

REV.	DATE	DESCRIPTION

CLIENT:



सड़क परिवहन एवं राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

सत्यमेव जयते

DPR CONSULTANT:

TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH
SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.



Senior MIG -17 Gokuldham Complex, Gautam Nagar, Bhopal (M.P.) 462023 Ph:- 0755-4851333 E-Mail : tasp1.smlc@gmail.com

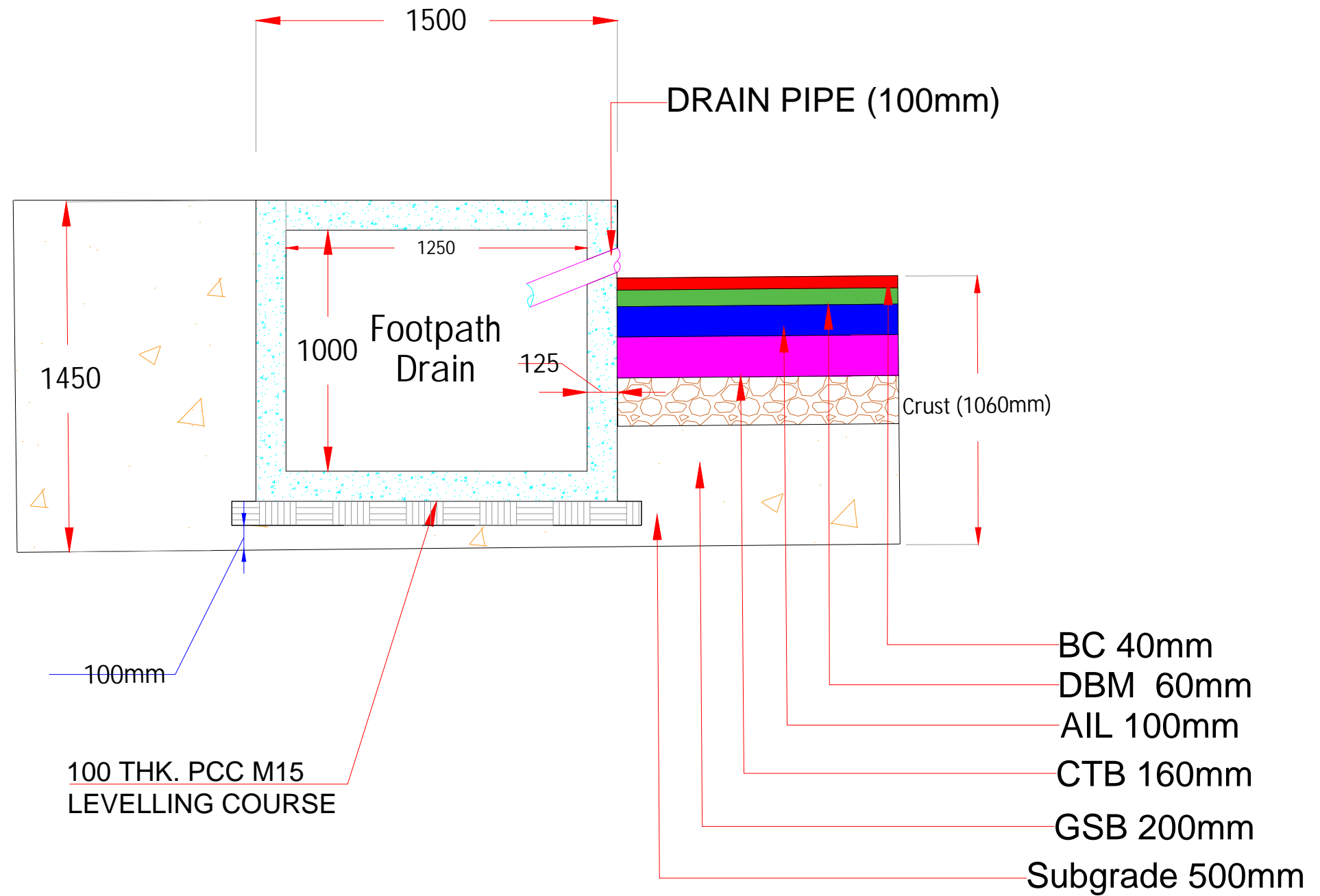


PROJECT :

Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B

TITLE:		DWG NO.:	
Toe Wall			
SCALE:		DATE:- NOV 2025 PAPER – A3	
NOT TO SCALE		DRAWN	DESIGN
A.M.	A.G.	CHECKED	APPROVED
		S.K.	A.D.

DRAIN CROSS SECTION



REV.	DATE	DESCRIPTION

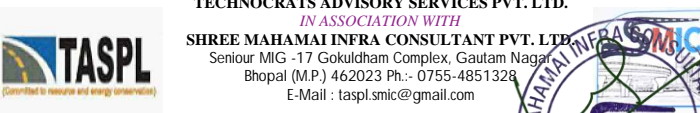
CLIENT:



सड़क परिवहन एवं राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
सत्यमेव जयते

DPR CONSULTANT:

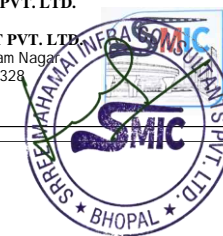
TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH
SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
Senior MIG -17 Gokuldham Complex, Gautam Nagar
Bhopal (M.P.) 462023 Ph:- 0755-4851328
E-Mail : tasp1.smic@gmail.com

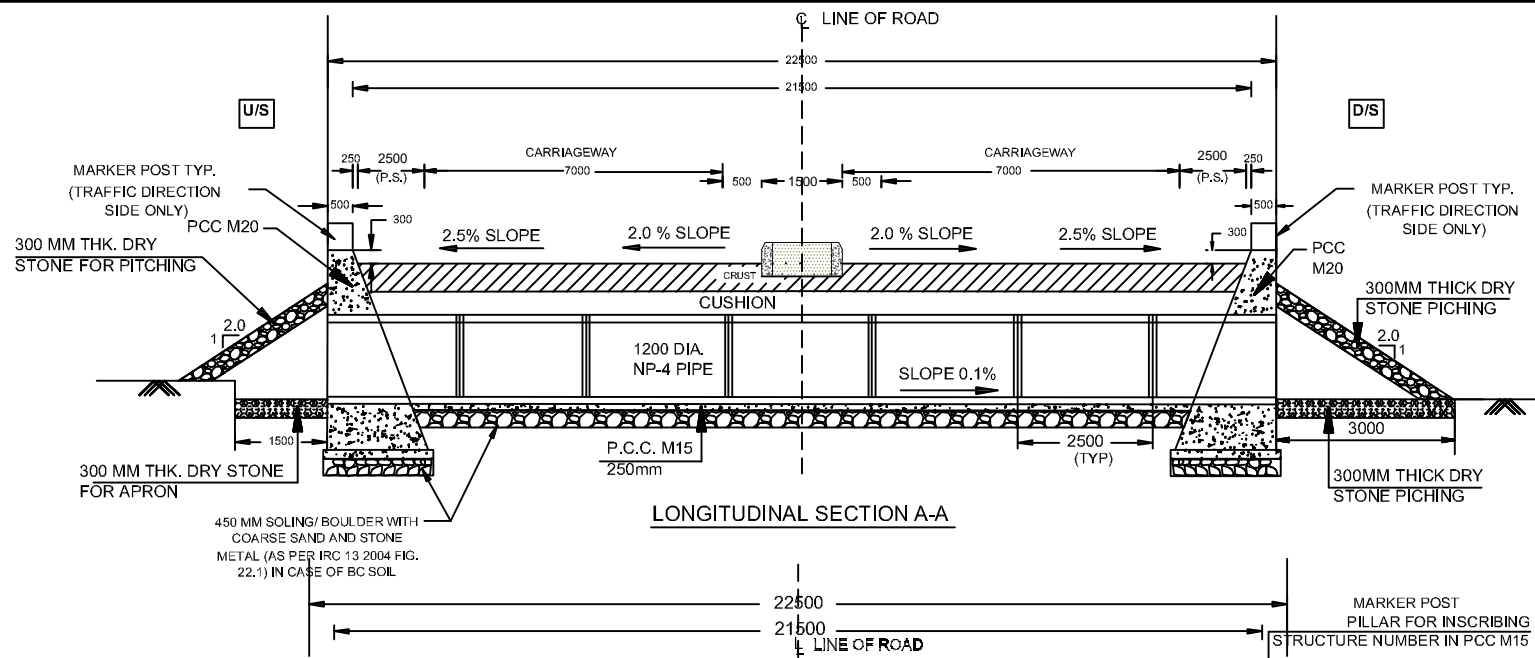


PROJECT :

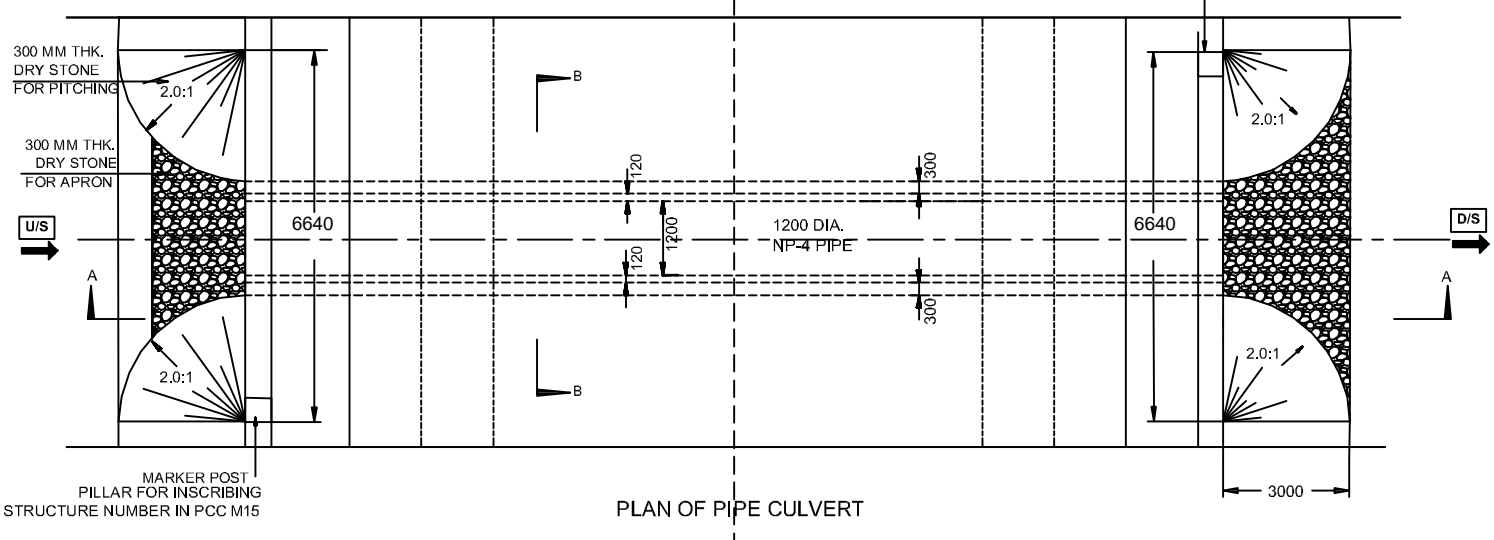
Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B

TITLE:	DWG NO:-			
Drain CS	DATE:- NOV 2025		PAPER – A3	
SCALE:	DRAWN	DESIGN	CHECKED	APPROVED
NOT TO SCALE	A.M.	A.G.	S.K.	A.D.

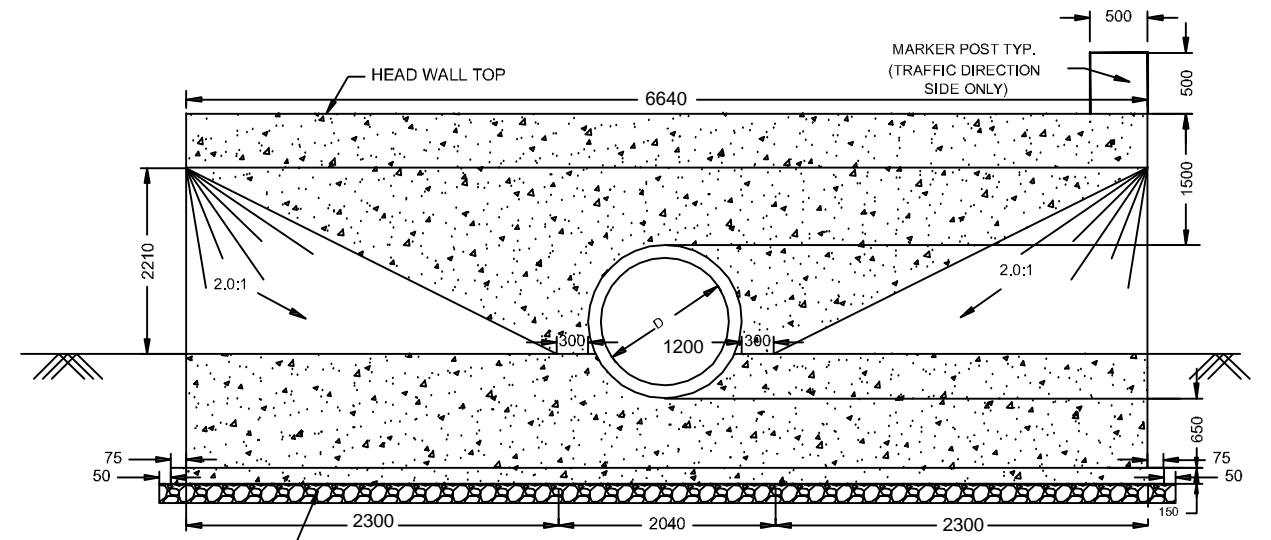




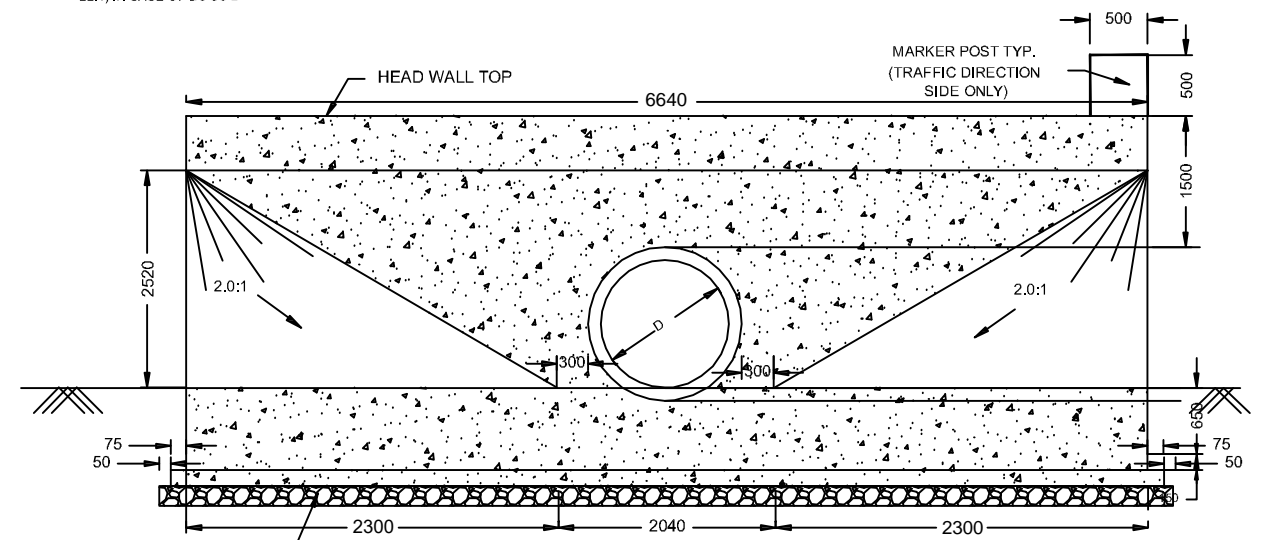
LONGITUDINAL SECTION A-A



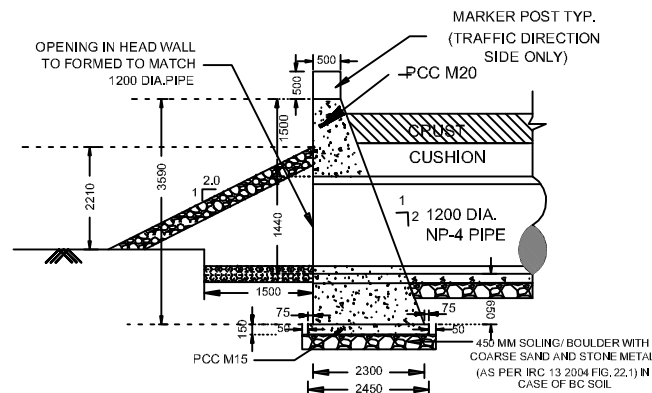
PLAN OF PIPE CULVERT



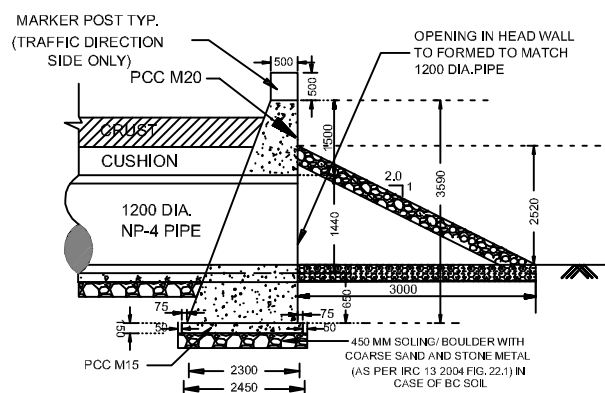
ELEVATION C-C (U/S)



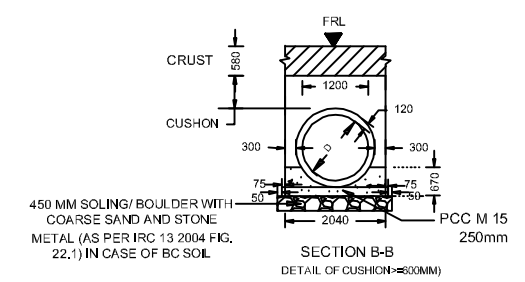
ELEVATION C-C (D/S)



DETAILS OF HEADWALL (U/S)



DETAILS OF HEADWALL (D/S)



SECTION B-B
DETAIL OF CUSHION=800MM

NOTES :-

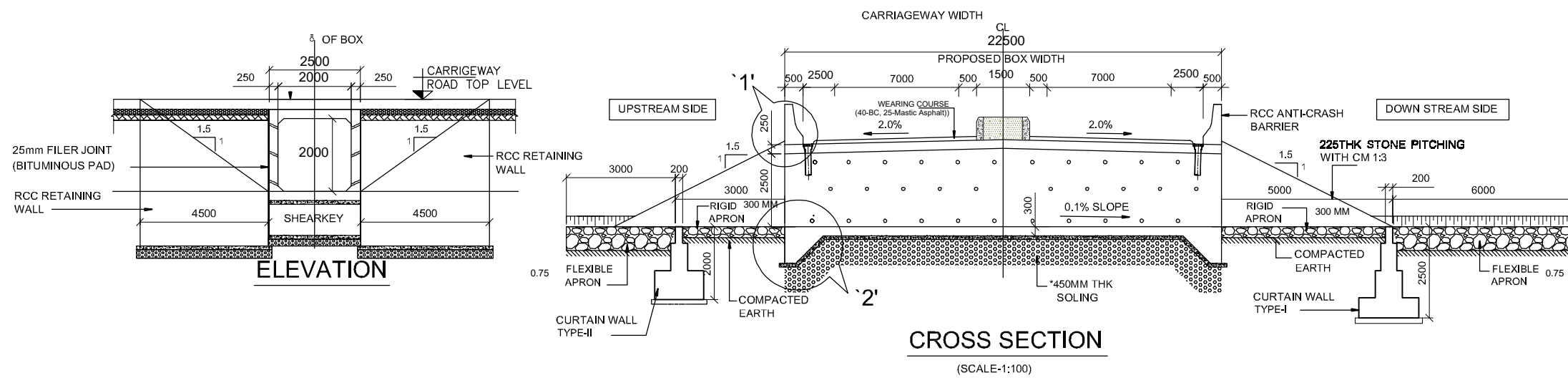
1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METER
2. DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED
3. 1200mm dia. NP4 PIPE SHOULD CONFIRM TO IS: 458-2003
4. LONGITUDINAL SLOPE OF PIPE SHOULD BE MIN. 1 IN 1000
5. READ THIS DRAWINGS WITH PLAN & PROFILE DRAWINGS.
6. THE PIPE JOINTS SHALL BE AS PER IS: 458-2003
7. MINIMUM WEIGHT OF STONE USED FOR FLEXIBLE APRON SHOULD BE 40 KG.
8. THE FRL SHOWN ARE AT CENTER OF ROAD, FOR CAMBER AND SUPER ELEVATION DETAILS REFER PLAN AND PROFILE DRAWINGS
9. ALL THE LEVELS, CAMBERS TO BE VERIFIED WITH RESPECT TO PLAN & PROFILE DRAWINGS BEFORE STARTING UP OF EXECUTION
10. IN CASE OF BLACK COTTON SOIL AT PIPE CULVERT LOCATION IMPROVEMENT HAS TO BE DONE IN ACCORDANCE WITH THE ARTICLE 22 OF IRC: SP: 13
11. GRADE OF CONCRETE SHALL BE -
a) FOR LEVELING COURSE - M15
b) FOR HEAD WALL & KERB - M20

PROJECT:
Rehabilitation & Upgradation of Four Lane road with Paved Shoulders in Hingoli Town section of NH 461B from Narsi Phata to Junction with NH 161 at Sawarkheda with Major Bridge across Kayadhu river and additional 2 lane ROB at LC No. 144(B) (From KM. 94+750 to KM. 101+530, Total length = 6.780 KM) in the state of Maharashtra EPC mode.

