.	⑩	12	200
12.	⑪	20	150
13.	⑫	16	150
14.	⑬	12	200
15.	⑭	12	200
16.	⑮	12	200
17.	⑯	12	200
18.	⑰	12	200
19.	⑱	12	5(Nos)
20.	⑲	12	200

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
21.	⑳	10	150
22.	㉑	10	10(Nos)
23.	㉒	12	200
24.	㉓	20	150
25.	㉔	20	150
26.	㉕a	20	150
27	㉕b	16	150
28	㉖	12	125
29	㉗	12	225
30	㉘	12	150
31.	㉙	25	100
32.	㉚	25	100

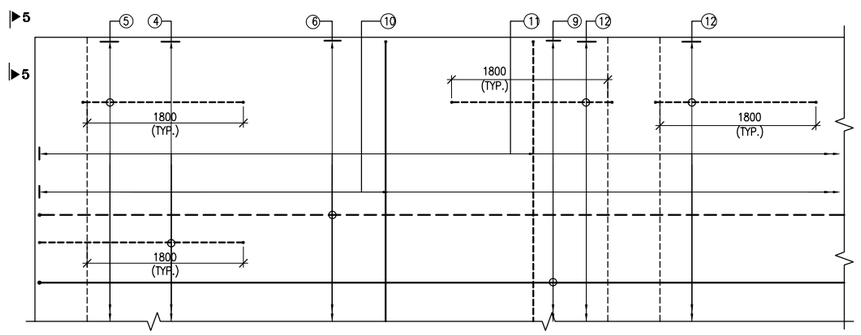


BOTTOM SLAB R/F PLAN
(HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:60

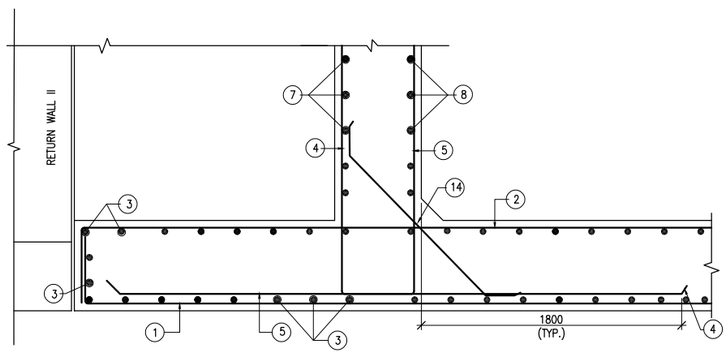


DETAIL- A
SCALE : 1:30

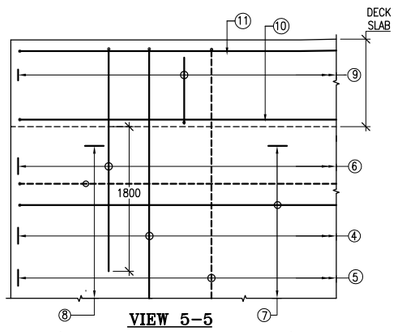
DETAIL- C
SCALE : 1:30



TOP SLAB R/F PLAN
(KERB, BRACKET & HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:50



DETAIL- B
SCALE : 1:30



VIEW 5-5
(HAUNCH BARS ARE NOT SHOWN)
SCALE : 1:30

LEGEND:-

REAR FACE / TOP FACE / EARTH FACE BAR ----------

FRONT FACE / BOTTOM FACE / OPPOSITE TO EARTH FACE BAR ——————

NOTES :

1. ALL DIMENSIONS ARE IN MM.
2. CONC. GRADE SHALL BE M-30 & M-25 WHERE APPLICABLE.
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe-500) CONFORMING TO IS: 1786.
4. CLEAR COVER =TOP SLAB 40MM, SIDE WALL 50MM, BOTTOM SLAB 75.
5. LAP LENGTH & DEVELOPMENT LENGTH (Ld) OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH RELEVANT CLAUSE IRC : 112-2011.
6. WELDING OF BARS SHALL NOT BE PERMITTED.
7. SHARP EDGES OF CONCRETE WILL NOT BE PERMITTED.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA (SHEET NO. 01 & 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC (SHEET NO. 01 OF 01)

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REINFORCEMENT DETAILS OF 4X6.0M X6.0M RCC BOX BRIDGE

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

CETEST Engineering Consultants AnISO 9001, 14001 & OHSAS 18001 Certified Company

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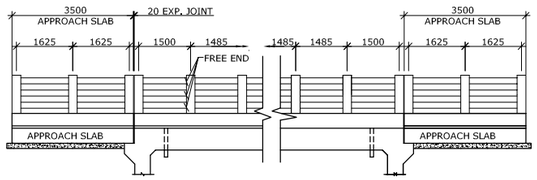
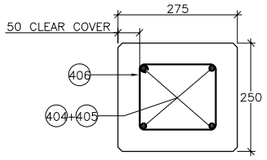
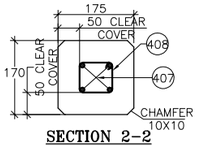


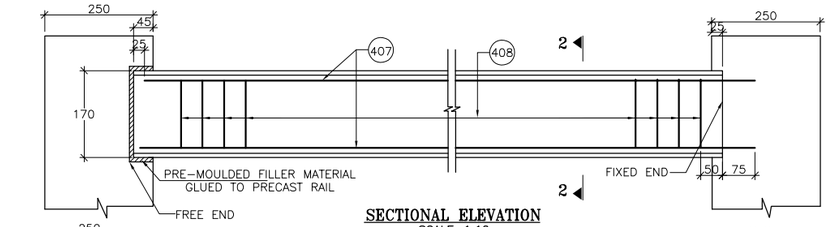
GENERAL ARRANGEMENT OF R.C.C. RAILING
4X6.0X6.0 BOX BRIDGE)
SCALE – 1:125



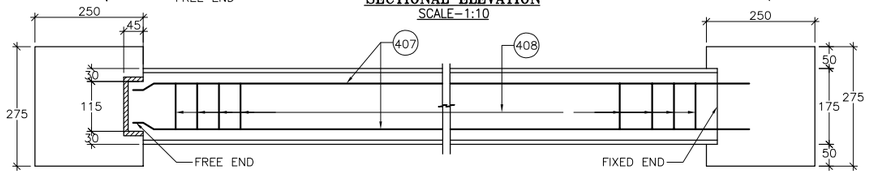
SECTION 1–1
SCALE– 1:10



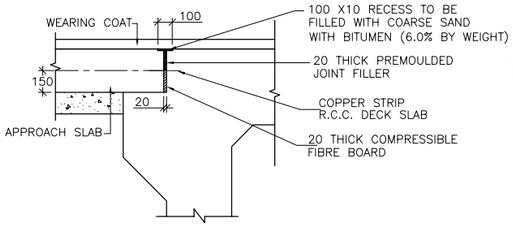
SECTION 2–2
SCALE– 1:10



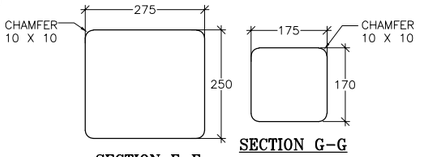
SECTIONAL ELEVATION
SCALE–1:10



PLAN
DETAIL OF PRECAST HANDRAIL
SCALE–1:10

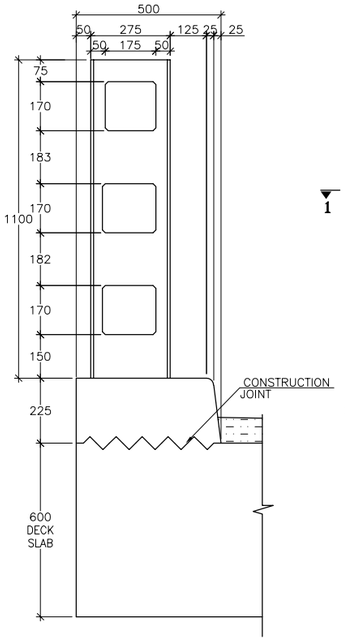


DETAILS OF FILLER JOINT
SCALE– 1:30

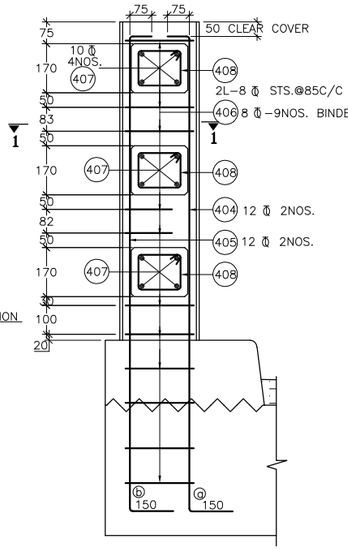


SECTION F–F
SECTION G–G

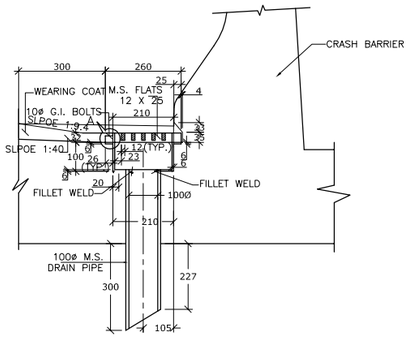
DETAILS OF HANDRAIL & POST
SCALE–1:10



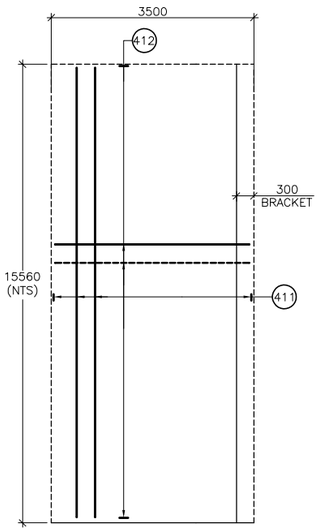
SECTION THROUGH POST
(FOR GENERAL ARRANGEMENT)
SCALE–1:15



