



## JAWAHARLAL NEHRU PORT TRUST

Preparation of Detailed Project Report (DPR) for up gradation of Roads and Drainage system outside Custom bound area at J N Port, Navi-Mumbai.

## DRAWINGS

SEPTEMBER 2020

### CONSULTANTS



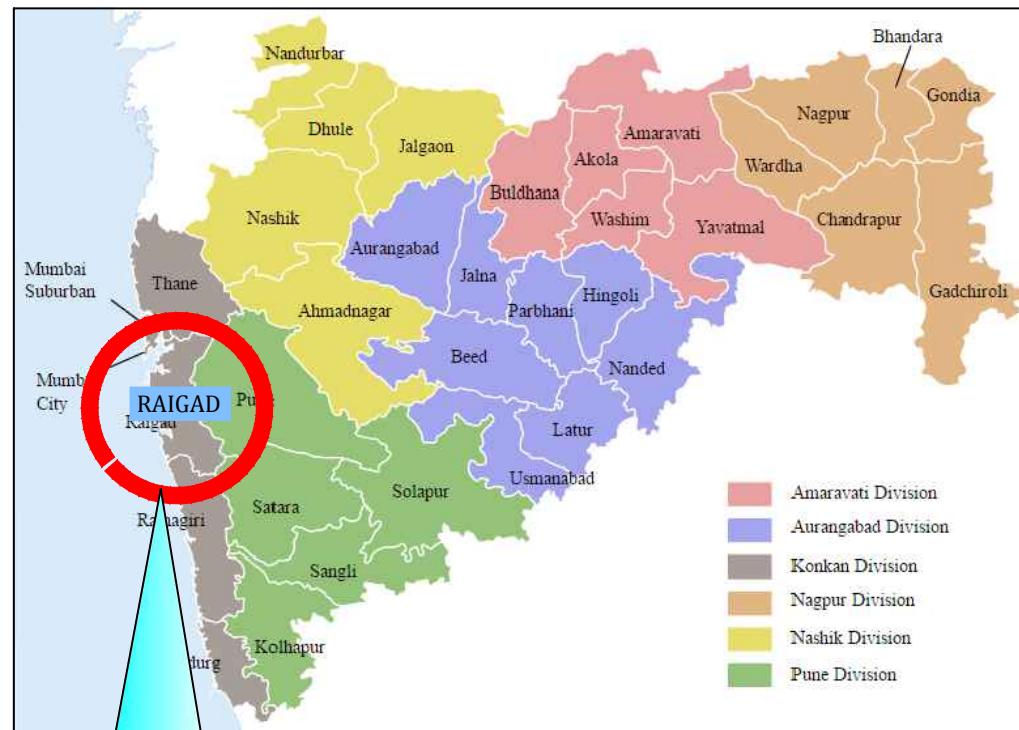
**QMAX TECHNO CONSULTANTS PVT. LTD.**  
307-308, 3rd Floor Foundation Tower, Plot No. 20, Sector 11,  
CBD Belapur, Navi Mumbai 400 614, Maharashtra, India  
Tel.: 022 4794 64 66 / 67, Email ID: qmaxconsultants@gmail.com

Up gradation of Roads and Drainage system outside Custom bound  
area at J N Port, Navi-Mumbai.

# INDEX

SR. NO.	PARTICULARS	DRAWING NO.
1	LOCATION PLAN	DPR_JNPT_QTCPL_LP_01
2	PROPOSAL & PLAN & PROFILE	DPR_JNPT_QTCPL_P&P_1 to __
3	TYPICAL CROSS SECTION	DPR_JNPT_QTCPL_TCS_1 TO __
4	JUNCTION DRAWING	DPR_JNPT_QTCPL_JN_1 TO __
5	DRAINAGE PLAN	DPR_JNPT_QTCPL_DR_1 TO 2
6	CULVERT RE CONSTRUCTION - PIPE & BOX CULVERT	DPR_JNPT_QTCPL_CD_1 TO 4
7	EXISTING UTILITY & PR. UTILITY DUCTS PLAN	DPR_JNPT_QTCPL.Utility_1 TO __
8	ELECTRICAL DRAWINGS	DPR_JNPT_QTCPL_ELEC.DWG_1 TO __
9	EXISTING SURVEY PLAN	DPR_JNPT_QTCPL_SURVEY_1 TO __
10	LANE MARKING & SIGNAGES MARKING	DPR_JNPT_QTCPL_Ln&Sign_1 TO __
11	MISC. DRAWINGS	DPR_JNPT_QTCPL_MISC_1 TO __

# **LOCATION PLAN**

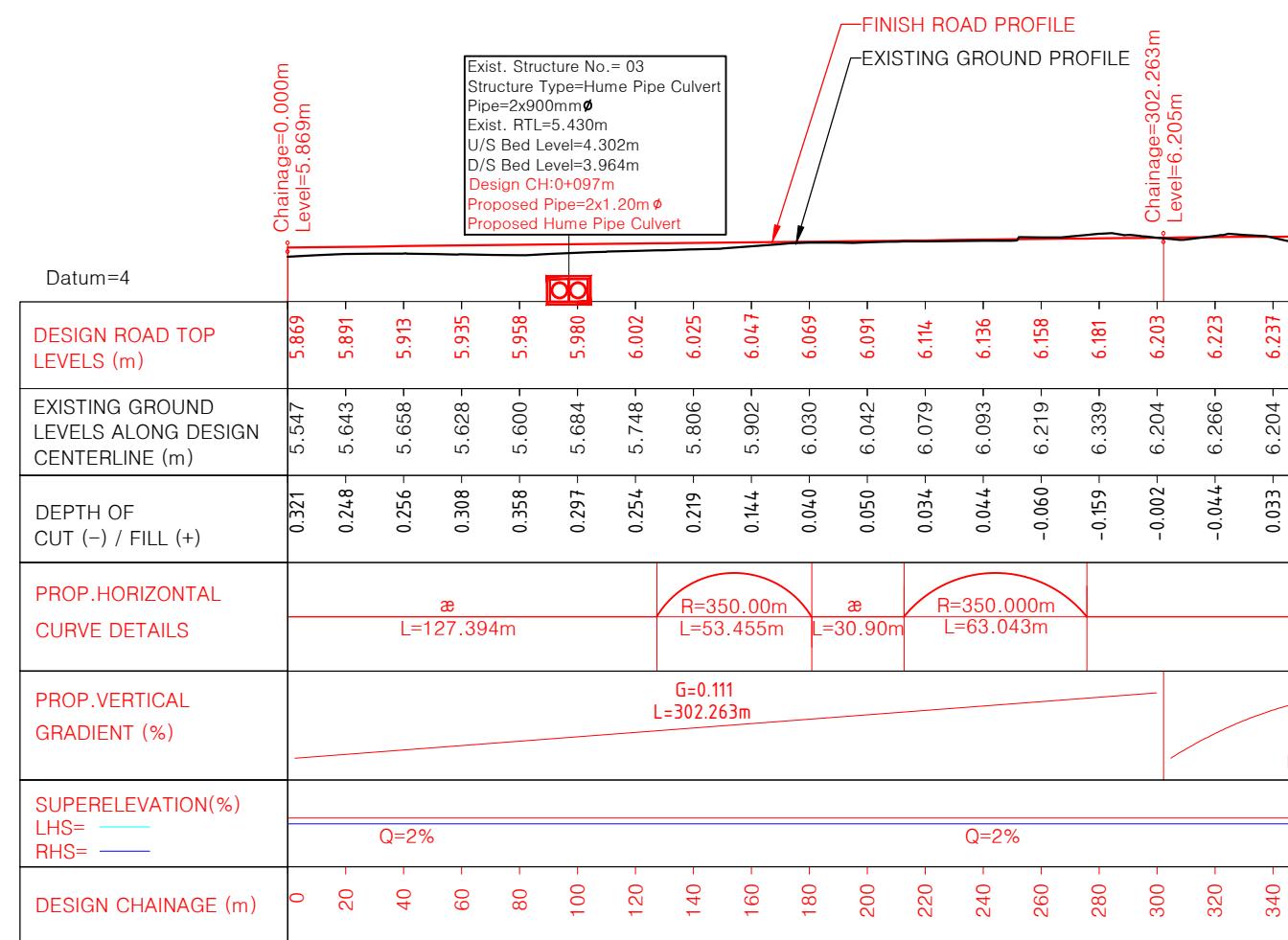
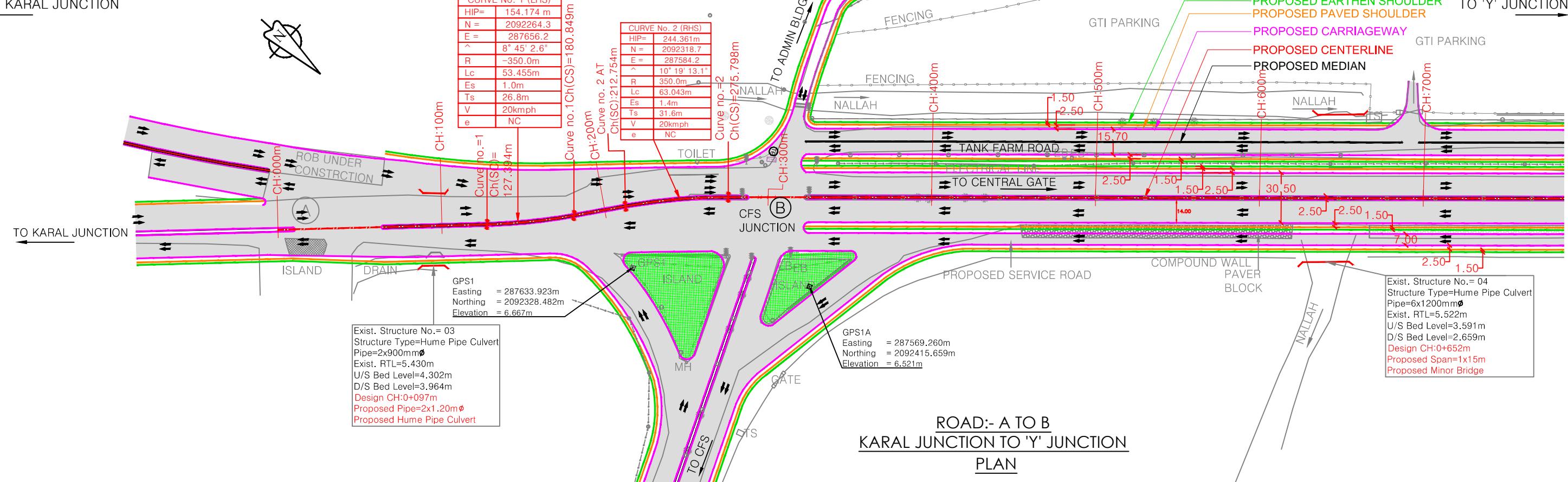


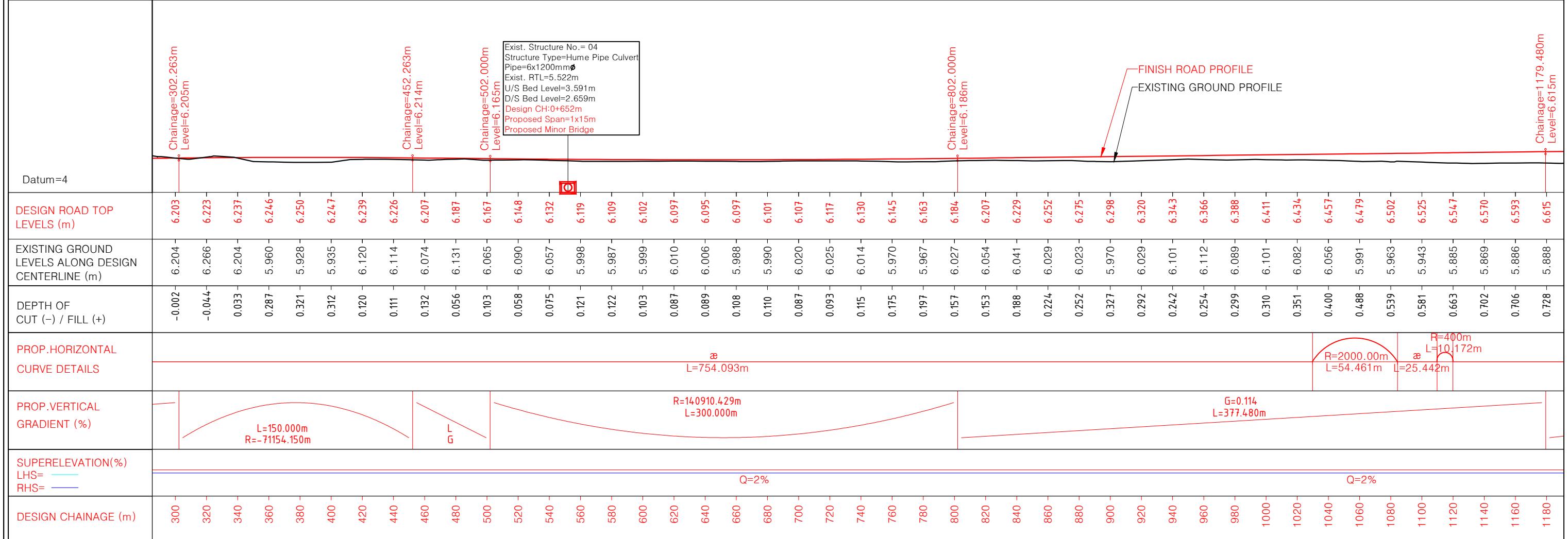
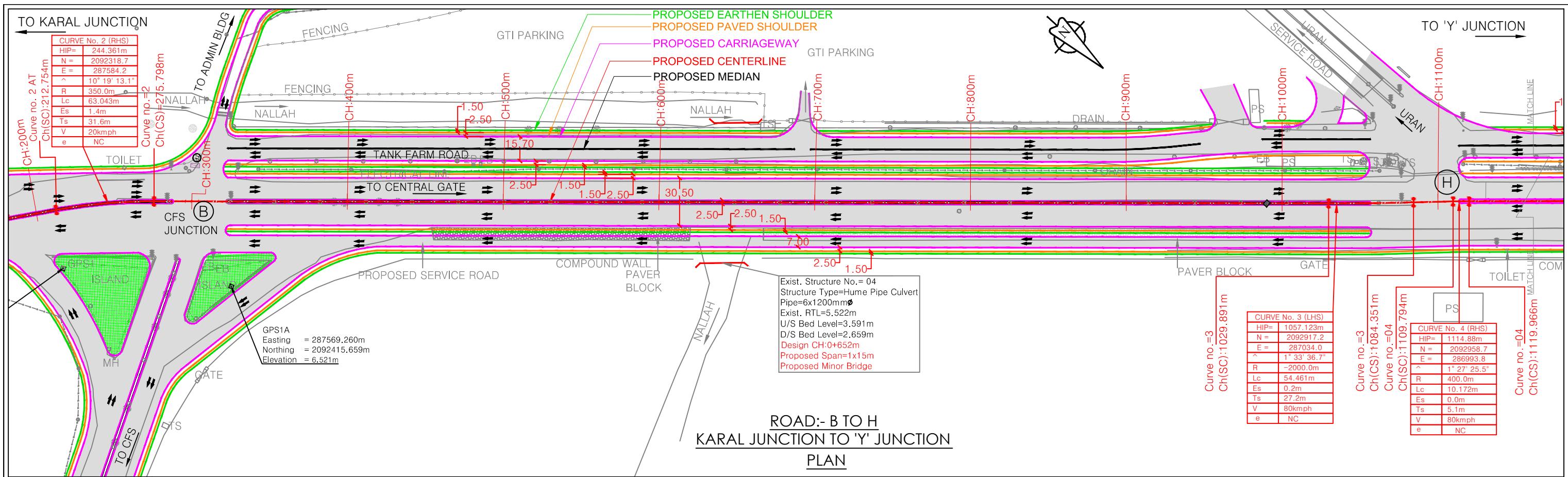
NOTES: 1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.							CONSULTANT:	CLIENT:	PROJECT:-
							 QMAX TECHNO CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
	R0	FEB-2020	FOR REVIEW				NAME	SIGNATURE	
							DRAWN BY:-	CHECKED BY:-	TITLE :- LOCATION PLAN
	NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DESIGNED BY:-	APPROVED BY:-	DRG.NO:DPR_JNPT_QTCPL_LP_01
							CHECKED BY:-	DATE:-	SCALE: H=1:2500 ISSUE: V=1:250 R0 DATE: FEB-2020

# **PLAN & PROFILE**

TO KARAL JUNCTION

TO 'Y' JUNCTION





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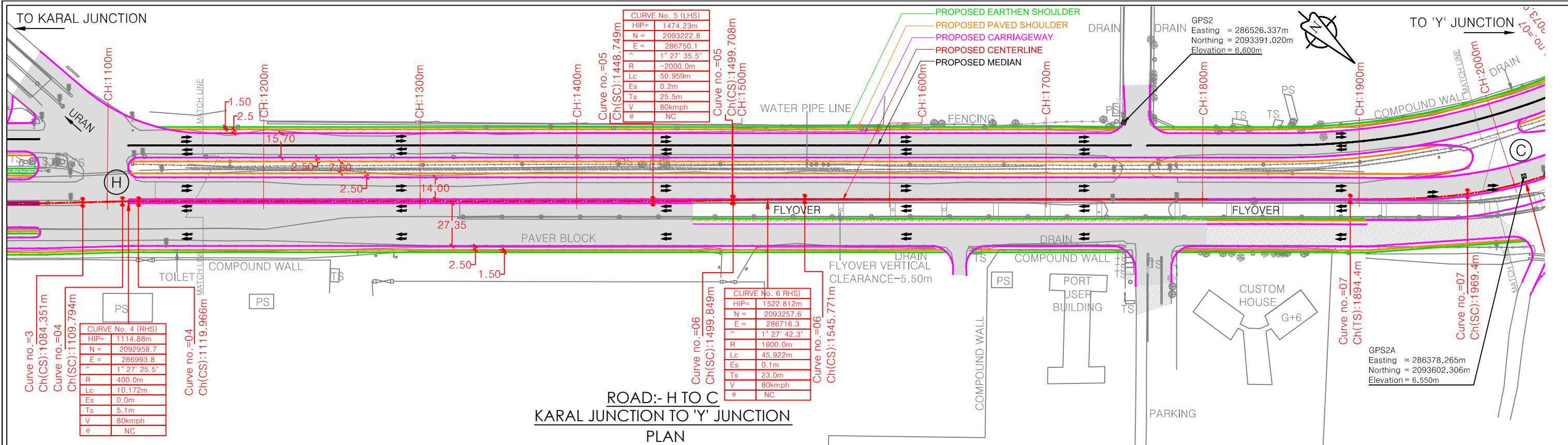
CLIENT:	
VT. LTD. Plot No. 20, ai 400 614	 <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021

PROJECT:-	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
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R0	FEB-2020	FOR REVIEW	
NO.	DATE	REVISION/PURPOSE	DRAWN

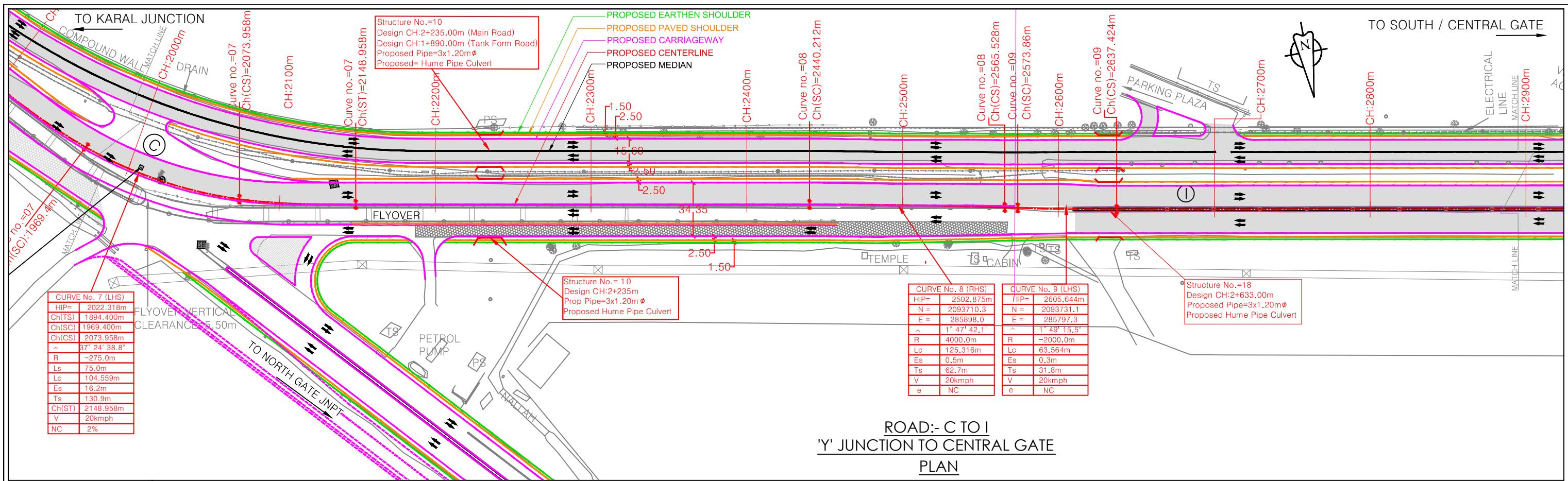
	NAME	SIGNATURE		NAME	SIGNATURE
DRAWN BY:-	MVP		CHECKED BY:-		
DESIGNED BY:-	MVJ		APPROVED BY:-		
CHECKED BY:-	AMS		DATE:-		

TITLE :- PLAN & PROFILE (ROAD B TO H) FROM CH:300m TO CH:1100m		PURPOSE OF DRAWING FOR PLANNING	
DRG.NO:DPR_JNPT_QTCPL_P&P_01/02		SCALE : H:1:2500 V:1:250	ISSUE R0
DATE: FEB-2020			



**ROAD:- H TO C**  
**KARAL JUNCTION TO 'Y' JUNCTION**  
**PLAN**

		DESIGN ROAD TOP LEVELS (m)										EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)										DEPTH OF CUT (-) / FILL (+)										PROP.HORIZONTAL CURVE DETAILS										PROP.VERTICAL GRADIENT (%)										SUPERELEVATION(%)										DESIGN CHAINAGE (m)																																																																																																																																																																											
Datum=4		5.943										5.943										5.873										5.873										5.873																																																																																																																																																																																															
DESIGN ROAD TOP LEVELS (m)		5.885										5.869										5.541										5.541										5.541																																																																																																																																																																																															
DESIGN ROAD TOP LEVELS (m) RHS (MAINTAINED EXIT LEVELS)		5.886										5.519										5.511										5.511										5.511																																																																																																																																																																																															
EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)		5.888										5.728										5.615										5.615										5.615																																																																																																																																																																																															
DEPTH OF CUT (-) / FILL (+)		0.581										0.663										0.702										0.702										0.702																																																																																																																																																																																															
PROP.HORIZONTAL CURVE DETAILS		R=400m el=10.72m .442m										L=328.783m										R=2000m L=50.959m										R=1800m L=45.922m										L=348.628m										A=20625.000 L=75.000m																																																																																																																																																																																					
PROP.VERTICAL GRADIENT (%)																																																																																																																																																																																																																																									
SUPERELEVATION(%)		LHS=										RHS=																																																																																																																																																																																																																													
DESIGN CHAINAGE (m)		1100-										1120-										1140-										1160-										1180-										1200-										1220-										1240-										1260-										1280-										1300-										1320-										1340-										1360-										1380-										1400-										1420-										1440-										1460-										1480-										1500-										1520-										1540-										1560-	