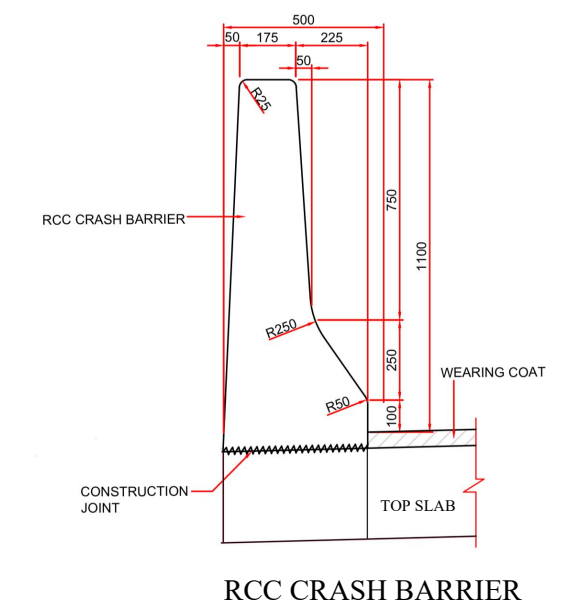
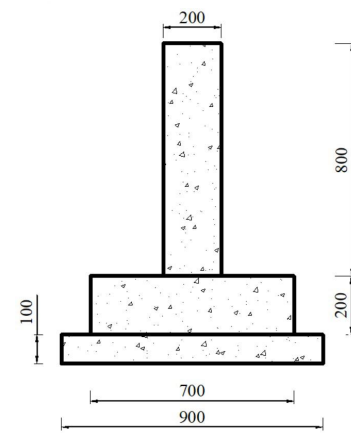
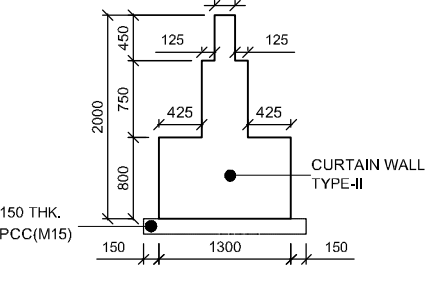
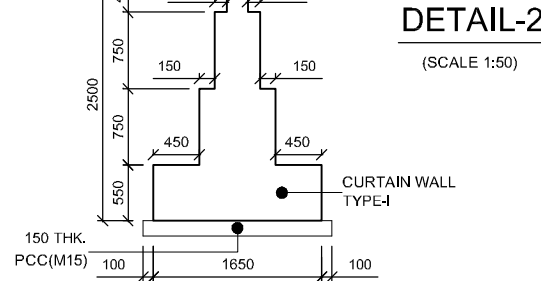
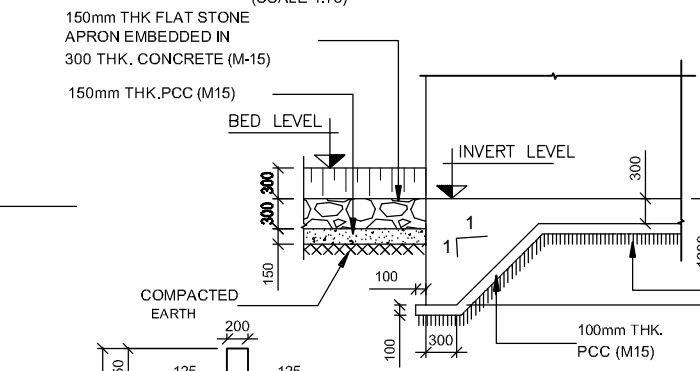
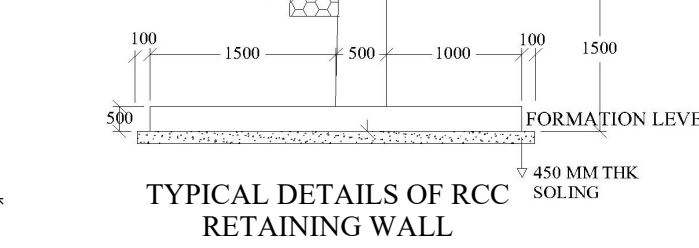
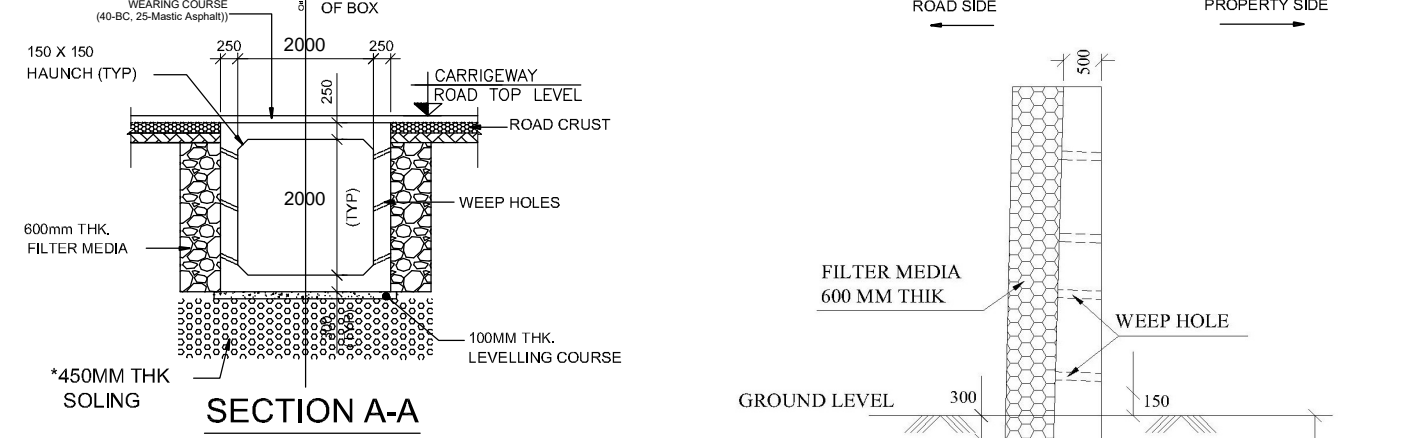
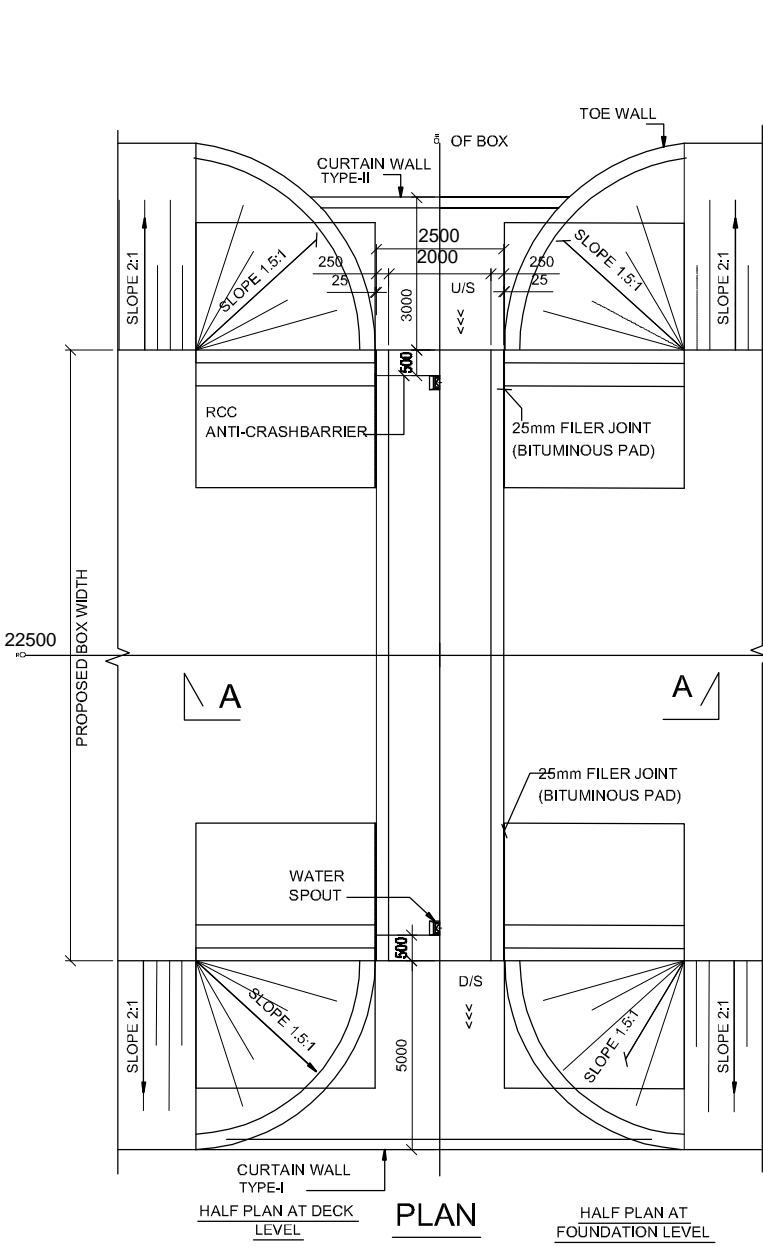


HINGOLI TOWN		
Title: ONE PIPE CULVERT WITH CRUST & CUSHION		
AT- CH. 99+320 & CH. 100+350		
Scale for A3	As Shown	
STATE	ROAD NO.	SCALE
Maharashtra	NH 461B	Not to Scale

Stage	Description	Date
1		
2		
3		



- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
 2. DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 3. GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS:-
 (I) RCC BOX = M35
 (II) RCC CRASH BARRIER = M40
 (III) RCC RETAINING WALL = M30
 (IV) PCC = M15
 4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANES OF CLASS A +70R OR 3 LANES CLASS A WHICHEVER GIVES WORST EFFECT.
 5. ALL REINFORCEMENT BARS ARE OF GRADE Fe=500
 6. BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS III.
 7. EXPANSION JOINT SHALL BE FILLER TYPE.
 8. FILTER MEDIA SHALL BE AS PER MORTH&H SPECIFICATION.
 9. 100mm ϕ WEEP HOLE SHALL BE 1M C/C HORIZONTALLY & VERTICALLY IN STAGGERED POSITION.
 10. THE SAFE BEARING CAPACITY AT FOUNDING LEVEL IS CONSIDERED AS 15 T/M².
 11. FOR DETAILS OF CRASH BARRIER, KERB, RAILING, FOOT PATH & WATER SPOUT REFER SEPARATE DRAWING.
 12. MINIMUM CLEAR COVER TO REINFORCEMENT
 a) SOIL FACE = 75mm
 b) AWAY FORM SOIL FACE = 50mm
 13. THE 900mm THK. COMPACTED EARTH FILL TO BE DONE BY REMOVING BC SOIL BELOW RAFT OF BOX CULVERT ONLY IF BLACK COTTON SOIL OR EXPANSIVE CLAY OR WEAK SOIL IS ENCOUNTERED AT SITE. THE 450MM THK SOLING TO BE PROVIDED.
 14. THE FRL, CAMBER, SKEW ANGLE SHALL BE VERIFIED WITH APPROVED PLAN AND PROFILE DWG.
- LEGENDS:-**
- THK = THICKNESS.
 RTL = ROAD TOP LEVEL.
 TYP = TYPICAL
 C/L = CENTER LINE
 U/S = UP STREAM
 D/S = DOWN STREAM



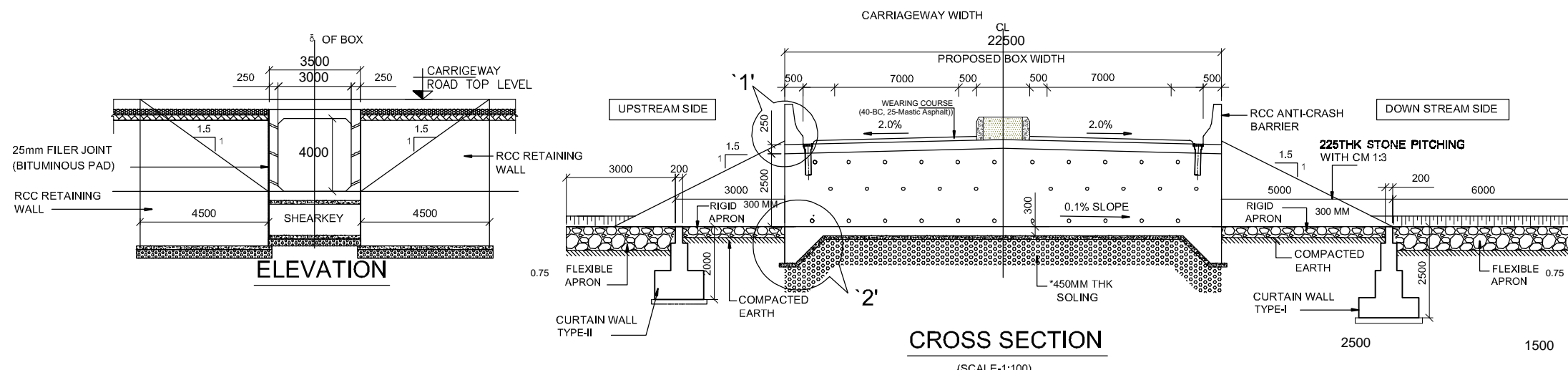
PROJECT:
 Rehabilitation & Upgradation of Four Lane road with Paved Shoulders in Hingoli Town section of NH 461B from Narsi Phata to Junction with NH 161 at Sawarkheda with Major Bridge across Kayadhu river and additional 2 lane ROB at LC No. 144(B) (From KM. 94+750 to KM. 101+530, Total length = 6.780 KM) in the state of Maharashtra EPC mode.

HINGOLI TOWN
BOX CULVERT At CH. 95+450 & 95+850
- 2.0 M x 2.0 M

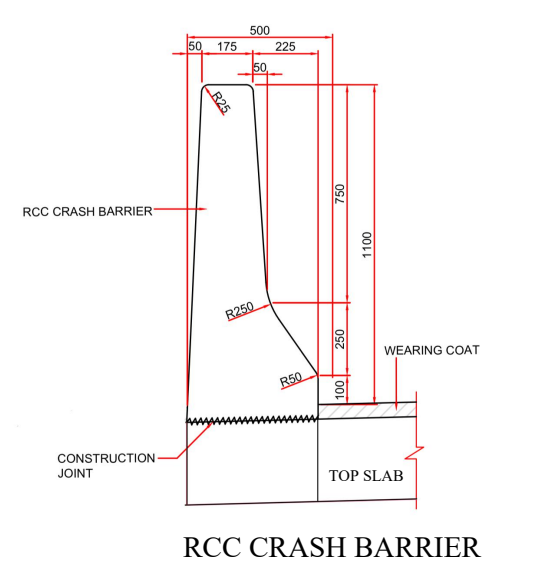
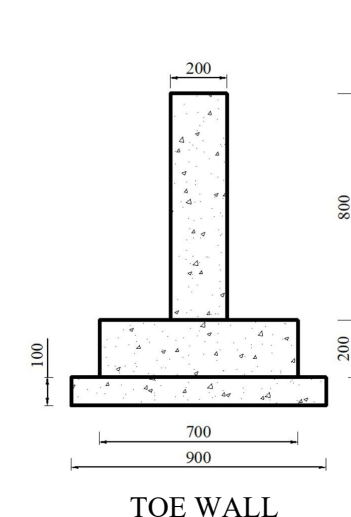
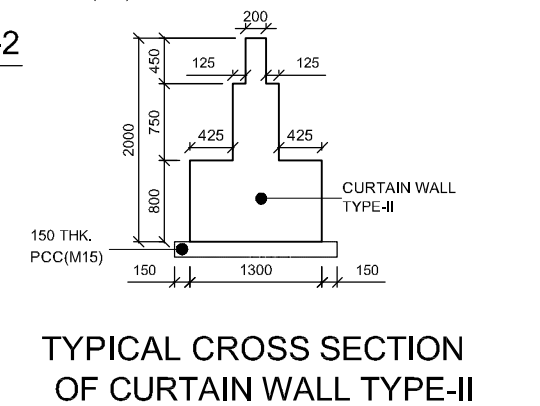
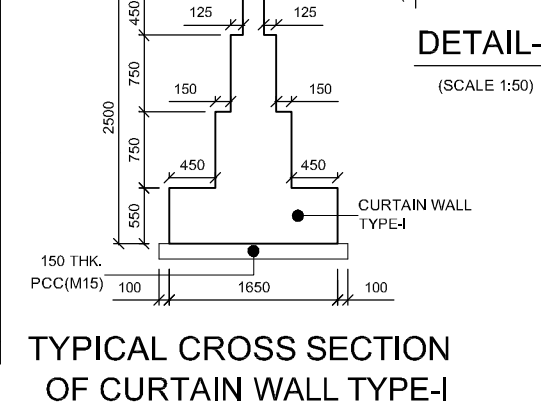
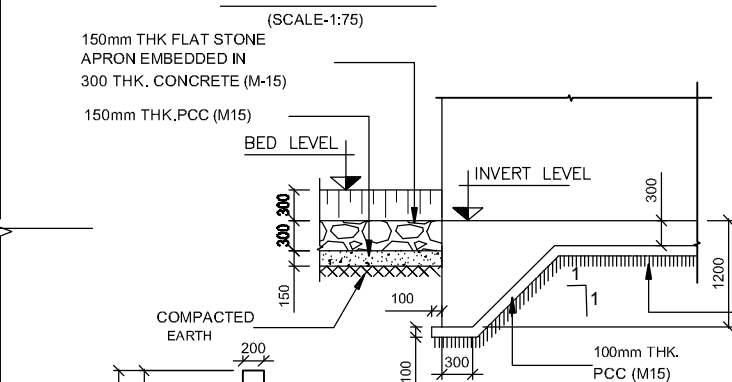
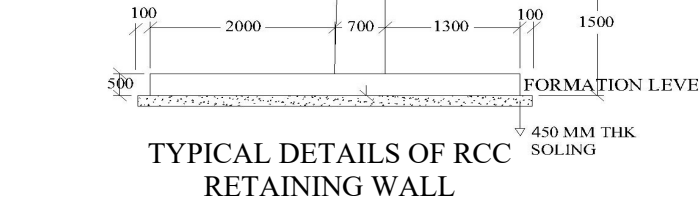
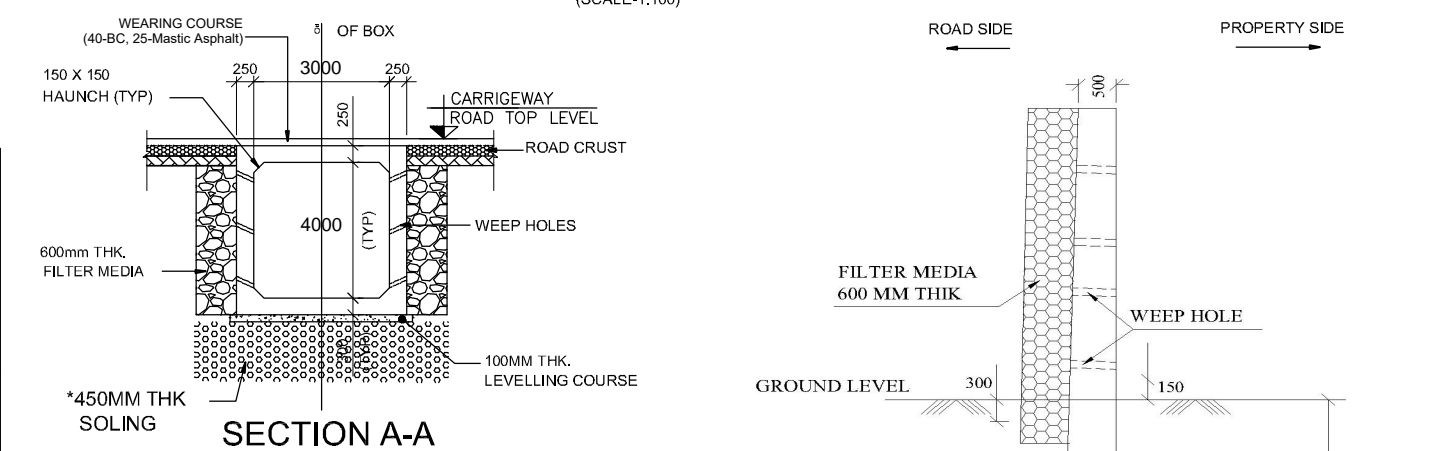
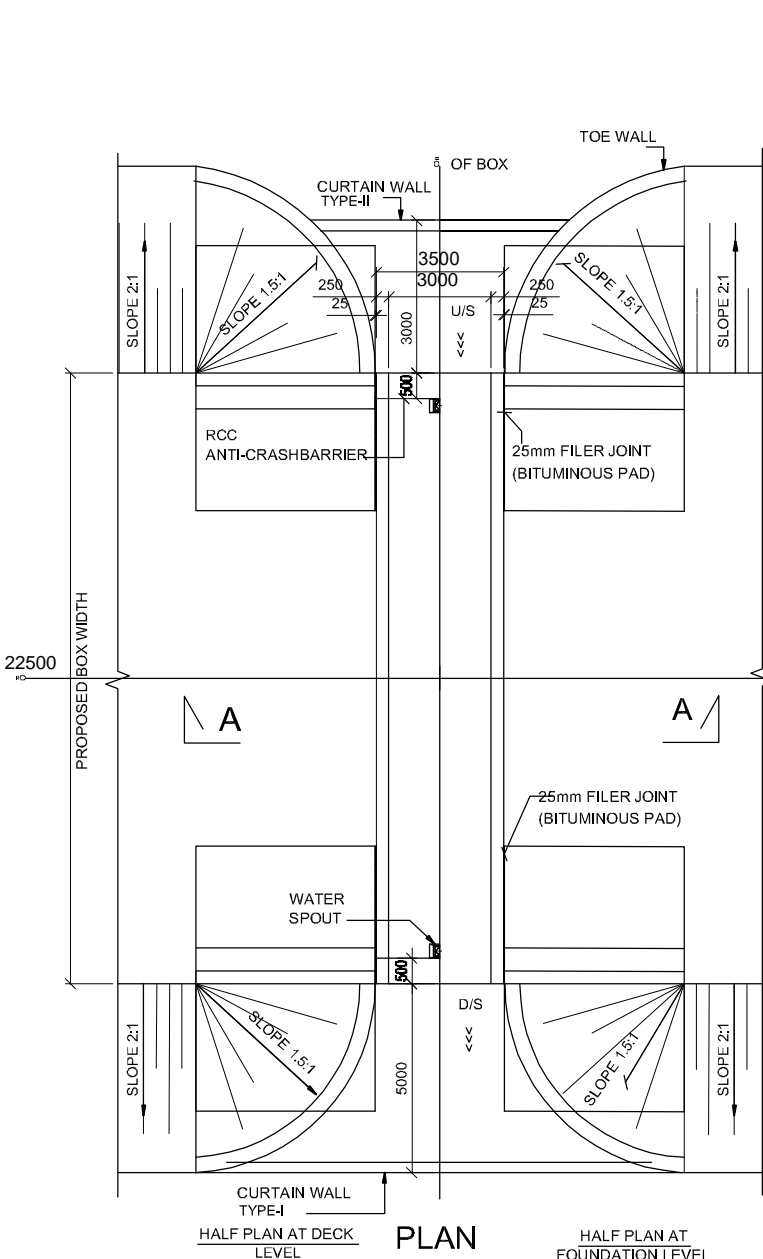
SCALE- NOT TO SCALE

A3





- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
 2. DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 3. GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS:-
(I) RCC BOX =M35
(II) RCC CRASH BARRIER =M40
(III) RCC RETAINING WALL =M30
(IV) PCC =M15
 4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANES OF CLASS A +70R OR 3 LANES CLASS A WHICHEVER GIVES WORST EFFECT.
 5. ALL REINFORCEMENT BARS ARE OF GRADE Fe=500
 6. BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS III.
 7. EXPANSION JOINT SHALL BE FILLER TYPE.
 8. FILTER MEDIA SHALL BE AS PER MORTH&H SPECIFICATION.
 9. 100mm ϕ WEEP HOLE SHALL BE 1M C/C HORIZONTALLY & VERTICALLY IN STAGGERED POSITION.
 10. THE SAFE BEARING CAPACITY AT FOUNDING LEVEL IS CONSIDERED AS 15 T/M².
 11. FOR DETAILS OF CRASH BARRIER, KERB, RAILING, FOOT PATH & WATER SPOUT REFER SEPARATE DRAWING.
 12. MINIMUM CLEARANCE OVER TO REINFORCEMENT
a) SOIL FACE = 75mm
b) AWAY FORM SOIL FACE =50mm
 13. THE 900mm THK. COMPACTED EARTH FILL TO BE DONE BY REMOVING BC SOIL BELOW RAFT OF BOX CULVERT ONLY IF BLACK COTTON SOIL OR EXPANSIVE CLAY OR WEAK SOIL IS ENCOUNTERED AT SITE. THE 450MM THK SOLING TO BE PROVIDED.
 14. THE FRL, CAMBER, SKEW ANGLE SHALL BE VERIFIED WITH APPROVED PLAN AND PROFILE DWG.
- LEGENDS:-**
- THK =THICKNESS.
RTL =ROAD TOP LEVEL.
TYP =TYPICAL
C = CENTER LINE
U/S =UP STREAM
D/S = DOWN STREAM



PROJECT:
Rehabilitation & Rehabilitation & Upgradation of Four Lane road with Paved Shoulders in Hingoli Town section of NH 461B from Narsi Phata to Junction with NH 161 at Sawarkheda with Major Bridge across Kayadhu river and additional 2 lane ROB at LC No. 144(B) (From KM. 94+750 to KM. 101+530, Total length = 6.780 KM) in the state of Maharashtra EPC mode.