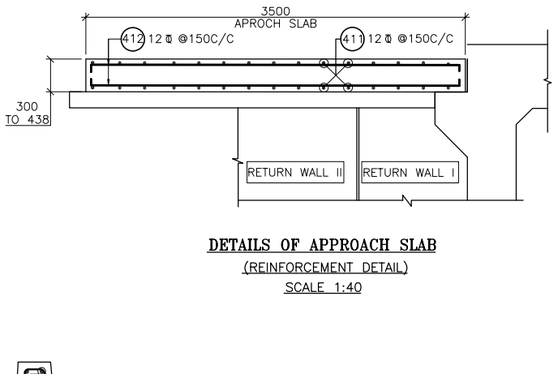
SECTION THROUGH POST
(FOR REINFORCEMENT DETAIL)
SCALE–1:15



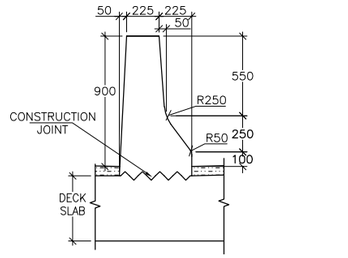
SECTION 3–3
SCALE– 1:15



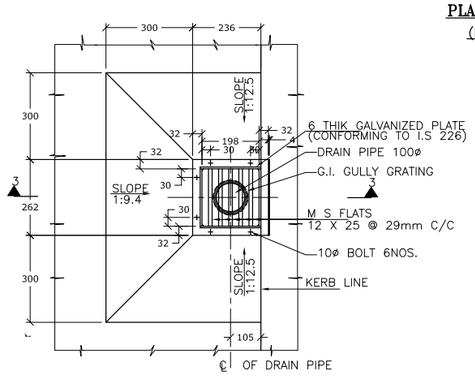
PLAN OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:75



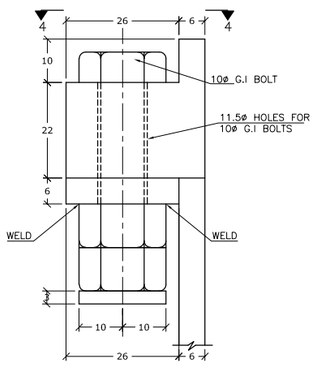
DETAILS OF APPROACH SLAB
(REINFORCEMENT DETAIL)
SCALE 1:40



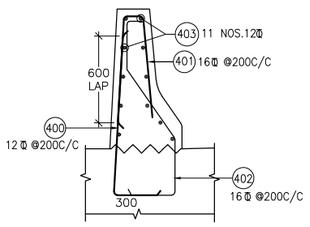
DETAILS OF CRASH BARRIER
(FOR GENERAL ARRANGEMENT)
SCALE–1:30



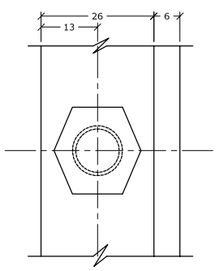
PLAN
DETAIL OF DRAINAGE
SPOUT AND COLLECTION PIT
SCALE– 1:15



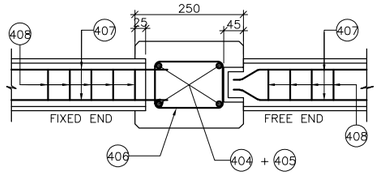
DETAIL – A
SCALE– 1:1



RCC OF CRASH BARRIER
SCALE–1:30



PLAN AT 4–4
SCALE– 1:1



REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST
SCALE–1:10

NOTE :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.

NOTES FOR RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES FOR DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR/MN/GA
(SHEET NO. 01 & 02)
CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN
DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

DETAILS OF DRAINAGE SPOUT, EXP. GAP RCC RAILING & CRASH BARRIER

ROAD NAME: Kailashahar to Teliamura Section of NH-208

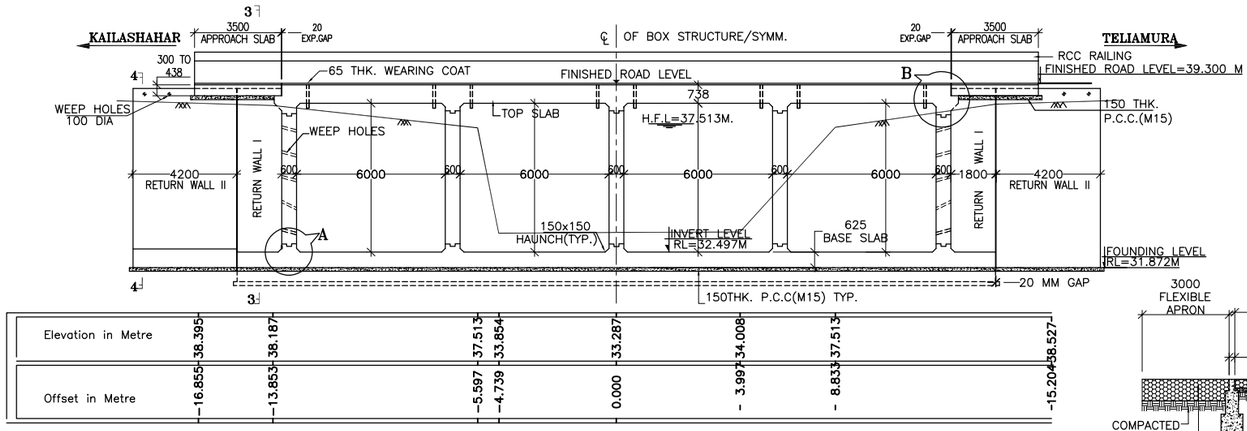
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

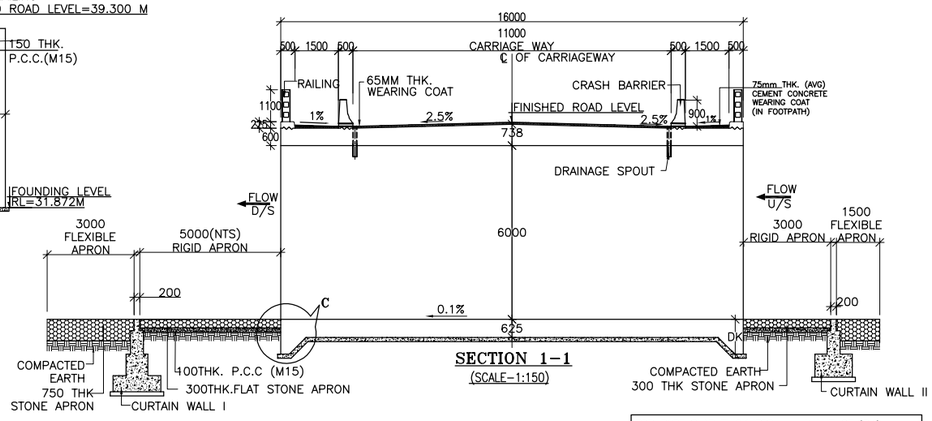
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/MISC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
S.R	-	A. D	B.K

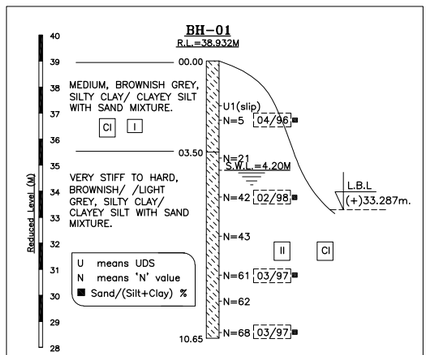


SECTION 2-2
(SCALE-1:175)