ROAD:- C TO I  
'Y' JUNCTION TO CENTRAL GATE  
PLAN

Datum=4

DESIGN ROAD TOP LEVELS (m)	-0.006	6.050	6.044																																										
EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)	-0.058	6.053	5.995																																										
DEPTH OF CUT (-) / FILL (+)	-0.104	6.050	5.946																																										
PROP.HORIZONTAL CURVE DETAILS	R=-275.000m L=104.559m	A=20625.000 L=75.000m																																											
PROP.VERTICAL GRADIENT (%)	L=104.215m G=-0.244	R=8353.870m L=100.000m	L=291.254m																																										
SUPERELEVATION(%) LHS= RHS=	Q=2%																																												
DESIGN CHAINAGE (m)	2000	2020	2040	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360	2380	2400	2420	2440	2460	2480	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700	2720	2740	2760	2780	2800	2820	2840	2860	2880
	2000	2020	2040	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360	2380	2400	2420	2440	2460	2480	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700	2720	2740	2760	2780	2800	2820	2840	2860	2880
	2000	2020	2040	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360	2380	2400	2420	2440	2460	2480	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700	2720	2740	2760	2780	2800	2820	2840	2860	2880
	2000	2020	2040	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360	2380	2400	2420	2440	2460	2480	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700	2720	2740	2760	2780	2800	2820	2840	2860	2880

## NOTES:

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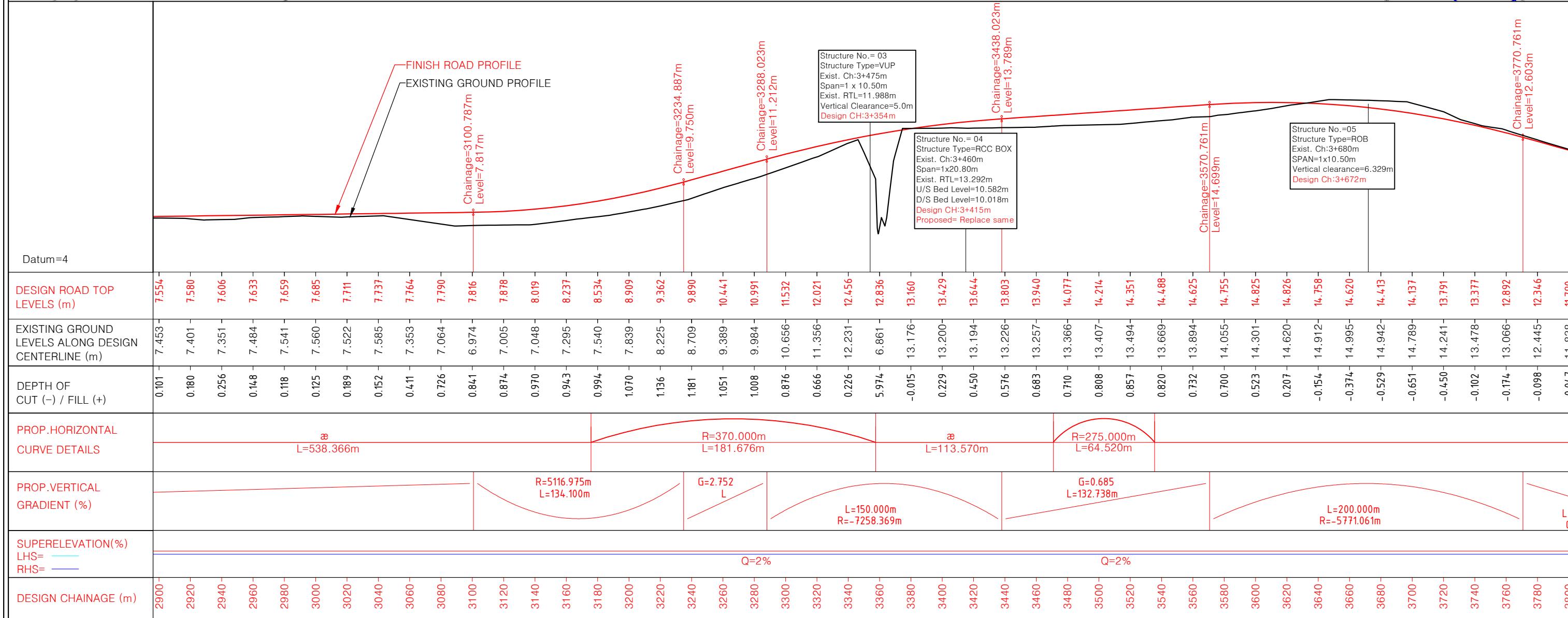
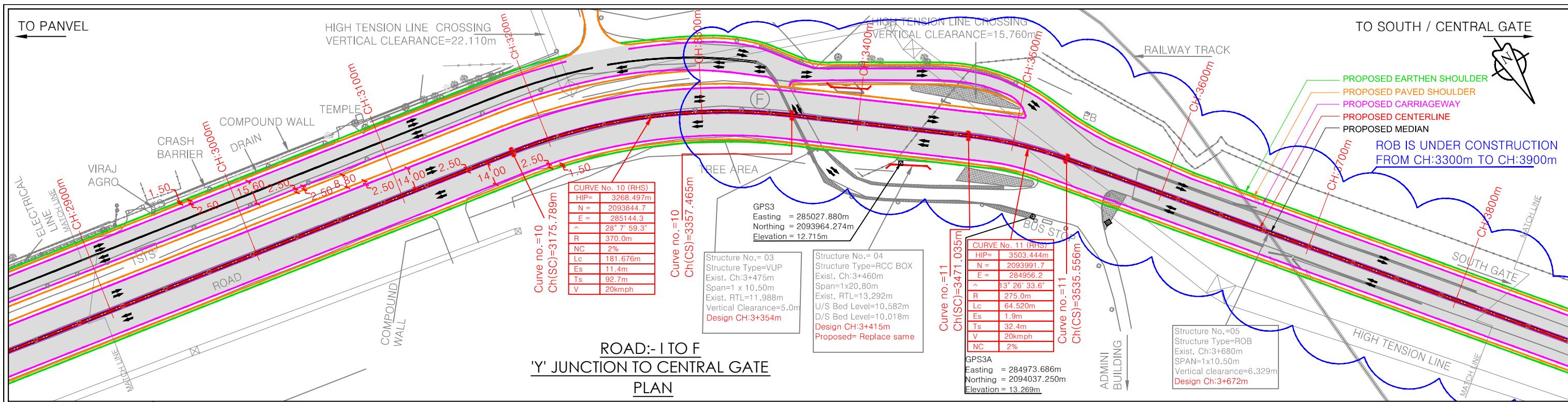
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 Sector - 11, CBD Belapur, Navi Mumbai  
 Email : qmaxconsultants@gmail.com

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td><td style="width: 85%; text-align: center; padding: 5px;"> <b>CLIENT:</b>    <b>JAWAHARLAL NEHRU PORT TRUST</b>            1107, Raheja centre, FPJ Marg,            Nariman Point, Mumbai-400021         </td></tr> </table>		<b>CLIENT:</b>  <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021
	<b>CLIENT:</b>  <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021		

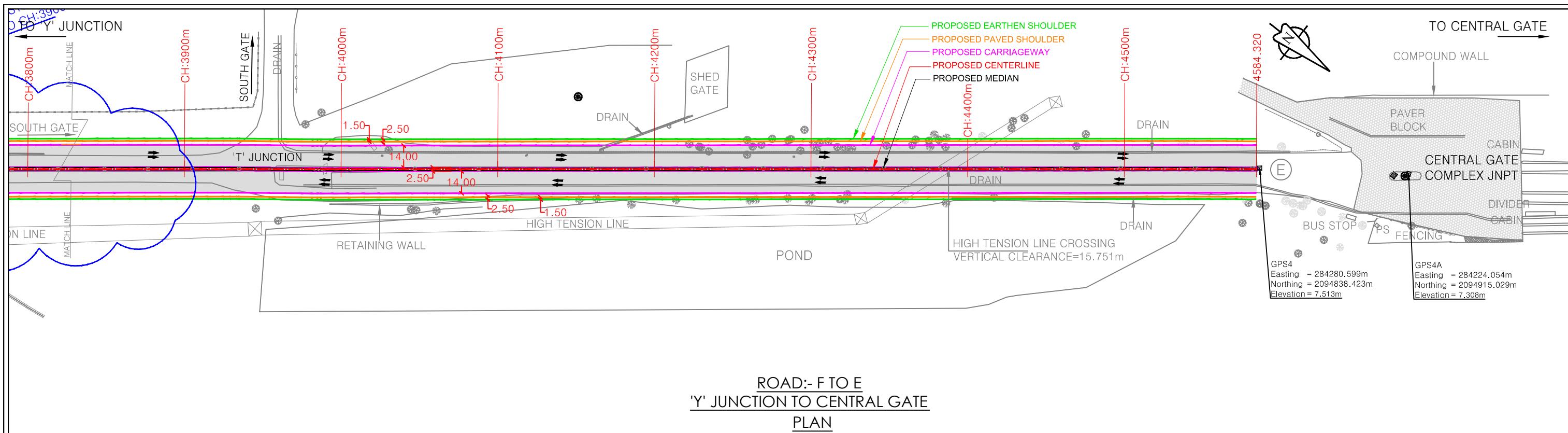
<b>PROJECT:-</b>
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

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NO.	DATE	REVISION/PURPOSE	DRAWN
			CHECKED APPROVED

	NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PLAN & PROFILE (ROAD C TO I) FROM CH:1980m TO CH:2860m	PURPOSE OF DRAWING FOR PLANNING
DRAWN BY:-	MVP	CHECKED BY:-			DRG.NO:DPR_JNPT_QTCPPL_P&P_01/04	SCALE: H=1:2500   ISSUE
DESIGNED BY:-	MVJ	APPROVED BY:-			DATE: FEB-2020	V=1:250   P0
CHECKED BY:-	AMS	DATE:-				



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ROAD:- F TO E  
'Y' JUNCTION TO CENTRAL GATE  
PLAN

The figure consists of two main parts: a profile diagram and a table of data.

**Profile Diagram:**

- Datum:** 4
- Design Road Top Levels (m):** A red line representing the designed road surface, starting at Chainage 3800m (Level 11.790) and ending at Chainage 4580m (Level 7.629).
- Existing Ground Levels along Design Centerline (m):** A black line representing the current ground level, starting at Chainage 3800m (Level 11.838) and ending at Chainage 4580m (Level 7.629).
- Depth of Cut (-) / Fill (+):** The vertical difference between the design and existing levels, ranging from -0.047m to 0.223m.
- Proposed Horizontal Curve Details:** An arc with radius R=5608.569m and length L=150.000m, centered at approximately Chainage 3940m.
- Proposed Vertical Gradient (%):** A curve with L=78.732m and G=-2.781 at the start, transitioning to L=584.827m and G=-0.106 at the end.
- Superelevation (%):** LHS= (blue line) and RHS= (red line), both set to Q=2%.
- Finish Road Profile:** A red line indicating the final road profile after construction.
- Existing Ground Profile:** A black line indicating the original ground surface.

**Table Data:**

DESIGN CHAINAGE (m)	DESIGN ROAD TOP LEVELS (m)	EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)	DEPTH OF CUT (-) / FILL (+)
3800	11.790	11.838	-0.047
3820	11.234	11.227	0.007
3840	10.678	10.665	0.014
3860	10.132	10.067	0.065
3880	9.649	9.472	0.176
3900	9.237	8.803	0.435
3920	8.897	8.390	0.507
3940	8.628	8.162	0.466
3960	8.430	7.476	0.955
3980	8.304	7.332	0.972
4000	8.249	7.333	0.916
4020	8.227	7.334	0.893
4040	8.206	7.336	0.870
4060	8.185	7.337	0.848
4080	8.164	7.339	0.825
4100	8.143	7.340	0.803
4120	8.121	7.341	0.780
4140	8.100	7.343	0.757
4160	8.079	7.344	0.735
4180	8.058	7.345	0.713
4200	8.037	7.347	0.690
4220	8.015	7.348	0.667
4240	7.994	7.350	0.644
4260	7.973	7.351	0.622
4280	7.952	7.352	0.600
4300	7.931	7.354	0.577
4320	7.909	7.355	0.554
4340	7.888	7.357	0.531
4360	7.867	7.358	0.509
4380	7.846	7.361	0.485
4400	7.825	7.392	0.432
4420	7.803	7.371	0.433
4440	7.782	7.371	0.411
4460	7.761	7.373	0.387
4480	7.740	7.389	0.350
4500	7.719	7.365	0.354
4520	7.697	7.332	0.365
4540	7.676	7.418	0.258
4560	7.655	7.419	0.236
4580	7.629	7.421	0.223

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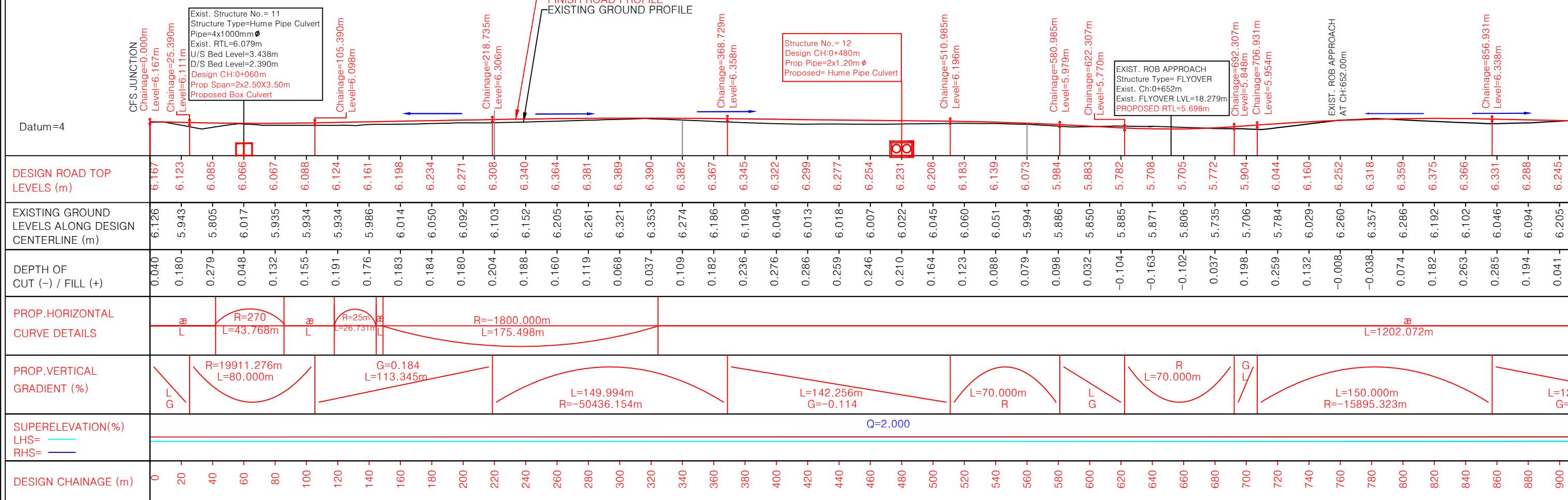
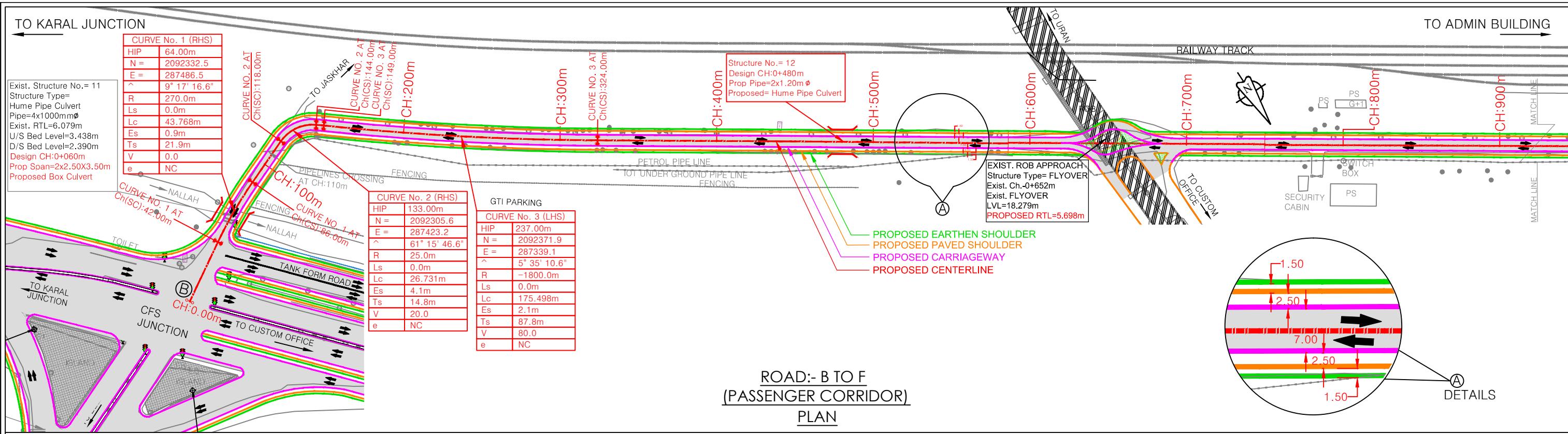
**PROJECT:-** Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

**TITLE :- PLAN & PROFILE (ROAD F TO E)  
FROM CH:3800m TO CH:4584.320m**

**PURPOSE OF DRAWING  
FOR PLANNING**

**DRG.NO:DPR\_JNPT\_QTCPL\_P&P\_01/06**

**SCALE:H=1:2500 V=1:250 ISSUE RO DATE: FEB-2020**



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### L - SECTION

**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
107-308, 3rd Floor, Foundation Tower, Plot No. 20,  
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Nariman Point, Mumbai-400021

**PROJECT:-**  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

NO. DATE REVISION/PURPOSE DRAWN CHECKED APPROVED

NAME SIGNATURE  
DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
DATE:-

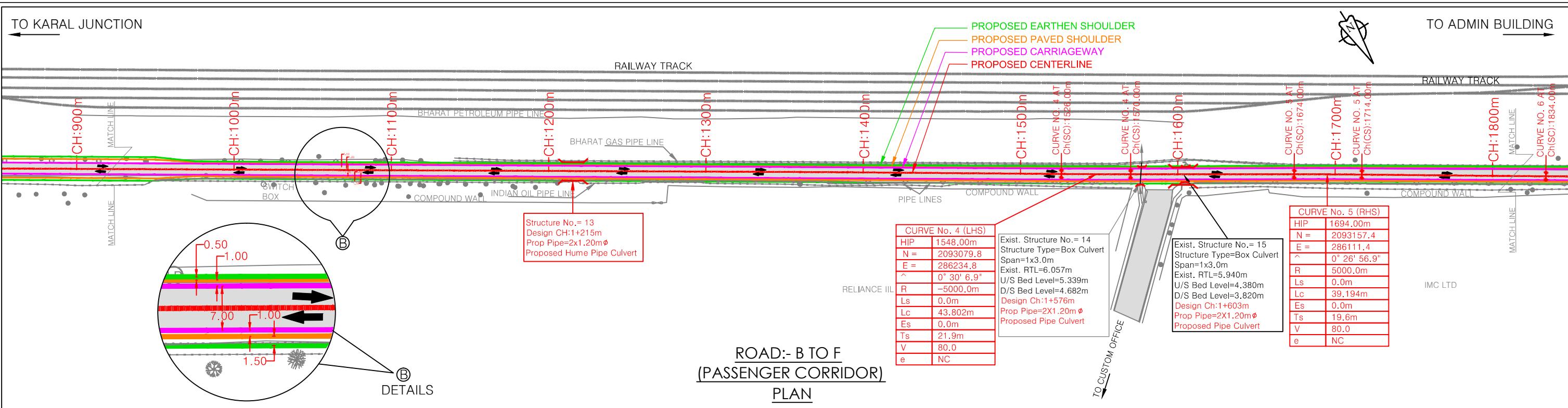
NAME SIGNATURE  
DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
DATE:-

**TITLE :- PLAN & PROFILE (ROAD B TO F)  
FROM CH:0.00m TO CH:900.00m**

**PURPOSE OF DRAWING FOR PLANNING**

**DRG.NO:DPR\_JNPT\_QTCPL\_P&P\_02/01**

**SCALE: H=1:2500 ISSUE R0**



		FINISH ROAD PROFILE EXISTING GROUND PROFILE																																													
Datum=4		6.205	6.245	6.202	6.146	6.159	5.990	6.116	5.887	5.887	6.073	5.924	6.044	6.044	6.063	6.063	6.078	6.078	6.125m																												
DESIGN ROAD TOP LEVELS (m)		0.041	0.055	0.169	0.229	0.149	0.095	0.118	0.124	0.124	0.103	0.002	6.105	6.041	6.063	6.063	6.078m	6.078m	Level=6.125m																												
EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)		0.041	0.055	0.169	0.229	0.149	0.095	0.118	0.124	0.124	0.103	0.002	6.105	6.041	6.063	6.063	6.078m	6.078m	Level=6.125m																												
DEPTH OF CUT (-) / FILL (+)		0.041	0.055	0.169	0.229	0.149	0.095	0.118	0.124	0.124	0.103	0.002	6.105	6.041	6.063	6.063	6.078m	6.078m	Level=6.125m																												
PROP.HORIZONTAL CURVE DETAILS		L=1202.072m $\alpha$																																													
PROP.VERTICAL GRADIENT (%)		$=121.142m$ $G=-0.216$																																													
SUPERELEVATION(%) LHS= RHS=		Q=2.000																																													
DESIGN CHAINAGE (m)		900	920	940	960	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260	1280	1300	1320	1340	1360	1380	1400	1420	1440	1460	1480	1500	1520	1540	1560	1580	1600	1620	1640	1660	1680	1700	1720	1740	1760	1780	1800