**HINGOLI TOWN
BOX CULVERT AT CH. 96+610
- 3.0 M x 4.0 M**



SCALE- NOT TO SCALE

A3

G.A.D FOR MAJOR BRIDGE AT CH 96+200



REV.	DATE	DESCRIPTION

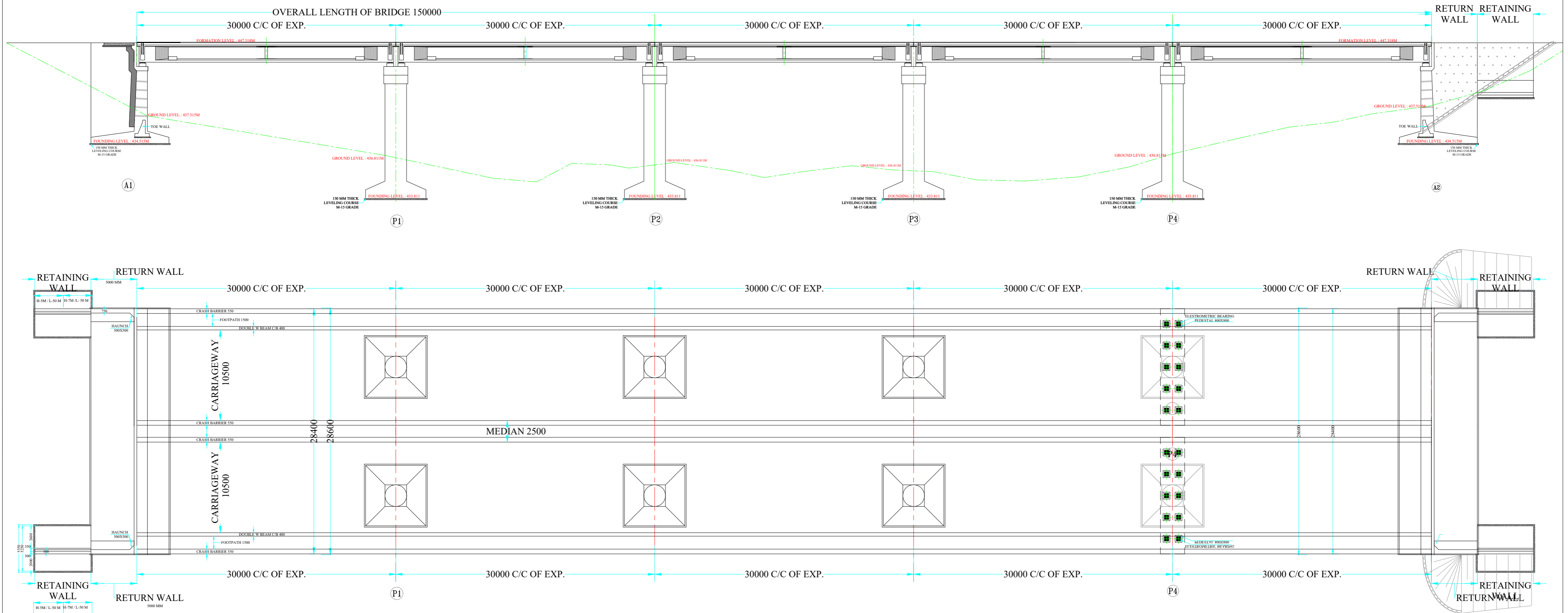
CLIENT:
National Highways Authority of India
 Chief Engineer National Highway,
 Public Works Department, Government of Maharashtra,
 Room No. 526; 5th Floor, Konkani Bhawan, Sector -10,
 CBD Belapur,
 Navi Mumbai - 400 614

DPR CONSULTANT:
TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH
SHREE MAHAMAII INFRA CONSULTANT PVT. LTD.
 Senior MIG -17 Gokuldham Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph:- 0755-4851328
 E-Mail : taspl.smic@gmail.com



PROJECT :
 Consultancy Services for Preparation of Detailed Project Report for
 Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with
 paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road
 Section of NH 461B

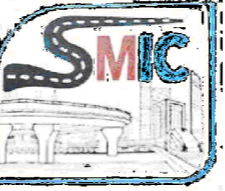
TITLE: MJB	DWG NO:-			
SCALE: NOT TO SCALE	DATE:- MARCH 2025		PAPER-A3	
	DRAWN	DESIGN	CHECKED	APPROVED
	A.M.	A.G.	S.K.	A.D.



REV.	DATE	DESCRIPTION

CLIENT:
National Highways Authority of India
 Chief Engineer National Highway,
 Public Works Department, Government of Maharashtra,
 Room No. 526; 5th Floor, Konkarn Bhawan, Sector -10,
 CBD Belapur,
 Navi Mumbai - 400 614

DPR CONSULTANT:
TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH
SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
 Senior MIG -17 Gokuldam Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph:- 0755-4851328
 E-Mail : tasp@smic@gmail.com

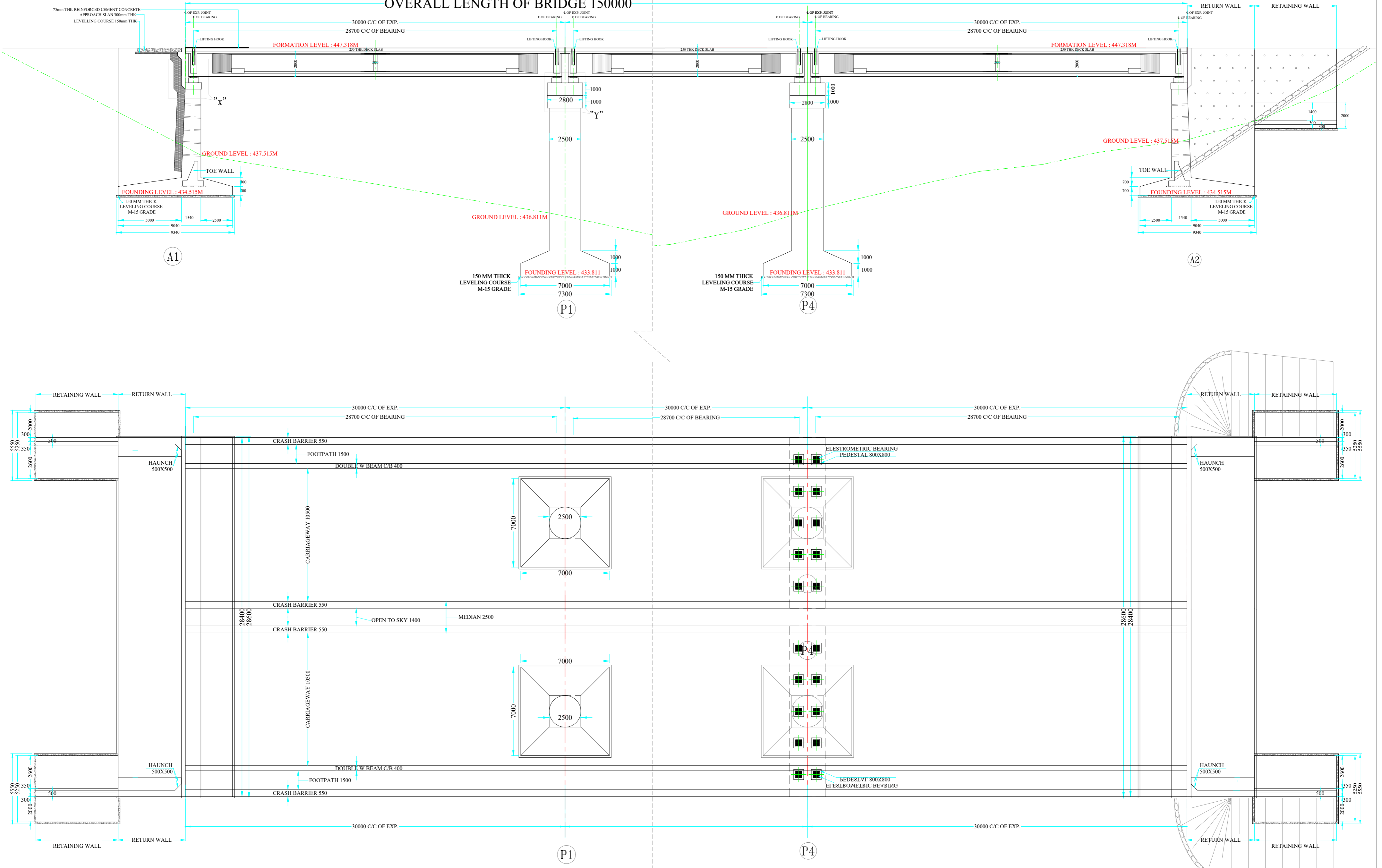


PROJECT :
 Consultancy Services for Preparation of Detailed Project Report for
 Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with
 paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road
 Section of NH 461B

TITLE:
MJB
 SCALE:
NOT TO SCALE

DWG NO:-			
DATE:- MARCH 2025		PAPER-A3	
DRAWN	DESIGN	CHECKED	APPROVED
A.M.	A.G.	S.K.	A.D.

OVERALL LENGTH OF BRIDGE 150000



REV.	DATE	DESCRIPTION

CLIENT:
National Highways Authority of India
 Chief Engineer National Highway,
 Public Works Department, Government of Maharashtra,
 Room No. 526; 5th Floor, Konkan Bhawan, Sector -10,
 CBD Belapur,
 Navi Mumbai - 400 614

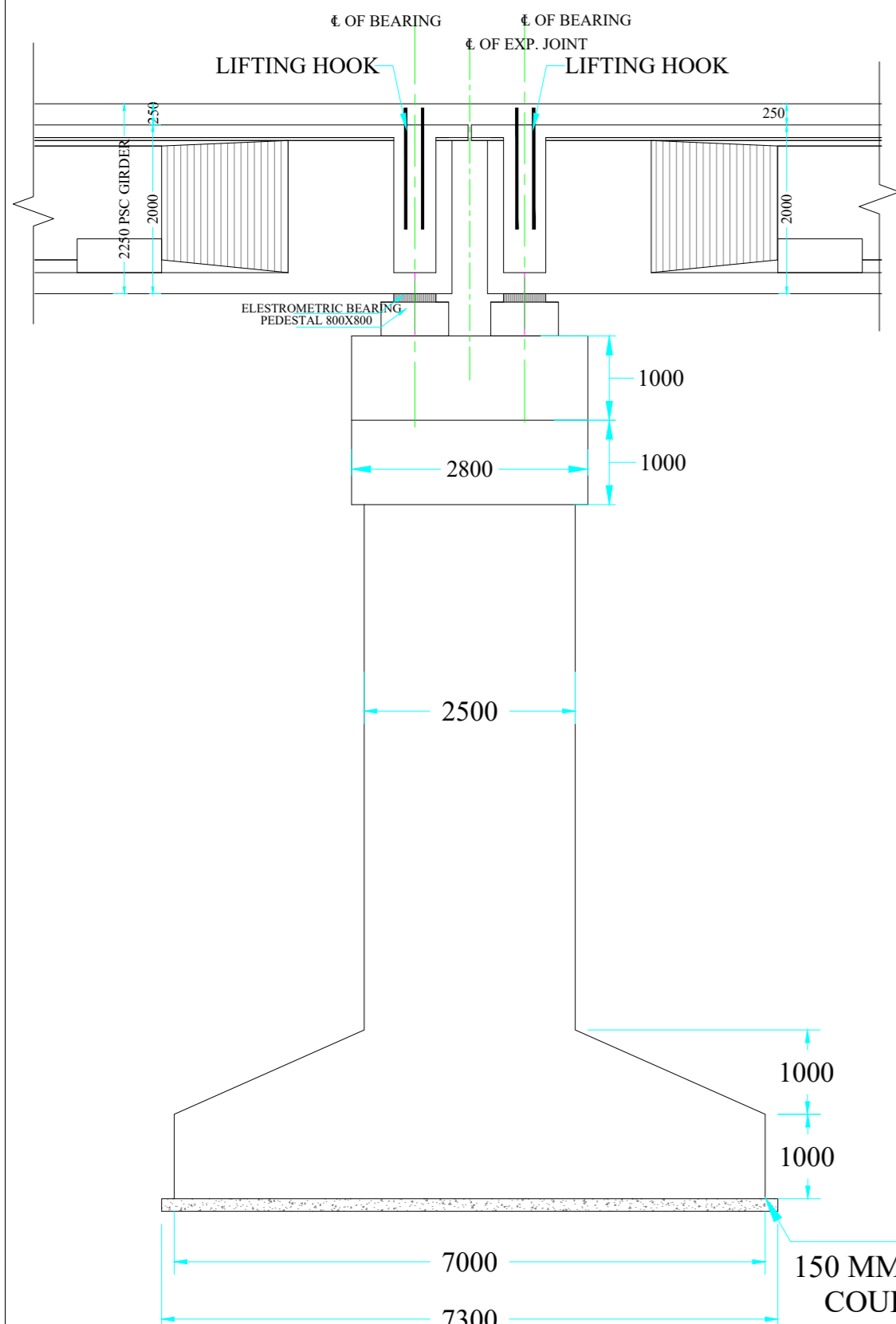
DPR CONSULTANT:
TECHNOCRATS ADVISORY SERVICES PVT. LTD.
 IN ASSOCIATION WITH
SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
 Senior MIG -17 Gokuldam Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph:- 0755-4851328
 E-Mail : tasplsmic@gmail.com

PROJECT :
 Consultancy Services for Preparation of Detailed Project Report for
 Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with
 paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road
 Section of NH 461B

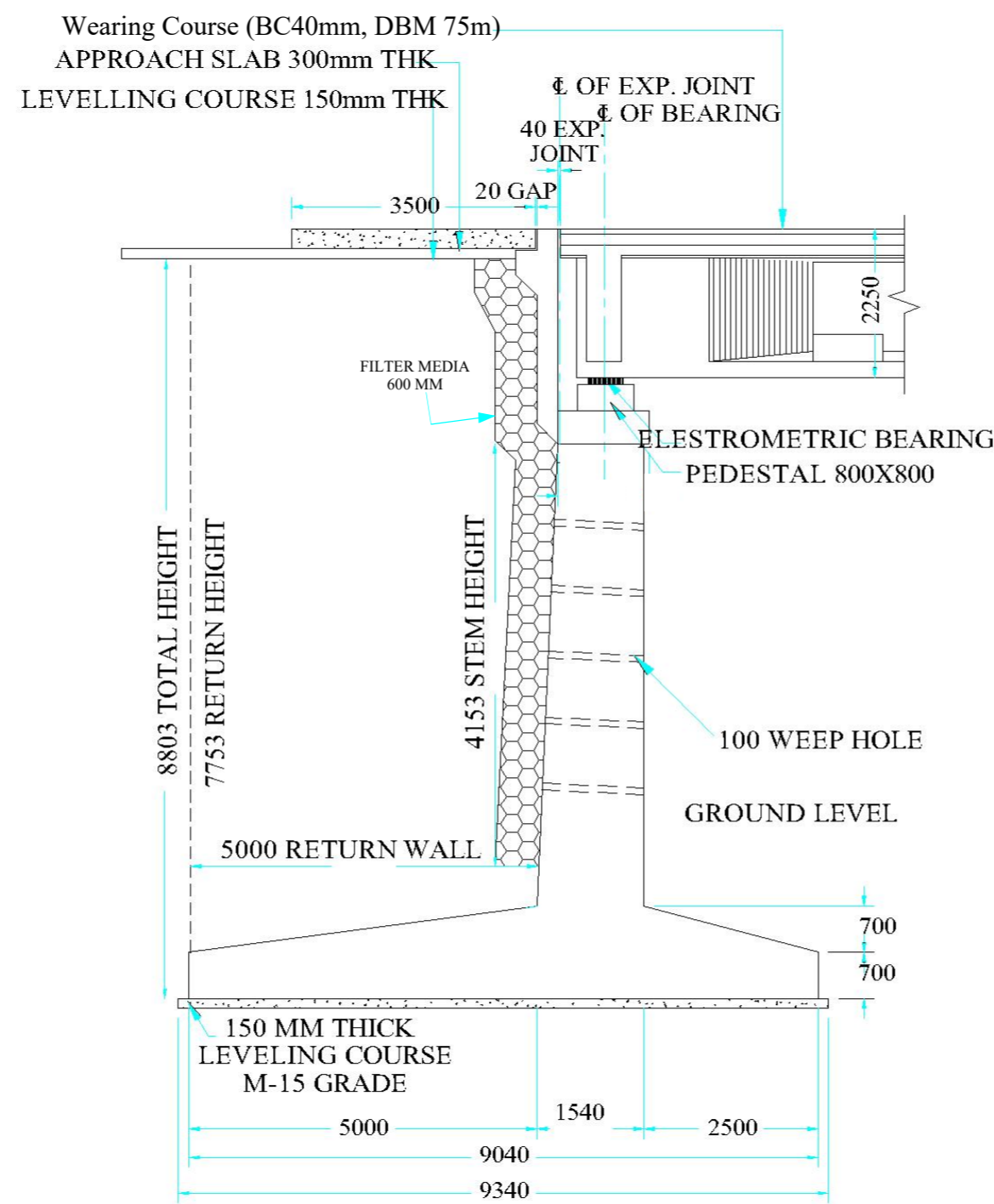
TITLE:
MJB
 SCALE:
NOT TO SCALE

DWG NO:-
 DATE:- MARCH 2025
 DRAWN DESIGN CHECKED APPROVED
 A.M. A.S.M. S.M. A.D.