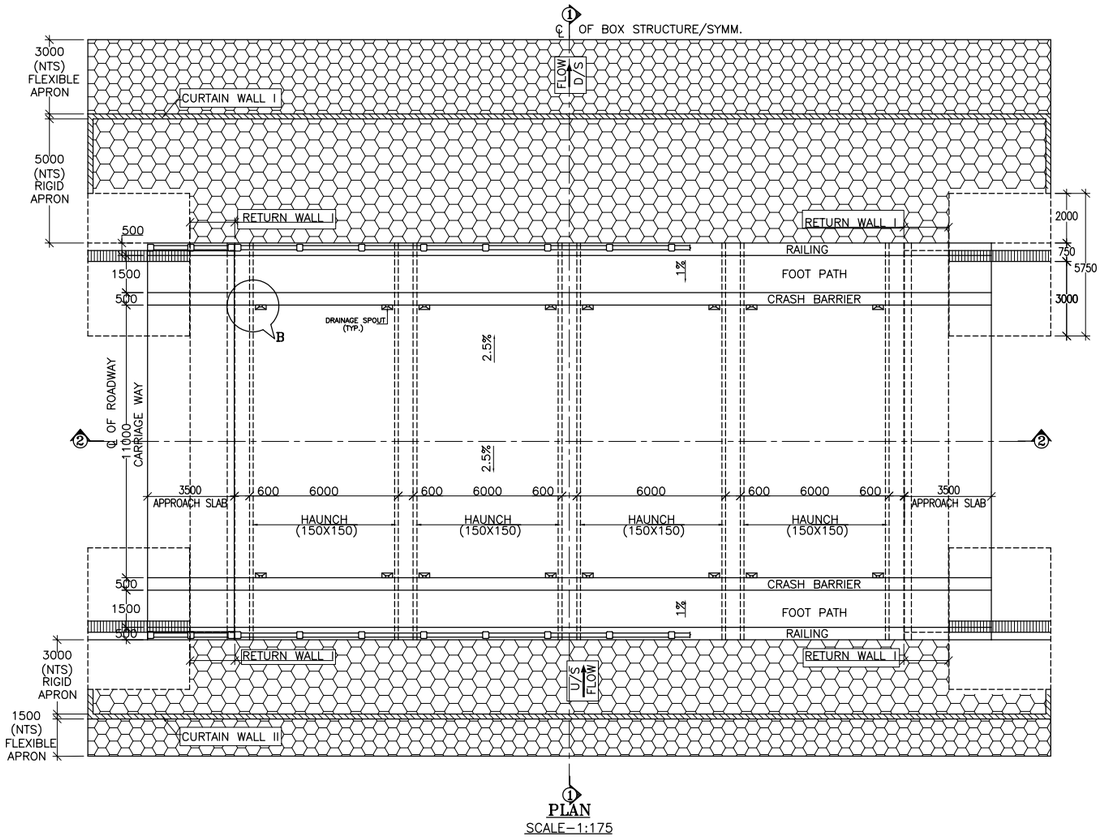


SECTION 1-1
(SCALE-1:150)

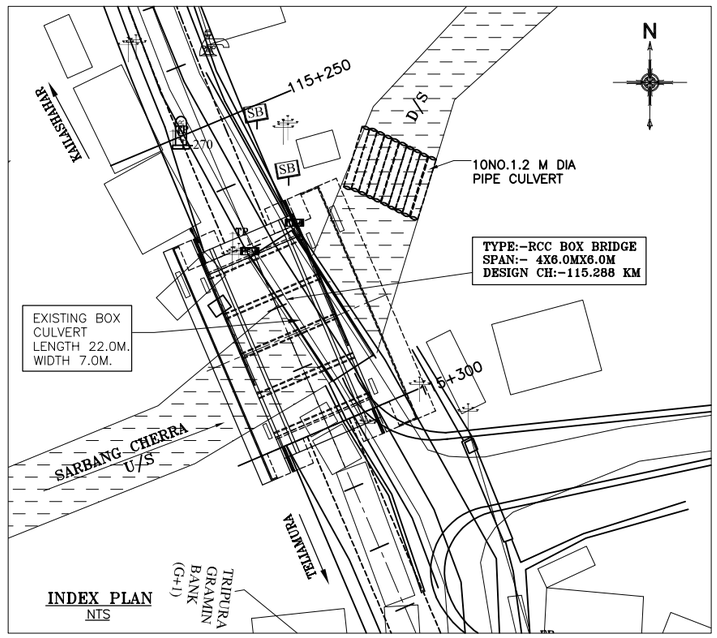
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm
	e = BASE SLAB THICKNESS



SOIL PROFILE
(SCALE : NTS)



PLAN
SCALE-1:175



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :-
   BOX STRUCTURE – M30
   RETURN WALL – M30
   APPROACH SLAB – M30
   RCC RAILING – M30
   CURTAIN WALL – M20
   LEVELING COURSE(P.C.C) – M15
   CRASH BARRIER– M40 & KERB–M30
3. GRADE OF STEEL Fe-500 AS PER I.S.-1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL γ=2.0t/m^3 , ϕ=30°.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. THE SOIL BELOW FOUNDATION LEVEL SHOULD BE WELL COMPACTED TO ACHIEVE MINIMUM BEARING CAPACITY OF 10t/SQM.
9. NORMAL SCOUR LEVEL-30.858 M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :-

    CET/BDG/2015/3580/NH-208/FDPR/MN/GA
    (SHEET NO 02 OF 02)
    CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
    (SHEET NO 01 OF 01)
    CET/BDG/2015/3580/NH-208/FDPR/MN/MISC
    (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

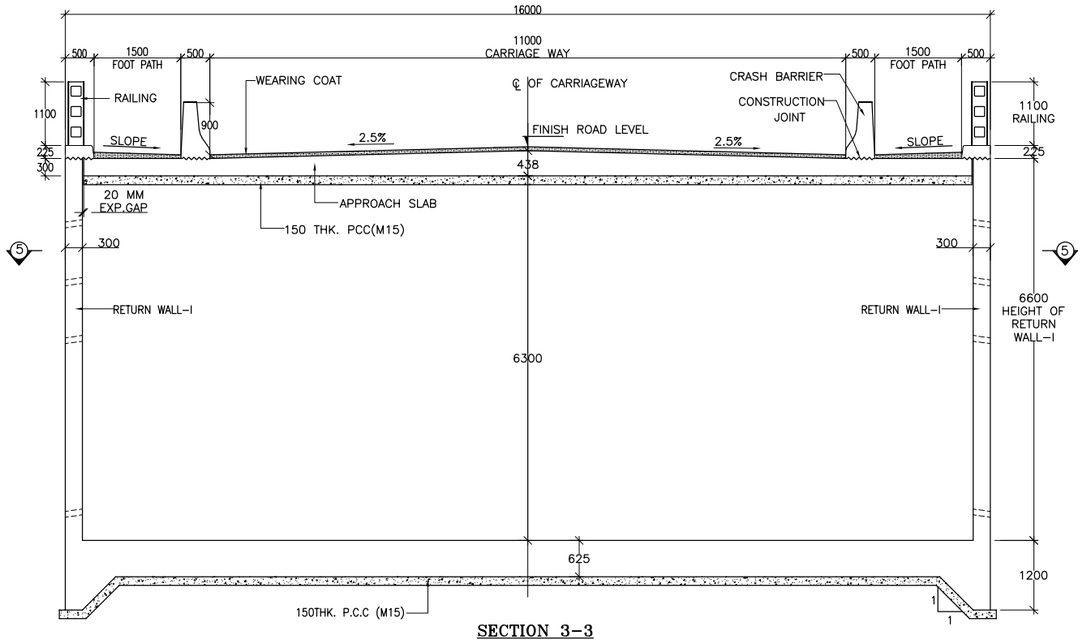
GENERAL ARRANGEMENT OF R.C.C BOX BRIDGE 4X6.0M X6.0M (AT CHAINAGE 115.288)

ROAD NAME: Kailashahar to Teliamura Section of NH-208

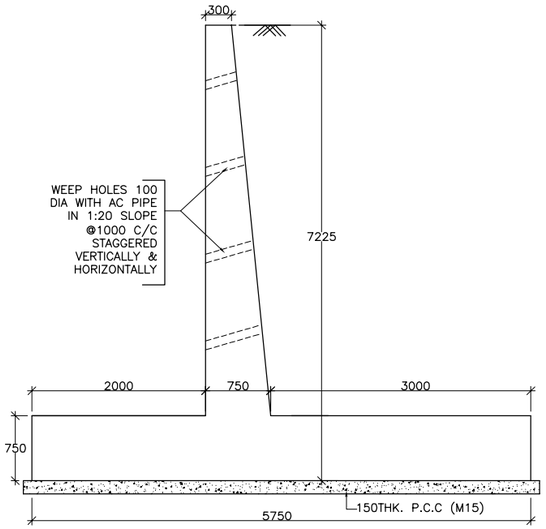
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 CertifiedCompany
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

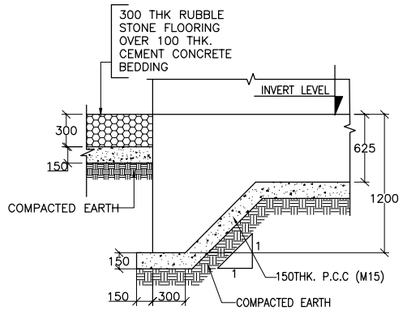
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 01 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
S.R	A. M	A. D	B.K



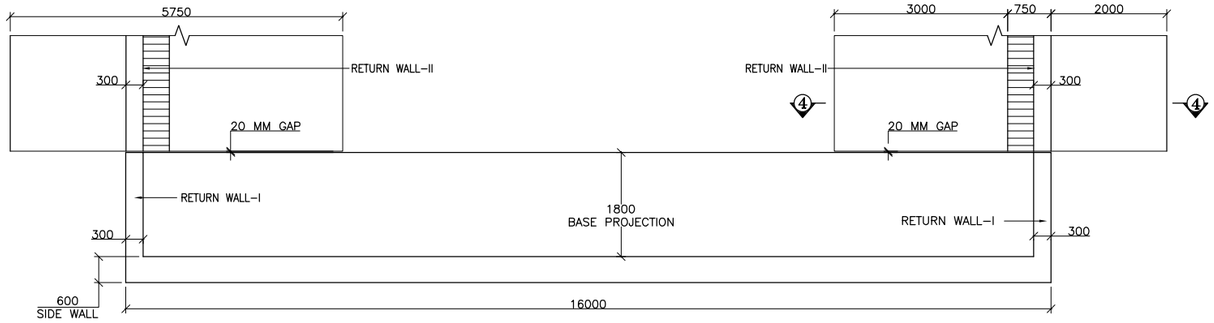
SECTION 3–3
(SCALE–1:75)