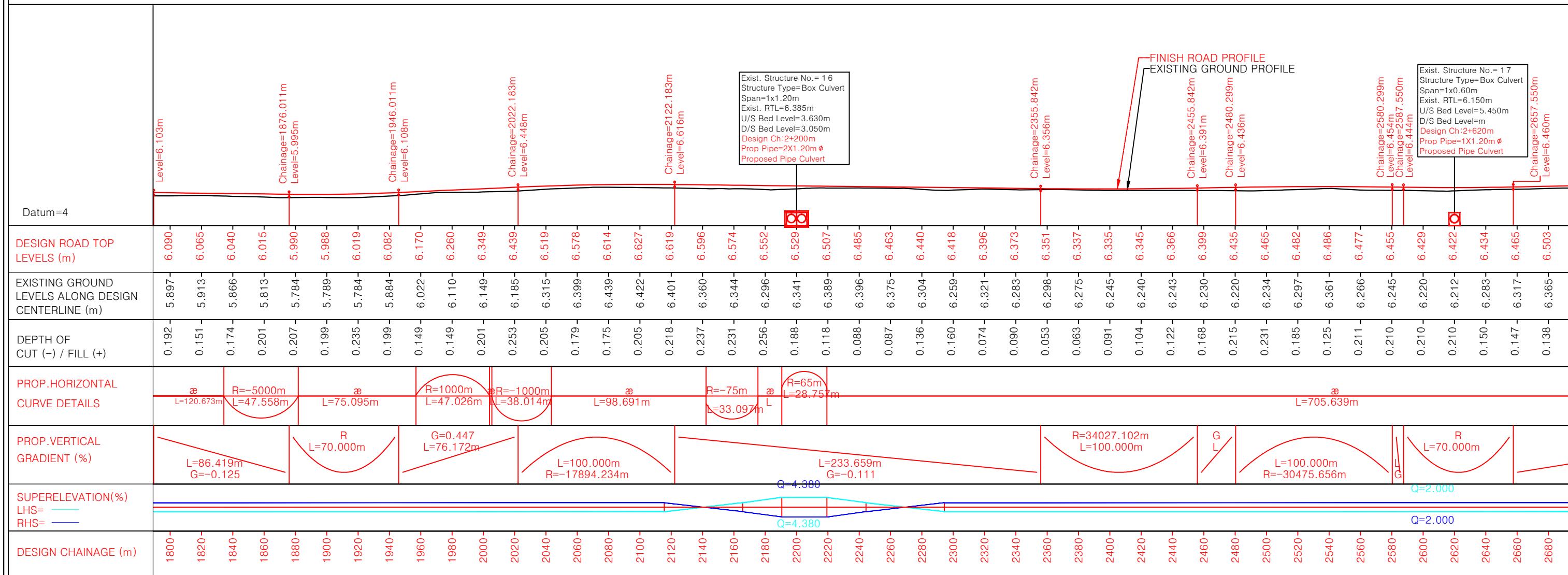
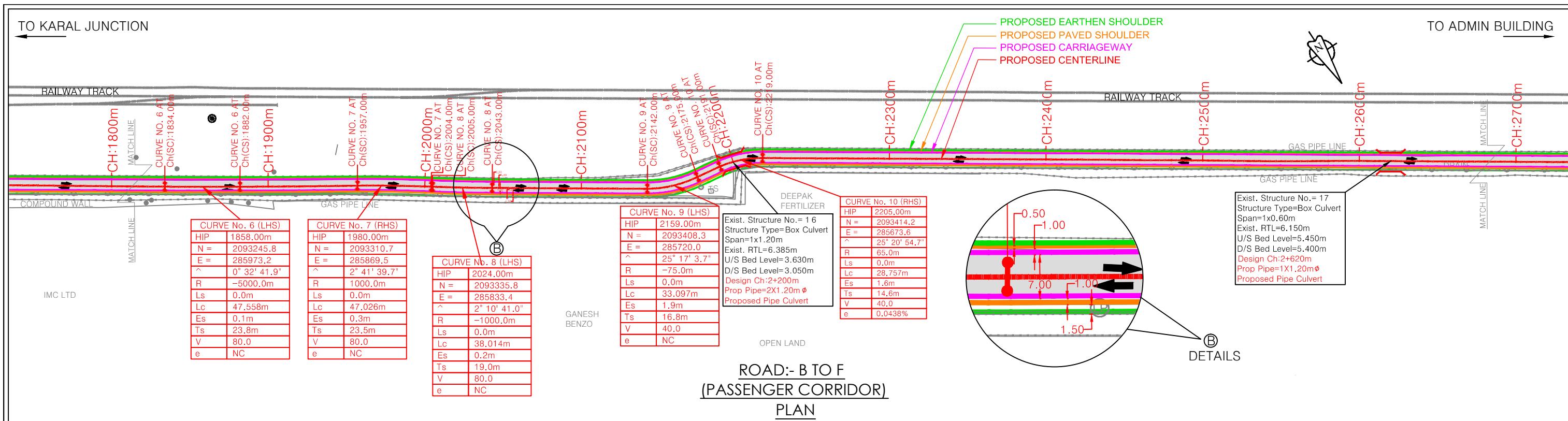
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RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

CONSULTANT:	CLIENT:			PROJECT:-		
NAME	SIGNATURE	NAME	SIGNATURE	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.		
	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021				
DRAWN BY:-		CHECKED BY:-				
DESIGNED BY:-		APPROVED BY:-				
CHECKED BY:-		DATE:-				

SCALE: H=1:2500 ISSUE: R0

### L - SECTION



## L - SECTION

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Sector - 11, CBD Belapur, Navi Mumbai  
Email : qmaxconsultants@gmail.com

<p><b>ANTS PVT. LTD.</b> Tower, Plot No. 20, Mumbai 400 614 .com</p>	<p><b>CLIENT:</b></p>  <p>JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021</p>
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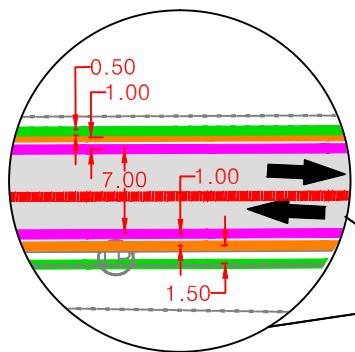
PROJECT

on of roads and drainage system outside custom at Jawaharlal Nehru Port Trust.

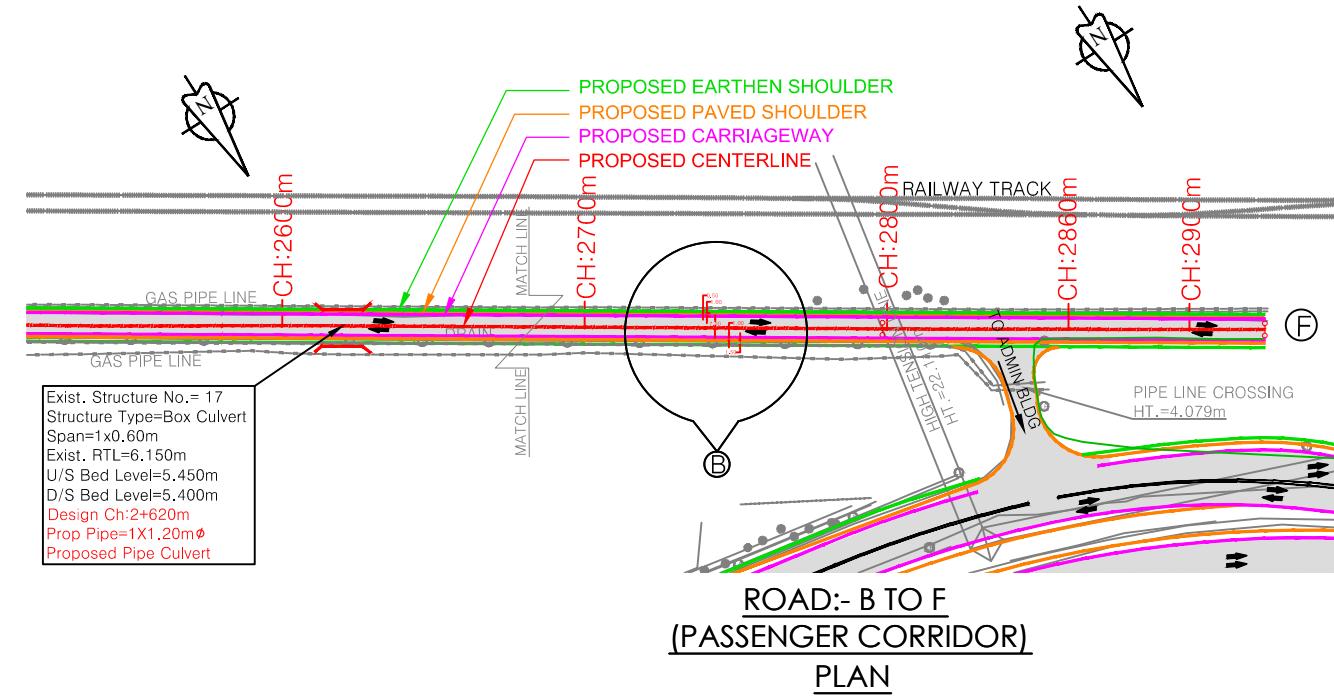
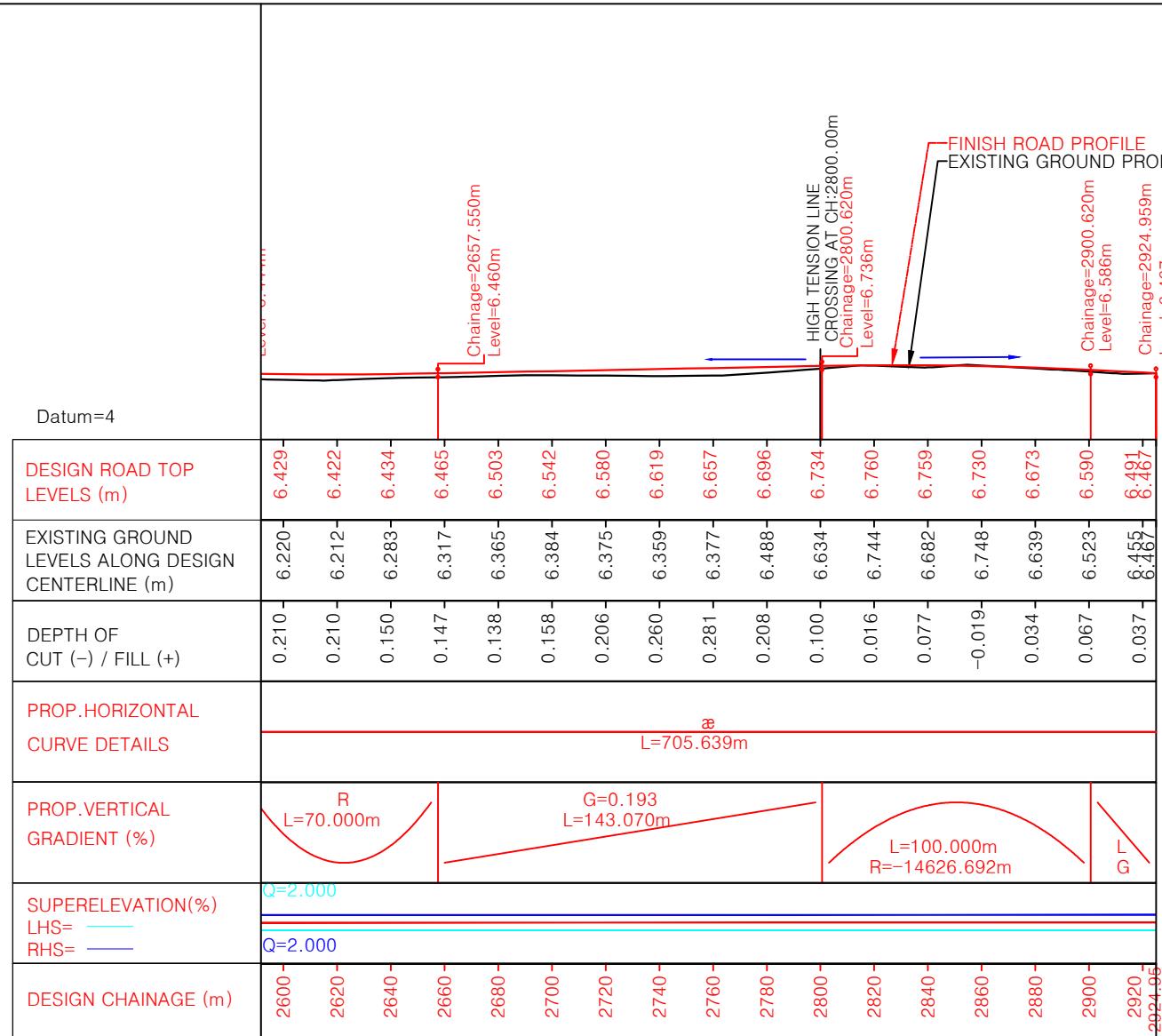
1 & PROFILE (ROAD B TO F)  
H:1800.00m TO CH:2680.00m  
JNPT\_QTCP1\_P&P\_02/03  
20  
PURPOSE OF DRAWING  
FOR PLANNING  
SCALE: H=1:2500 V=1:250  
ISSUE R0

TO KARAL JUNCTION

TO ADMIN BUILDING



DETAILS

ROAD:- B TO F  
(PASSENGER CORRIDOR)  
PLAN

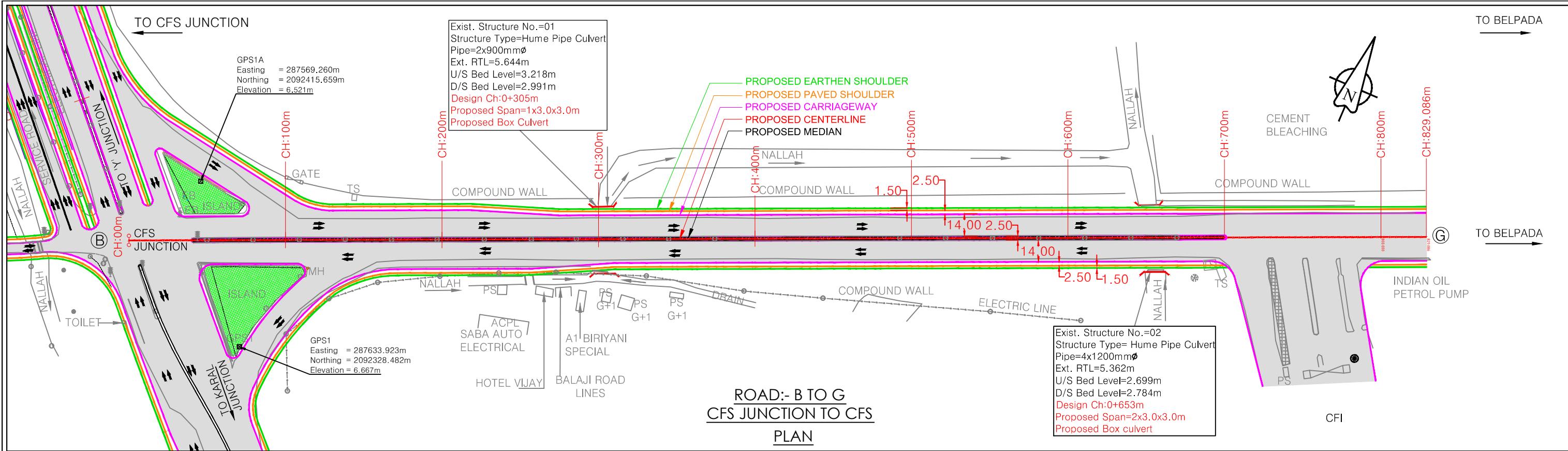
## L - SECTION

NOTES:					
1. All dimensions and levels are in meters unless otherwise specified.					
2. Any discrepancy in drawing please bring it to notice.					
3. All levels are w.r.t. GTS bench mark.					
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.					

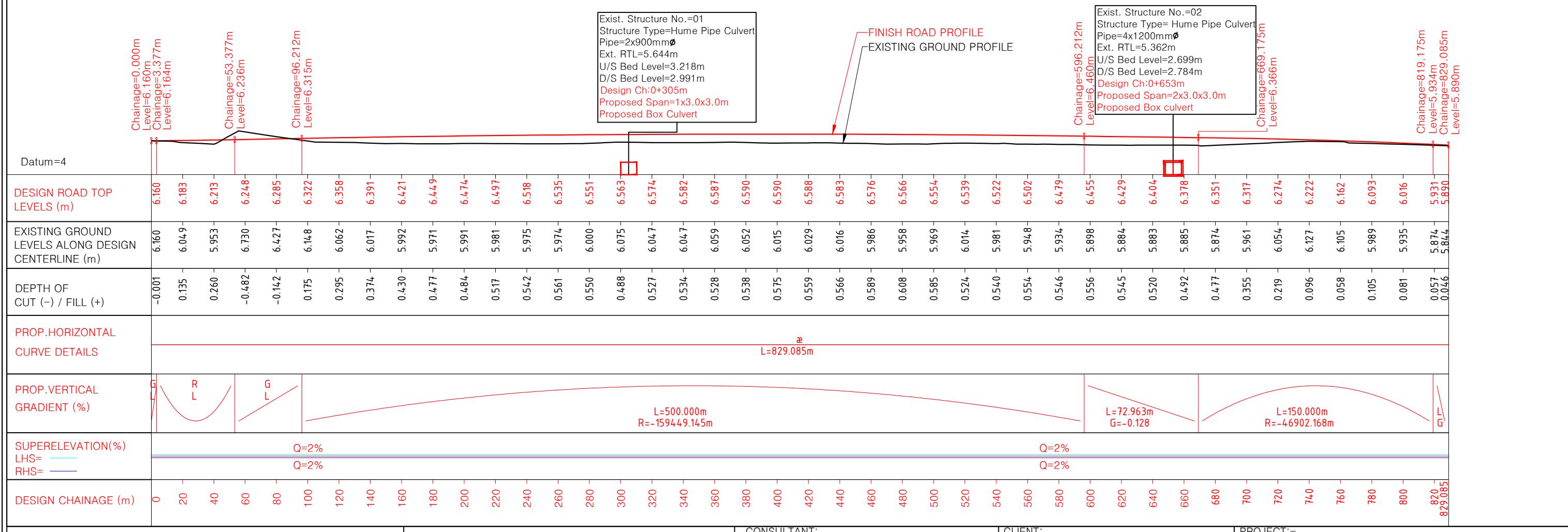
RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

CONSULTANT:	CLIENT:		PROJECT:-
QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021		Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
DRAWN BY:-	NAME	SIGNATURE	
DESIGNED BY:-			CHECKED BY:-
CHECKED BY:-			APPROVED BY:-

TITLE :- PLAN & PROFILE (ROAD B TO F) FROM CH:2680.00m TO CH:2924.959m	PURPOSE OF DRAWING FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_P&P_02/04	SCALE:H=1:2500 ISSUE V=1:250 R0
DATE: FEB-2020	



**ROAD:- B TO G**  
**CFS JUNCTION TO CFS**  
**PLAN**



**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email : qmaxconsultants@gmail.com

**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai - 400021

**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.  
**TITLE :- PLAN & PROFILE (ROAD B TO G)**  
**FROM CH:0.00m TO CH:829.086m**  
**PURPOSE OF DRAWING**  
**FOR PLANNING**  
**DRG.NO:DPR\_JNPT\_QTCPL\_P&P\_03/01**  
**SCALE: H=1:2500 ISSUE**  
**V=1:250 R0**

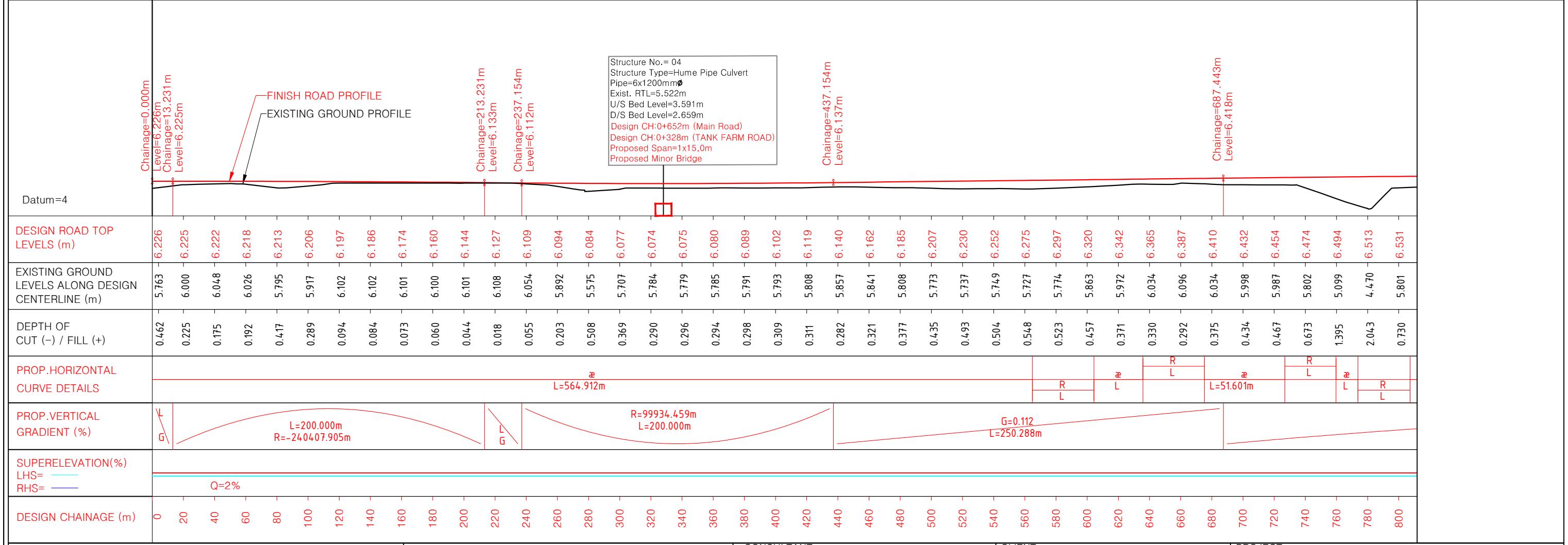
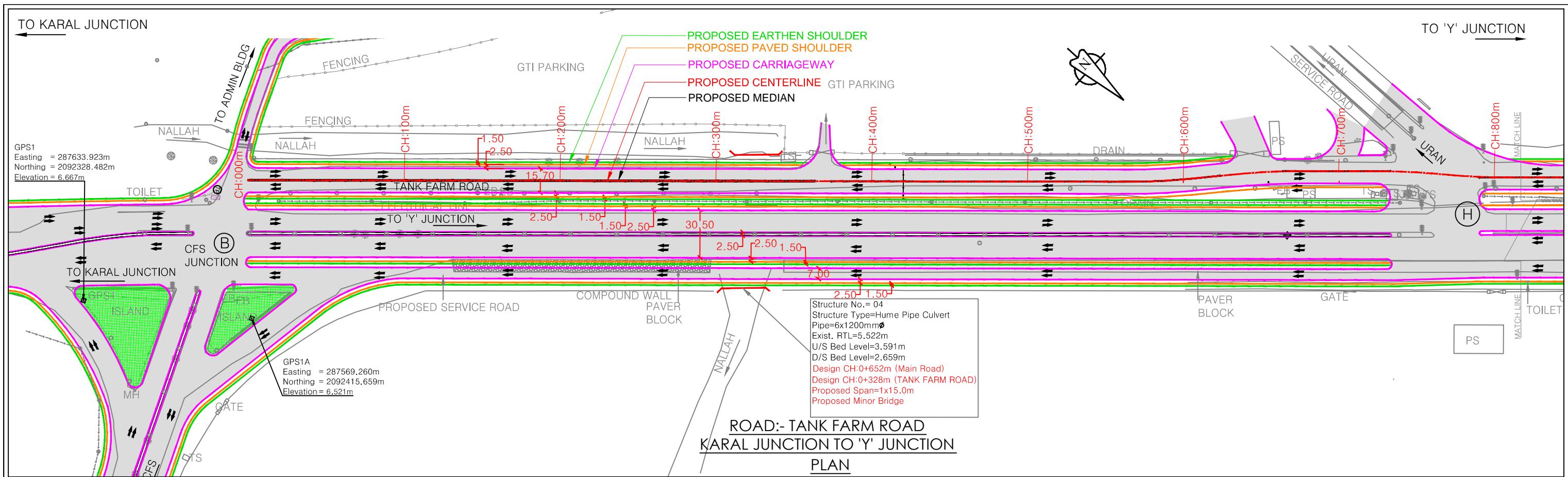
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	AJ	
CHECKED BY:-	AMS	