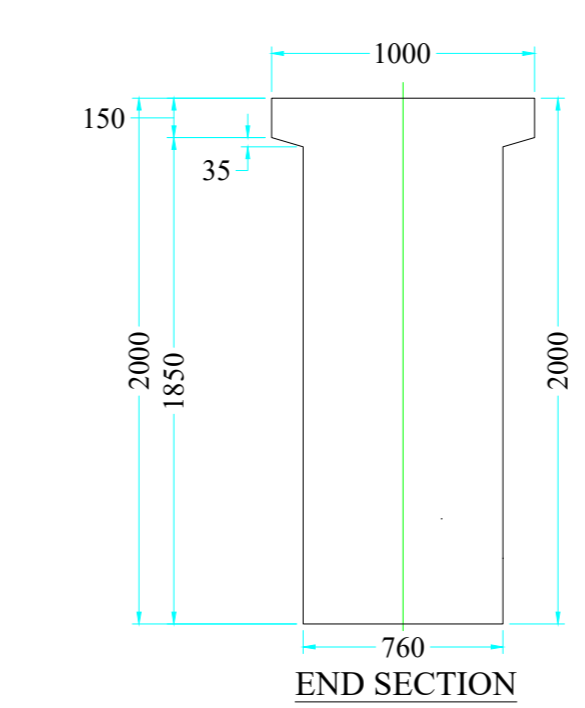




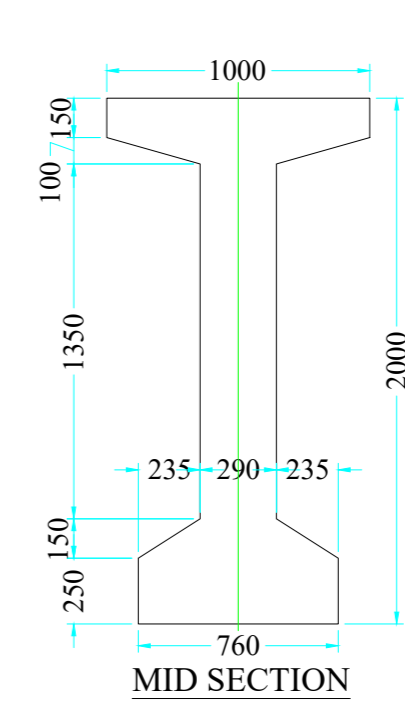
SECTIONAL ELEVATION OF PIER



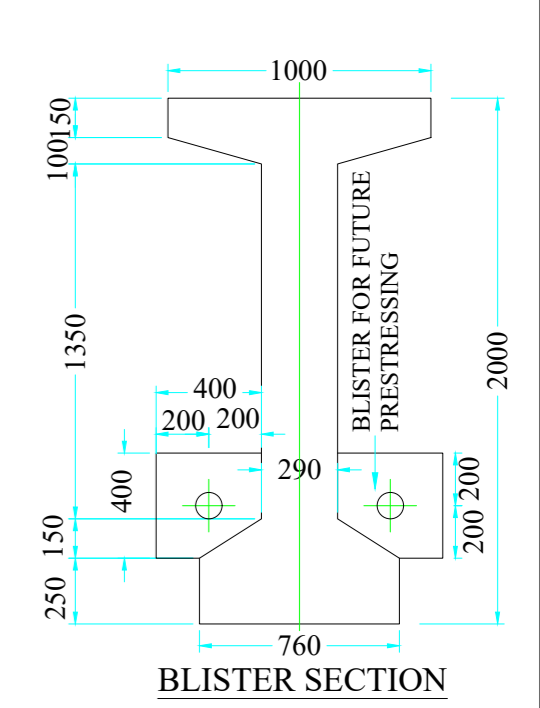
SECTIONAL ELEVATION OF ABUTMENT



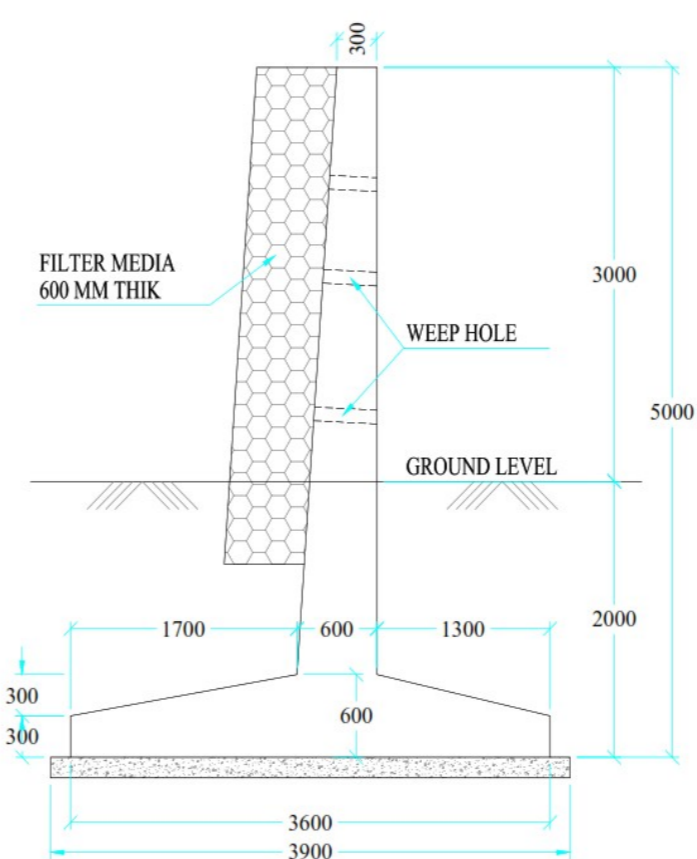
END SECTION



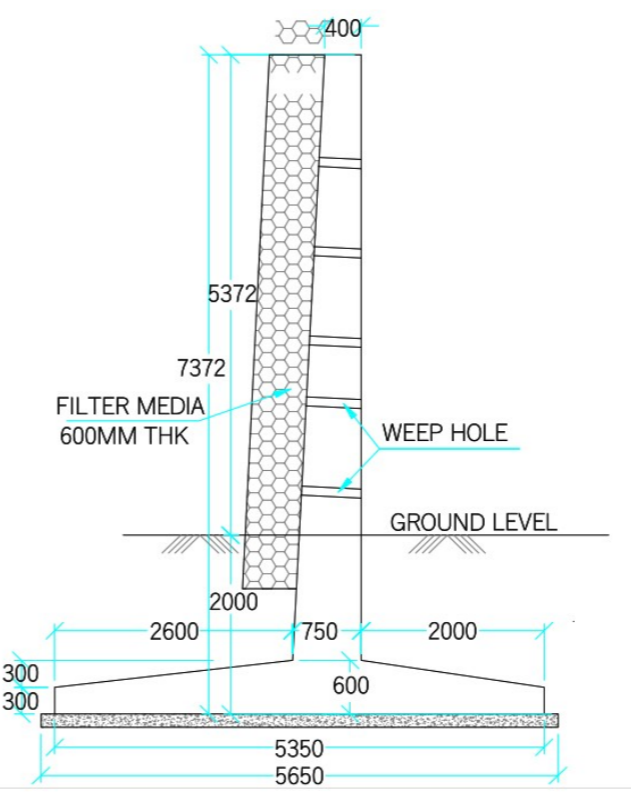
MID SECTION



BLISTER SECTION



DIMENSION DETAILS (SCALE 1:50) TOTAL LENGTH - 200 M HEIGHT - 5M

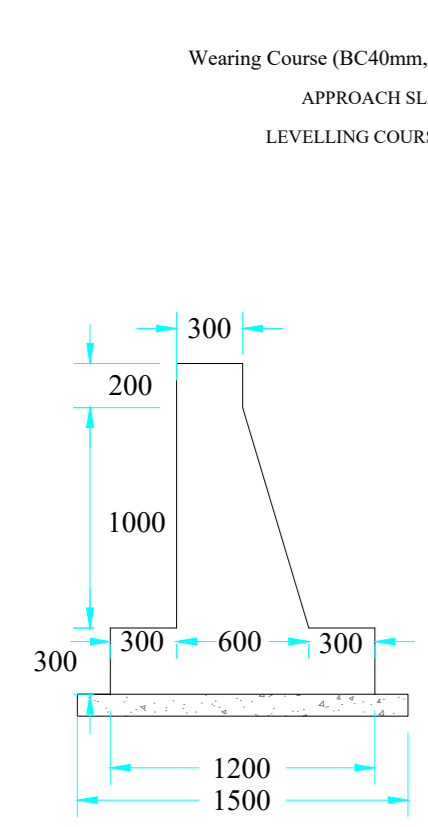


RETAINING WALL

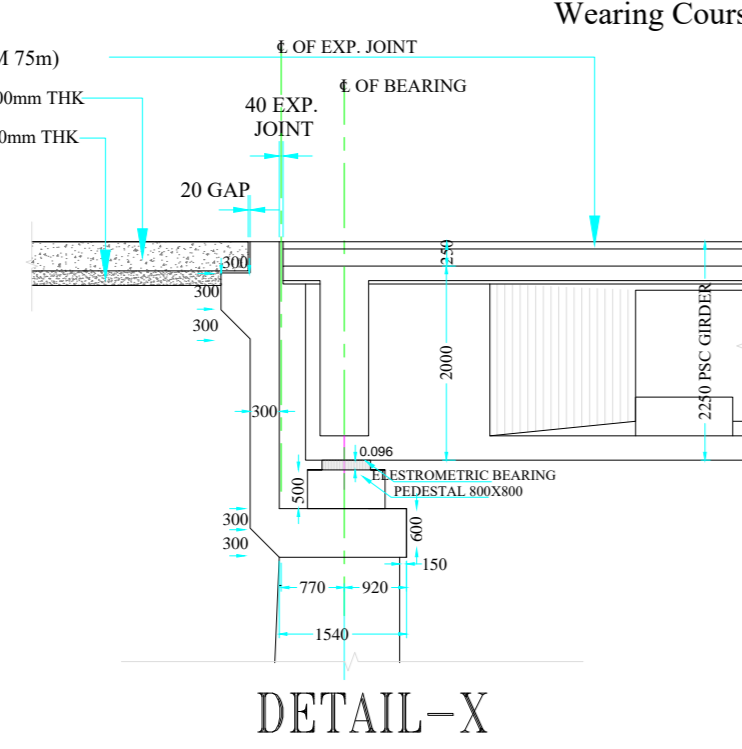
- NOTES:-**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. LEVELS ARE IN METRES.
 - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - SAFE ALLOWABLE BEARING CAPACITY AT FOUNDING LEVEL SHALL NOT BE LESS THAN 35 t/SQMT.
 - GRADE OF CONCRETE :

PCC LEVELLING COURSE	M-15	PEDESTAL	M-30
FOUNDATION	M-30	GIRDER	M-30
SUB STRUCTURE	M-30	SLAB	M-35
ABUTMENT CAP	M-30	CRASH BARRIER	M-40
PIER CAP	M-30	RETURN WALL	M-30
PIER	M-30	APPROACH SLAB	M-30
DIRT WALL	M-30		
 - REINFORCEMENT H.Y.S.D. BARS CONFORMING TO IS:1786 GRADE Fe 500.
 - BEARING TYPE : ELESTROMETRIC BEARING
 - THE BRIDGE HAS BEEN DESIGNED FOR SPECIAL VEHICLE CLASS LOADING
 - WEEP HOLES AT 1000 C/C BOTH HORIZONTALLY & VERTICALLY IN A STAGGERED MANNER IN ABUTMENT AND RETURN WALLS FROM BED LEVEL TO ABUTMENT CAP LEVEL.
 - BACK FILL PARAMETERS ASSUMED ARE C=0, $\phi > 30^\circ$. DRY DENSITY = 18kN/m³
 - CLEAR COVER TO ANY REINFORCEMENT

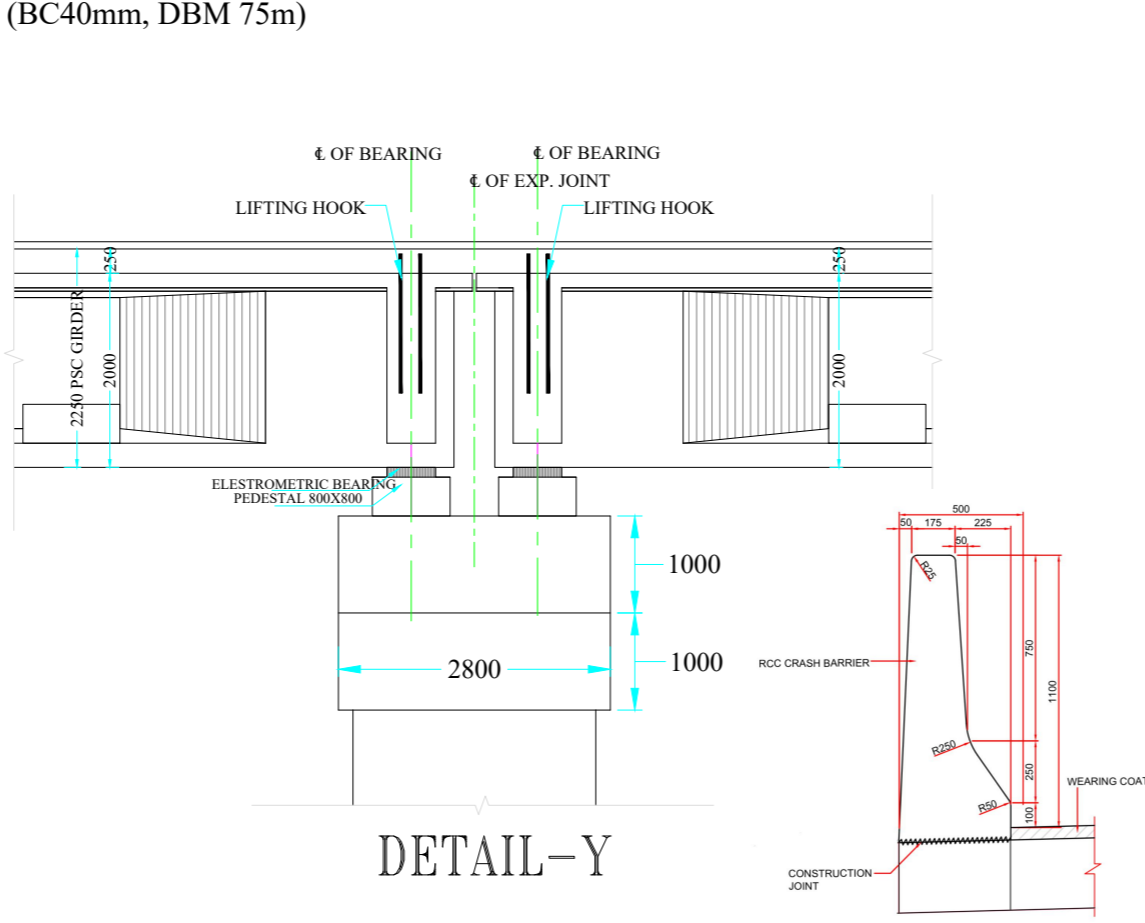
IN FOUNDATION	= 75mm
IN SUB STRUCTURE	= 50mm
IN SUPERSTRUCTURE	= 40mm
 - FILLER TYPE EXPANSION JOINT SHALL BE PROVIDED AS PER MoRT&H SPECIFICATIONS.
 - WEARING COAT SHALL BE 75mm THK REINFORCED CEMENT CONCRETE
 - FRL, CAMBER/ SUPERELEVATION & LAYOUT SHALL BE FOLLOWED AS PER LATEST PLAN & PROFILE DRAWING.
 - THE 600 mm TH. FILTER MEDIA BEHIND ABUTMENT SHALL BE MINIMUM 500 mm BELOW EXISTING GROUND LEVEL.
 - THE FOUNDATION DEPTH SHOULD BE MINIMUM 2m BELOW THE MAXIMUM SCOUR LEVEL. IF HARD ROCK IS ENCOUNTERED THE MINIMUM EMBEDMENT SHOULD BE 0.6m ON ALL SIDES OF THE FOOTING AND 1.5m IN THE CASE OF OTHER TYPE OF ROCKS AS PER REQUIREMENTS OF IRC 78.
 - DRAINAGE SPOUT SHALL BE PROVIDED IN DECK SLAB AS PER MORTH.
 - DIMENSIONS ARE TENTATIVE AND MAY CHANGE DURING DETAIL DESIGN.
 - THIS DRAWING IS ONLY FOR ESTIMATION. DEPTH OF FOUNDATION MAY BE CHANGE AS PER SITE CONDITION.



TOE WALL



DETAIL-X



DETAIL-Y

REV.	DATE	DESCRIPTION

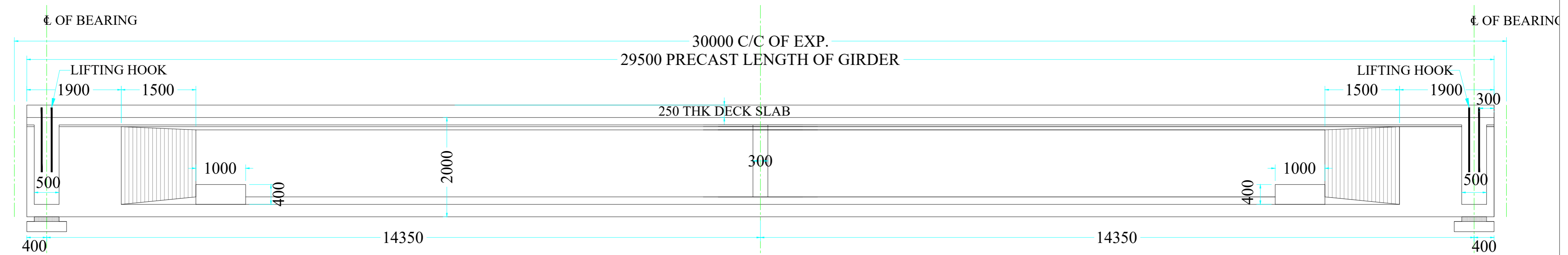
CLIENT:
National Highways Authority of India
 Chief Engineer National Highway,
 Public Works Department, Government of Maharashtra,
 Room No. 526; 5th Floor, Konkan Bhawan, Sector -10,
 CBD Belapur,
 Navi Mumbai - 400 614

DPR CONSULTANT:
 TECHNOCRATS ADVISORY SERVICES PVT. LTD.
 IN ASSOCIATION WITH
 SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
 Senior MIG -17 Gokuldhara Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph.: 0755-4851328
 E-Mail : taspl.smic@gmail.com

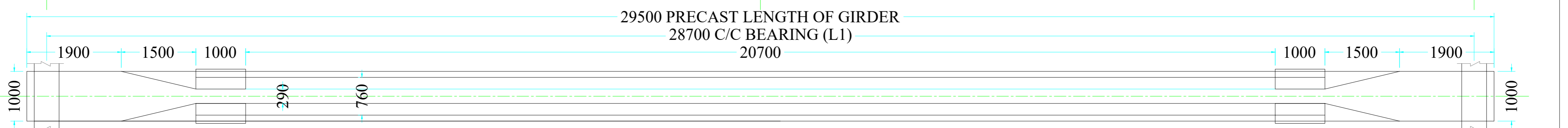
PROJECT :
 Consultancy Services for Preparation of Detailed Project Report for
 Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with
 paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road
 Section of NH 461B

TITLE:	DWG NO.:								
MJB									
SCALE:	DATE: MARCH 2025 PAPER-A3								
NOT TO SCALE	<table border="1"> <tr> <th>DRAWN</th> <th>DESIGN</th> <th>CHECKED</th> <th>APPROVED</th> </tr> <tr> <td>A.M.</td> <td>A.G.</td> <td>S.K.</td> <td>A.D.</td> </tr> </table>	DRAWN	DESIGN	CHECKED	APPROVED	A.M.	A.G.	S.K.	A.D.
DRAWN	DESIGN	CHECKED	APPROVED						
A.M.	A.G.	S.K.	A.D.						

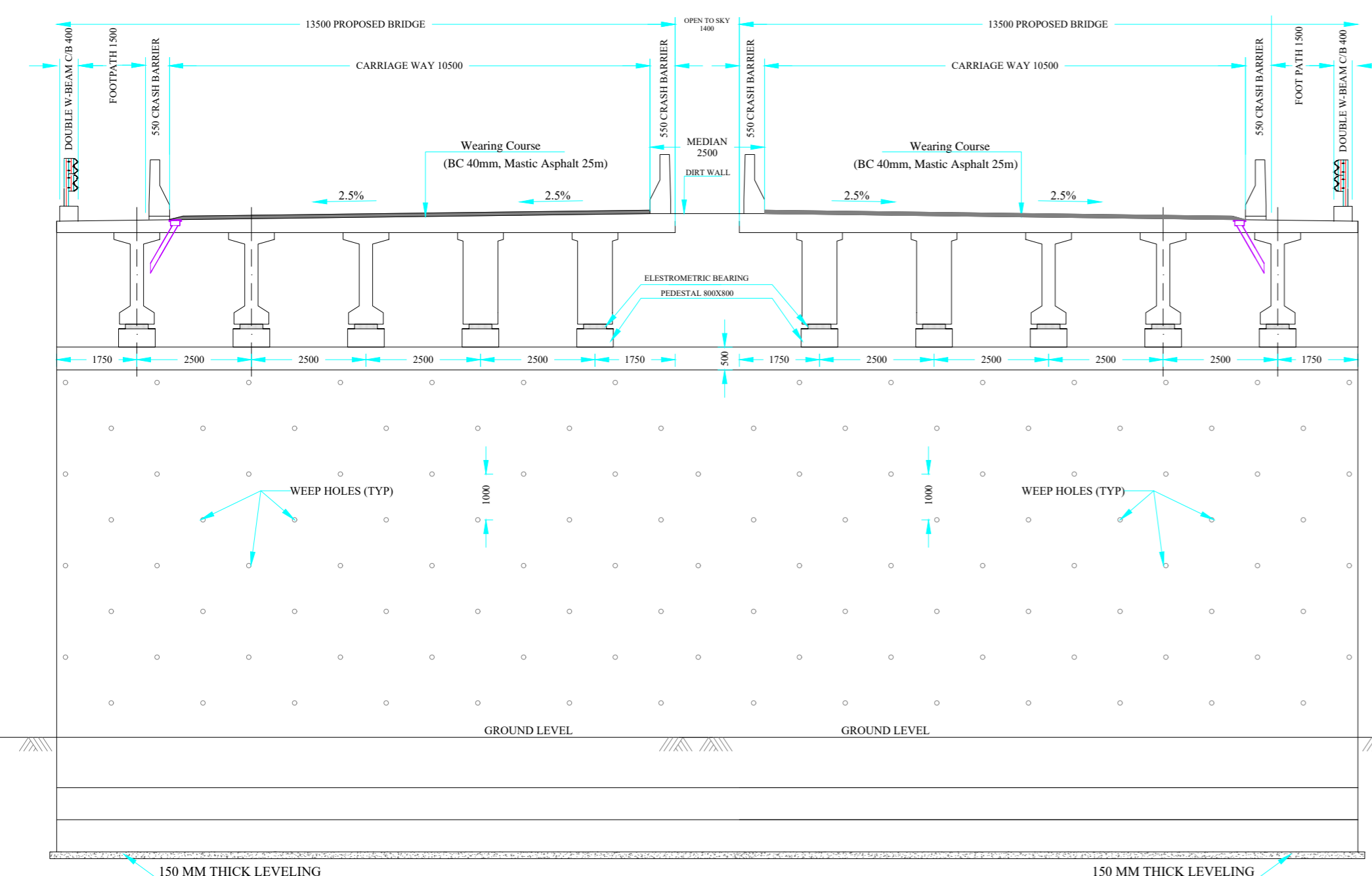




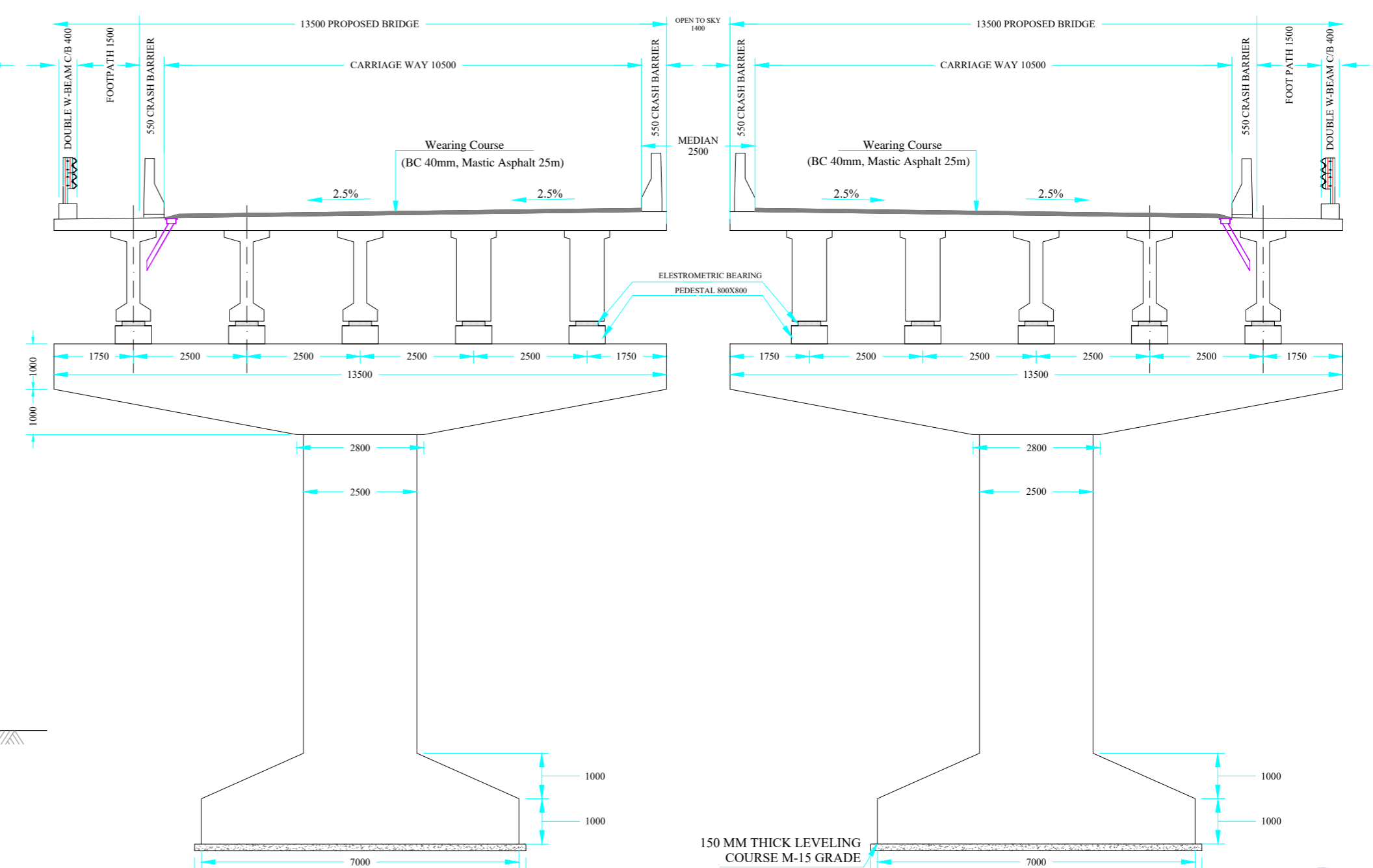
ELEVATION



PLAN



SECTION A-A
ABUTMENT

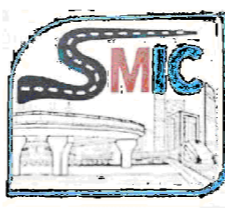


SECTION A-A
PIER

REV.	DATE	DESCRIPTION

CLIENT:
National Highways Authority of India
 Chief Engineer National Highway,
 Public Works Department, Government of Maharashtra,
 Room No. 526; 5th Floor, Konkan Bhawan, Sector -10,
 CBD Belapur,
 Navi Mumbai - 400 614