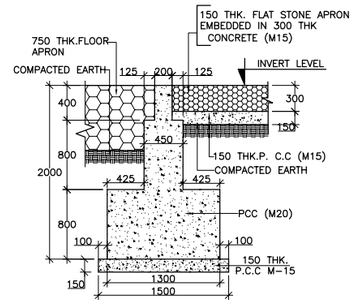
SECTION 4–4
(SHOWING RETURN WALL– II)
(SCALE–1:50)



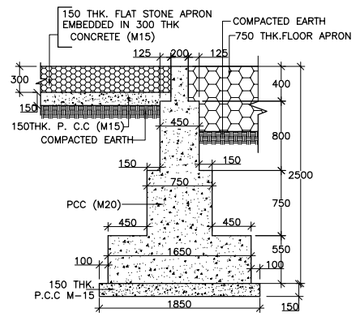
DETAIL 'C'
(SCALE–1:40)



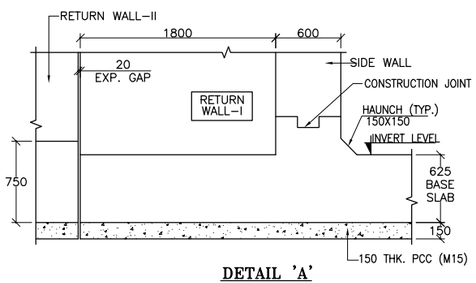
SECTIONAL PLAN 5–5
SCALE:– 1:75



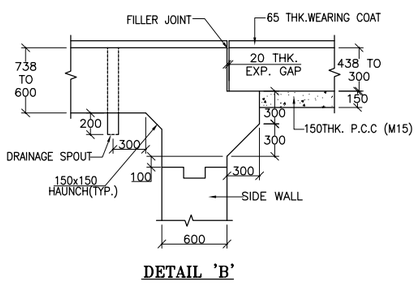
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE–II (U/S)
(SCALE 1:50)



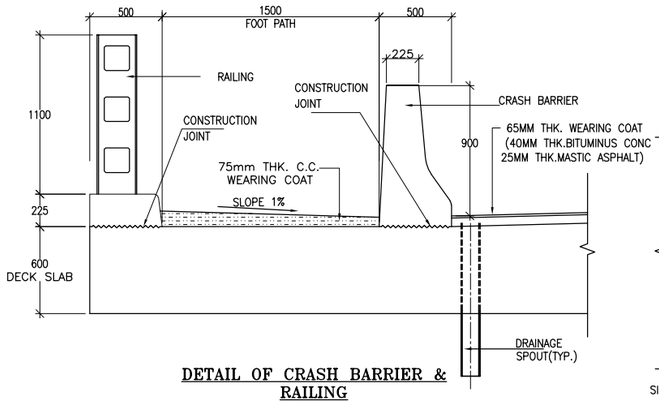
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE–I (D/S)
(SCALE 1:50)



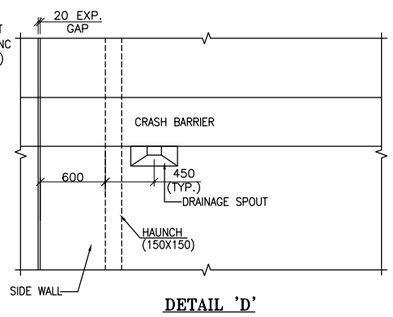
DETAIL 'A'
SCALE–1:40



DETAIL 'B'
SCALE–1:40



DETAIL OF CRASH BARRIER & RAILING
SCALE – 1:30



DETAIL 'D'
(SCALE–1:40)

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO.:–
   CET/BDG/2015/3580/NH–208/FDPR/MN/GA
   (SHEET NO 01 OF 02)
   CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
   (SHEET NO 01 OF 01)
   CET/BDG/2015/3580/NH–208/FDPR/MN/MISC
   (SHEET NO 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

GENERAL ARRANGEMENT DRAWING OF RCC BOX BRIDGE 4X6.0M X6.0M

ROAD NAME: Kailashahar to Teliamura Section of NH-208

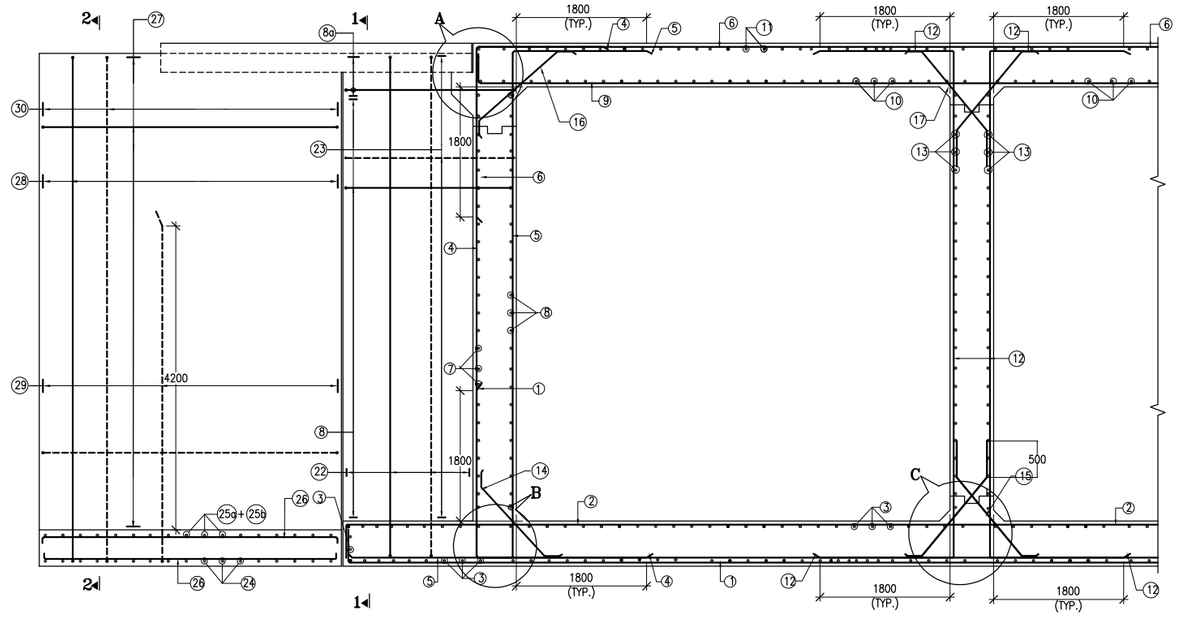
Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

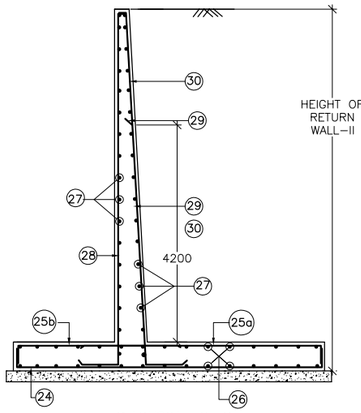
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

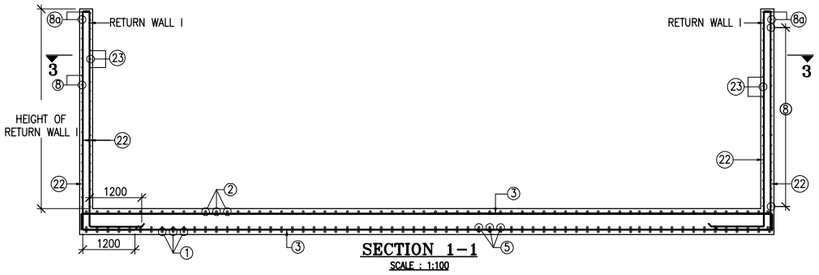
Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/GA		
Revision Mkd. - R0		Sheet No. - 02 of 02	
Drawn By.	Design By.	Checked By.	Approved By.
S.R	A. M	A. D	B.K



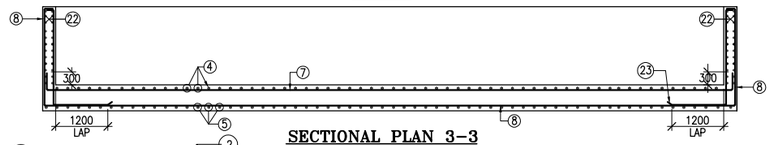
REINFORCEMENT DETAIL OF FOUR CELL BOX CULVERT
SCALE : 1:60



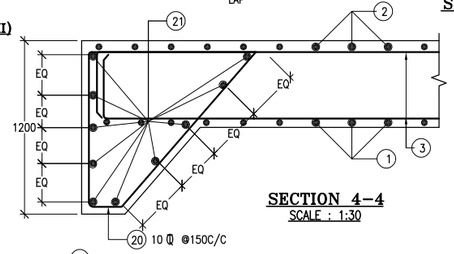
SECTION 2-2
(SHOWING RETURN WALL- II)
(SCALE-1:60)