CHECKED BY:-	NAME	SIGNATURE
APPROVED BY:-		
DATE:-		

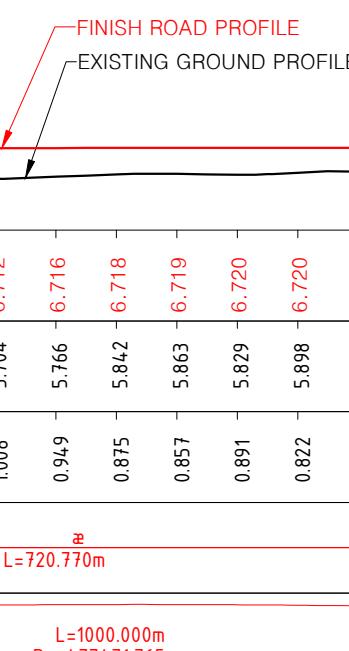
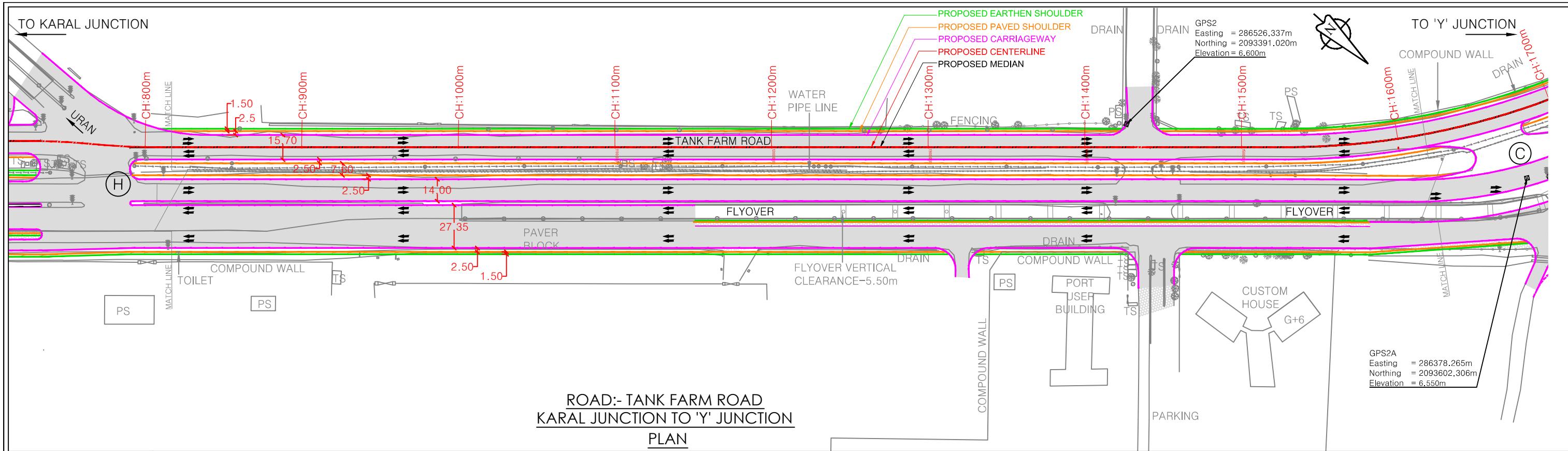
CHECKED BY:- AMS DATE:-

CHECKED BY:- NAME SIGNATURE APPROVED BY:- DATE:-

R0 FEB-2020 FOR REVIEW  
 NO. DATE REVISION/PURPOSE DRAWN CHECKED APPROVED



NOTES: 1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						CONSULTANT:  QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	CLIENT:  JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021			PROJECT:-		
	R0	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED	NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PLAN & PROFILE (TANK FARM ROAD) FROM CH:000m TO CH:800m	
	NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DRAWN BY:-	MVP	CHECKED BY:-	APPROVED BY:-	PURPOSE OF DRAWING FOR PLANNING	
							DESIGNED BY:-	MVJ	APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_P&P_04/01	
							CHECKED BY:-	AMS	DATE:-		SCALE: H=1:2500 ISSUE V=1:250 R0 DATE: FEB-2020	



Datum=4

DESIGN ROAD TOP LEVELS (m)		EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)		DEPTH OF CUT (-) / FILL (+)		PROP.HORIZONTAL CURVE DETAILS		PROP.VERTICAL GRADIENT (%)		SUPERELEVATION(%)		DESIGN CHAINAGE (m)	
800	-	0.730	5.801	6.531	-					LHS=0%	RHS=2%		
820	-	0.680	5.868	6.549	-								
840	-	0.655	5.920	6.565	-								
860	-	0.661	5.844	6.581	-								
880	-	0.740	5.856	6.596	-								
900	-	0.765	5.844	6.610	-								
920	-	0.826	5.796	6.623	-								
940	-	0.888	5.748	6.635	-								
960	-	0.948	5.698	6.647	-								
980	-	0.958	5.700	6.657	-								
1000	-	0.909	5.759	6.667	-								
1020	-	0.957	5.779	6.676	-								
1040	-	0.962	5.723	6.684	-								
1060	-	0.933	5.758	6.692	-								
1080	-	0.904	5.794	6.698	-								
1100	-	0.921	5.782	6.704	-								
1120	-	0.965	5.743	6.708	-								
1140	-	1.008	5.704	6.712	-								
1160	-	0.949	5.766	6.716	-								
1180	-	0.875	5.842	6.718	-								
1200	-	0.857	5.863	6.719	-								
1220	-	0.891	5.829	6.720	-								
1240	-	0.822	5.898	6.720	-								
1260	-	0.782	5.936	6.719	-								
1280	-	0.774	5.943	6.717	-								
1300	-	0.732	5.982	6.714	-								
1320	-	0.710	6.001	6.710	-								
1340	-	0.771	5.934	6.706	-								
1360	-	0.796	5.905	6.701	-								
1380	-	0.720	5.974	6.694	-								
1400	-	0.631	6.056	6.688	-								
1420	-	0.474	6.206	6.680	-								
1440	-	0.408	6.263	6.671	-								
1460	-	0.544	6.118	6.662	-								
1480	-	0.566	6.085	6.651	-								
1500	-	0.621	6.019	6.640	-								
1520	-	0.583	6.046	6.628	-								
1540	-	0.597	6.019	6.616	-								
1560	-	0.587	6.014	6.602	-								
1580	-	0.589	6.001	6.587	-								
1600	-	0.589	5.983	6.572	-								

FINISH ROAD PROFILE  
EXISTING GROUND PROFILE

L=720.770m

L=1000.000m  
R=-4774.71765m

Q=2%

Datum=4

**NOTES:**

- NOTES:-

  1. All dimensions and levels are in meters unless otherwise specified.
  2. Any discrepancy in drawing please bring it to notice.
  3. All levels are w.r.t. GTS bench mark.
  4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

CONSU

DRAWN BY  
DESIGNED BY  
CHECKED BY

TANT:  
MAX TECHNO-CONSULTANT  
7-308, 3rd Floor, Foundation T  
ector - 11, CBD Belapur, Navi M  
ail : qmaxconsultants@gmail.com

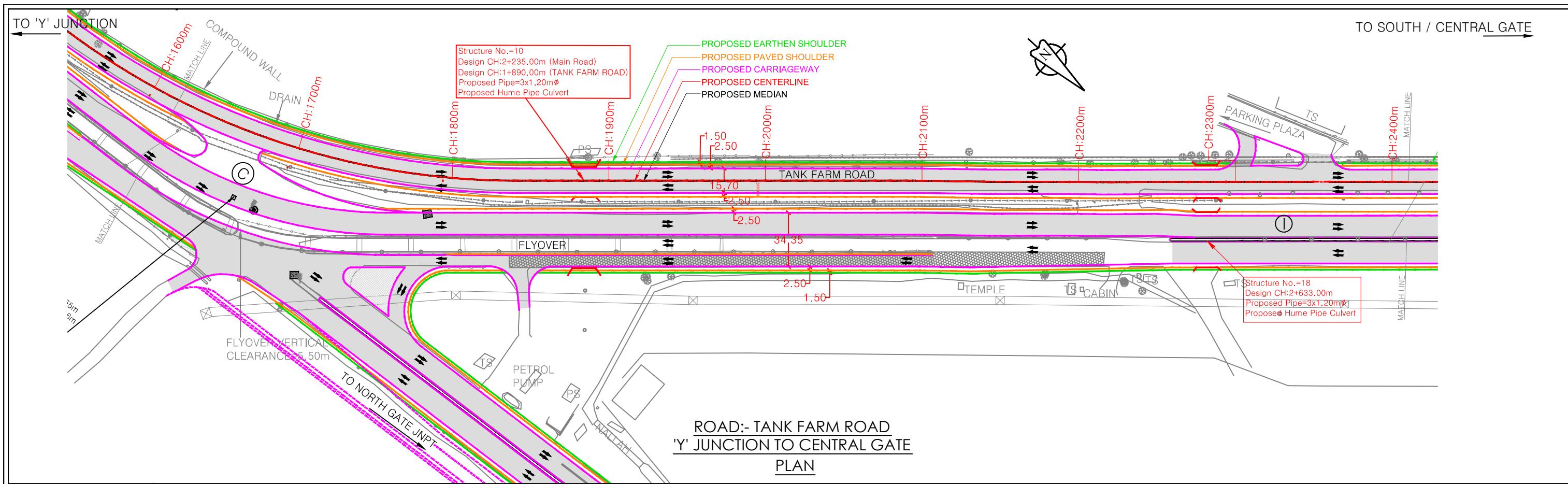
	NAME
-	MVP
BY:-	MVJ
Y:-	AMS

 <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	<b>CLIENT:</b> <b>S PVT. LTD.</b> 1001, Plot No. 20, Mumbai 400 614
---	--

SIGNATURE		NAME	SIGNATURE
	CHECKED BY:-		
	APPROVED BY:-		
	DATE:-		

PROJECT:-	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
-----------	---

TITLE :- PLAN & PROFILE (TANK FARM ROAD) FROM CH:800m TO CH:1600m	PURPOSE OF DRAWING FOR PLANNING
DRG.NO:DPR_JNPT_QTCP_L_P&P_04/02	SCALE:H=1:2500
DATE: FEB-2020	ISSUE: 'V=1:250 B0



Datum=4

DESIGN ROAD TOP LEVELS (m)	
EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)	5.983    6.572
DEPTH OF CUT (-) / FILL (+)	0.589    0.548    0.607    6.556 0.542    5.996    6.539 0.564    5.958    6.521 0.570    5.932    6.502 0.563    5.921    6.483 0.551    5.912    6.464 0.492    5.952    6.444 0.407    6.018    6.425 0.355    6.054    6.409 0.298    6.103    6.402 0.292    6.111    6.403 0.351    6.062    6.413 0.411    6.021    6.432 0.438    6.019    6.457 0.452    6.030    6.482 0.375    6.132    6.506 0.313    6.219    6.531 0.259    6.296    6.556 0.209    6.371    6.580 0.230    6.375    6.605 0.303    6.327    6.630 0.317    6.337    6.654 0.335    6.369    6.679 0.311    6.316    6.728 0.443    6.311    6.753 0.472    6.305    6.778 0.461    6.342    6.803 0.450    6.378    6.827 0.486    6.366    6.852 0.538    6.339    6.877 0.651    6.251    6.901 0.654    6.271    6.926 0.625    6.325    6.951 0.610    6.366    6.975 0.620    6.379    7.000 0.678    6.346    7.025 0.742    6.307    7.049 0.852    6.221    7.074 0.857    6.242    7.099
PROP.HORIZONTAL CURVE DETAILS	R=-480.000m L=313.475m
PROP.VERTICAL GRADIENT (%)	L=75.119m G=-0.097
SUPERELEVATION(%) LHS= RHS=	Q=2%
DESIGN CHAINAGE (m)	1600 1620 1640 1660 1680 1700 1720 1740 1760 1780 1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000 2020 2040 2060 2080 2100 2120 2140 2160 2180 2200 2220 2240 2260 2280 2300 2320 2340 2360 2380 2400

FINISH ROAD PROFILE  
EXISTING GROUND PROFILE

Structure No.=10  
Design CH:2+235.00m (Main Road)  
Design CH:1+890.00m (TANK FARM ROAD)  
Proposed Pipe=3x1.20m  $\phi$   
Proposed= Hume Pipe Culvert

Chainage=1687.443m  
Level=6.495m

Chainage=1762.562m  
Level=6.422m

Chainage=1862.562m  
Level=6.436m

R=45378.326m  
L=100.000m

G=0.123  
L=877.857m

## NOTES:

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**CONSULTANT:**  
 QMAX TECHNO-CONSULTANTS PVT. LTD  
307-308, 3rd Floor, Foundation Tower, Plot No.  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

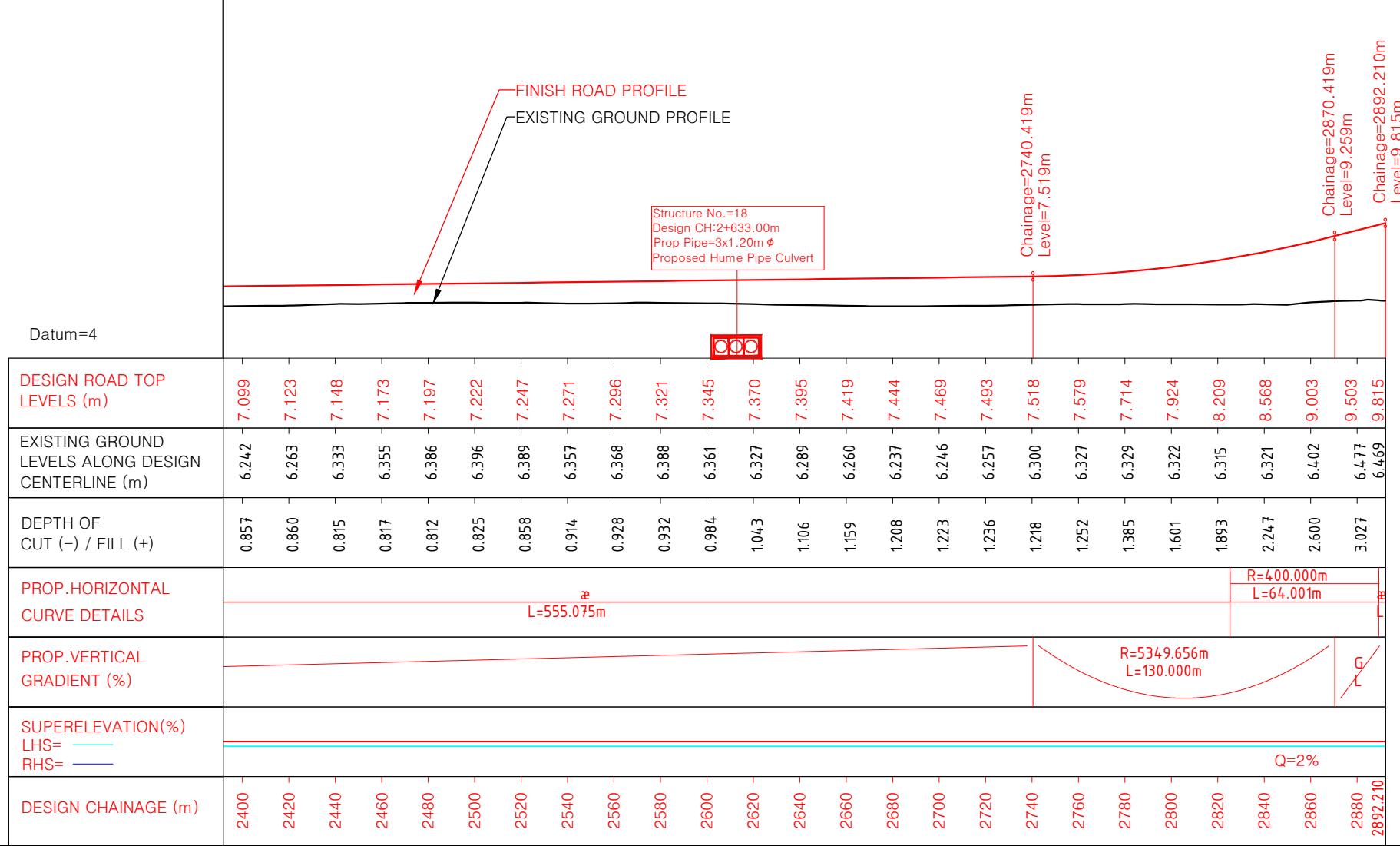
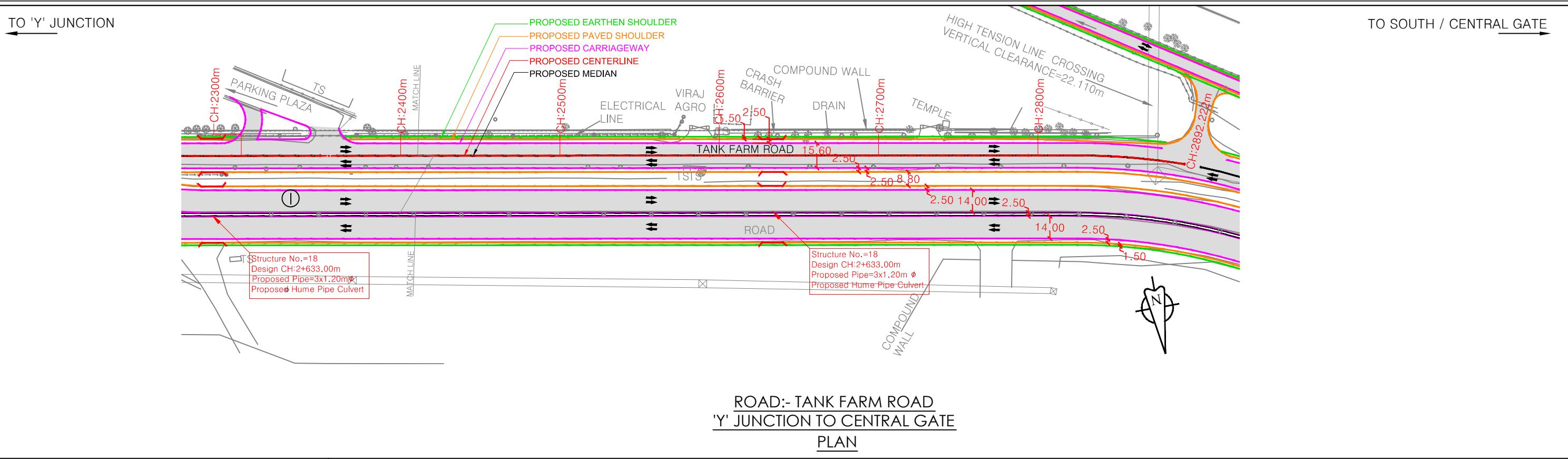


**JAWAHARLAL NEHRU PORT TRUST**  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

<b>PROJECT:-</b>	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
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R0	FEB-2020	FOR REVIEW	
NO.	DATE	REVISION/PURPOSE	DRAWN
			CHECKED APPROVED

	NAME	SIGNATURE		NAME	SIGNATURE	TITLE :- PLAN & PROFILE (TANK FARM ROAD) FROM CH:1600m TO CH:2400m	PURPOSE OF DRAWING FOR PLANNING
DRAWN BY:-	MVP		CHECKED BY:-				
DESIGNED BY:-	MVJ		APPROVED BY:-			DRG.NO:DPR_JNPT_QTCPL_P&P_04/03	
CHECKED BY:-	AMS		DATE:-			DATE: FEB-2020	SCALE: H=1:2500 ISSUE NO: R0 V=1:250



**NOTES:**  
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 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
RO	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
 QMAX TECHNO-CONSULTANTS PVT. LTD.  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email: qmaxconsultants@gmail.com

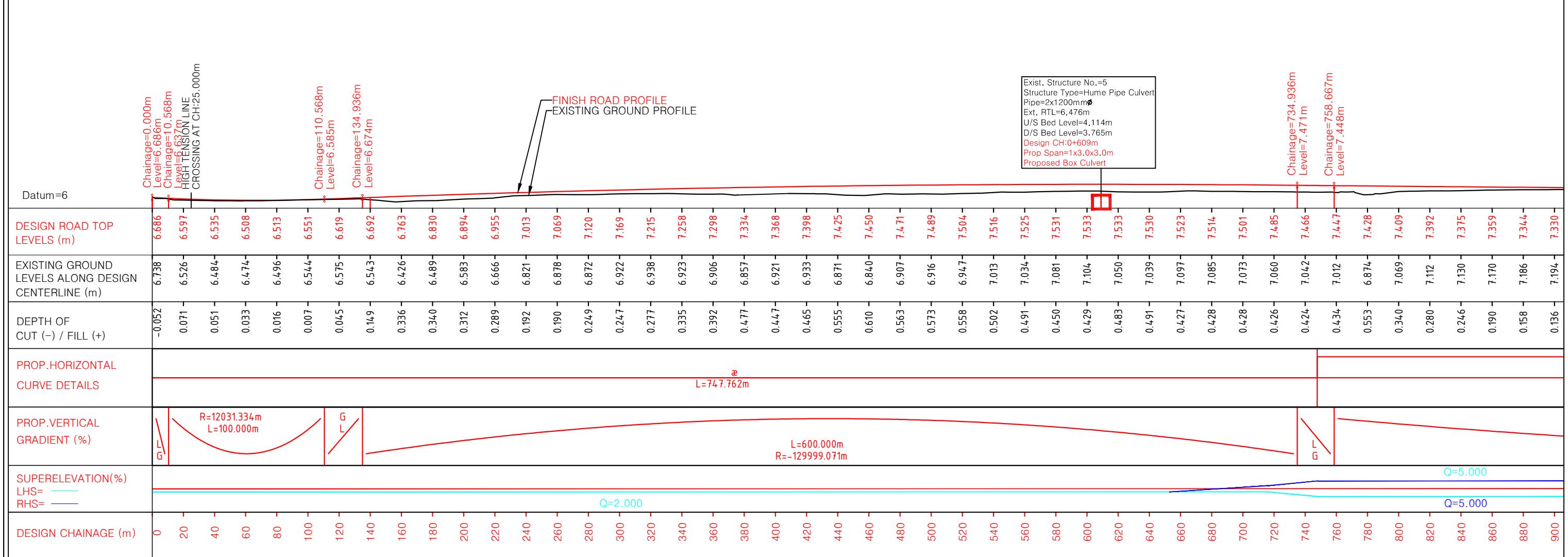
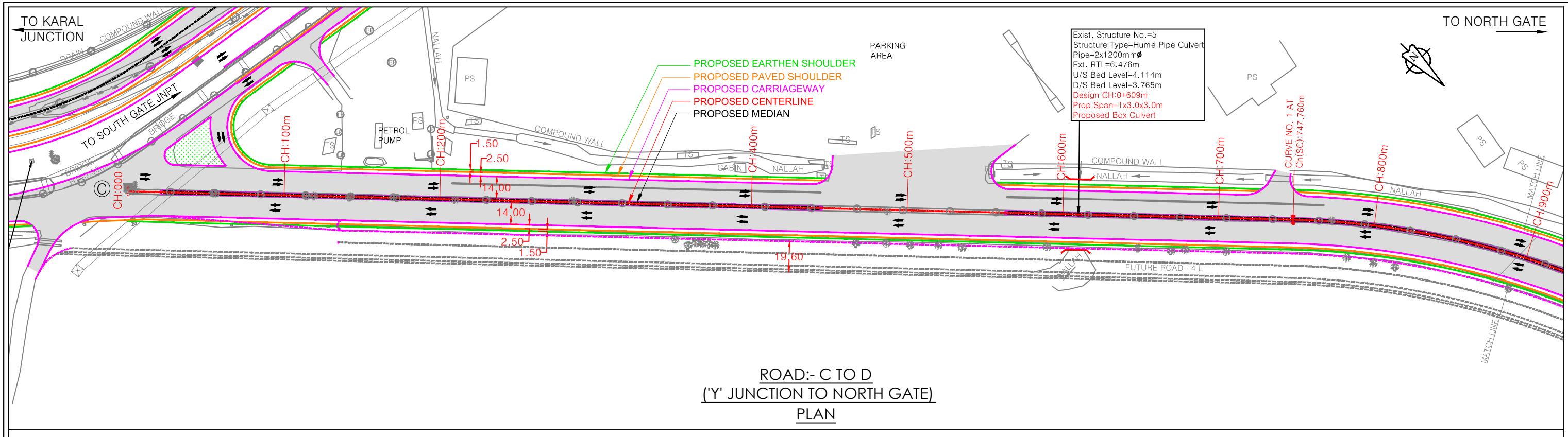
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	NAME	SIGNATURE
MVJ		
CHECKED BY:-	NAME	SIGNATURE
AMS		