DPR CONSULTANT:
TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH
SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
 Senior MIG -17 Gokuldam Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph:- 0755-4851328
 E-Mail : taspplsmic@gmail.com



PROJECT :
 Consultancy Services for Preparation of Detailed Project Report for
 Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with
 paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road
 Section of NH 461B

TITLE:
MJB

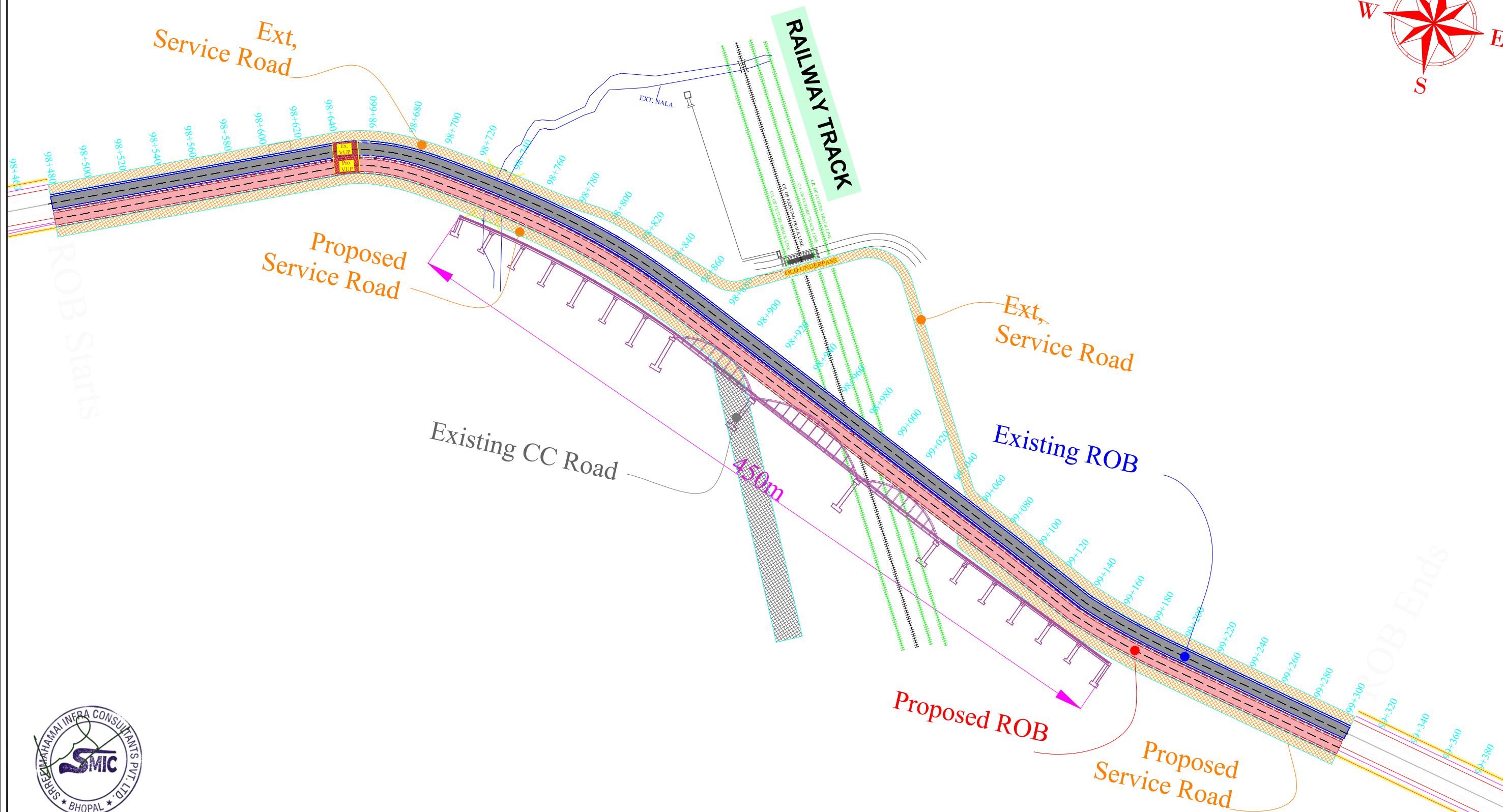
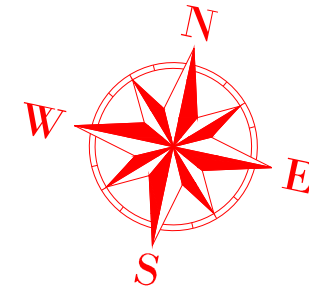
SCALE:
NOT TO SCALE

DWG NO:-			
DATE:- MARCH 2025		PAPER-A3	
DRAWN	DESIGN	CHECKED	APPROVED
A.M.	A.G.	S.K.	A.D.



← NARSI FATA

NH 161 →



CLIENT :  सड़क परिवहन एवं राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
सत्यमेव जयते

CONSULTANT :  **TECHNOCRATS ADVISORY SERVICES PVT. LTD.**
IN ASSOCIATION WITH  **SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.**
Senior MIG -17 Gokuldham Complex, Gautam Nagar
Bhopal (M.P.) 462023 Ph.-: 0755-4851328
E-Mail : tasplsmic@gmail.com

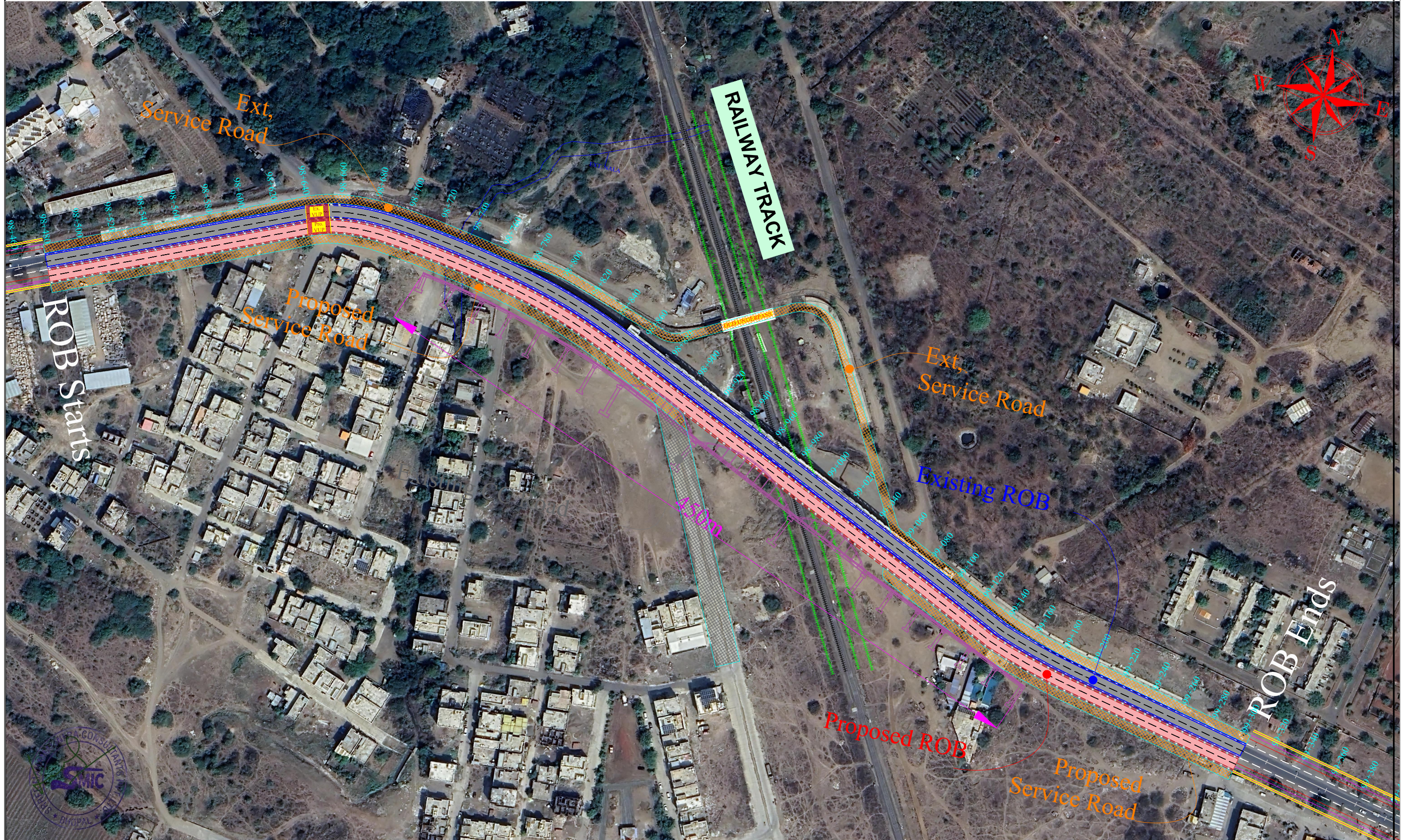
PROJECT:- Rehabilitation, Upgradation & Widening of existing Highway to for 4 lane with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B including 4L Major Bridge Across Kayadhu River in Hingoli district in the State of Maharashtra From Ch (94+740 to 98+450) & (99+250 to 101+540)

DRAWING TITLE :-
ALIGNMENT PLAN
100+000 TO 101+500

REV	R-1	
DATE	NAME	SIG.
DRAWN	-	-
DGN.	-	-
CHECKED	-	-
APPROVED	-	-

← NARSI FATA

NH 161 →



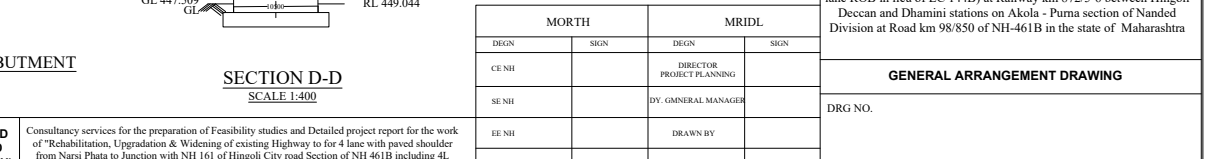
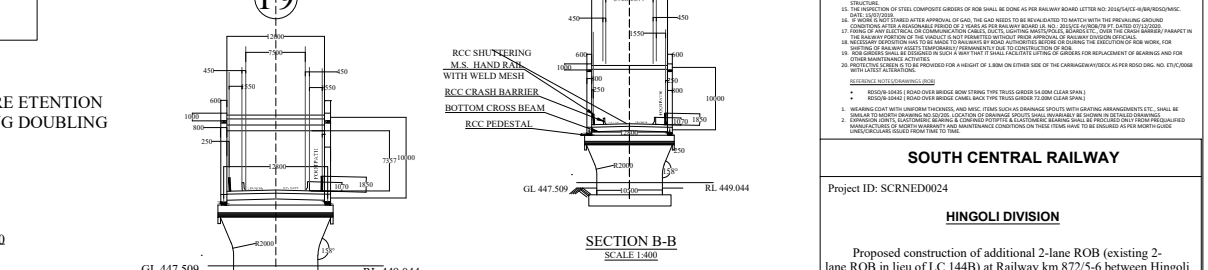
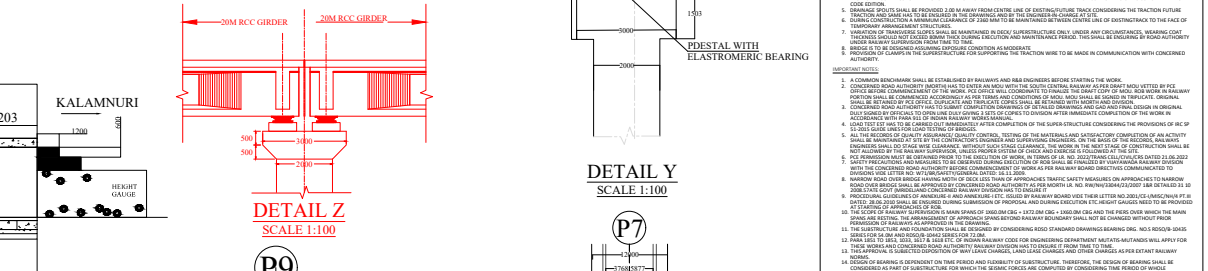
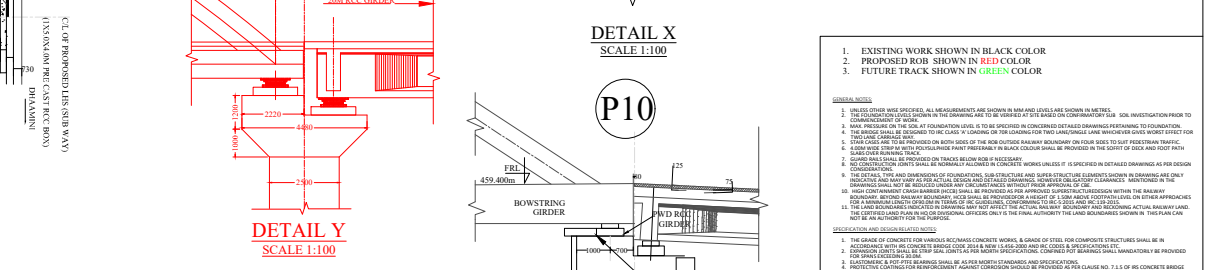
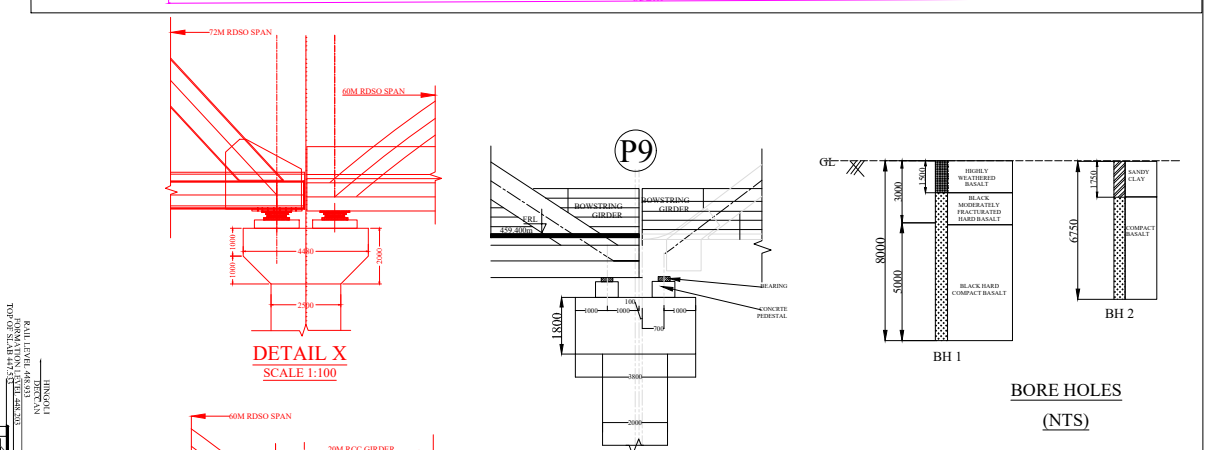
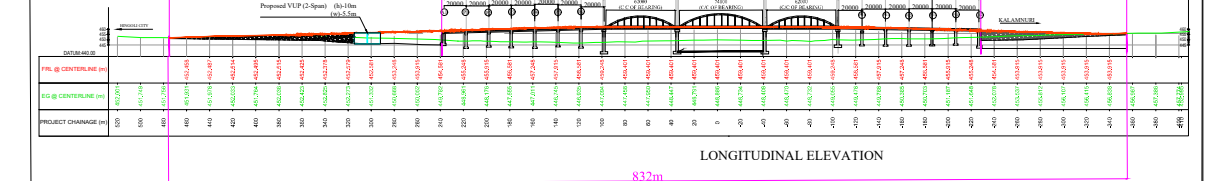
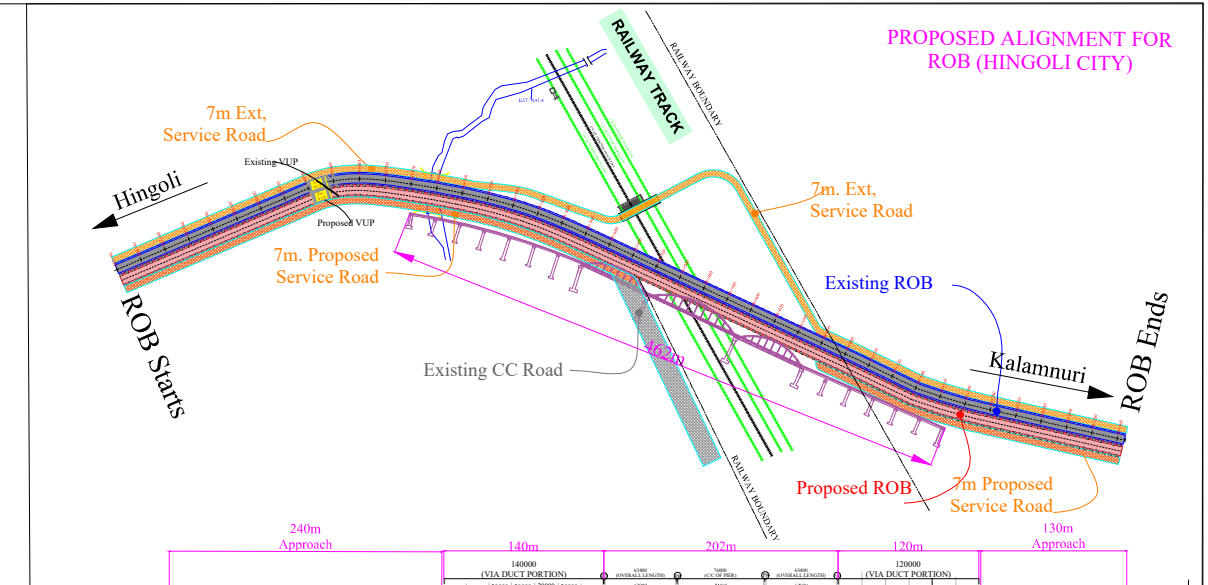
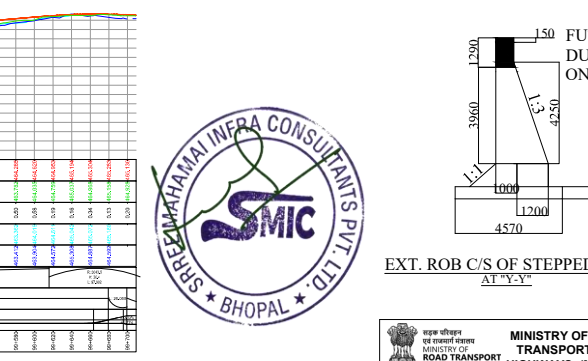
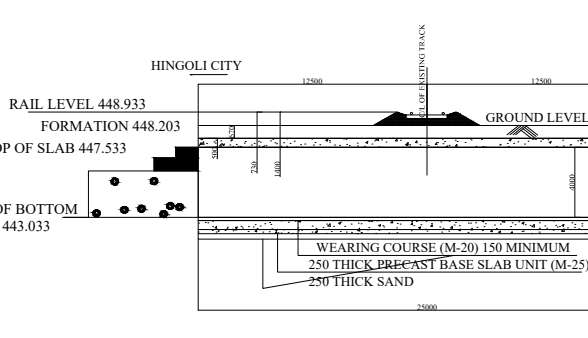
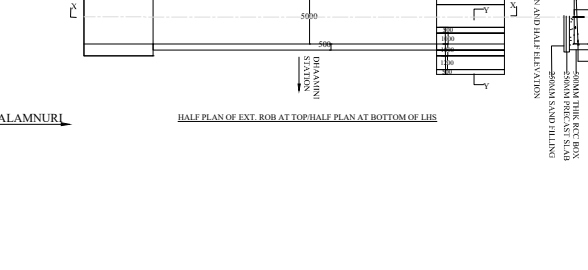
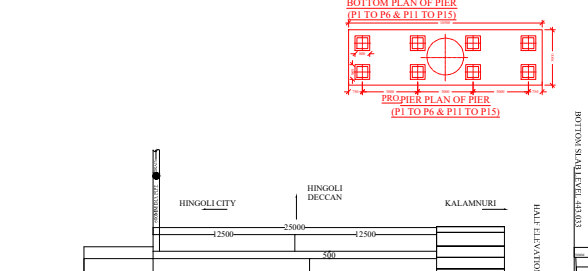
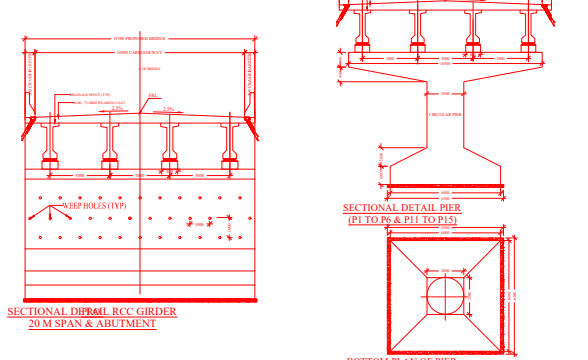
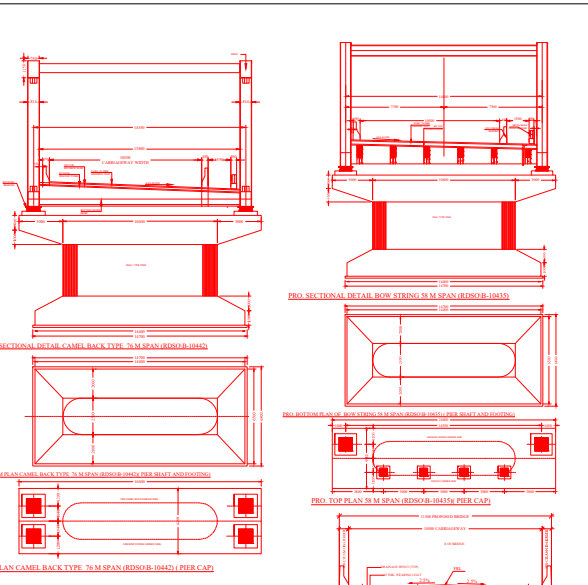
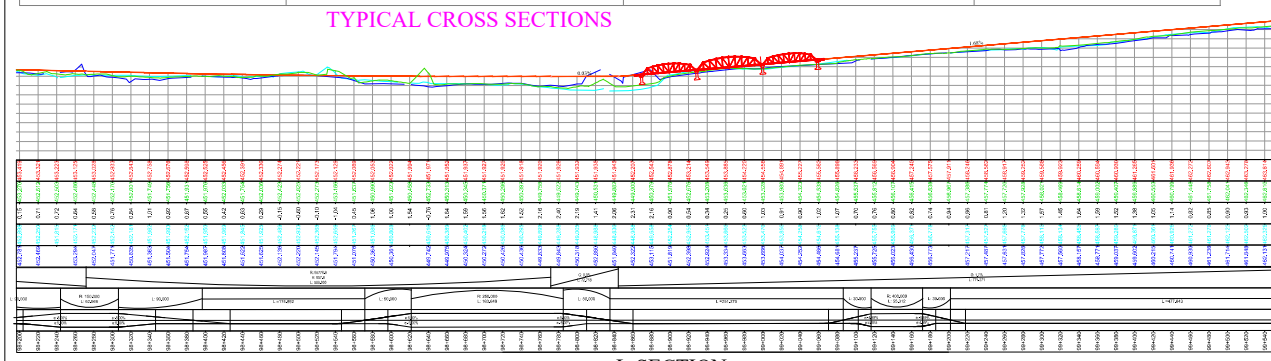
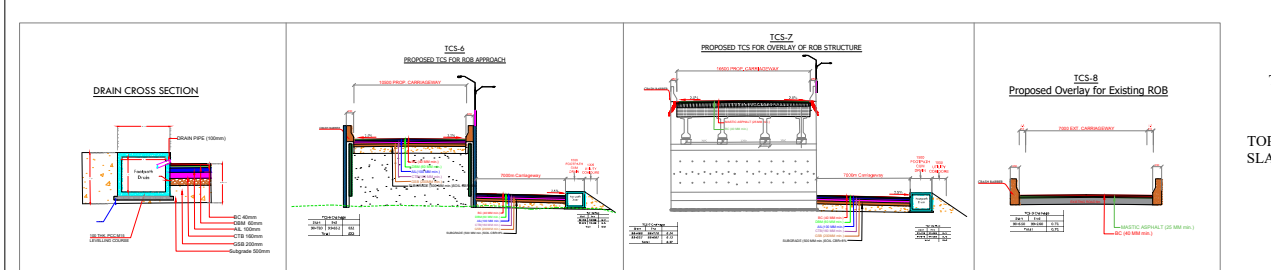
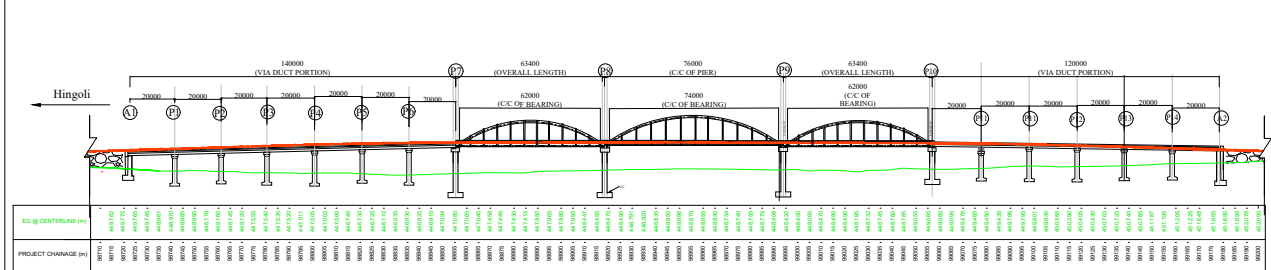
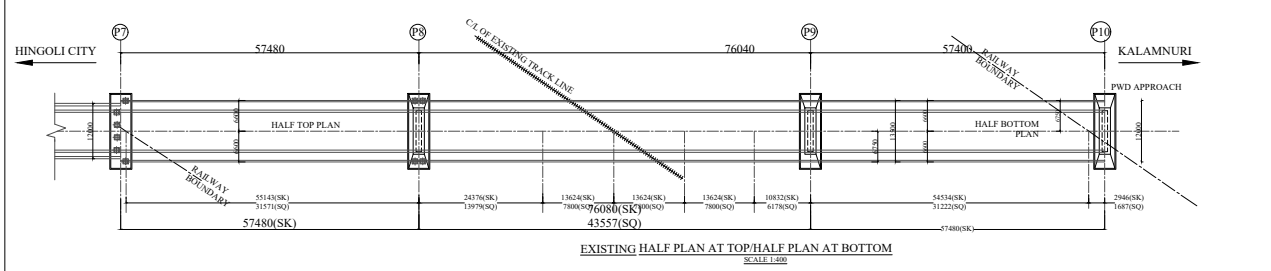
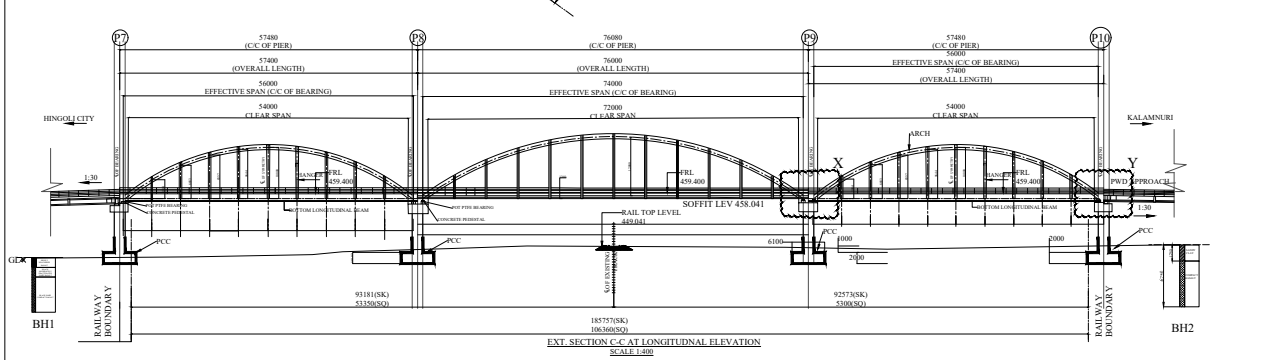
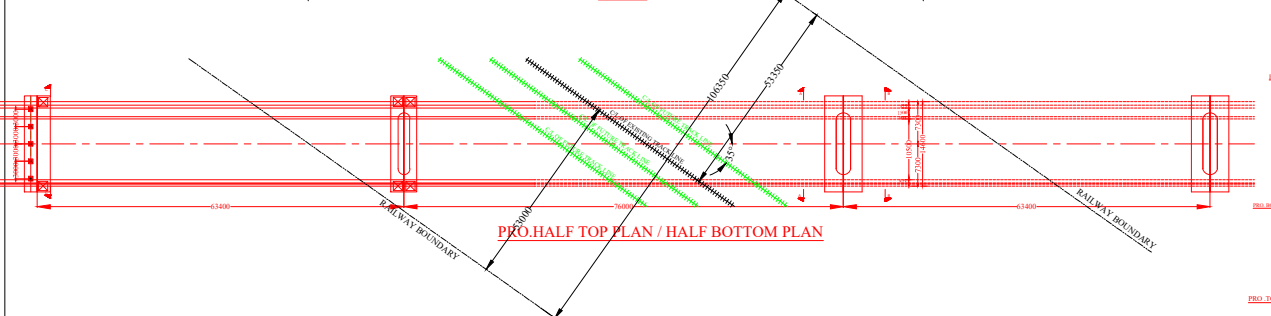
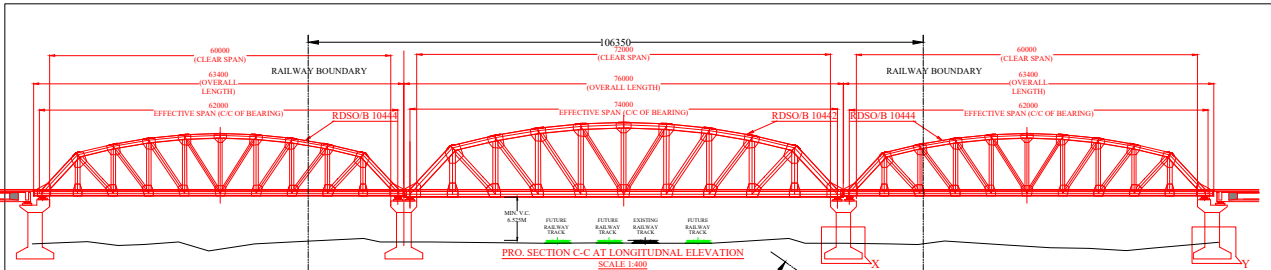
CLIENT: 
 सड़क परिवहन एवं राजमार्ग मंत्रालय
 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 सत्यमेव जयते