SECTION 1-1
SCALE : 1:100



SECTIONAL PLAN 3-3
SCALE : 1:100

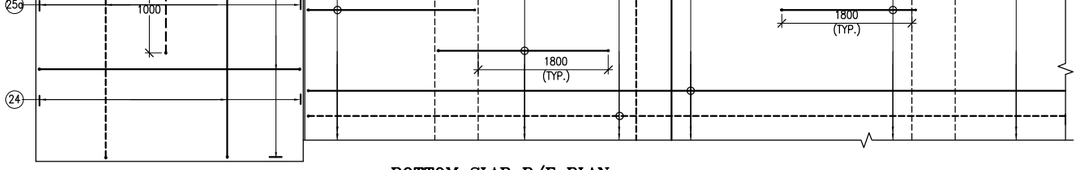


SECTION 4-4
SCALE : 1:30

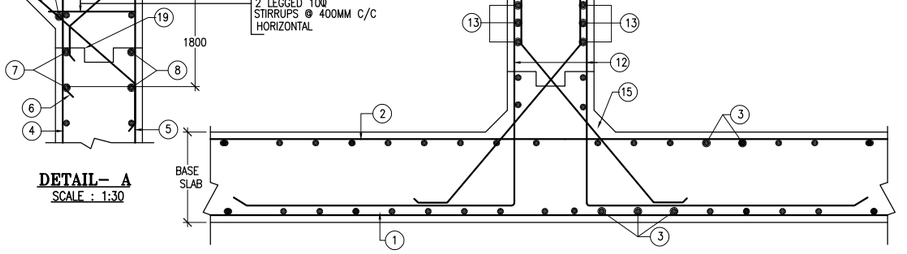
SCHEDULE OF REINFORCEMENT

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
1.	①	16	150
2.	②	16	150
3.	③	12	200
4.	④	20	150
5.	⑤	20	150
6.	⑥	16	150
7.	⑦	12	200
8.	⑧	12	200
9.	⑧a	12	5(Nos)
10.	⑨	16	150
11.	⑩	12	200
12.	⑪	20	150
13.	⑫	16	150
14.	⑬	12	200
15.	⑭	12	200
16.	⑮	12	200
17.	⑯	12	200
18.	⑰	12	200
19.	⑱	12	5(Nos)
20.	⑲	12	200

SL. NO.	BAR MARK	DIA. OF BARS (mm)	SPACING (mm)
21.	⑳	10	150
22.	㉑	10	10(Nos)
23.	㉒	12	200
24.	㉓	20	150
25.	㉔	20	150
26.	㉕a	20	150
27	㉕b	16	150
28	㉖	12	125
29	㉗	12	225
30	㉘	12	150
31.	㉙	25	100
32.	㉚	25	100

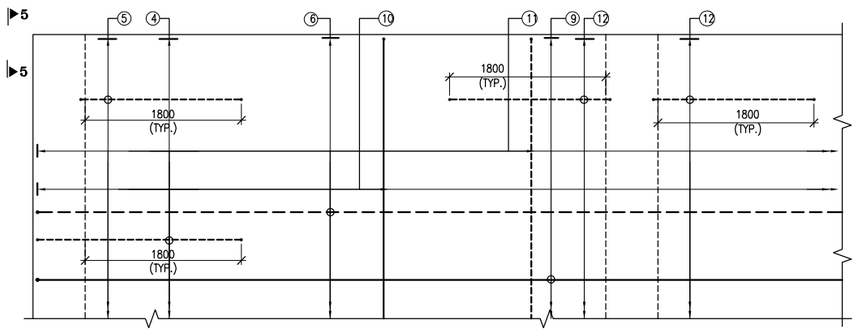


BOTTOM SLAB R/F PLAN
(HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:60

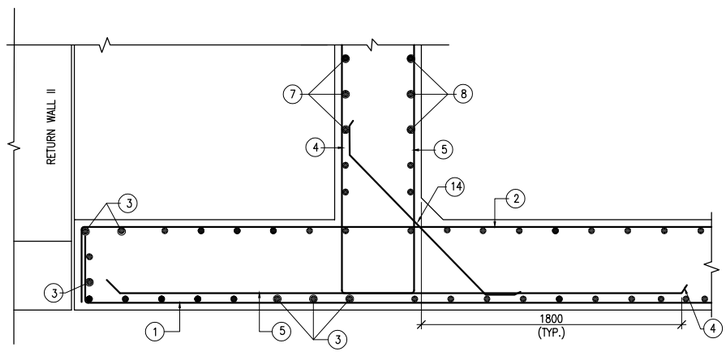


DETAIL- A
SCALE : 1:30

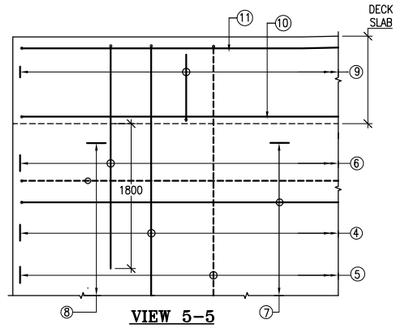
DETAIL- C
SCALE : 1:30



TOP SLAB R/F PLAN
(KERB, BRACKET & HAUNCH LINES ARE NOT SHOWN IN PLAN)
SCALE : 1:50



DETAIL- B
SCALE : 1:30



VIEW 5-5
(HAUNCH BARS ARE NOT SHOWN)
SCALE : 1:30

LEGEND:-

REAR FACE / TOP FACE / EARTH FACE BAR ----------

FRONT FACE / BOTTOM FACE / OPPOSITE TO EARTH FACE BAR ——————

NOTES :

1. ALL DIMENSIONS ARE IN MM.
2. CONC. GRADE SHALL BE M-30 & M-25 WHERE APPLICABLE.
3. ALL REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe-500) CONFORMING TO IS: 1786.
4. CLEAR COVER =TOP SLAB 40MM, SIDE WALL 50MM, BOTTOM SLAB 75.
5. LAP LENGTH & DEVELOPMENT LENGTH (Ld) OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH RELEVANT CLAUSE IRC : 112-2011.
6. WELDING OF BARS SHALL NOT BE PERMITTED.
7. SHARP EDGES OF CONCRETE WILL NOT BE PERMITTED.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO:
   CET/BDG/2015/3580/NH-208/FDPR/MN/GA (SHEET NO. 01 & 02)
   CET/BDG/2015/3580/NH-208/FDPR/MN/MISC (SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.

REVISIONS

SCALE: AS SHOWN

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REINFORCEMENT DETAILS OF 4X6.0M X6.0M RCC BOX BRIDGE

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

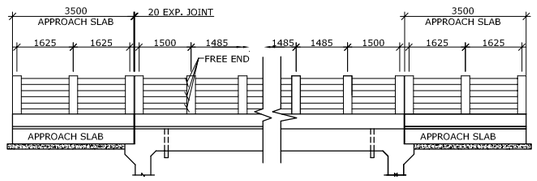
CONSULTANT :

CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No. CET/BDG/2015/3580/NH-208/FDPR/MN/RCC

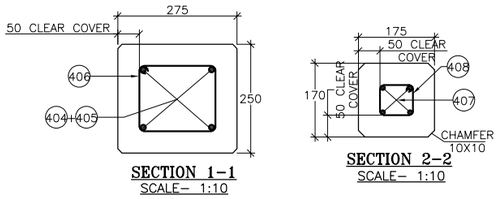
Revision Mkd. - R0 — Sheet No. - 01 of 01

Drawn By.	Design By.	Checked By.	Approved By.
S.R	A. M	A. D	B.K



GENERAL ARRANGEMENT OF R.C.C. RAILING 4X6.0X6.0 BOX BRIDGE)