**CLIENT:**  
 JAWAHARLAL NEHRU PORT TRUST  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai - 400021

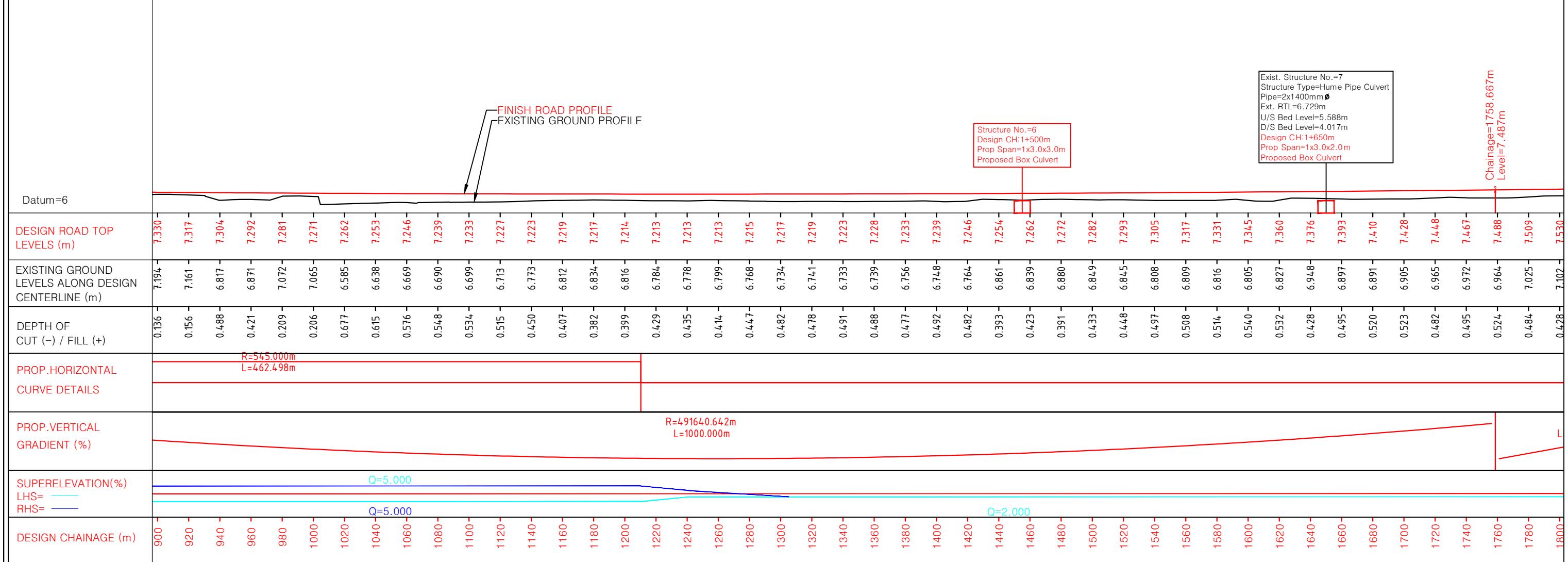
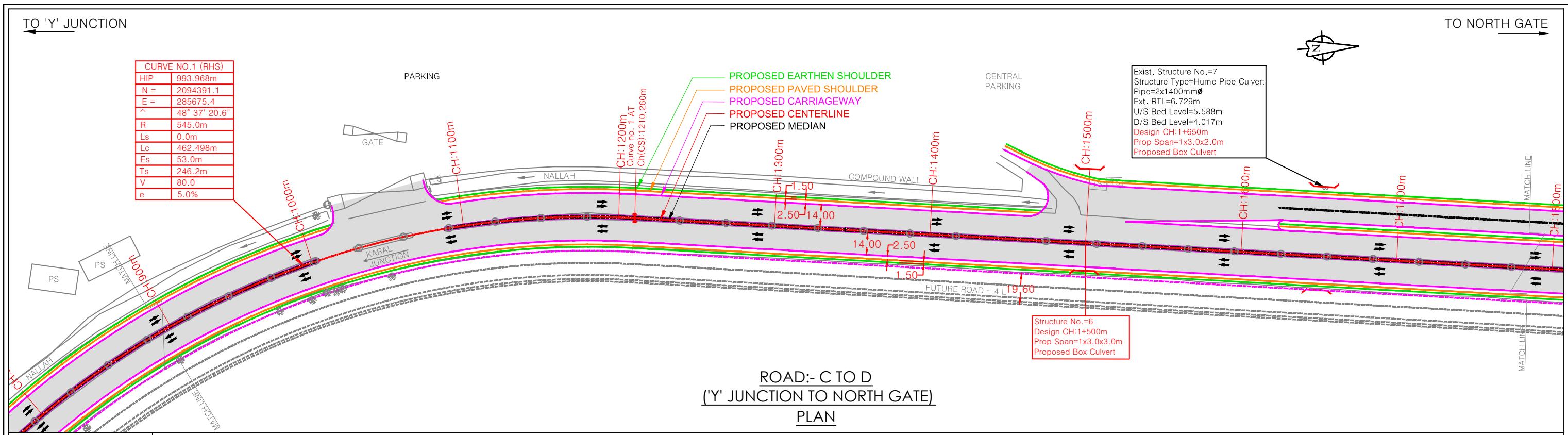
CHECKED BY:-	NAME	SIGNATURE
APPROVED BY:-	NAME	SIGNATURE
DATE:-	DATE:-	DATE:-

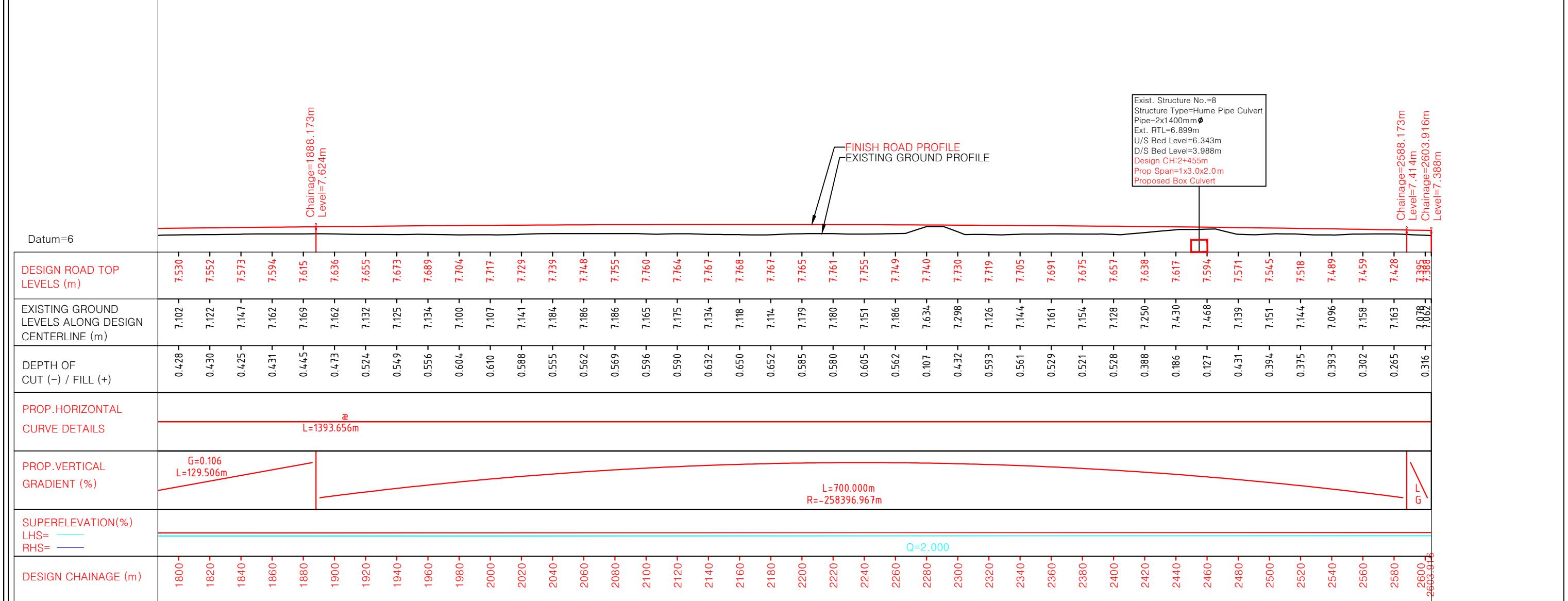
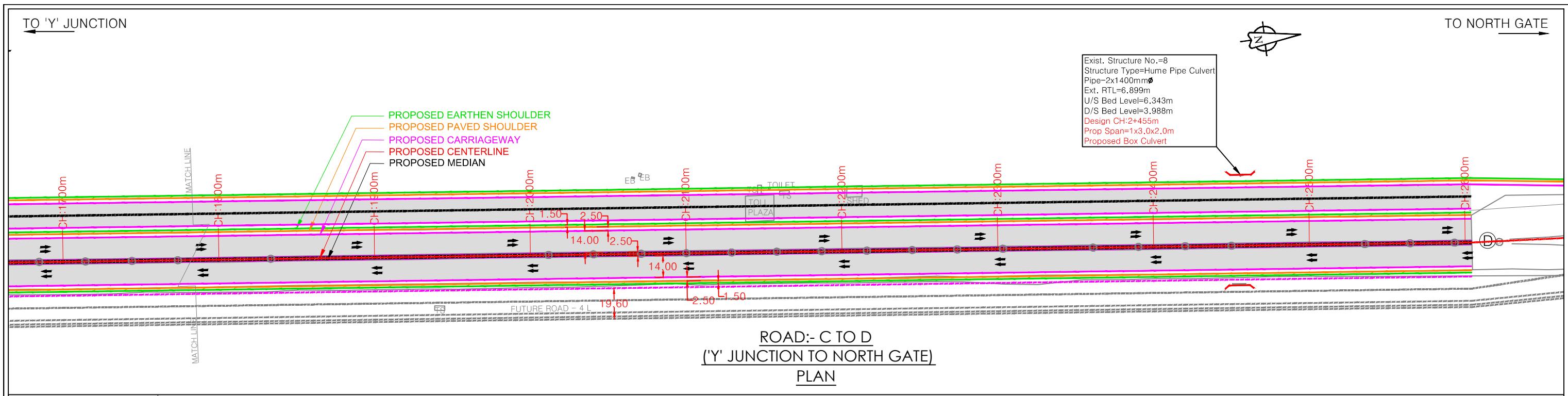
**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- PLAN & PROFILE (TANK FARM ROAD)	PURPOSE OF DRAWING
FROM CH:2400m TO CH:2892.222m	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_P&P_04/04	SCALE: H=1:2500 ISSUE R0
DATE: FEB-2020	



L - SECTION											
NOTES:					CONSULTANT:		CLIENT:		PROJECT:-		
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.					 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector – 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.				
					DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	
					DESIGNED BY:-			APPROVED BY:-			
R0	FEB-2020	FOR REVIEW			CHECKED BY:-			DATE:-		DATE: FEB-2020	
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED						





L - SECTION										
NOTES:					CONSULTANT:		CLIENT:		PROJECT:-	
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector – 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com		JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	
					NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PLAN & PROFILE (ROAD C TO D) FROM CH:1800.00m TO CH:2603.916m	
R0	FEB-2020	FOR REVIEW	DRAWN	CHECKED	DRAWN BY:-	CHECKED BY:-	FOR PLANNING		DRG.NO:DPR_JNPT_QTCPL_P&P_05/03	H=1:2500
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DESIGNED BY:-	APPROVED BY:-	ISSUE	V=1:250	RO
						CHECKED BY:-	DATE:-		DATE: FEB-2020	

# JETTYROAD 2 LANE

TO KARAL JUNCTION

TO JETTY

CURVE DETAILS-1	
HIP=	122.428
N =	2094275.1
E =	2094275.1
X =	89° 39' 22.7"
R	18.4m
Ls	0.0m
Lc	28.745m
Es	7.5m
Ts	18.3m
V	0.0

## SOUTH GATE ROAD 2+2LANE

PS PS PS PS

ROAD

ROAD:- SOUTH GATE  
(T' JUNCTION TO SOUTH GATE)  
PLAN

Chainage=0.000m  
Level=8.520m  
Chainage=5.649m  
Level=8.379m

Chainage=85.649m  
Level=8.024m

Datum=8

### DESIGN ROAD TOP LEVELS (m)

EXISTING GROUND LEVELS ALONG DESIGN CENTERLINE (m)

DEPTH OF CUT (-) / FILL (+)

PROP.HORIZONTAL CURVE DETAILS

PROP.VERTICAL GRADIENT (%)

SUPERELEVATION(%)  
LHS= \_\_\_\_\_  
RHS= \_\_\_\_\_

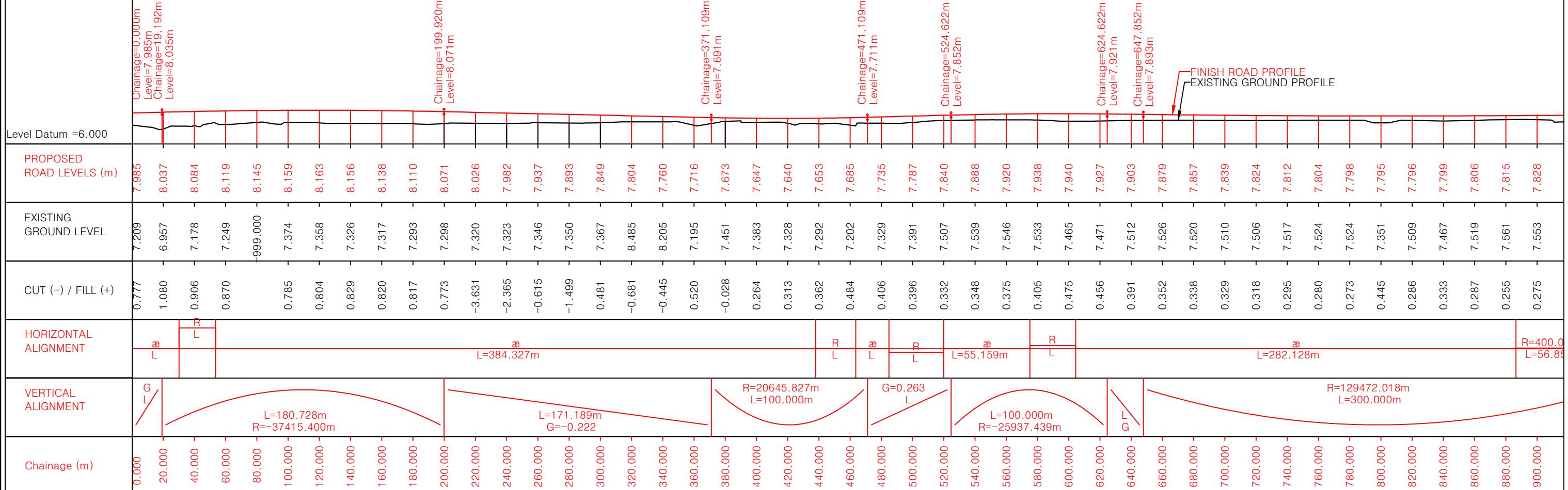
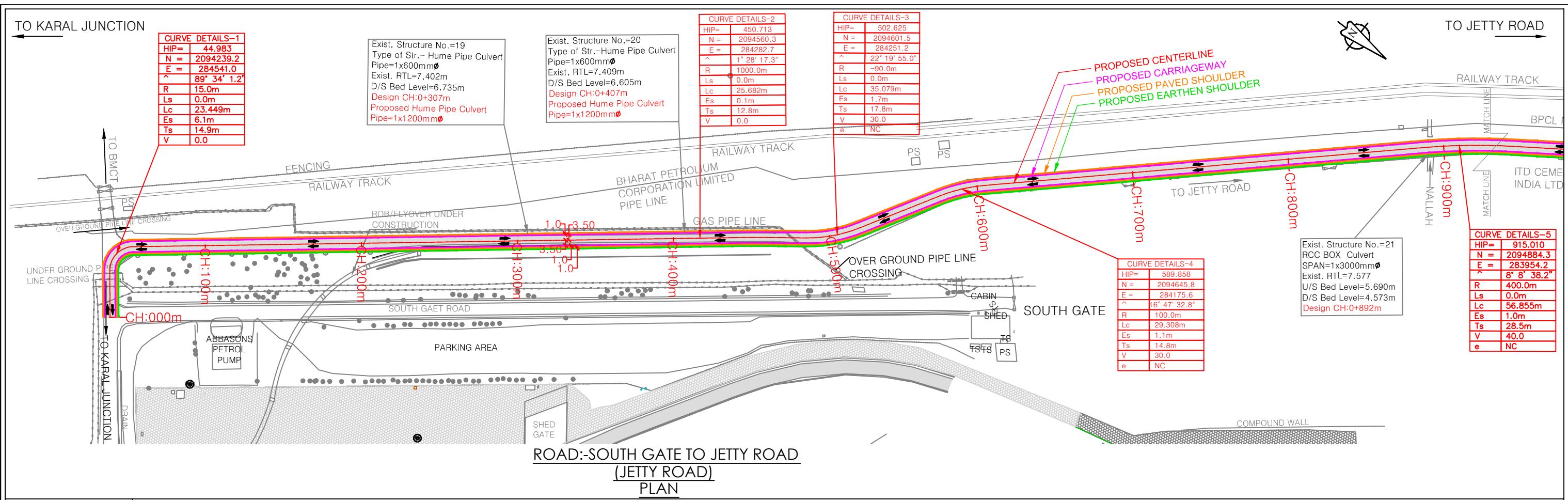
DESIGN CHAINAGE (m)

Chainage=0.000m  
Level=8.520m  
Chainage=5.649m  
Level=8.379m

Chainage=85.649m  
Level=8.024m

Datum=8

Q=2%



## NOTES

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  4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

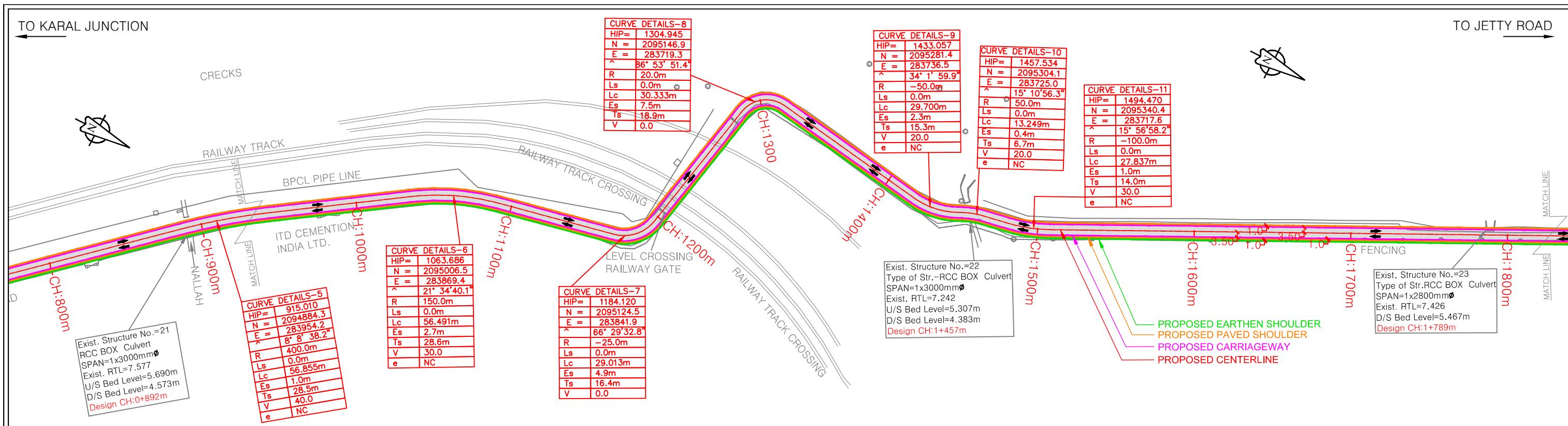
## L - SECTION

<b>CONSULTANT:</b>	QMAX TECHNO-CONSULTANTS PVT LTD 307-308, 3rd Floor, Foundation Tower, IIT Sector - 11, CBD Belapur, Navi Mumbai Email : qmaxconsultants@gmail.com	
DRAWN BY:-	NAME	SIG
REVIEWED BY:-		
APPROVED BY:-		

CLIENT:		
MR. LTD. Plot No. 20, 400 614	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	
NATURE	NAME	SIGNATURE
	CHECKED BY:-	

**Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.**

TITLE : - PLAN & PROFILE (JETTY ROAD) FROM CH:0000.00m TO CH:900.00m	PURPOSE OF DRAWING FOR PLANNING	
G.NO:DPR_JNPT_QTCPL_P&P_07/01	SCALE: H=1:2500	ISSUE
DATE: FEB-2020	V=1:250	R0



ROAD:-SOUTH GATE TO JETTY ROAD  
(JETTY ROAD)  
PLAN

## L - SECTION

**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS P  
307-308, 3rd Floor, Foundation Tower  
Sector - 11, CBD Belapur, Navi Mumbai  
Email : qmaxconsultants@gmail.com

	 <b>INPT</b> गोपनीय INPT	<p><b>CLIENT:</b></p> <p>JAWAHARLAL NEHRU PORT TRUST          1107, Raheja centre, FPJ Marg,          Nariman Point, Mumbai-400021</p>
T. LTD. Plot No. 20, 400 614		