CONSULTANT:  **TECHNOCRATS ADVISORY SERVICES PVT. LTD.**
 IN ASSOCIATION WITH  **SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.**
 Senior MIG -17 Gokuldham Complex, Gautam Nagar
 Bhopal (M.P.) 462023 Ph.: 0755-4851328
 E-Mail : taspl.smic@gmail.com

PROJECT:- Rehabilitation, Upgradation & Widening of existing Highway to for 4 lane with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B including 4L Major Bridge Across Kayadhu River in Hingoli district in the State of Maharashtra From Ch (94+740 to 98+450) & (99+250 to 101+540)

DRAWING TITLE :-
 ALIGNMENT PLAN
 100+000 TO 101+500

REV	DATE	NAME	SIG.
RS1			



- BORE HOLES (NTS)**
- EXISTING WORK SHOWN IN BLACK COLOR
 - PROPOSED ROB SHOWN IN RED COLOR
 - FUTURE TRACK SHOWN IN GREEN COLOR

- IMPORTANT NOTES**
- CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS OF THE MORTH.
 - CONCRETE SHALL BE CASTED IN LAYERS OF 150 MM TO 200 MM MAXIMUM THICKNESS.
 - CONCRETE SHALL BE CURED FOR A PERIOD OF 14 DAYS.
 - CONCRETE SHALL BE TESTED FOR STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR DURABILITY AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR PERMEABILITY AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR SPLIT TENSILE STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR TENSILE STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR FLEXURAL STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR SHEAR STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR BOND STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR ADHESION STRENGTH AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH OF JOINTS AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR TENSILE STRENGTH OF JOINTS AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR FLEXURAL STRENGTH OF JOINTS AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR SHEAR STRENGTH OF JOINTS AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR BOND STRENGTH OF JOINTS AT REGULAR INTERVALS.
 - CONCRETE SHALL BE TESTED FOR ADHESION STRENGTH OF JOINTS AT REGULAR INTERVALS.

SOUTH CENTRAL RAILWAY

Project ID: SCRNED0024

HINGOLI DIVISION

Proposed construction of additional 2-lane ROB (existing 2-lane ROB in lieu of LC 144B) at Railway km 872/5-6 between Hingoli Deccan and Dharni stations on Akola - Purna section of Nanded Division at Road km 98/850 of NH-461 B in the state of Maharashtra

MORTH		MRIDL	
DEGN	SGN	DEGN	SGN
CE NH		DEGN	
SE NH		DEGN	
EE NH		DEGN	
AE NH		DEGN	

GENERAL ARRANGEMENT DRAWING

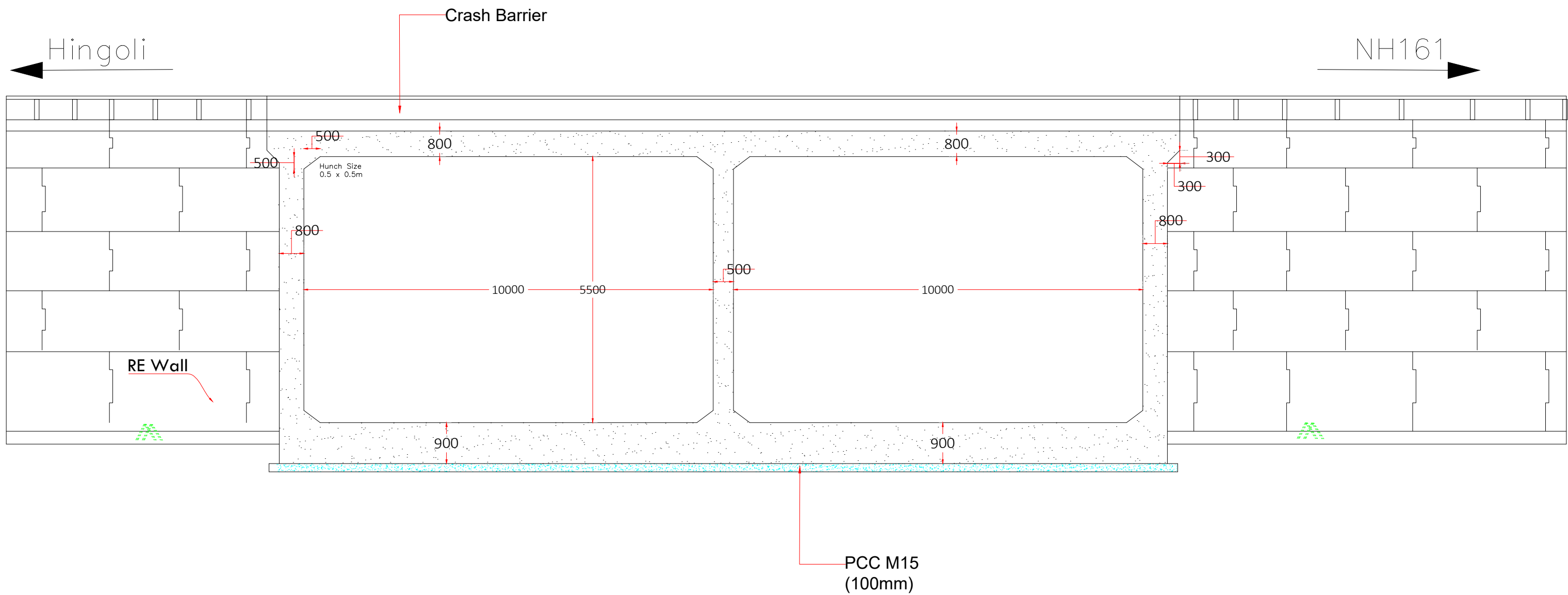
DRG NO.



MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (MORTH)

Consultancy services for the preparation of Feasibility studies and Detailed project report for the work of 'Rehabilitation, Upgradation & Widening of existing Highway to 4 lane with paved shoulder from Narsa Phata to Junction with NH 161 of Hingoli City road Section of NH 461B including 4L Major Bridge Across Kayadwa River in Hingoli district in the State of Maharashtra

PROJECT MANAGER
DY. GENERAL MANAGER
DRAWN BY
CHECKED BY



PROPOSED VUP SECTION

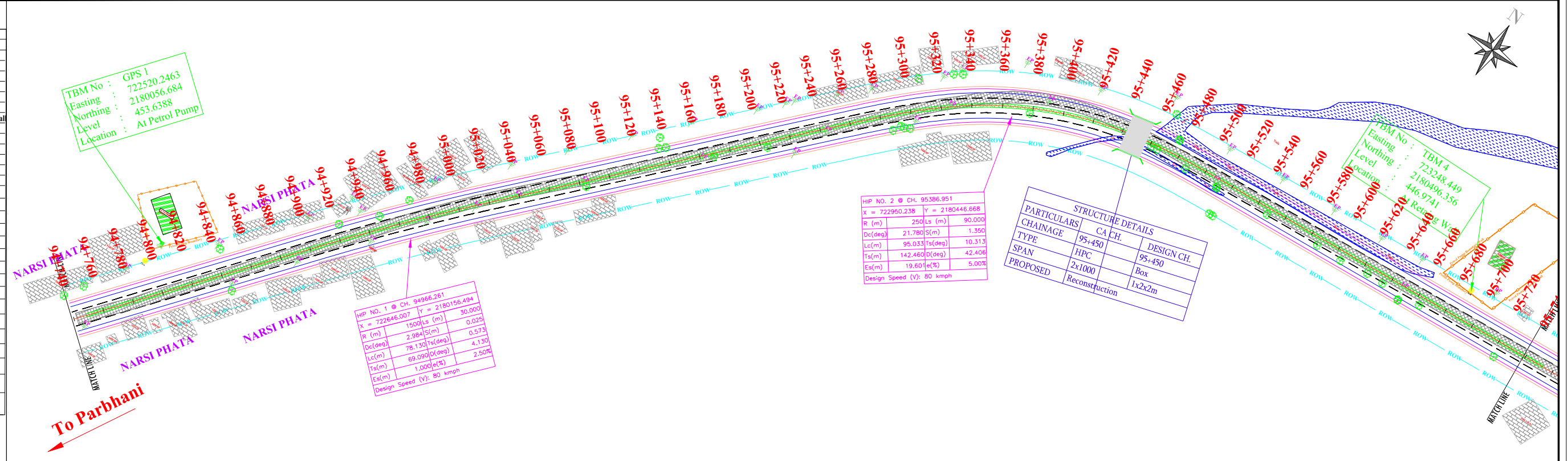
Project Name-
 Rehabilitation & Upgradation of Four Lane road with Paved Shoulders in Hingoli Town section of NH 461B from Narsi Phata to Junction with NH 161 at Sawarkheda with Major Bridge across Kayadhu river and additional 2 lane ROB at LC No. 144(B) (From KM. 94+750 to KM. 101+530, Total length = 6.780 KM) in the state of Maharashtra EPC mode.



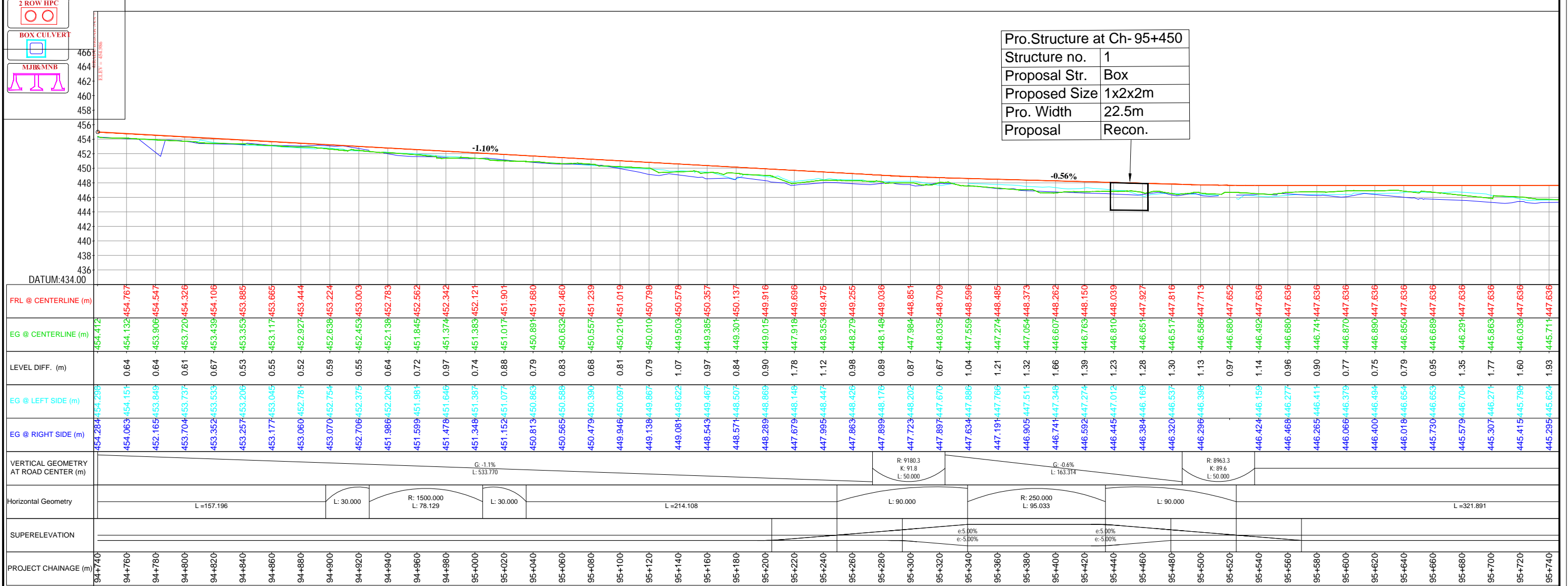
Legend:
HORIZONTAL PLAN

LEGEND FOR PROPOSED ROAD

NO.	SYMBOL	DESCRIPTION
1.	—	Pro. Center Line
2.	—	Pro. Road Edge
3.	—	Pro. Paved Shoulder
4.	—	Pro. Earthen Shoulder
5.	—	Pro. Drain
6.	—	Pro. Earthen Shoulder
7.	—	Pro. RCC Retaining Wall
8.	—	Pro. Road Marking
9.	—	Pro. Pipe Culvert
10.	—	Pro. Slab Culvert
11.	—	Pro. Minor Bridge
12.	—	Pro. Major Bridge
13.	—	Ex. Row
14.	—	Ex. Road
15.	—	GPS Pillar
16.	—	BM Pillar
17.	—	Name Board
18.	—	Electric Pole
19.	—	Transformer
20.	—	200 m Stone
21.	—	Handpump
22.	—	Borewell
23.	—	OFC Pillar
24.	—	Pylon
25.	—	Gaurd Stone
26.	—	Traffic Signal Board
27.	—	Lamp Post
28.	—	Ext. Trees
29.	—	KM Stone



1 ROW HPC	
2 ROW HPC	
BOX CULVERT	
MJR/MNB	

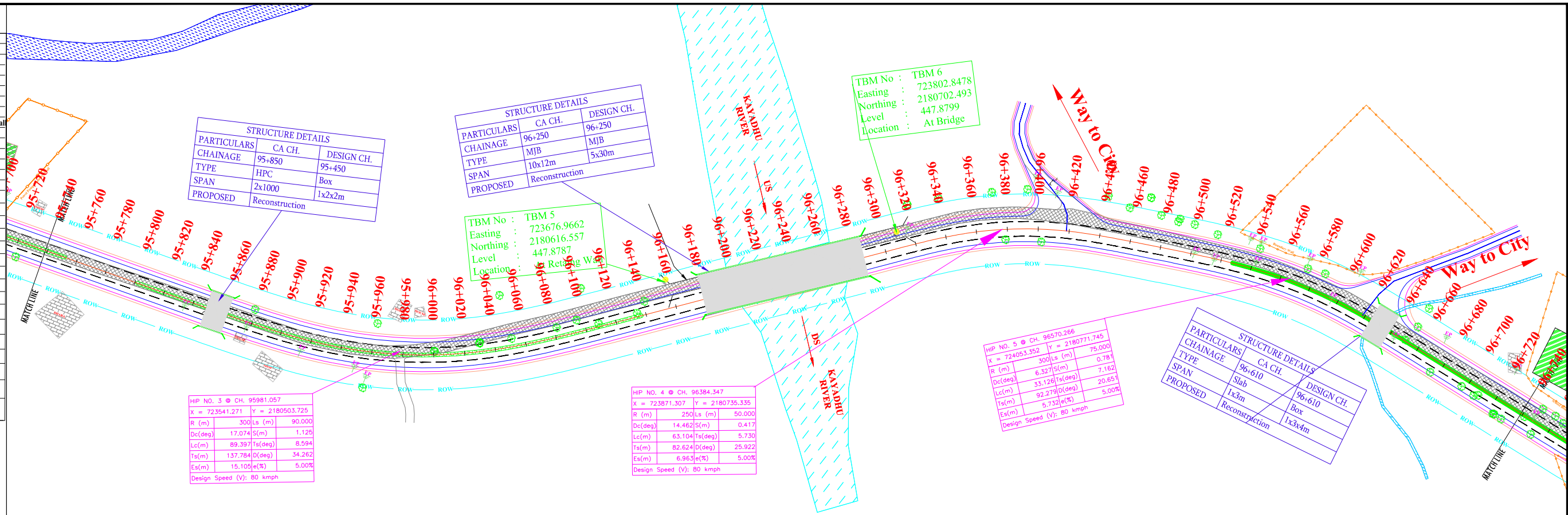


CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय MINISTRY OF ROAD TRANSPORT AND HIGHWAYS सत्यमेव जयते	CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD. IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD. Senior MIG -17 Gokuldham Complex, Gautam Nagar Bhopal (M.P.) 462023 Ph.: 0755-4851328 E-Mail : tasplsmic@gmail.com	PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B	DRAWING TITLE :-PLAN & PROFILE	REV DATE	R-1
			DRAWN DGN. CHECKED APPROVED	NAME SIG.	