SCALE – 1:125

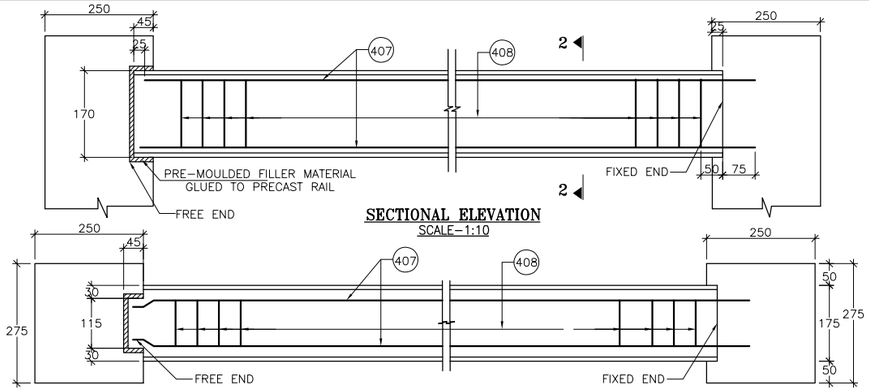


SECTION 1–1

SCALE– 1:10

SECTION 2–2

SCALE– 1:10



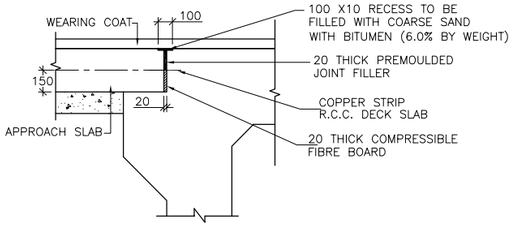
SECTIONAL ELEVATION

SCALE–1:10

PLAN

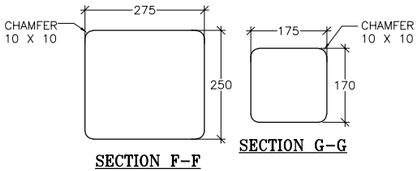
DETAIL OF PRECAST HANDRAIL

SCALE–1:10



DETAILS OF FILLER JOINT

SCALE– 1:30

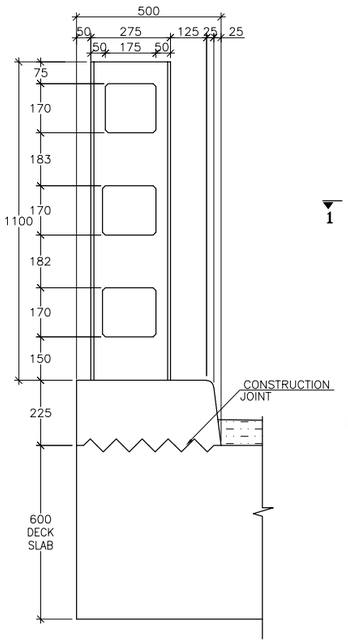


SECTION F–F

SECTION G–G

DETAILS OF HANDRAIL & POST

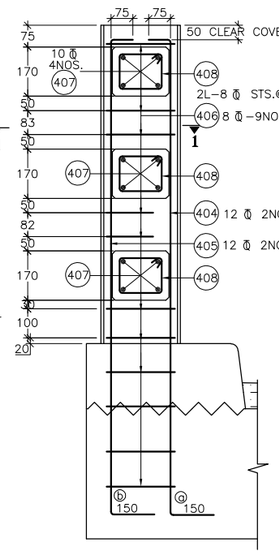
SCALE–1:10



SECTION THROUGH POST

(FOR GENERAL ARRANGEMENT)

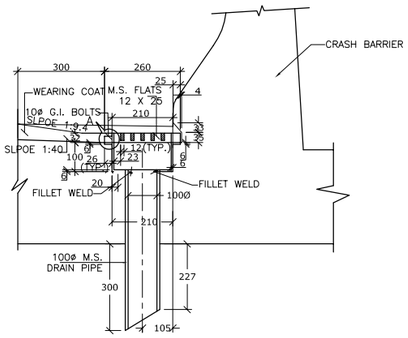
SCALE–1:15



SECTION THROUGH POST

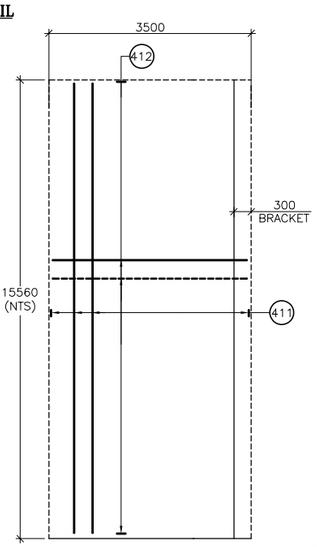
(FOR REINFORCEMENT DETAIL)

SCALE–1:15



SECTION 3–3

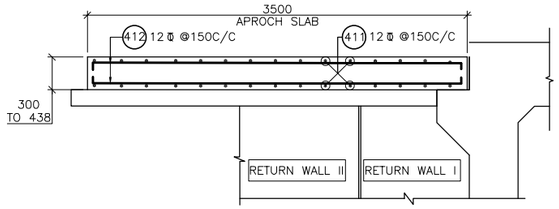
SCALE– 1:15



PLAN OF APPROACH SLAB

(REINFORCEMENT DETAIL)

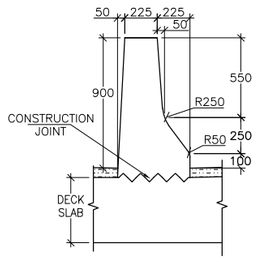
SCALE 1:75



DETAILS OF APPROACH SLAB

(REINFORCEMENT DETAIL)

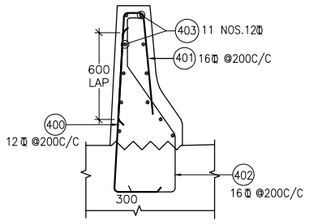
SCALE 1:40



DETAILS OF CRASH BARRIER

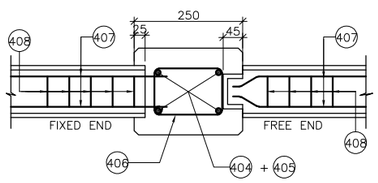
(FOR GENERAL ARRANGEMENT)

SCALE–1:30



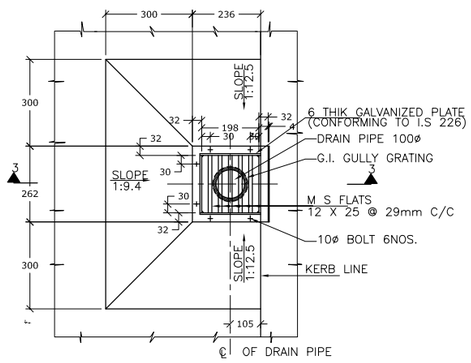
RCC OF CRASH BARRIER

SCALE–1:30



REINFORCEMENT ARRANGEMENT OF HAND RAIL & POST

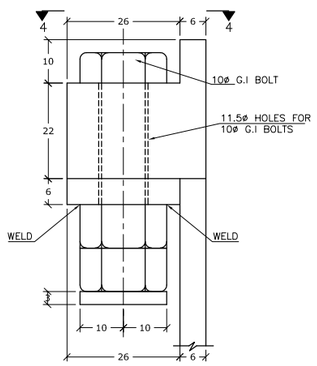
SCALE–1:10



PLAN

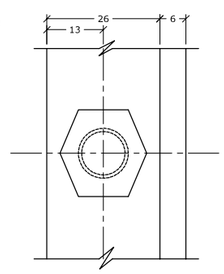
DETAIL OF DRAINAGE SPOUT AND COLLECTION PIT

SCALE– 1:15



DETAIL – A

SCALE– 1:1



PLAN AT 4–4

SCALE– 1:1

NOTE :

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.

NOTES FOR RAILING :

1. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED IN DECK SLAB.
2. CASTING OF POST SHALL BE DONE IN SINGLE POUR AFTER ACCURATELY POSITIONING THE PRECAST HANDRAIL.
3. RAILING SHALL BE CONSTRUCTED ONLY AFTER THE STRUCTURAL CONCRETE OF SUPERSTRUCTURE HAS HARDENED AND SHUTTERING IS RELEASED.
4. EXPANSION GAPS IN RAILING SHALL BE PROVIDED AT THE SAME LOCATIONS AS IN THE DECK SLAB.

NOTES FOR DRAINAGE SPOUT

1. ONLY FIGURED DIMENSIONS ARE TO BE FOLLOWED.
2. ALL STEEL WORK SHALL BE AS PER IS – 2062.
3. DRAINAGE SPOUT & COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL & AFTER FABRICATION, THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
4. THE REINFORCEMENT OF TOP SLAB OF BOX SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE DRAINAGE SPOUT.
5. THE DRAINAGE SPOUT SHALL BE GALVANIZED AFTER WELDING THE PLATES & FLATS.

REFERENCE DRAWINGS :

CET/BDG/2015/3580/NH–208/FDPR/MN/GA
(SHEET NO. 01 & 02)

CET/BDG/2015/3580/NH–208/FDPR/MN/RCC
(SHEET NO. 01 OF 01)

MKD.	DATE	DESCRIPTION	CHKD.	APPRD.
REVISIONS				

SCALE: AS SHOWN

DATE: Nov,2019

CLIENT: Public Works Department, Government of Tripura

National Highways & Infrastructure Development Corporation Ltd.

PROJECT: Consultancy Services for Preparation of Feasibility Study and DPR for Improvement and Widening to Two Lane with 1.5 m Paved Shoulder of Newly Declared NH-208 (Length 157.70 Km) for Execution on EPC Mode in the State of Tripura under NH(O)

DETAILS OF DRAINAGE SPOUT, EXP. GAP RCC RAILING & CRASH BARRIER

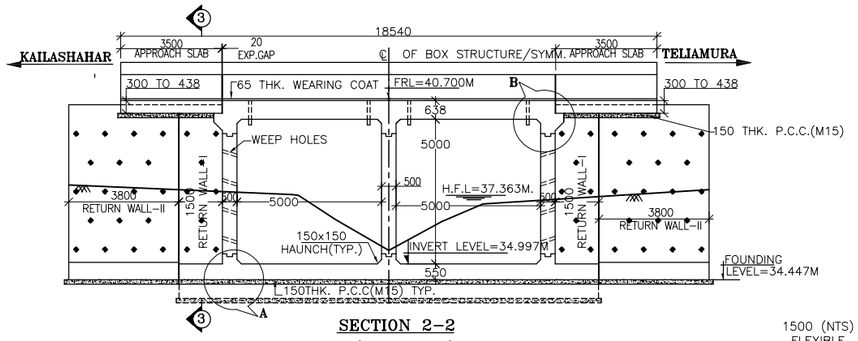
ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :