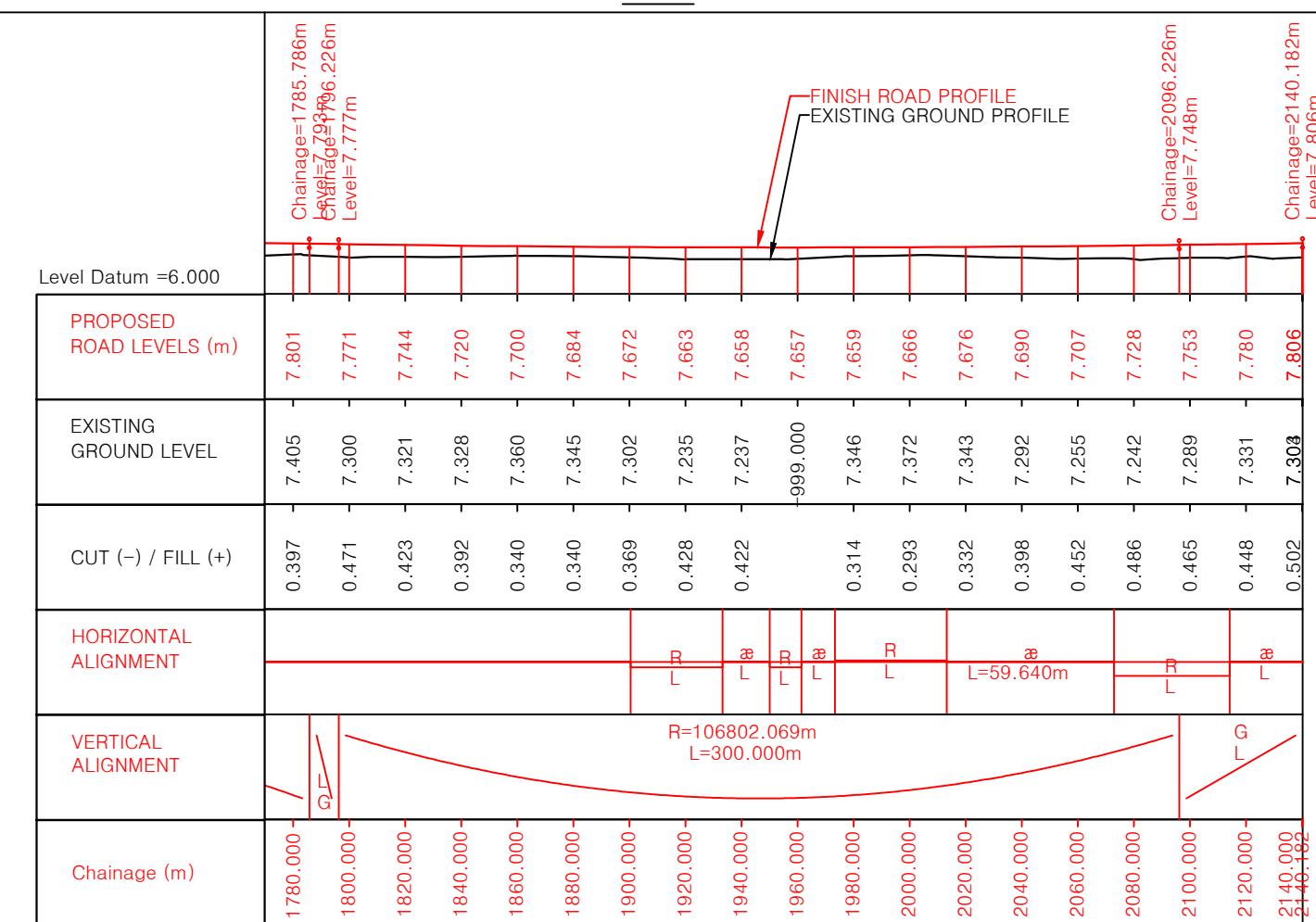
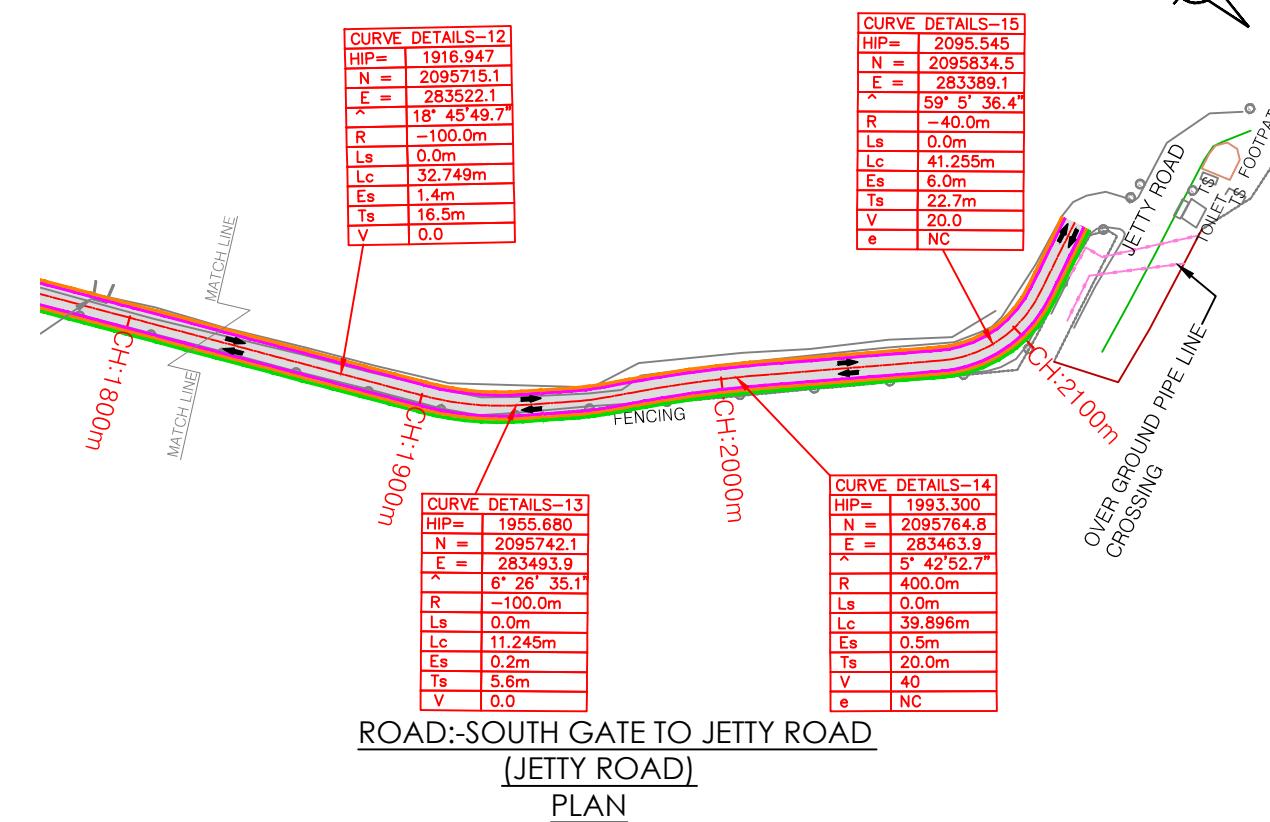
**PROJECT:-**  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

R0	FEB-2020	FOR REVIEW	
NO.	DATE	REVISION/PURPOSE	DRAWN

	NAME	SIGNATURE		NAME	SIGNATURE	TITLE :- PLAN & PROFILE (JETTY ROAD) FROM CH:900.00m TO CH:1800.00m	PURPOSE OF DRAWING FOR PLANNING
DRAWN BY:-			CHECKED BY:-			DRG.NO:DPR_JNPT_QTCPL_P&P_07/02	SCALE: H=1:2500 V=1:250 ISSUE NO:R0
DESIGNED BY:-			APPROVED BY:-				
CHECKED BY:-			DATE:-			DATE: FEB-2020	

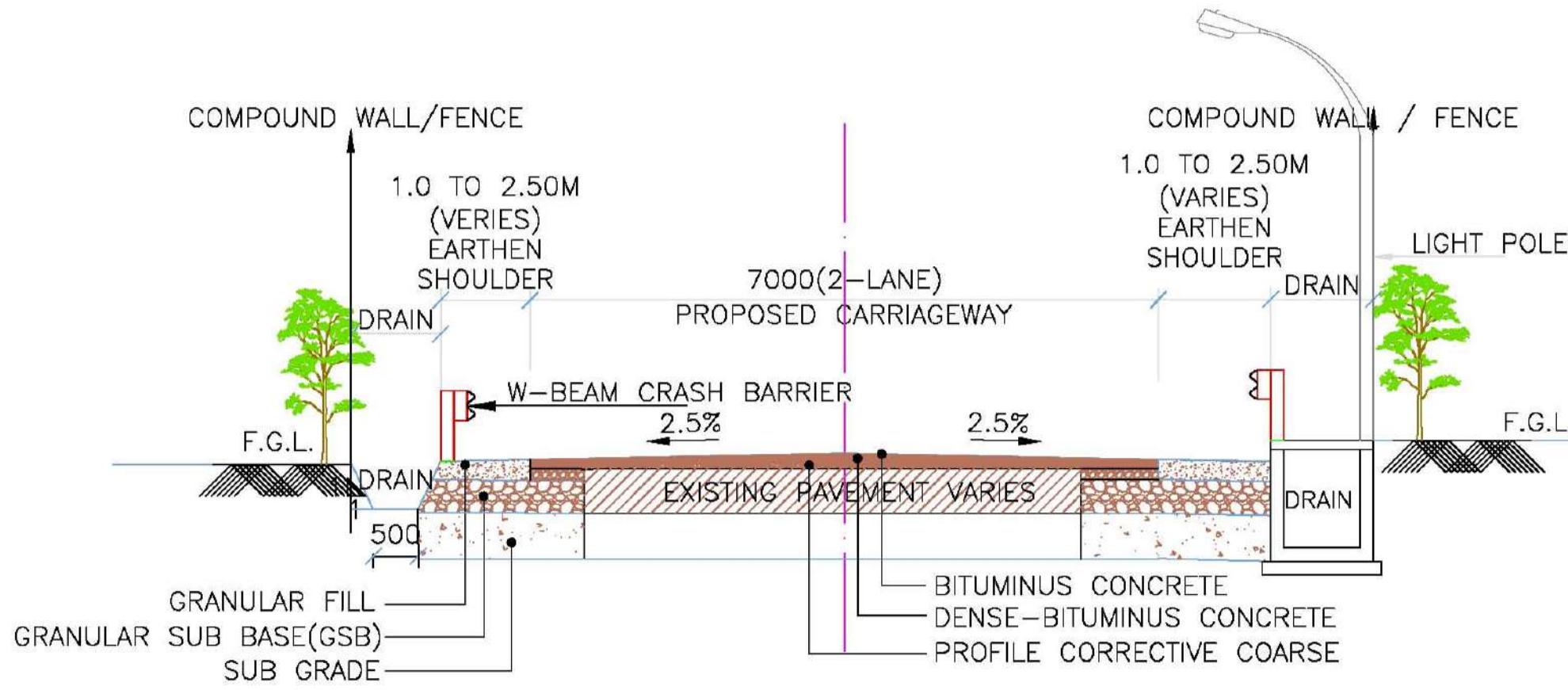
TO KARAL JUNCTION

TO JETTY ROAD

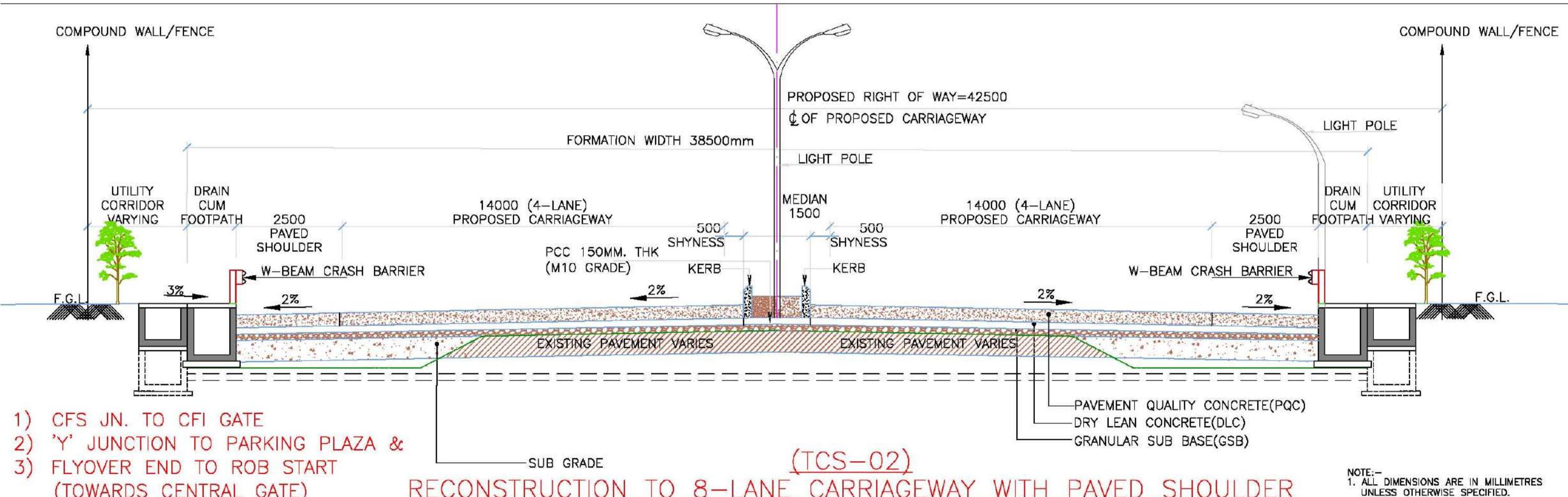


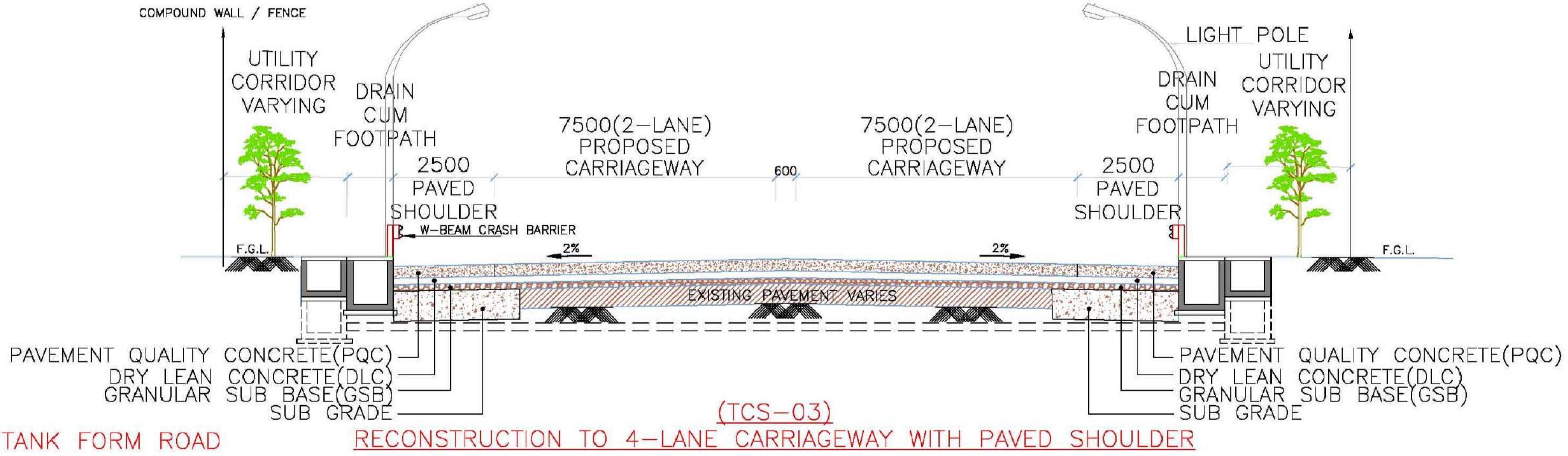
NOTES:						CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified.						QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai - 400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
2. Any discrepancy in drawing please bring it to notice.						DRAWN BY:-	NAME	SIGNATURE
3. All levels are w.r.t. GTS bench mark.						DESIGNED BY:-		
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						CHECKED BY:-		
RO FEB-2020	FOR REVIEW					APPROVED BY:-		
NO. DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED		CHECKED BY:-	DATE:-	
								DATE: FEB-2020