Legend:
HORIZONTAL PLAN

LEGEND FOR PROPOSED ROAD

NO.	SYMBOL	DESCRIPTION
1.	—	Pro. Center Line
2.	—	Pro. Road Edge
3.	—	Pro. Paved Shoulder
4.	—	Pro. Earthen Shoulder
5.	—	Pro. Drain
6.	—	Pro. Earthen Shoulder
7.	—	Pro. RCC Retaining Wall
8.	—	Pro. Road Marking
9.	—	Pro. Pipe Culvert
10.	—	Pro. Slab Culvert
11.	—	Pro. Minor Bridge
12.	—	Pro. Major Bridge
13.	—	Ex. Row
14.	—	Ex. Road
15.	—	GPS Pillar
16.	—	BM Pillar
17.	—	Name Board
18.	—	Electric Pole
19.	—	Transformer
20.	—	200 m Stone
21.	—	Handpump
22.	—	Borewell
23.	—	OFC Pillar
24.	—	Pylon
25.	—	Guard Stone
26.	—	Traffic Signal Board
27.	—	Lamp Post
28.	—	Ext. Trees
29.	—	KM Stone



Pro. Structure at Ch- 95+850

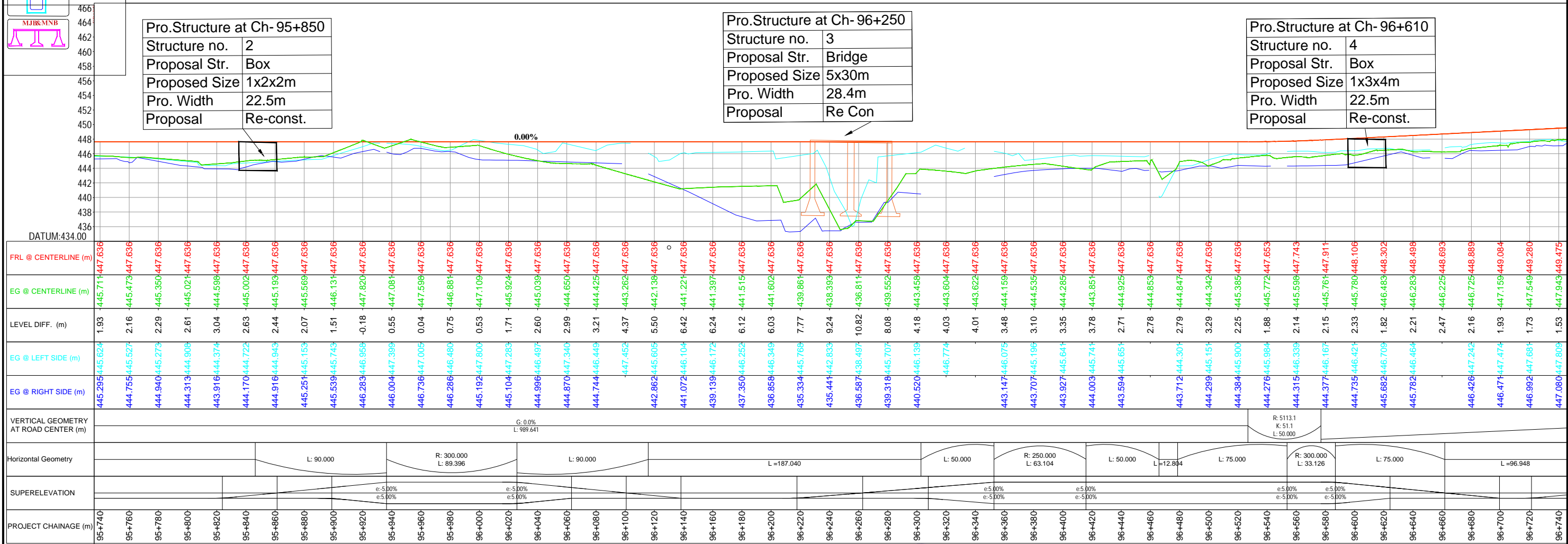
Structure no.	2
Proposal Str.	Box
Proposed Size	1x2x2m
Pro. Width	22.5m
Proposal	Re-const.

Pro. Structure at Ch- 96+250

Structure no.	3
Proposal Str.	Bridge
Proposed Size	5x30m
Pro. Width	28.4m
Proposal	Re Con

Pro. Structure at Ch- 96+610

Structure no.	4
Proposal Str.	Box
Proposed Size	1x3x4m
Pro. Width	22.5m
Proposal	Re-const.



CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
Senior MIG - 17 Gokuldham Complex, Gautam Nagar
Bhopal (M.P.) 462023 Ph.: 0755-4851328
E-Mail : tasplsmic@gmail.com

PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B

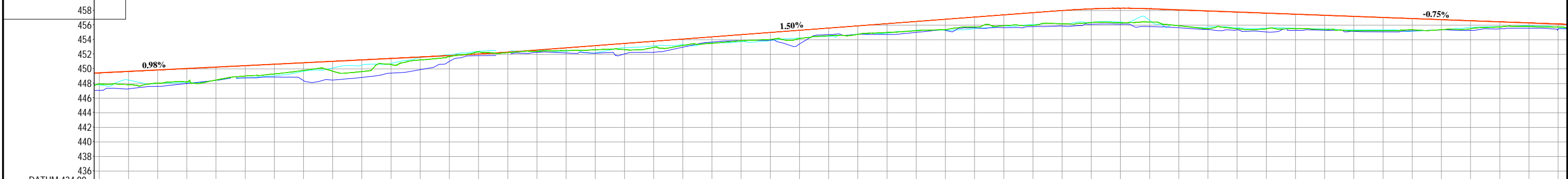
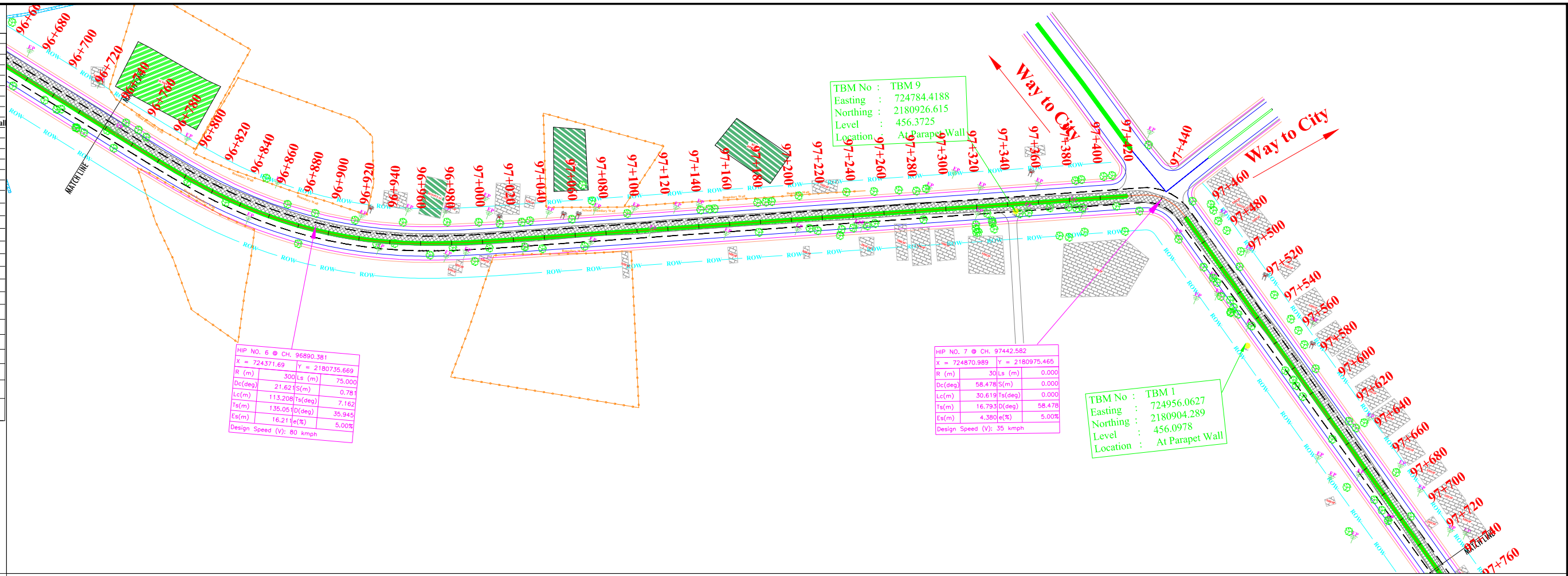
DRAWING TITLE :-PLAN & PROFILE
Chainage 95+740 to 96+740

REV	DATE	NAME	SIG.
DRAWN	-	-	-
DGN.	-	-	-
CHECKED	-	-	-
APPROVED	-	-	-

DRAWING NO. -STR/MB/GAD/ HI

Legend:
HORIZONTAL PLAN

NO.	SYMBOL	DESCRIPTION
1.	—	Pro. Center Line
2.	—	Pro. Road Edge
3.	—	Pro. Paved Shoulder
4.	—	Pro. Earthen Shoulder
5.	—	Pro. Drain
6.	—	Pro. Earthen Shoulder
7.	—	Pro. RCC Retaining Wall
8.	—	Pro. Road Marking
9.	—	Pro. Pipe Culvert
10.	—	Pro. Slab Culvert
11.	—	Pro. Minor Bridge
12.	—	Pro. Major Bridge
13.	—	Ex. Row
14.	—	Ex. Road
15.	—	GPS Pillar
16.	—	BM Pillar
17.	—	Name Board
18.	—	Electric Pole
19.	—	Transformer
20.	—	200 m Stone
21.	—	Handpump
22.	—	Borewell
23.	—	OFC Pillar
24.	—	Pylon
25.	—	Gard Stone
26.	—	Traffic Signal Board
27.	—	Lamp Post
28.	—	Ext. Trees
29.	—	KM Stone



PROJECT CHAINAGE (m)	FRL @ CENTERLINE (m)	EG @ CENTERLINE (m)	LEVEL DIFF. (m)	EG @ LEFT SIDE (m)	EG @ RIGHT SIDE (m)
96+740	447.943	447.808	1.53	447.808	447.808
96+760	447.851	447.676	1.82	447.676	447.676
96+780	448.066	448.016	1.80	448.016	448.016
96+800	448.232	448.150	1.83	448.150	448.150
96+820	448.481	448.428	1.78	448.428	448.428
96+840	449.036	448.775	1.42	448.775	448.775
96+860	449.322	448.893	1.33	448.893	448.893
96+880	449.796	448.405	1.05	448.405	448.405
96+900	450.062	448.480	1.34	448.480	448.480
96+920	450.258	448.637	1.59	448.637	448.637
96+940	450.453	449.424	0.82	449.424	449.424
96+960	450.649	449.907	0.40	449.907	449.907
96+980	450.844	451.032	0.12	451.032	451.032
97+000	451.040	451.822	-0.30	451.822	451.822
97+020	451.236	452.340	0.07	452.340	452.340
97+040	451.431	452.268	0.20	452.268	452.268
97+060	451.627	452.404	0.38	452.404	452.404
97+080	451.822	452.523	0.57	452.523	452.523
97+100	452.017	452.627	0.84	452.627	452.627
97+120	452.212	452.657	0.85	452.657	452.657
97+140	452.407	452.650	0.88	452.650	452.650
97+160	452.602	452.590	0.87	452.590	452.590
97+180	452.797	452.400	0.85	452.400	452.400
97+200	452.992	452.070	0.97	452.070	452.070
97+220	453.187	451.633	1.14	451.633	451.633
97+240	453.382	451.100	1.05	451.100	451.100
97+260	453.577	450.567	1.16	450.567	450.567
97+280	453.772	450.034	1.21	450.034	450.034
97+300	453.967	450.501	1.27	450.501	450.501
97+320	454.162	450.968	1.42	450.968	450.968
97+340	454.357	451.435	1.33	451.435	451.435
97+360	454.552	451.902	1.47	451.902	451.902
97+380	454.747	452.369	1.73	452.369	452.369
97+400	454.942	452.836	1.81	452.836	452.836
97+420	455.137	453.303	1.88	453.303	453.303
97+440	455.332	453.770	2.01	453.770	453.770
97+460	455.527	454.237	1.82	454.237	454.237
97+480	455.722	454.704	2.19	454.704	454.704
97+500	455.917	455.171	2.44	455.171	455.171
97+520	456.112	455.638	2.30	455.638	455.638
97+540	456.307	456.105	2.15	456.105	456.105
97+560	456.502	456.572	2.01	456.572	456.572
97+580	456.697	457.039	1.95	457.039	457.039
97+600	456.892	457.506	1.96	457.506	457.506
97+620	457.087	457.973	1.82	457.973	457.973
97+640	457.282	458.440	1.53	458.440	458.440
97+660	457.477	458.907	1.39	458.907	458.907
97+680	457.672	459.374	1.10	459.374	459.374
97+700	457.867	459.841	0.72	459.841	459.841
97+720	458.062	459.308	0.50	459.308	459.308
97+740	458.257	458.775	0.41	458.775	458.775

CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय, MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD. IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD. Senior MIG -17 Gokuldham Complex, Gautam Nagar Bhopal (M.P.) 462023 Ph.: 0755-4851328 E-Mail : tasplsmic@gmail.com

PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B

DRAWING TITLE :-PLAN & PROFILE

REV	R-1
DATE	
DRAWN	
DGN.	
CHECKED	
APPROVED	

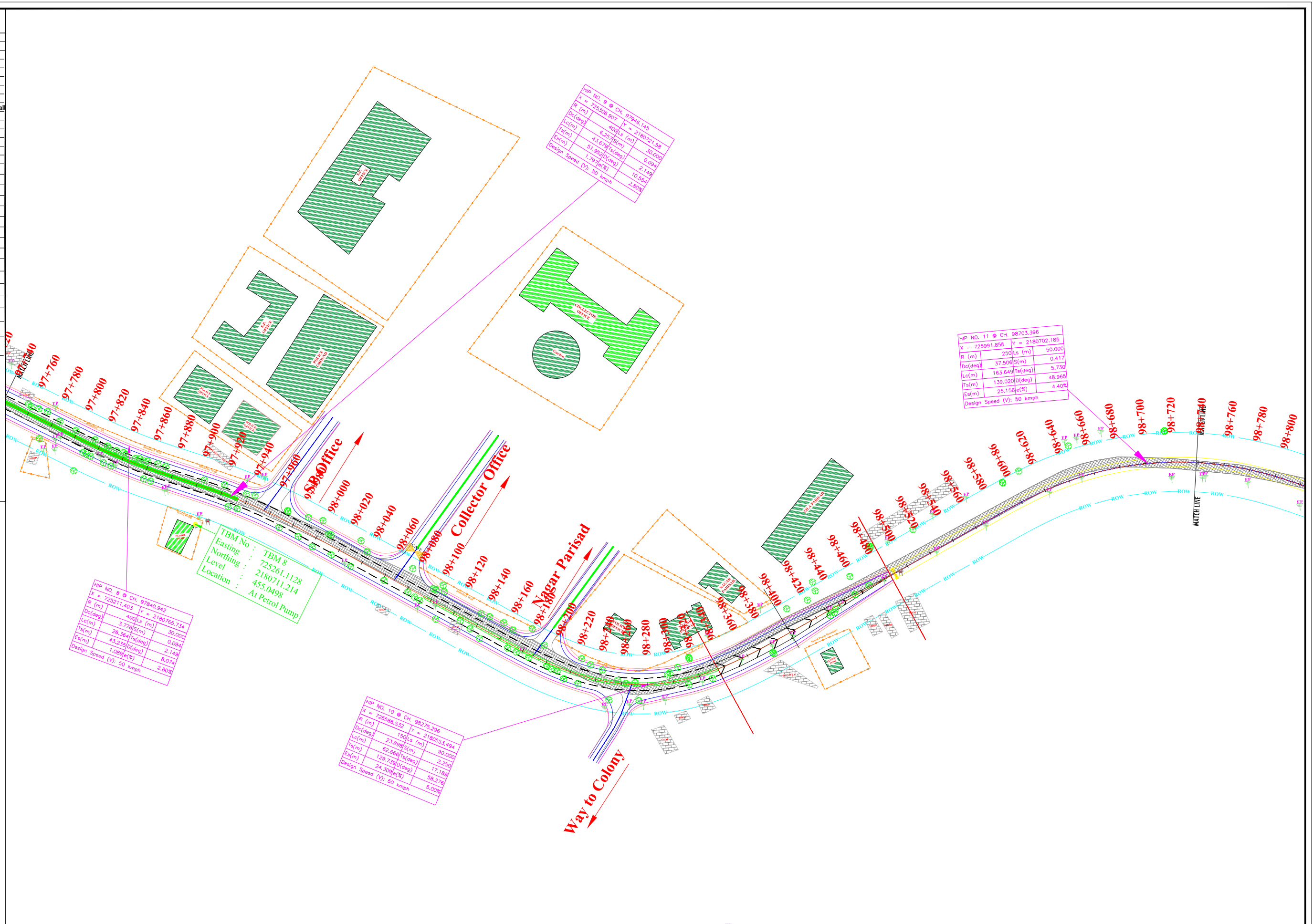
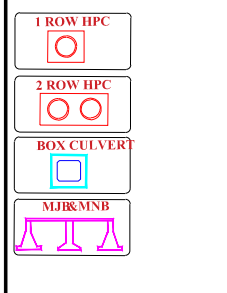
Chainage 96+740 to 97+740

DRAWING NO -STR/MB/GAD/ HI

Legend:
HORIZONTAL PLAN

LEGEND FOR PROPOSED ROAD

NO.	SYMBOL	DESCRIPTION
1.	—	Pro. Center Line
2.	—	Pro. Road Edge
3.	—	Pro. Paved Shoulder
4.	—	Pro. Earthen Shoulder
5.	—	Pro. Drain
6.	—	Pro. Earthen Shoulder
7.	—	Pro. RCC Retaining Wall
8.	—	Pro. Road Marking
9.	—	Pro. Pipe Culvert
10.	—	Pro. Slab Culvert
11.	—	Pro. Minor Bridge
12.	—	Pro. Major Bridge
13.	—	Ex. Row
14.	—	Ex. Road
15.	—	GPS Pillar
16.	—	BM Pillar
17.	—	Name Board
18.	—	Electric Pole
19.	—	Transformer
20.	—	200 m Stone
21.	—	Handpump
22.	—	Borewell
23.	—	OFC Pillar
24.	—	Pylon
25.	—	Gaurd Stone
26.	—	Traffic Signal Board
27.	—	Lamp Post
28.	—	Ext. Trees
29.	—	KM Stone



CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
सत्यमेव जयते

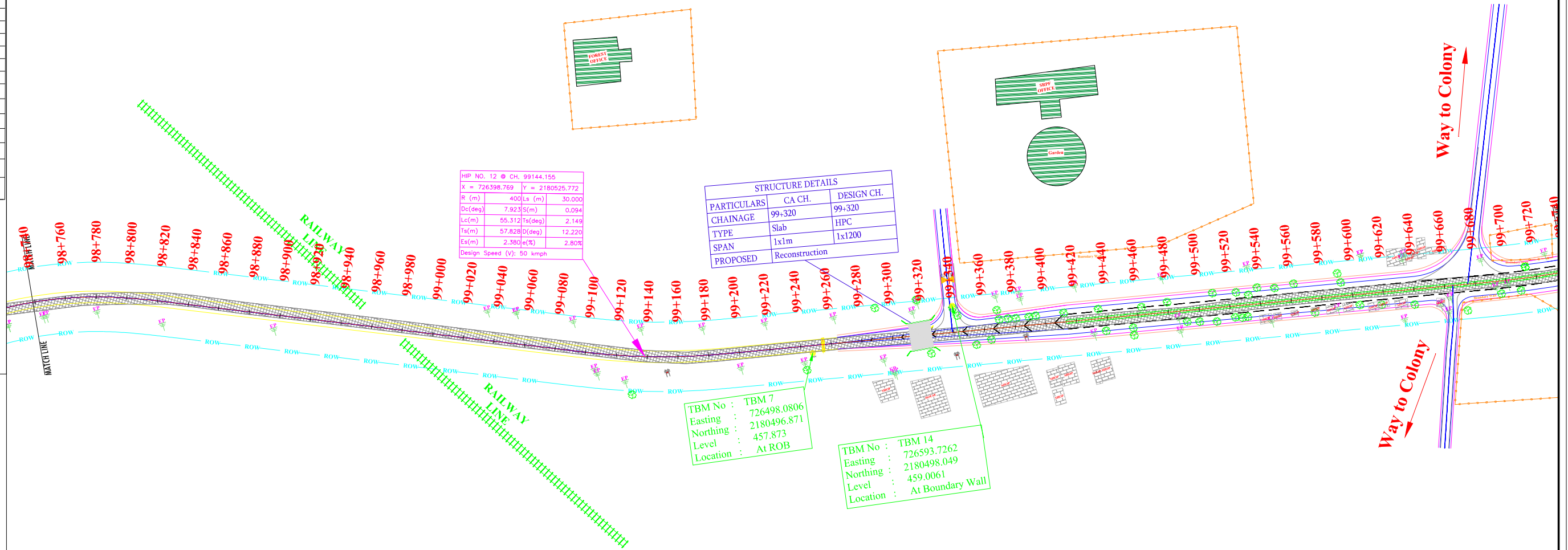
CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD.
IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD.
Senior MIG - 17 Gokuldham Complex, Gautam Nagar
Bhopal (M.P.) 462023 Ph.: 0755-4851328
E-Mail: tasplsmic@gmail.com

PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B

DRAWING TITLE :-PLAN & PROFILE	REV		B-1
	DATE	NAME	
Chainage 97+740 to 98+740	DRAWN	-	
	DGN.	-	
	CHECKED	-	
DRAWING NO :-STR/MB/GAD/ HI	APPROVED	-	

- Legend:**
HORIZONTAL PLAN
- LEGEND FOR PROPOSED ROAD**
- | NO. | SYMBOL | DESCRIPTION |
|-----|--------|-------------------------|
| 1. | — | Pro. Center Line |
| 2. | — | Pro. Road Edge |
| 3. | — | Pro. Paved Shoulder |
| 4. | — | Pro. Earthen Shoulder |
| 5. | — | Pro. Drain |
| 6. | — | Pro. Earthen Shoulder |
| 7. | — | Pro. RCC Retaining Wall |
| 8. | — | Pro. Road Marking |
| 9. | — | Pro. Pipe Culvert |
| 10. | — | Pro. Slab Culvert |
| 11. | — | Pro. Minor Bridge |
| 12. | — | Pro. Major Bridge |
| 13. | — | Ex. Row |
| 14. | — | Ex. Road |
| 15. | — | GPS Pillar |
| 16. | — | BM Pillar |
| 17. | — | Name Board |
| 18. | — | Electric Pole |
| 19. | — | Transformer |
| 20. | — | 200 m Stone |
| 21. | — | Handpump |
| 22. | — | Borewell |
| 23. | — | OFC Pillar |
| 24. | — | Pylon |
| 25. | — | Gaurd Stone |
| 26. | — | Traffic Signal Board |
| 27. | — | Lamp Post |
| 28. | — | Ext. Trees |
| 29. | — | KM Stone |

- | | |
|-------------|--|
| 1 ROW HPC | |
| 2 ROW HPC | |
| BOX CULVERT | |
| MJBR/MNB | |



CLIENT : **सड़क परिवहन एवं राजमार्ग मंत्रालय**
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

CONSULTANT : **TECHNOCRATS ADVISORY SERVICES PVT. LTD.**
IN ASSOCIATION WITH
 SHREE MAHAMAI INFRA CONSULTANTS PVT. LTD.
Senior MIG - 17 Gokuldham Complex, Gautam Nagar
Bhopal (M.P.) 462023 Ph.: 0755-4851328
E-Mail : tasplsmic@gmail.com

PROJECT TITLE : **Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B**

DRAWING TITLE :-PLAN & PROFILE	REV	B-1	
	DATE	NAME	SG.
Chainage 98+740 to 99+740	DRAWN	-	-
	DGN.	-	-
	CHECKED	-	-
DRAWING NO :-STR/MB/GAD/ HI	APPROVED	-	-

Legend:

HORIZONTAL PLAN

LEGEND FOR PROPOSED ROAD

NO.	SYMBOL	DESCRIPTION
1.		Pro. Center Line
2.		Pro. Road Edge
3.		Pro. Paved Shoulder
4.		Pro. Earthen Shoulder
5.		Pro. Drain
6.		Pro. Earthen Shoulder
7.		Pro. RCC Retaining Wall
8.		Pro. Road Marking
9.		Pro. Pipe Culvert
10.		Pro. Slab Culvert
11.		Pro. Minor Bridge
12.		Pro. Major Bridge
13.		Ex. Row
14.		Ex. Road
15.		GPS Pillar
16.		BM Pillar
17.		Name Board
18.		Electric Pole
19.		Transformer
20.		200 m Stone
21.		Handpump
22.		Borewell
23.		OFC Pillar
24.		Pylon
25.		Guard Stone
26.		Traffic Signal Board
27.		Lamp Post
28.		Ext. Trees
29.		KM Stone

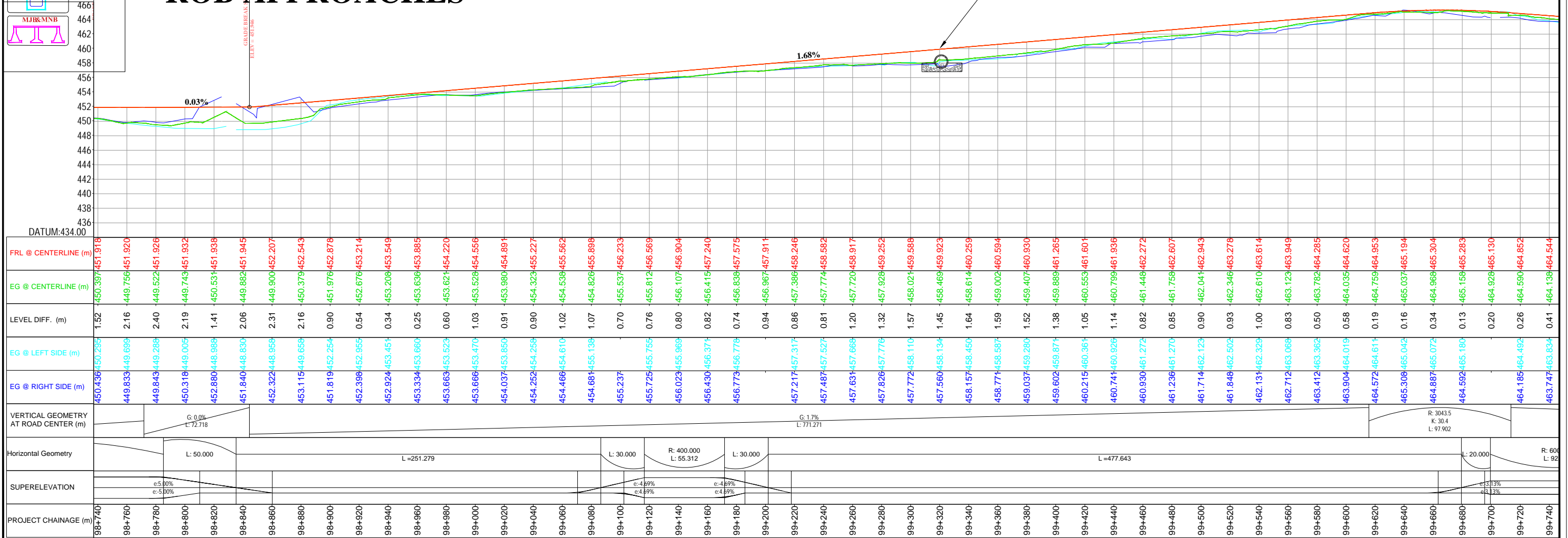
	1 ROW HPC
	2 ROW HPC
	BOX CULVERT
	MJB/MNB

839

ROB APPROACHES

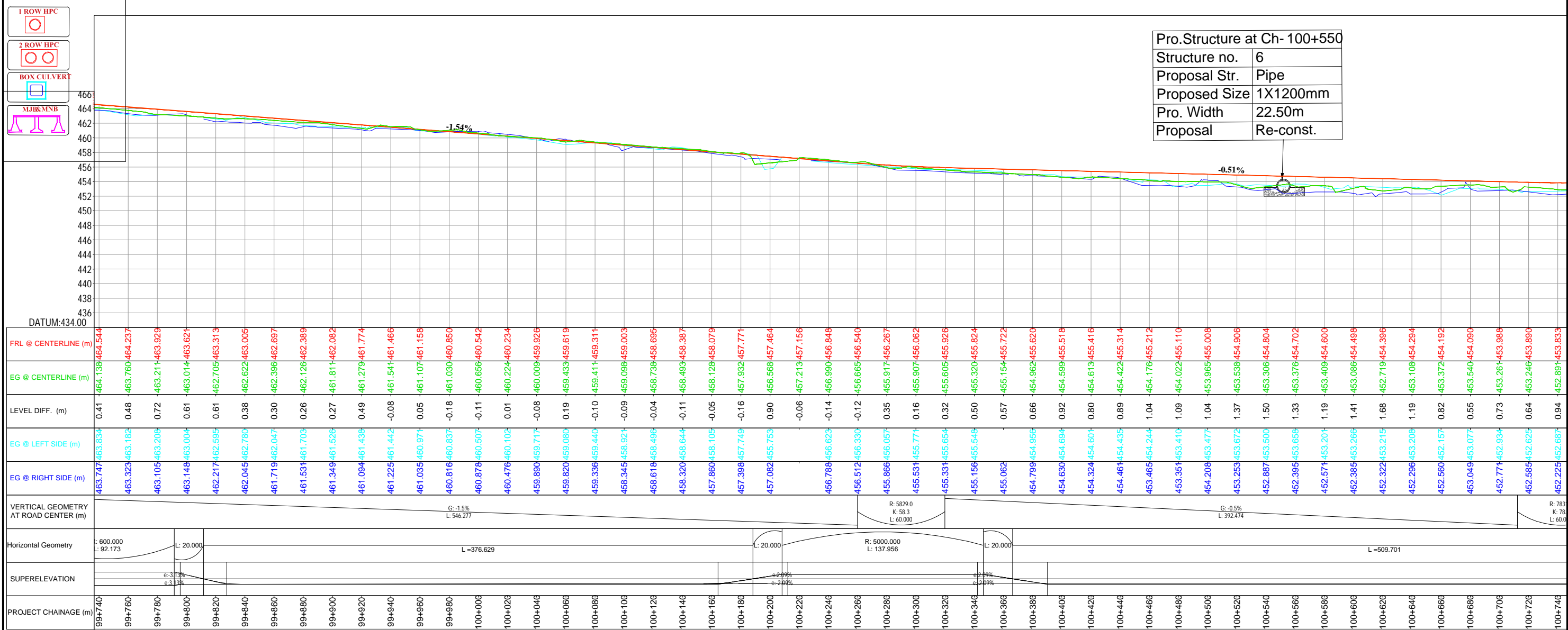
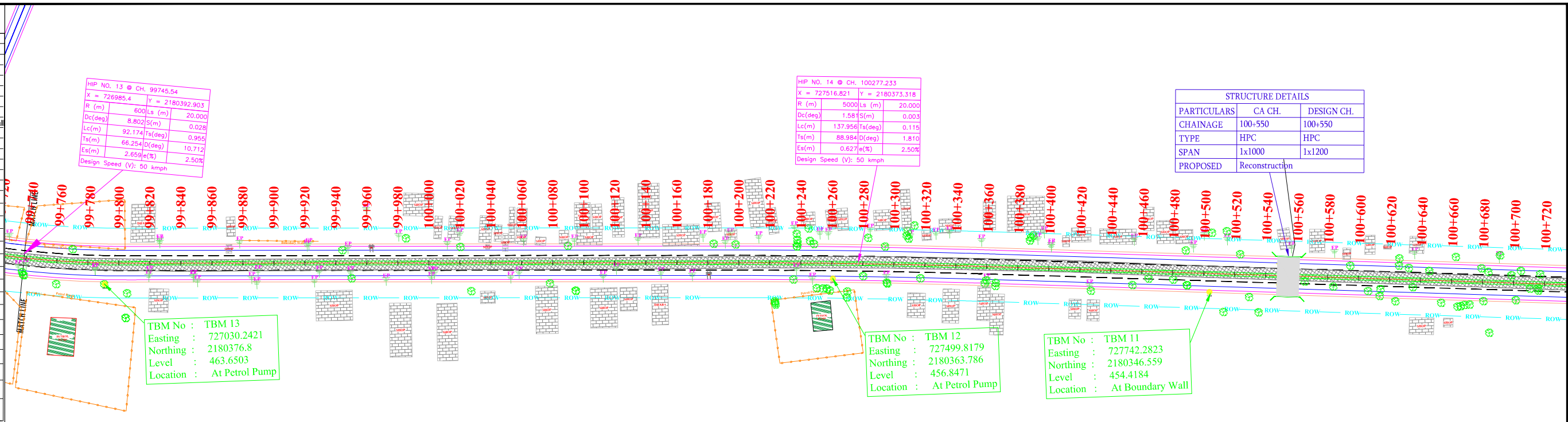
Pro.Structure at Ch- 99+320

Structure no.	5
Pro Str.	HPC
Proposed Size	1x1200
Pro. Width	22.50m
Proposal	Re-const.



CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय MINISTRY OF ROAD TRANSPORT AND HIGHWAYS सत्यमेव जयते	CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD. IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD. Senior MIG - 17 Gokuldham Complex, Gautam Nagar Bhopal (M.P.) 462023 Ph.: 0755-4851328 E-Mail : tasplsmic@gmail.com	PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B	DRAWING TITLE :-PLAN & PROFILE	REV R-1												
			Chainage 98+740 to 99+740	<table border="1"> <thead> <tr> <th>DATE</th> <th>NAME</th> <th>SG.</th> </tr> </thead> <tbody> <tr><td>DRAWN</td><td>-</td><td>-</td></tr> <tr><td>DGN.</td><td>-</td><td>-</td></tr> <tr><td>CHECKED</td><td>-</td><td>-</td></tr> <tr><td>APPROVED</td><td>-</td><td>-</td></tr> </tbody> </table>	DATE	NAME	SG.	DRAWN	-	-	DGN.	-	-	CHECKED	-	-
DATE	NAME	SG.														
DRAWN	-	-														
DGN.	-	-														
CHECKED	-	-														
APPROVED	-	-														
DRAWING NO : STR/MB/GAD/ HI																

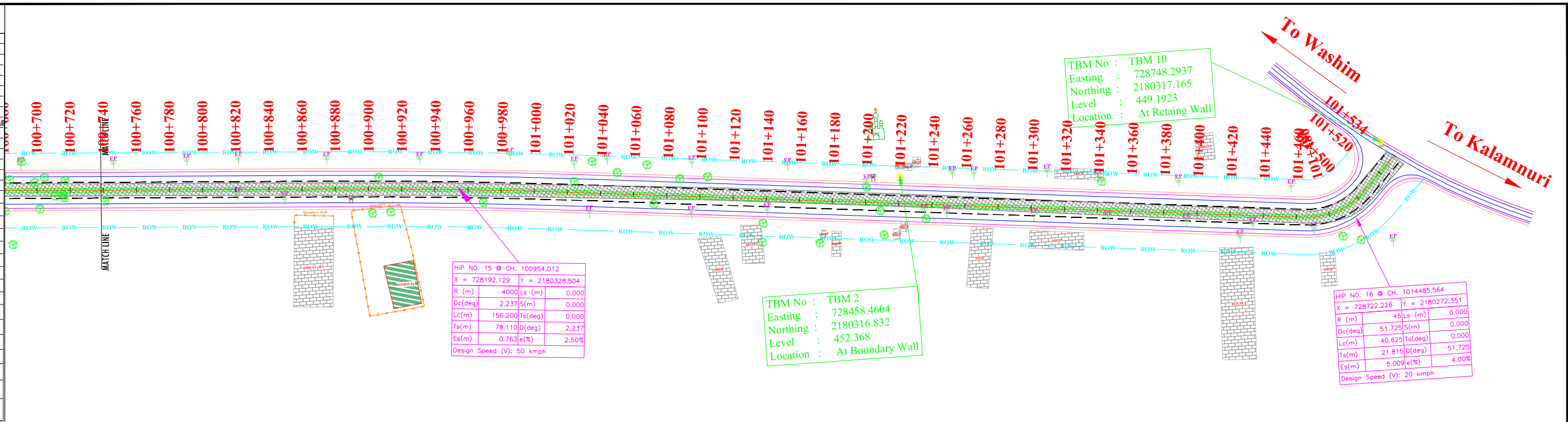
- Legend:**
HORIZONTAL PLAN
- LEGEND FOR PROPOSED ROAD**
- | NO. | SYMBOL | DESCRIPTION |
|-----|--------|-------------------------|
| 1. | — | Pro. Center Line |
| 2. | — | Pro. Road Edge |
| 3. | — | Pro. Paved Shoulder |
| 4. | — | Pro. Earthen Shoulder |
| 5. | — | Pro. Drain |
| 6. | — | Pro. Earthen Shoulder |
| 7. | — | Pro. RCC Retaining Wall |
| 8. | — | Pro. Road Marking |
| 9. | — | Pro. Pipe Culvert |
| 10. | — | Pro. Slab Culvert |
| 11. | — | Pro. Minor Bridge |
| 12. | — | Pro. Major Bridge |
| 13. | — | Ex. Row |
| 14. | — | Ex. Road |
| 15. | — | GPS Pillar |
| 16. | — | BM Pillar |
| 17. | — | Name Board |
| 18. | — | Electric Pole |
| 19. | — | Transformer |
| 20. | — | 200 m Stone |
| 21. | — | Handpump |
| 22. | — | Borewell |
| 23. | — | OFC Pillar |
| 24. | — | Pylon |
| 25. | — | Gaurd Stone |
| 26. | — | Traffic Signal Board |
| 27. | — | Lamp Post |
| 28. | — | Ext. Trees |
| 29. | — | KM Stone |



Legend:
HORIZONTAL PLAN

LEGEND FOR PROPOSED ROAD

NO.	SYMBOL	DESCRIPTION
1.	—	Pro. Center Line
2.	—	Pro. Road Edge
3.	—	Pro. Paved Shoulder
4.	—	Pro. Earthen Shoulder
5.	—	Pro. Drain
6.	—	Pro. Earthen Shoulder
7.	—	Pro. RCC Retaining Wall
8.	—	Pro. Road Marking
9.	—	Pro. Pipe Culvert
10.	—	Pro. Slab Culvert
11.	—	Pro. Minor Bridge
12.	—	Pro. Major Bridge
13.	—	Ex. Row
14.	—	Ex. Road
15.	—	GPS Pillar
16.	—	BM Pillar
17.	—	Name Board
18.	—	Electric Pole
19.	—	Transformer
20.	—	200 m Stone
21.	—	Handpump
22.	—	Borewell
23.	—	OFC Pillar
24.	—	Pylon
25.	—	Gurd Stone
26.	—	Traffic Signal Board
27.	—	Lamp Post
28.	—	Ext. Trees
29.	—	KM Stone



HIP NO. 15 @ CH. 100954.012

X = 728192.129	Y = 2180328.504
R (m) : 4000	Ls (m) : 0.000
Dc(deg) : 2.237	S(m) : 0.000
Lc(m) : 156.200	Ts(deg) : 0.000
Ts(m) : 78.110	D(deg) : 2.237
Es(m) : 0.763	e(%) : 2.50%

Design Speed (V): 50 kmph

TBM No : TBM 2

Easting : 728458.4604

Northing : 2180316.832

Level : 452.368

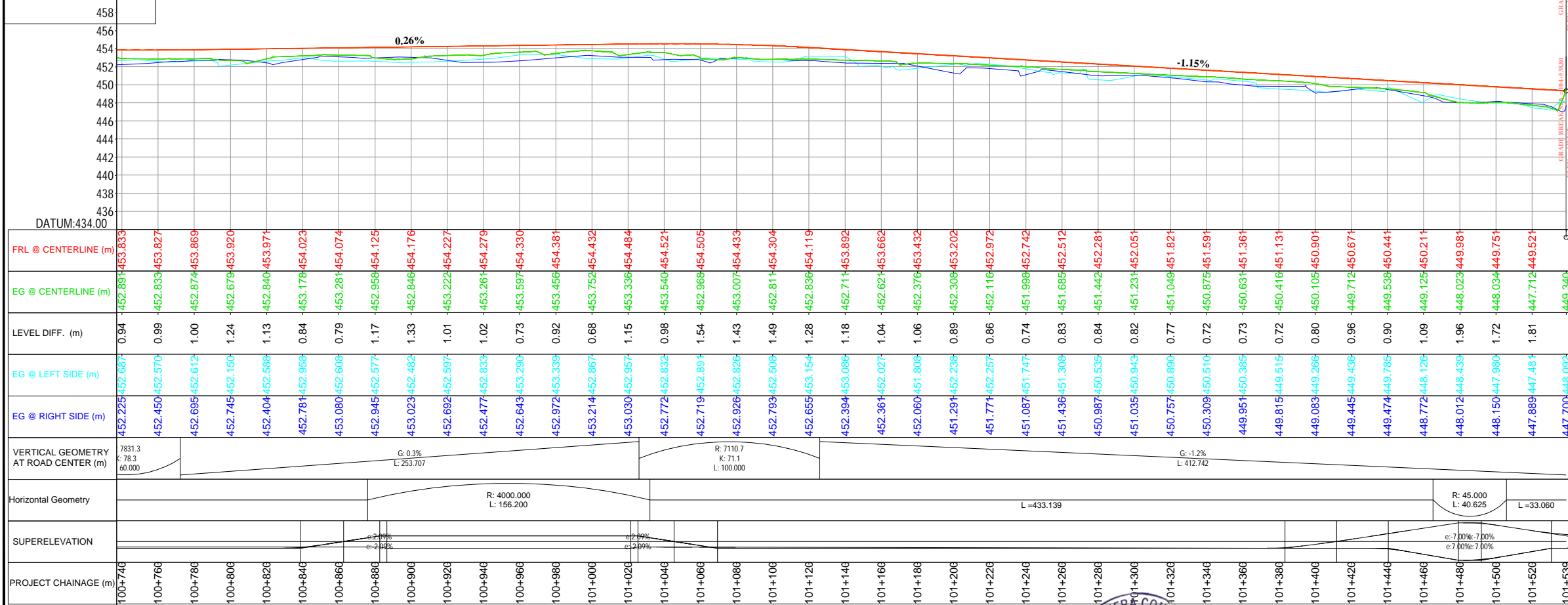
Location : At Boundary Wall

HIP NO. 16 @ CH. 101485.564

X = 728722.226	Y = 2180272.351
R (m) : 45	Ls (m) : 0.000
Dc(deg) : 51.725	S(m) : 0.000
Lc(m) : 40.625	Ts(deg) : 0.000
Ts(m) : 21.816	D(deg) : 51.725
Es(m) : 5.009	e(%) : 4.00%

Design Speed (V): 20 kmph

1 ROW HPC	
2 ROW HPC	
BOX CULVERT	
MJBR/MNB	



CLIENT : सड़क परिवहन एवं राजमार्ग मंत्रालय MINISTRY OF ROAD TRANSPORT AND HIGHWAYS सत्यमेव जयते	CONSULTANT : TECHNOCRATS ADVISORY SERVICES PVT. LTD. IN ASSOCIATION WITH SHREE MAHAMAI INFRA CONSULTANT PVT. LTD. Senior MIG - 17 Gokuldham Complex, Gautam Nagar Bhopal (M.P.) 462023 Ph.: 0755-4851328 E-Mail : tasplsmic@gmail.com	PROJECT TITLE : Consultancy Services for Preparation of Detailed Project Report for Rehabilitation, Upgradation & Widening of existing Highway to for 4 lanes with paved shoulder from Narsi Phata to Junction with NH 161 of Hingoli City road Section of NH 461B	DRAWING TITLE :-PLAN & PROFILE	REV DATE	R-1
			Chainage 100+740 to 101+539	DRAWN DGN. CHECKED APPROVED	NAME SGL.