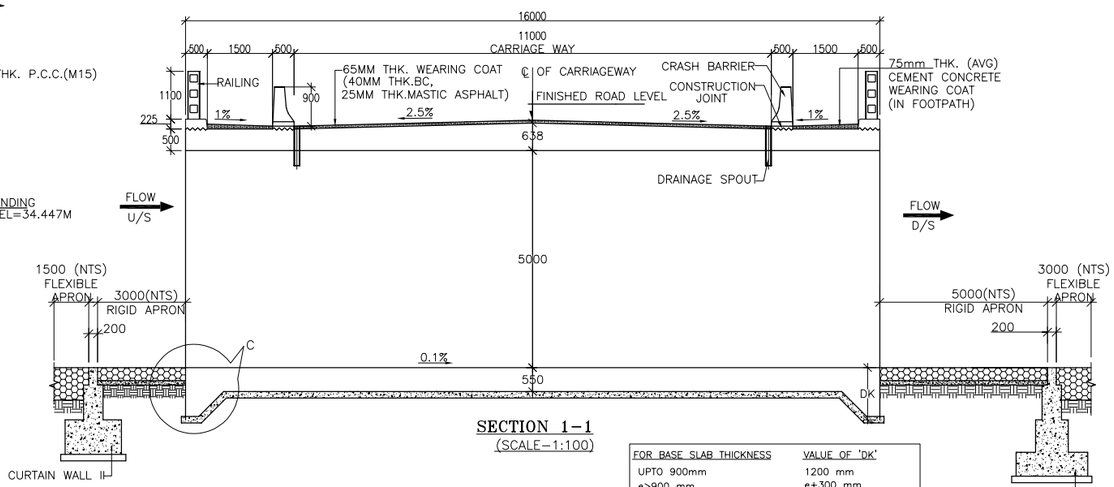
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

Dwg. No.	CET/BDG/2015/3580/NH-208/FDPR/MN/MISC		
Revision Mkd. - R0		Sheet No. - 01 of 01	
Drawn By.	Design By.	Checked By.	Approved By.
S.R	-	A. D	B.K



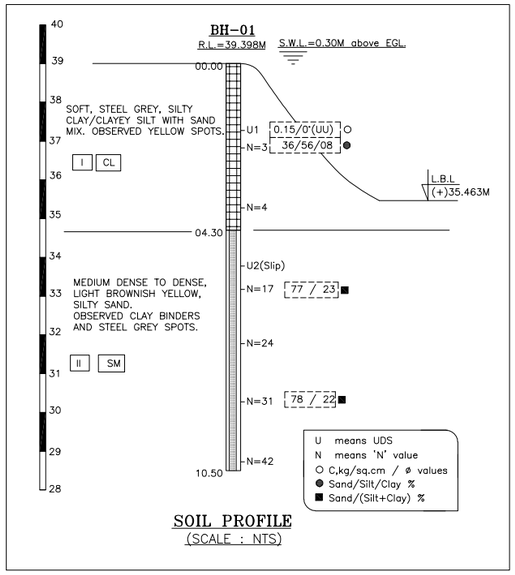
SECTION 2-2
(SCALE-1:150)

ELEVATION(M)	37.722		37.386	37.363	36.517	35.463	36.459	37.068	37.564
OFFSET(M)	11.070		-3.339	-3.126	-1.835	0.000	1.827	3.256	11.070

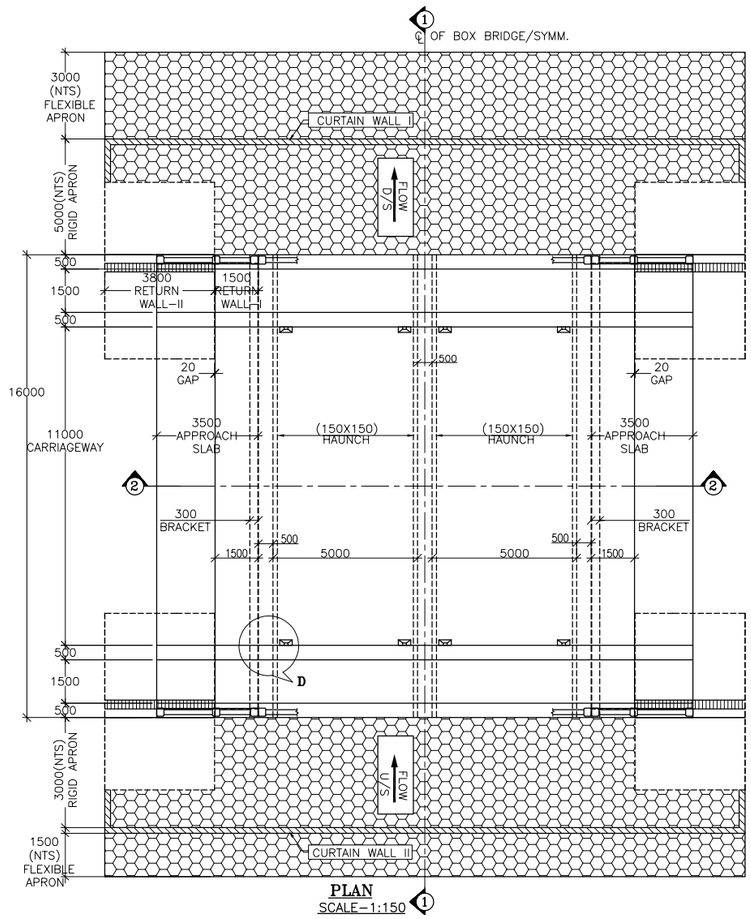


SECTION 1-1
(SCALE-1:100)

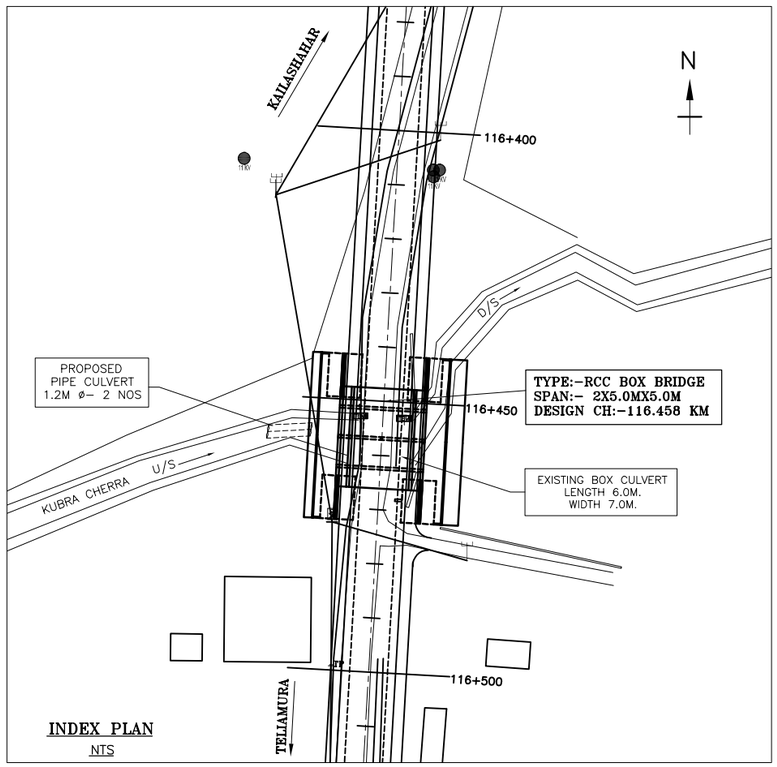
FOR BASE SLAB THICKNESS	VALUE OF 'DK'
UPTO 900mm	1200 mm
e>900 mm	e+300 mm
	e = BASE SLAB THICKNESS



SOIL PROFILE
(SCALE : NTS)



PLAN
SCALE-1:150



INDEX PLAN
NTS

NOTES :

1. ALL DIMENTIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. GRADE OF CONCRETE :-
   BOX STRUCTURE - M30
   RETURN WALL - M30
   APPROACH SLAB - M30
   RCC RAILING - M30
   CURTAIN WALL - M20
   LEVELING COURSE(P.C.C) - M15
   CRASH BARRIER- M40 & KERB-M30
3. GRADE OF STEEL Fe-500 AS PER I.S.-1786.
4. CLASS A 3 LANES OR CLASS A 1 LANE+ CLASS 70R PRODUCING WORST EFFECT WILL BE CONSIDERED.
5. PROPERTIES OF BACKFILL SOIL γ=1.8t/m^3 , ø=30°.
6. FILTER MATERIAL BEHIND ABUTMENT AND RETURN WALL SHALL CONFORM TO CLAUSE 2504.2.2 OF MoRTH SPECIFICATIONS TO A THICKNESS OF NOT LESS THAN 600mm. WITH SMALLER SIZE TOWARDS THE SOIL AND BIGGER SIZE TOWARDS THE WALL TO THE FULL HEIGHT.
7. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANNULAR FILLS WITH LAYERS NOT EXCEEDING 300mm.
8. THE SOIL BELOW FOUNDATION LEVEL SHOULD BE WELL COMPACTED TO ACHIEVE MINIMUM BEARING CAPACITY OF 10t/SQM.
9. NORMAL SCOUR LEVEL-35.463M.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DWG. NO. :-
    CET/BDG/2015/3580/NH-208/FDPR/MN/GA
    (SHEET NO. 02 OF 02)
    CET/BDG/2015/3580/NH-208/FDPR/MN/RCC
    (SHEET NO. 01 OF 01)
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    (SHEET NO. 01 OF 01)

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GENERAL ARRANGEMENT DRAWING OF RCC BOX BRIDGE 2X5.0M X5.0M
CHAINAGE : 116.458 KM

ROAD NAME: Kailashahar to Teliamura Section of NH-208

Package:-VI (Km 101+300 to Km 127+319)

CONSULTANT :
CETEST Engineering Consultants
An ISO 9001, 14001 & OHSAS 18001 Certified Company
CE TESTING COMPANY PVT. LTD.
124-A, N.S.C. Bose Road
Kolkata - 700092.