# TYPICAL CROSS SECTION

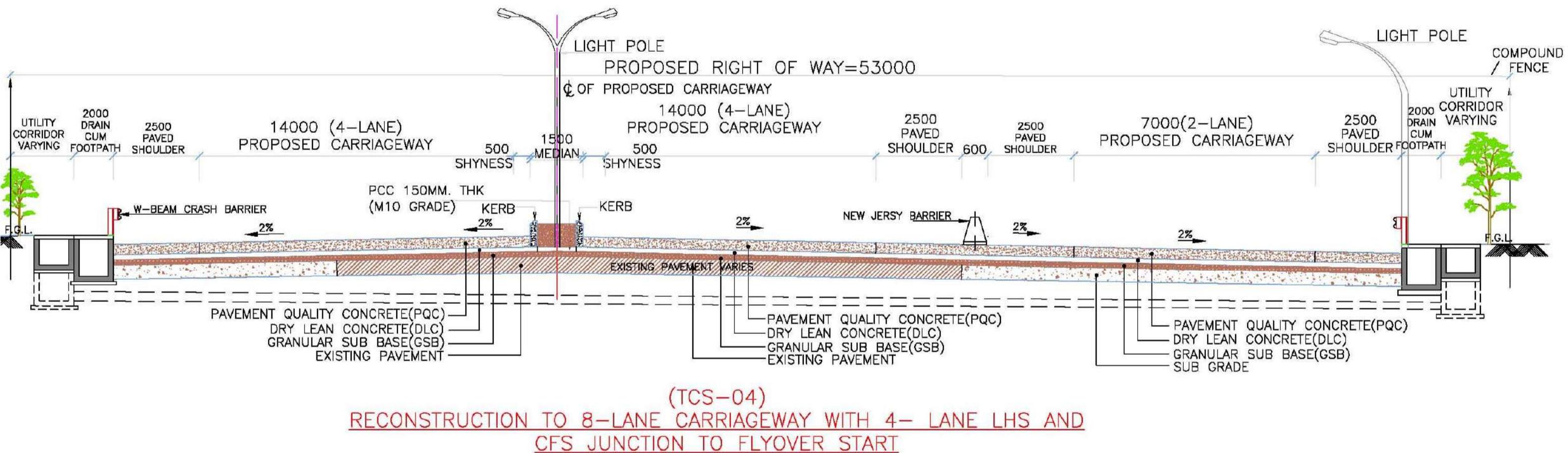


(TCS-01)  
1) PASSENGER CORRIDOR

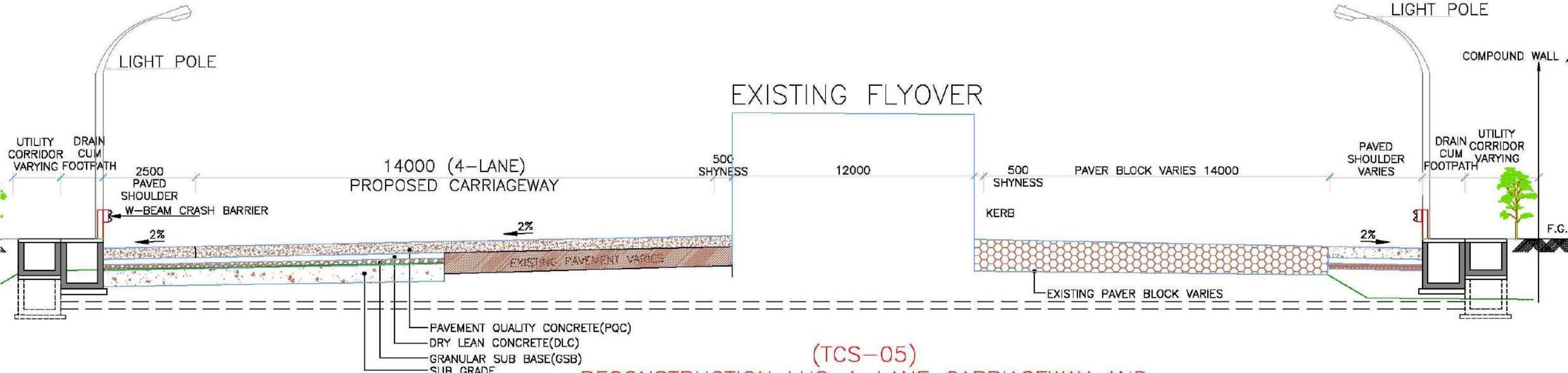




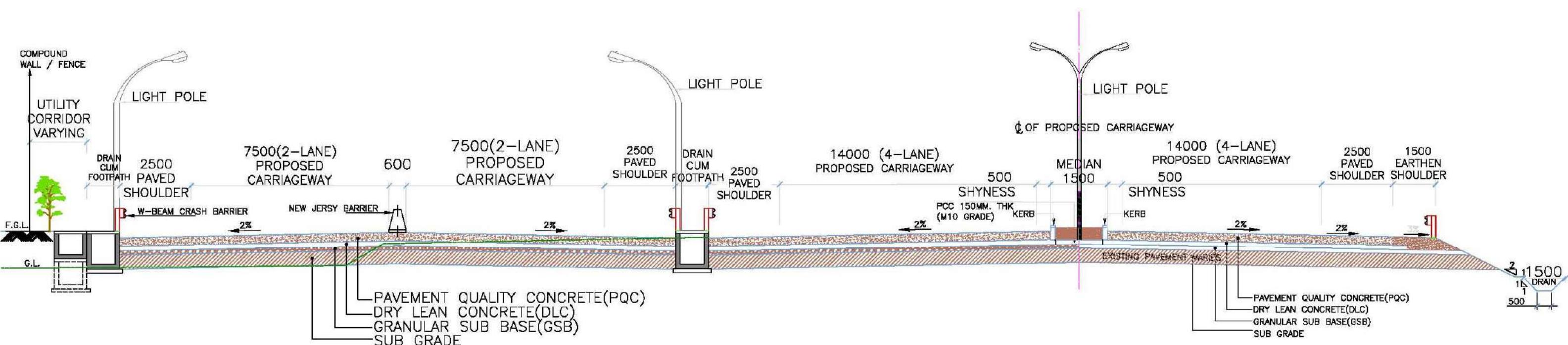
1) TANK FORM ROAD



**NOTE:-**  
1. ALL DIMENSIONS ARE IN MILLIMETRES  
UNLESS OTHERWISE SPECIFIED.

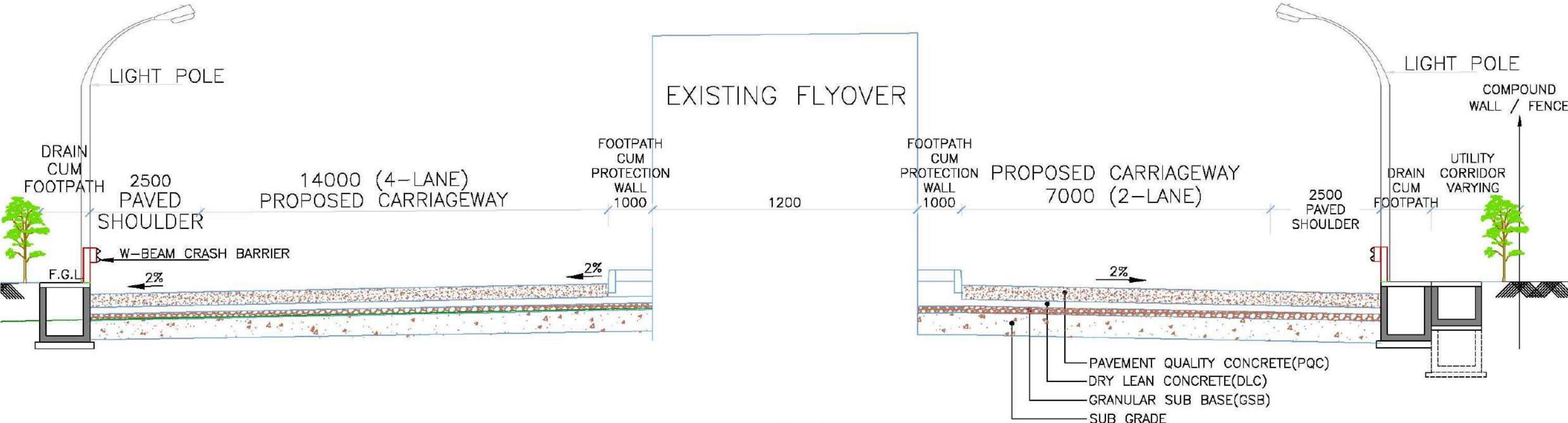


(TCS-05)  
RECONSTRUCTION LHS 4-LANE CARRIAGEWAY AND  
4LANE PAVERBLOCK EXISTING  
'Y' JUNCTION TO FLYOVER START

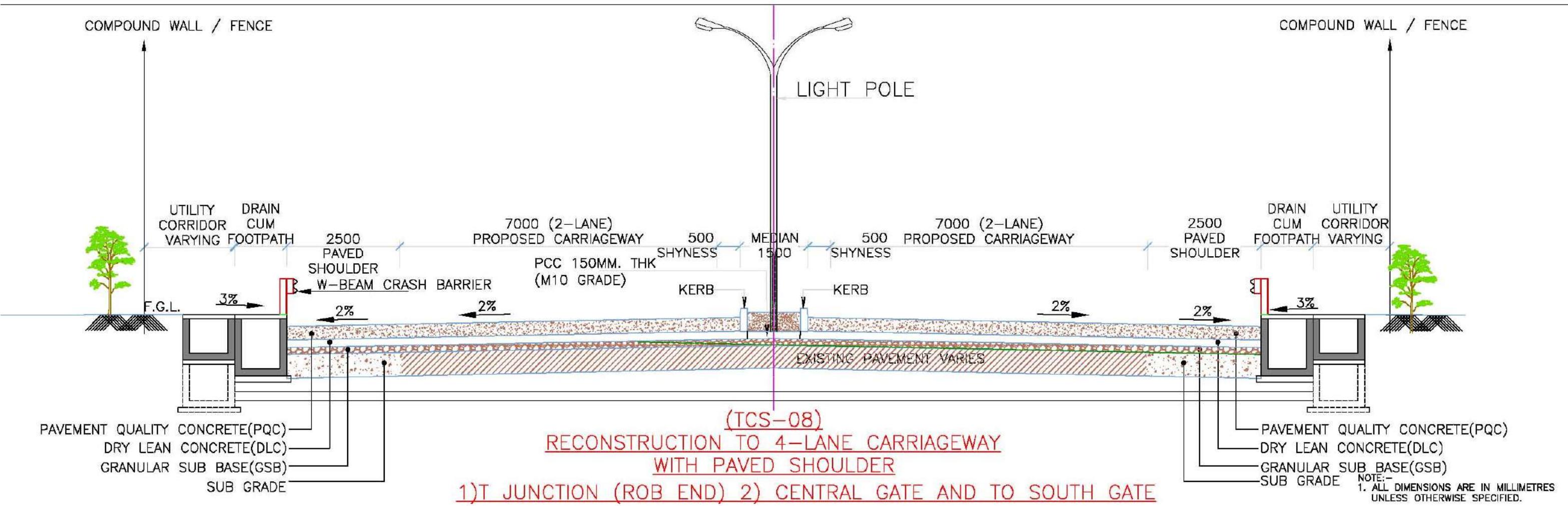


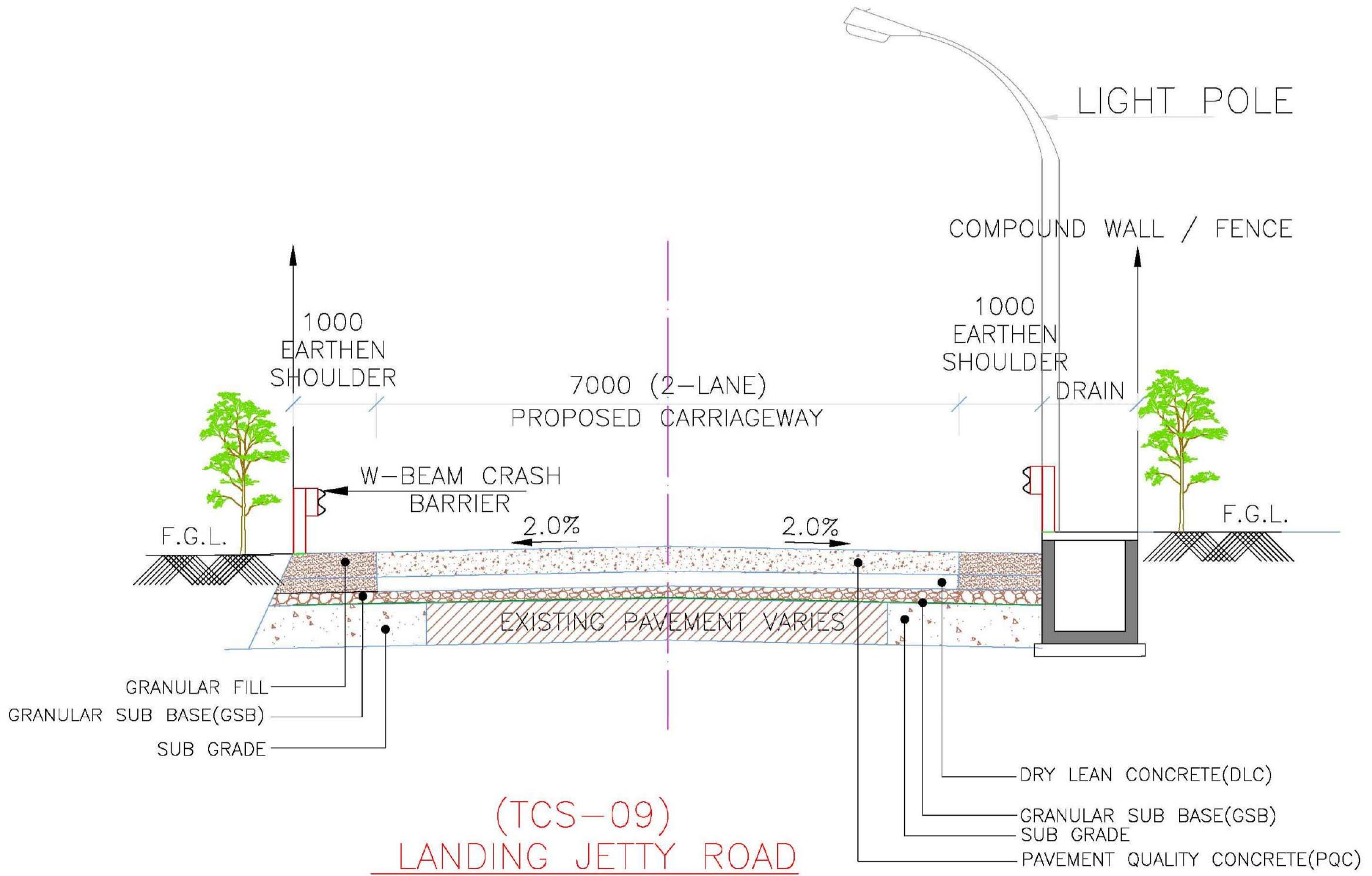
(TCS-06)  
RECONSTRUCTION TO 8-LANE CARRIAGEWAY WITH  
4- LANE LHS SERVICE ROAD  
PARKING PLAZA TO NORTH GATE (FLYOVER START)

**NOTE:-**  
1. ALL DIMENSIONS ARE IN MILLIMETRES  
UNLESS OTHERWISE SPECIFIED.



(TCS-07)  
RECONSTRUCTION LHS 4-LANE CARRIAGEWAY & RHS 2- LANE SERVICE ROAD  
1)'Y' JUNCTION TO FLYOVER END (TOWARDS CENTRAL GATE)

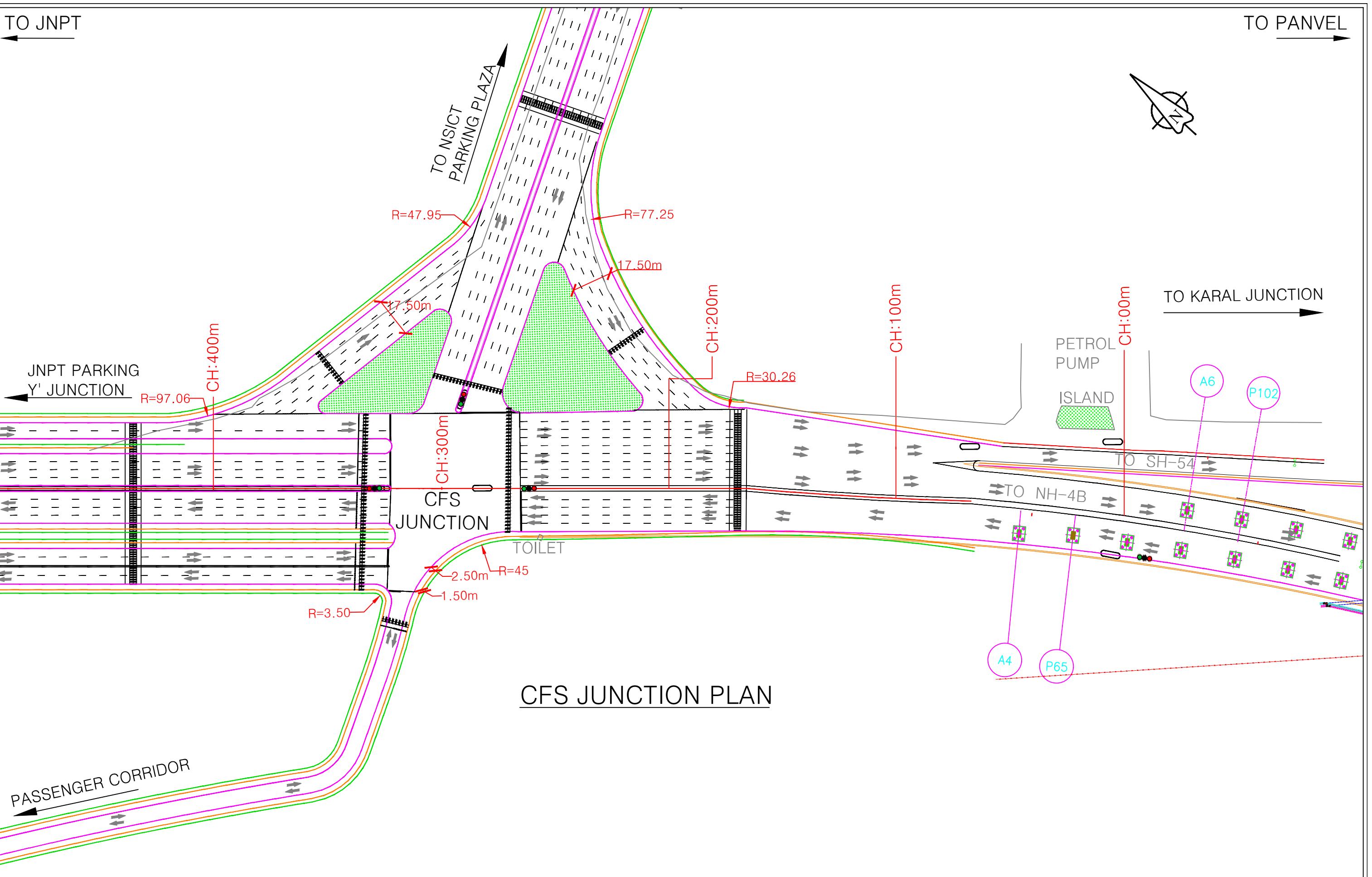




# JUNCTION PLAN

TO JNPT

**TO PANVEL**



## CFS JUNCTION PLAN

<b>NOTES:</b>
1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
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4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**CONSULTANT:**  
 QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 40  
Sector - 11, CBD Belapur, Navi Mumbai 400 705  
Email : qmaxconsultants@gmail.com

	NAME	SIGNATURE
DRAWN BY:-		
DESIGNED BY:-		
CHECKED BY:-		

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center; vertical-align: top;">    <b>JAWAHARLAL NEHRU PORT TRUST</b>            INP         </td><td style="width: 85%; text-align: left; padding-left: 10px;"> <b>CLIENT:</b>  <b>JAWAHARLAL NEHRU PORT TRUST</b>            1107, Raheja centre, FPJ Marg,            Nariman Point, Mumbai-400021         </td></tr> </table>	 <b>JAWAHARLAL NEHRU PORT TRUST</b> INP	<b>CLIENT:</b> <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021
 <b>JAWAHARLAL NEHRU PORT TRUST</b> INP	<b>CLIENT:</b> <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021		

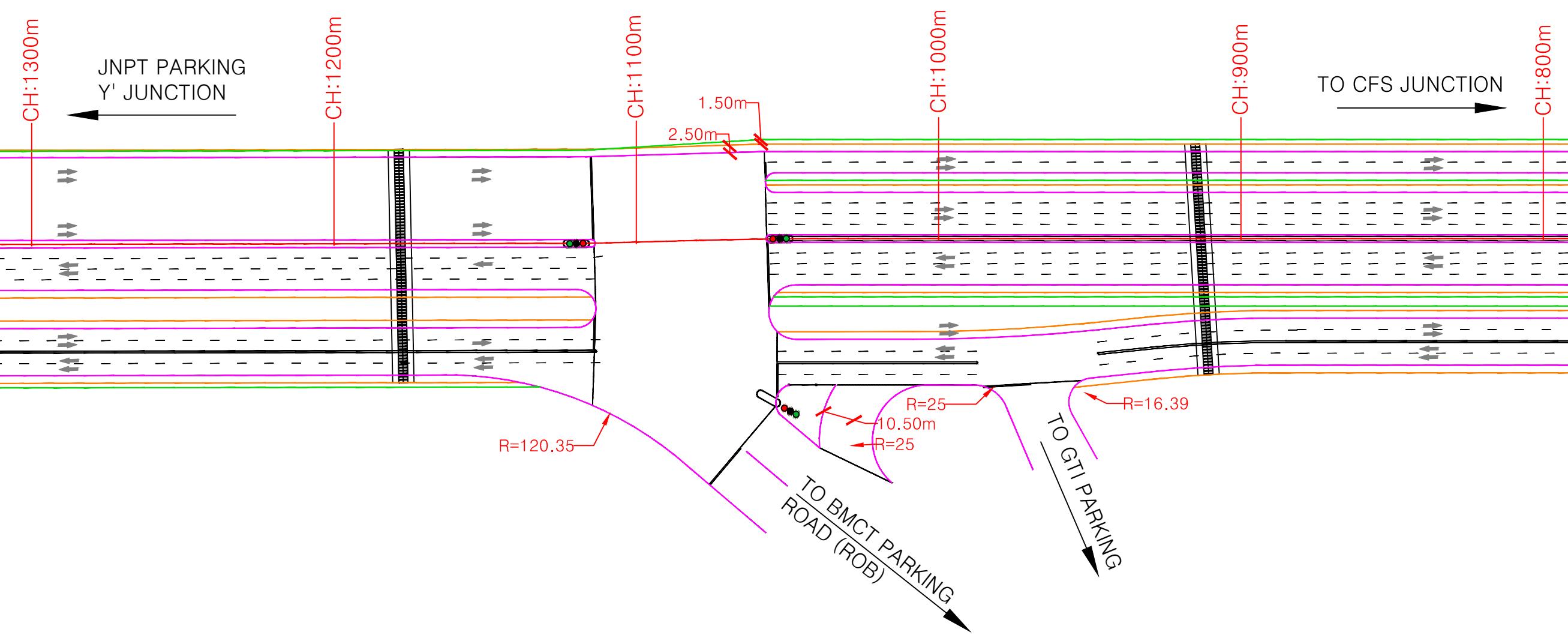
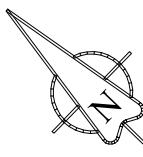
	NAME	SIGNATURE
CHECKED BY:-		
APPROVED BY:-		
DATE:-		

<b>PROJECT:-</b>
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- JUNCTION PLAN CFS JUNCTION		PURPOSE OF DRAWING FOR PLANNING	
DRG.NO:DPR_JNPT_QTCPL_JP_04/01		SCALE : H=1:1500 'V=1:150	ISSUE NO. B0
DATE: FEB-2020			

TO JNPT

TO PANVEL



## JUNCTION PLAN NEAR GTI PARKING

**NOTES:**

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NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
R0	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
DATE:-

**CLIENT:**  
JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

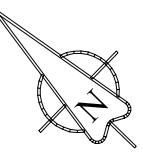
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SIGNATURE  
NAME  
SIGNATURE  
NAME  
SIGNATURE  
DATE:-

**PROJECT:-**  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

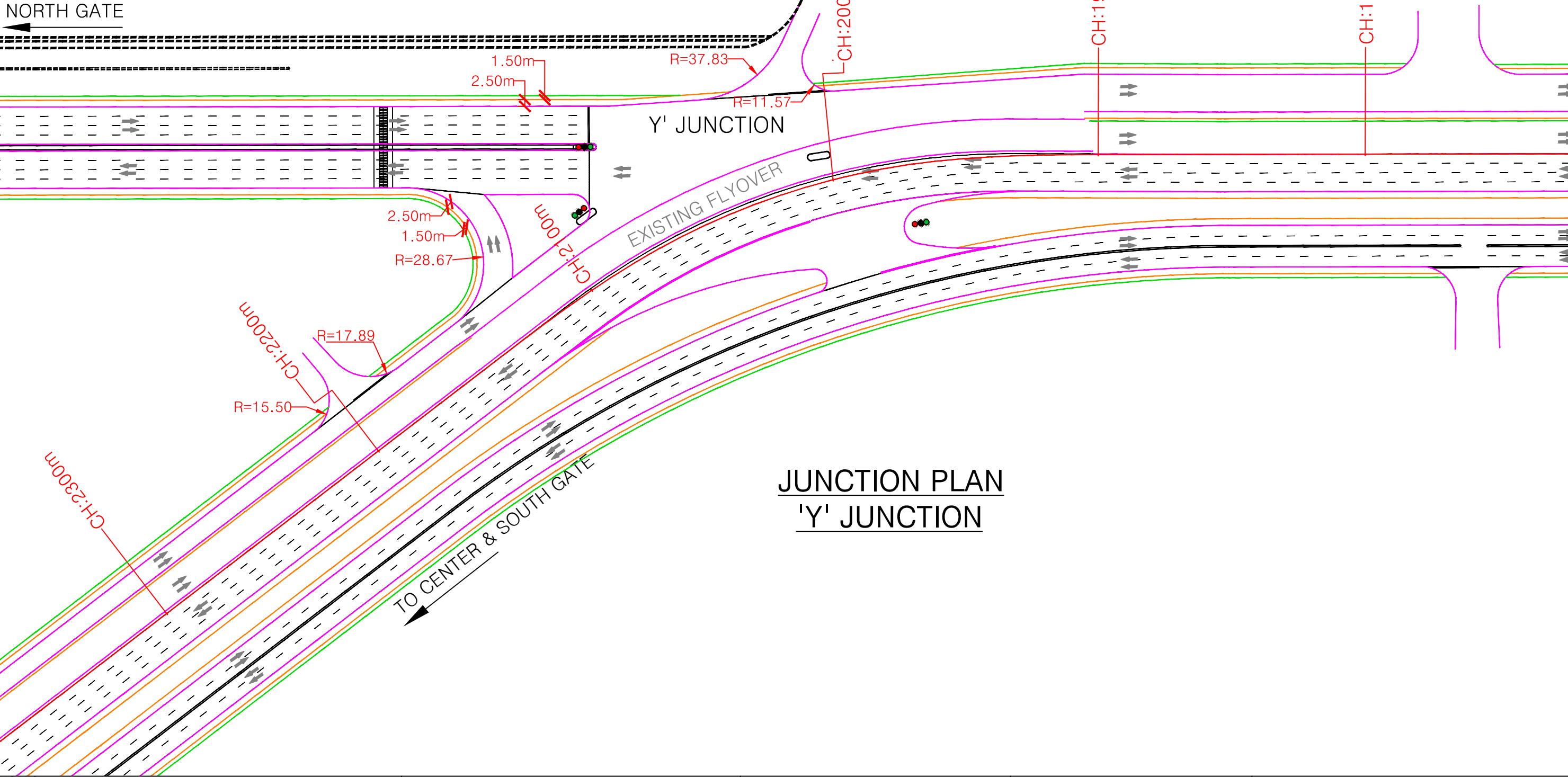
**TITLE :-** JUNCTION PLAN  
NEAR GTI PARKING GATE **PURPOSE OF DRAWING**  
FOR PLANNING  
**DRG.NO:** DPR\_JNPT\_QTCPL\_JP\_04/02 **SCALE:** H=1:1500 ISSUE  
**SCALE:** V=1:150 R0

TO JNPT

TO PANVEL

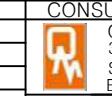


NORTH GATE

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NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
R0	FEB-2020	FOR REVIEW			



**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

**CLIENT:**  
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

**PROJECT:-**  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
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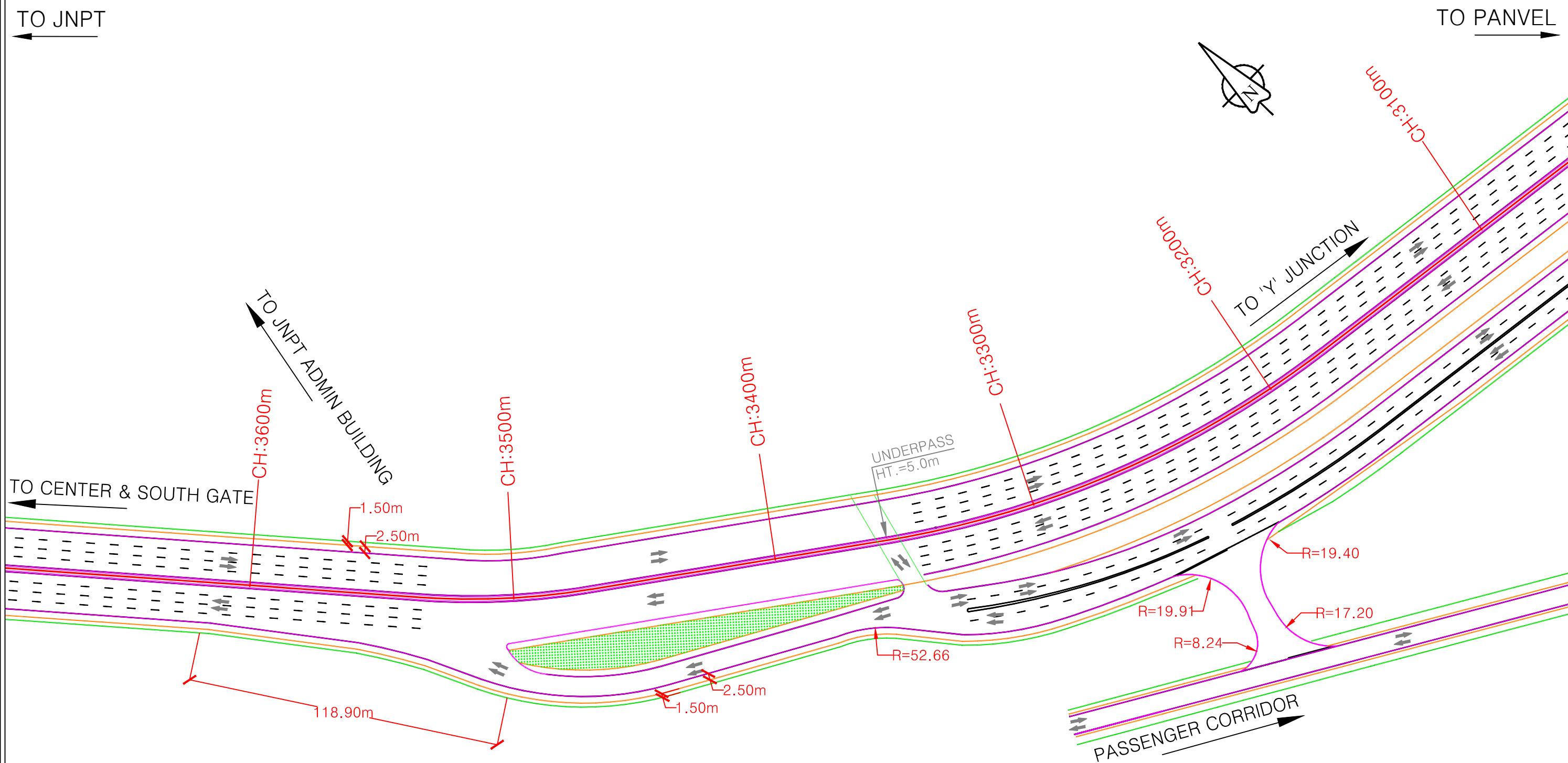
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APPROVED BY:-  
DATE:-

NAME  
NAME  
DATE:-

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SIGNATURE  
DATE:-

TITLE :- JUNCTION PLAN  
'Y' JUNCTION  
DRG.NO:DPR\_JNPT\_QTCPL\_JP\_04/03  
DATE: FEB-2020

PURPOSE OF DRAWING  
FOR PLANNING  
SCALE: H=1:1500 ISSUE  
V=1:150 R0



## JUNCTION PLAN NEAR JNPT ADMIN BUILDING

### NOTES:

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- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.