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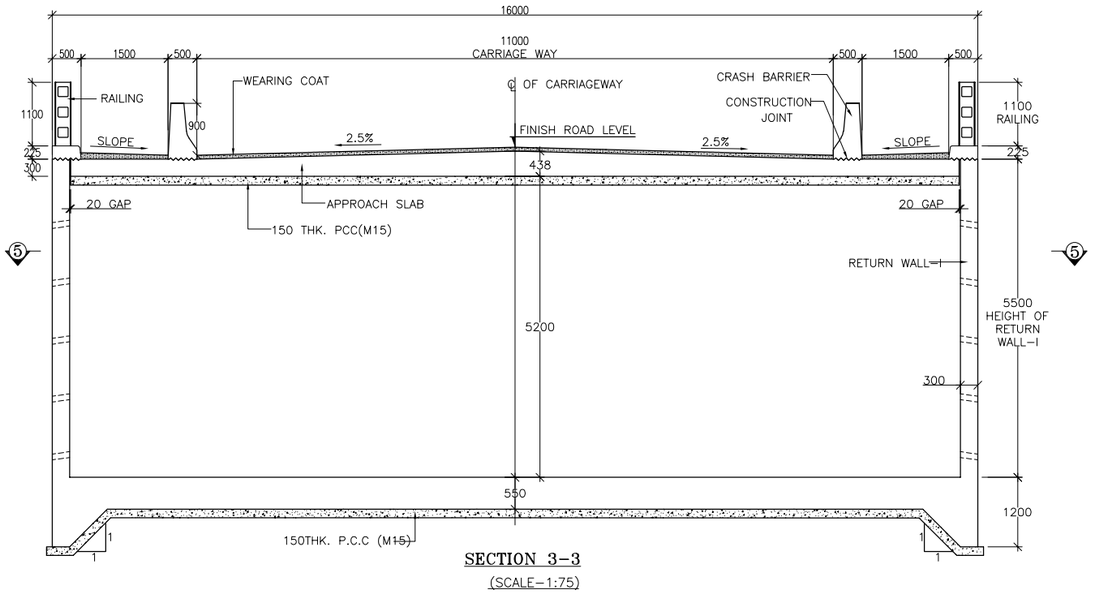
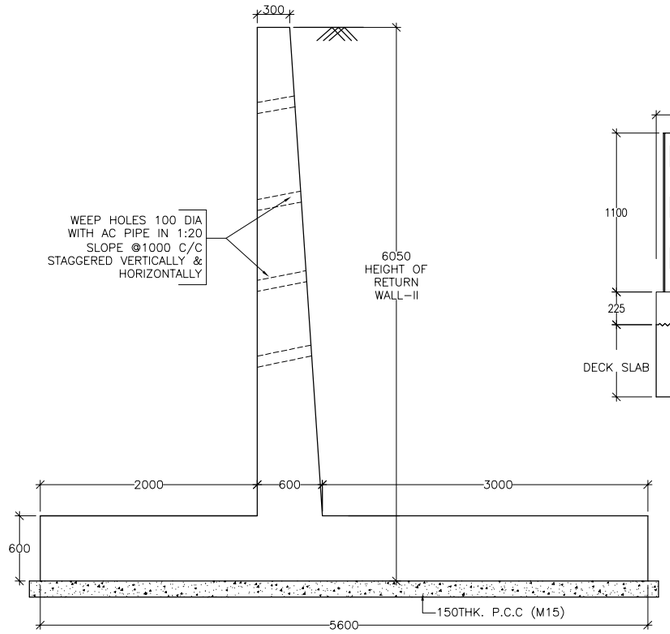
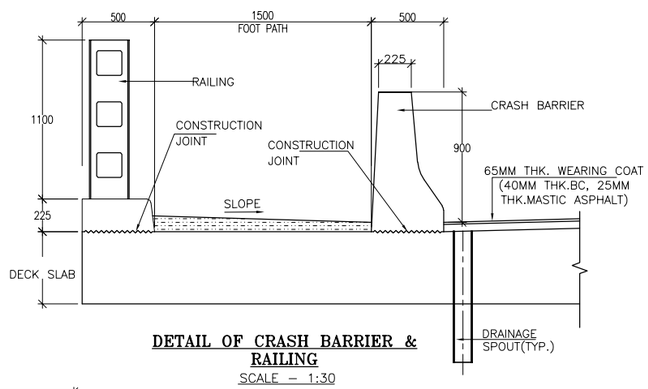


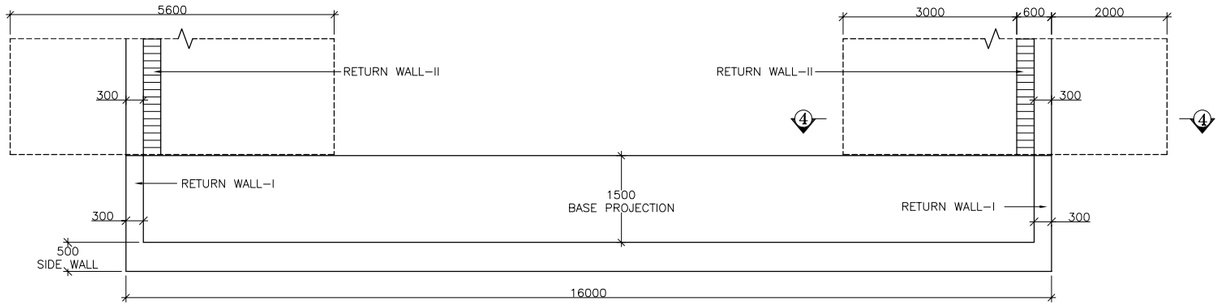
SECTION 3-3
(SCALE-1:75)



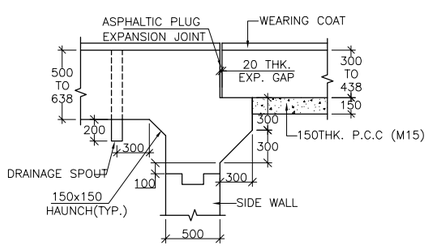
SECTION 4-4
(SHOWING RETURN WALL- II)
(SCALE-1:40)



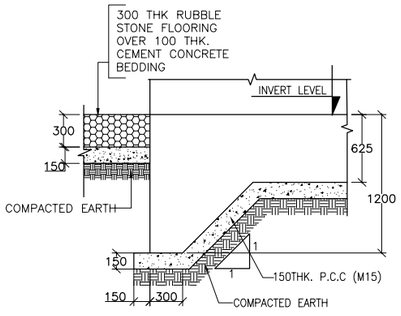
DETAIL OF CRASH BARRIER & RAILING
SCALE - 1:30



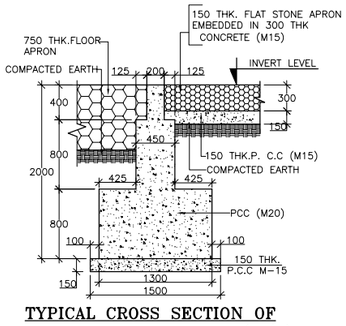
SECTIONAL PLAN 5-5
SCALE:- 1:75



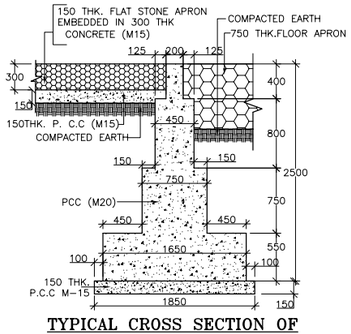
DETAIL 'B'
SCALE-1:40



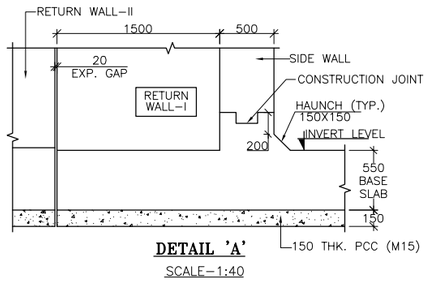
DETAIL 'C'
(SCALE-1:40)



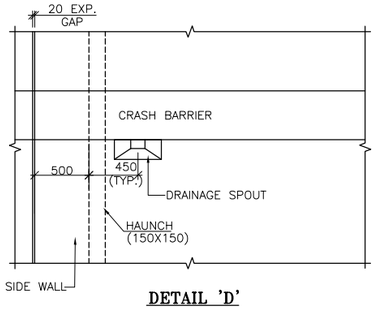
TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-II (U/S)
(SCALE 1:50)



TYPICAL CROSS SECTION OF CURTAIN WALL TYPE-I (D/S)
(SCALE 1:50)



DETAIL 'A'
SCALE-1:40



DETAIL 'D'
(SCALE-1:40)

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Package:-VI (Km 101+300 to Km 127+319)

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