CONSULTANT:  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

CLIENT:  
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai - 400021

PROJECT:-  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
DATE:-

NAME  
SIGNATURE

CHECKED BY:-  
APPROVED BY:-  
DATE:-

NAME  
SIGNATURE

APPROVED BY:-  
DATE:-

PURPOSE OF DRAWING  
FOR PLANNING  
SCALE: H=1:1500 ISSUE  
V=1:150 R0

R0

FEB-2020

FOR REVIEW

REVISION/PURPOSE

DRAWN

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NO.

DATE

REVISION/PURPOSE

DRAWN

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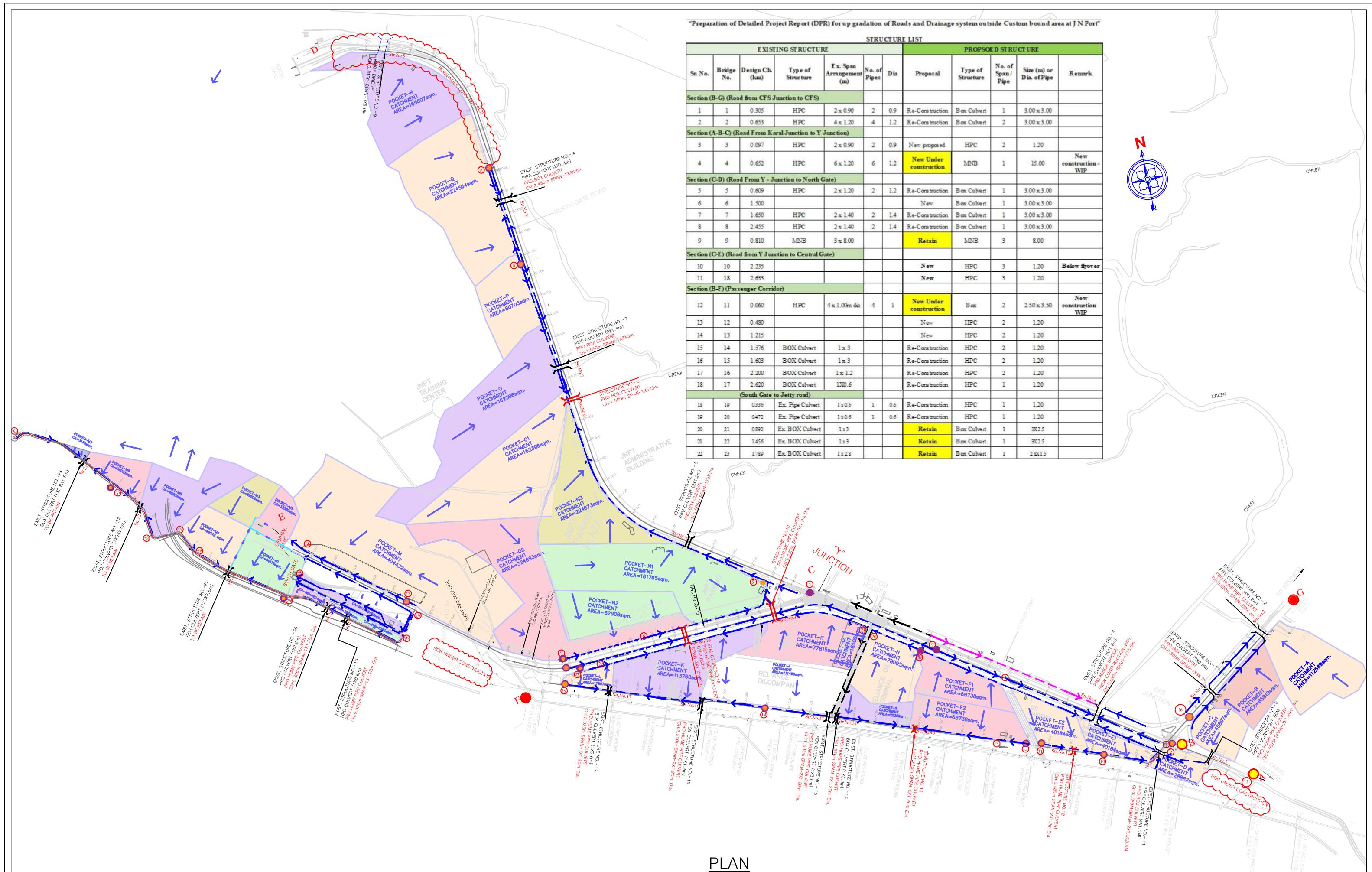
APPROVED

CHECKED BY:-

DATE:-

APPROVED BY:-</p

# DRAINAGE PLAN



NOTES:-				LEGENDS:-				CONSULTANT:-				CLIENT:-				PROJECT:-			
1. ALL DIMENSIONS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.				CONTOURS	PROP RIDGE			M/s. QMAX TECHNO CONSULTANTS PVT. LTD.				JAWAHARLAL NEHRU PORT TRUST				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
2. ANY DISCREPANCY IN DRAWING PLEASE BRING IT TO NOTICE.				CULVERT	NODE														
3. ALL CO ORDINATES ARE w.r.t. GLOBAL POSITIONING SYSTEM OF WGS-84 DATUM.				ELECTRIC POLE	RAILWAY ELEC. POLE NO.														
4. FOR DECIDING LHS AND RHS DRAIN, FACE DIRECTION IS ASSUMED TOWARDS NORTH /CENTRAL/ SOUTH GATE STANDING AT CFS JUNCTION.				GATE	SIGNAL POLE														
5. PROP. RHS SIDE DRAIN OF TANK FARM ROAD IS NOT SHOWN FOR THE SAKE OF CONVENIENCE. FOR MORE DETAILS REFER STORM WATER DESIGN TABLE.				HANDPUMP	STRUCTURE														
				HIGH TENSION TOWER	EXISTING DRAIN														
				NALLAH/POND	PROP. DRAIN														
				HIGH MUST POLE	DRAIN UNDER CONSTRUCTION														
TITLE :- PROPOSED STORM WATER DRAINAGE NETWORK				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
FOR PLANNING				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
DWG. NO:-JNPT/QTCP/ROAD/P&P/01				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
SCALE:- 1:10000				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
REV -				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
TITLE :- PROPOSED STORM WATER DRAINAGE NETWORK				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
FOR PLANNING				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
DWG. NO:-JNPT/QTCP/ROAD/P&P/01				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
SCALE:- 1:10000				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			
REV -				PURPOSE OF DRAWING				CLIENT:-				PROJECT:-				CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT (DPR) FOR UP GRADATION OF ROADS & DRAINAGE SYSTEM OUTSIDE CUSTOM BOUND AREA AT J N PORT.			

DRAIN	Side	Chainage		Length IN 'M'	Clear Width IN 'M'	ROAD EDGE LEVEL		INVERT LEVELS		Remark	
						From	To	U/S	D/S		
Node		From	To								
No		m	m								
<b>CFS Junction-Y Junction - VUP</b>											
2-Str no.4	LHS	290	650	360	1.00	6.38	5.62	5.48	4.72	RCC Drain	
2'-Str No.4'	RHS	290	650	360	1.00	6.38	5.62	5.48	4.72	RCC Drain	
3-Str. No.4	LHS	1120	650	470	1.50	6.14	5.62	5.14	4.62	RCC Drain	
4-3	LHS	1440	1120	320	1.00	6.32	6.14	5.47	5.14	RCC Drain	
4-Str. No. 10	LHS	1440	2235	795	2.00	6.32	6.26	5.42	5.03	RCC Drain	
7-6	LHS	3200	2820	380	1.00	8.54	7.089	7.74	6.29	RCC Drain	
7'-6'	RHS	3200	2820	380	4.00	8.54	7.089	7.54	6.09	Open Trapezoidal Drain	
6-Str. No. 18	LHS	2820	2677	143	1.00	7.09	7.17	6.19	6.07	RCC Drain	
6'-Str. No. 18'	RHS	2820	2677	143	5.00	7.09	7.17	5.39	5.27	Open Trapezoidal Drain	
Str No. 18-Str. No. 10	LHS	2677	2235	442	1.00	7.09	6.14	6.17	5.24	RCC Drain	
Str No. 18'-Str. No. 10'	RHS	2677	2235	442	8.00	7.09	6.14	5.77	4.79	Open Trapezoidal Drain	
Prop. Str 10 to Str. No.5				500	5.00	6.14	5.300	4.29	3.50	Open Trapezoidal Drain	

DRAIN	Type of Road	Side	Chainage		Length in 'M'	Clear Width IN 'M'	ROAD EDGE LEVEL		INVERT LEVELS		Depth w.r.t. REL	Remark	
			From	To			U/S	D/S	U/S	D/S			
			No	m	m								
<b>Y Junction to North Gate (C to D)</b>													
5 to 5'	Main Road	LHS	50	200	150	1.00	5.88	6.254	4.58	4.45	1.30	1.80	RCC Drain
5 to 5'	Main Road	RHS	50	200	150	1.00	6.17	6.54	4.87	4.74	1.30	1.80	RCC Drain
Br no.5 to Br 6	Main Road	LHS	650	1500	850	5.00	6.92	6.642	4.97	4.49	1.95	2.15	Open Trapezoidal Drain
Br no.5 to Br 6	Main Road	RHS	650	1500	850	1.50	7.14	6.892	5.84	5.44	1.30	1.45	RCC Drain
Br No. 7 to Br No.6	Service Road	LHS	1650	1500	150	2.50	6.74	6.642	5.39	5.14	1.35	1.50	Open Trapezoidal Drain
Br No. 7 to Br No.6	Service Road	RHS	1650	1500	150	0.60	6.99	6.892	6.09	5.89	0.90	1.00	RCC Drain
8 to Br.7	Service Road	LHS	2150	1650	500	2.00	7.03	6.744	5.33	4.89	1.70	1.85	RCC Drain
8' to Br.7'	Service Road	RHS	2150	1650	500	1.00	7.28	6.994	5.48	4.99	1.80	2.00	RCC Drain
8 to Br.8	Service Road	LHS	2150	2450	300	2.00	7.03	6.954	5.83	5.55	1.20	1.40	RCC Drain
8' to Br.8'	Service Road	RHS	2150	2450	300	1.00	7.28	7.204	6.08	5.85	1.20	1.35	RCC Drain
9 to Br.8	Main Road	LHS	2603	2450	153	1.50	6.75	6.95	4.95	4.80	1.80	2.15	RCC Drain
9 to Br.8	Main Road	RHS	2603	2450	153	1.00	7.00	7.20	5.50	5.40	1.50	1.80	RCC Drain
<b>ROB TO CENTRAL GATE</b>													
17-18	Main Road	LHS	4000	4580	580	0.60	8.05	7.43	6.75	6.13	1.30	1.30	RCC Drain
17-18'	Main Road	RHS CENTER	4000	4580	580	0.60	8.05	7.43	6.75	6.13	1.30	1.30	RCC Drain
17"-18"	Main Road	RHS	4000	4580	580	0.60	7.88	7.26	6.58	5.96	1.30	1.30	RCC Drain

DRAIN	Side	Chainage		Length IN 'M'	Clear Width IN 'M'	ROAD EDGE LEVEL		INVERT LEVELS		Remark
		From	To			U/S	D/S	U/S	D/S	
		No	m	m	'M'	'M'	U/S	D/S		
<b>CFS Junction to CGI Complex (B-G)</b>										
16 to Br 1	LHS	150	305	155	1.00	6.00	6.163	5.10	4.96	RCC Drain
16' to Br 1'	RHS	150	305	155	1.00	6.00	6.163	5.10	4.96	RCC Drain
Br no.1 to Br 2	LHS	305	653	348	1.00	6.16	5.987	5.26	4.89	RCC Drain
Br no.1' to Br 2'	RHS	305	653	348	1.50	5.99	5.987	4.79	4.49	RCC Drain

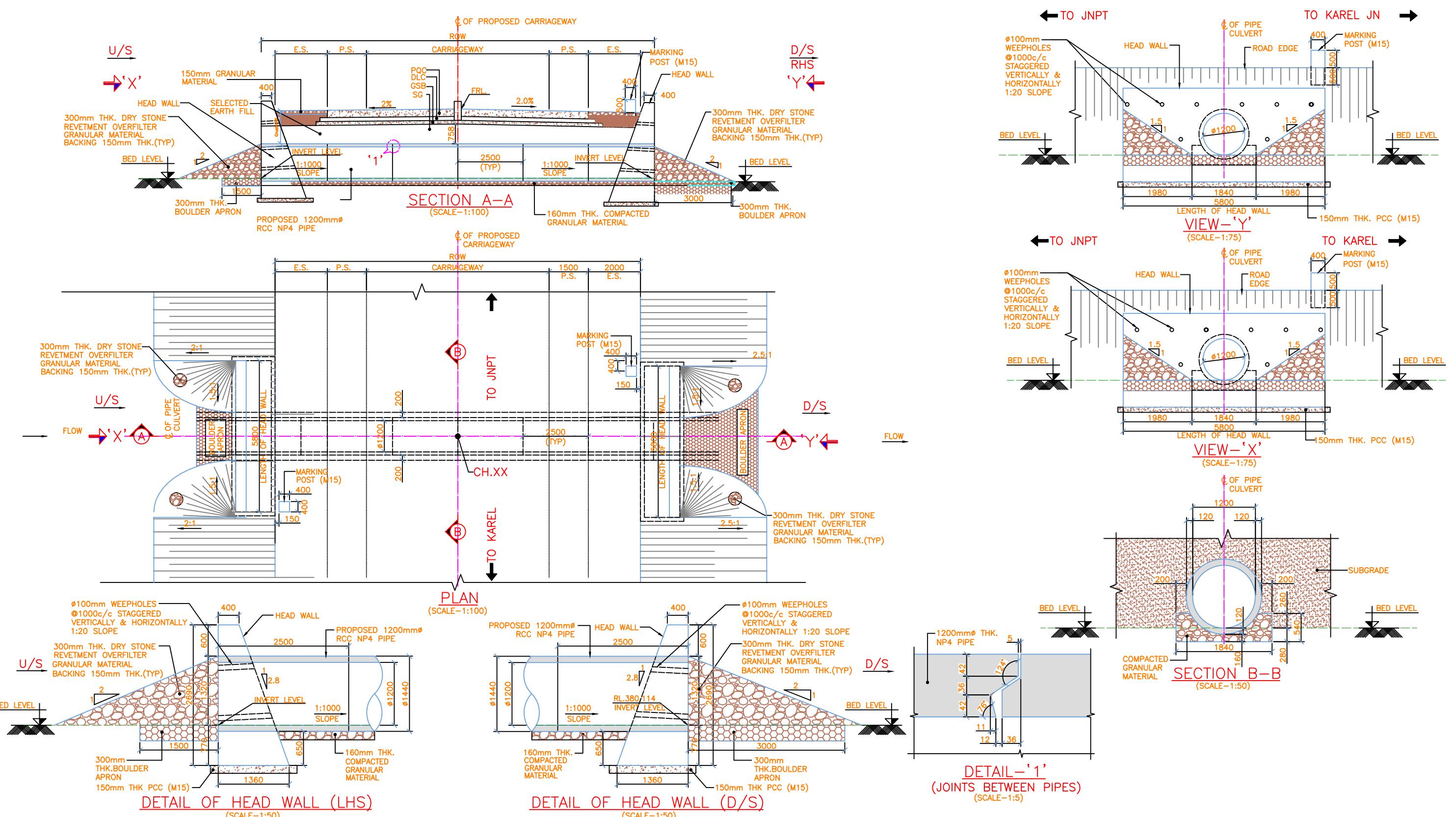
DRAIN	Type of Road	Side	Chainage		Length in 'M'	Clear Width IN 'M'	ROAD EDGE LEVEL		INVERT LEVELS		Remark
			From	To			IN	IN	U/S	D/S	
			No.	m	m	'M'	'M'	'M'	U/S	D/S	
<b>ROB TO CENTRAL GATE</b>											
17-D	Main Road	LHS	4000	4580	580	0.60	8.05	7.43	6.75	6.13	RCC Drain
17-D'	Main Road	RHS CENTER	4000	4580	580	0.60	8.05	7.43	6.75	6.13	RCC Drain
17-D'	Main Road	RHS	4000	4580	580	0.60	7.88	7.26	6.58	5.96	RCC Drain

DRAIN	Side	Chainage		Length in 'M'	Clear Width IN 'M'	ROAD EDGE LEVEL		INVERT LEVELS		Remark
From	To	U/S	D/S							
No	m	m	'M'	'M'	U/S	D/S				




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**CULVERTS-PIPE & BOX**



NOTES:-

1. ALL DIMENSIONS ARE IN MM AND LEVELS IN METRE UNLESS OTHERWISE SPECIFIED.

- NOTES:-**

  - ALL DIMENSIONS ARE IN MM AND LEVELS IN METRE UNLESS OTHERWISE SPECIFIED.
  - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
  - THE PIPES SHALL BE R.C.C. NP4 PIPES.
  - THE COMPAKTED THICKNESS OF THE BEDDING BELOW PIPE SHALL NOT BE LESS THAN 75MM.
  - LENGTH OF APRON ON U/S SIDE SHALL BE 1.5M AND ON D/S SIDE SHALL BE 3M.
  - CONCRETE GRADE M15 SHALL BE USED FOR FOUNDATION BEDDING AND LEVELLING COURSE.
  - CONCRETE GRADE M20 SHALL BE USED FOR HEAD WALL.
  - THE DESIGN OF CULVERT IS ACCORDING TO IRC:SP:13-2004.
  - IF THE BED MATERIAL IS B.C. SOIL, THE LAYER PROVIDED FOR IMPROVING THE SBC SHOULD BE MODIFIED AS 40 TO 90MM THICK BOULDER & STONE METAL WITH SAND HAVING THICKNESS OF ABOUT 450 TO 600MM AS PER CL.22 (IRC:SP:13-2004)
  - BARREL THICKNESS OF NP4 PIPES SHALL BE AS PER IS-458, TABLE NO.6.

**NOTES:**

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  4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

11. IF THE BED MATERIAL IS EXPOSED ROCK / BOULDER THE EXCAVATION SHALL BE TAKEN DOWN TO AT LEAST 200MM BELOW THE BOTTOM LEVEL OF THE PIPE & ALL ROCK / BOULDER IN THIS AREA BE REMOVED AND THE SPACE FILLED WITH APPROVED MATERIAL, SHAPED TO THE REQUIREMENT & THOROUGHLY COMPACTED TO PROVIDE ADEQUATE SUPPORT FOR THE PIPE AS PER SEC 2903 OF MORT&H.
12. THE PIPES SHALL BE FITTED & MATCHED SO THAT WHEN LAID THEY FORM A CULVERT WITH A SMOOTH UNIFORM INVERT.

11. IF THE BED MATERIAL IS EXPOSED ROCK / BOULDER THE EXCAVATION SHALL BE TAKEN DOWN TO AT LEAST 200MM BELOW THE BOTTOM LEVEL OF THE PIPE & ALL ROCK / BOULDER IN THIS AREA BE REMOVED AND THE SPACE FILLED WITH APPROVED MATERIAL, SHAPED TO THE REQUIREMENT & THOROUGHLY COMPACTED TO PROVIDE ADEQUATE SUPPORT FOR THE PIPE AS PER SEC 2903 OF MORT&H.
  12. THE PIPES SHALL BE FITTED & MATCHED SO THAT WHEN LAID THEY FORM A CULVERT WITH A SMOOTH UNIFORM INVERT.

#### LEGENDS:

<b>LEGENDS.—</b>	
¢	CENTER LNE
TYP	— TYPICAL
IL	— INVERT LEVEL
FRL	— FINISH ROAD LEVEL
U/S	— UP STREAM
D/S	— DOWN STREAM
P.S.	— PAVED SHULDER
E.S.	— EARTHEN SHOULDER
Ø	— DIAMETER
V	— VERTICAL
H	— HORIZONTAL
THK. — THICK	
R.L.	— REDUCE LEVEL
LHS	— LEFT HAND SIDE
RHS	— RIGHT HAND SIDE
PCC	— PLAIN CEMENT CONCRETE
SG	— SUBGRADE
GSB	— GRANULAR SUB-BASE
BC	— BITUMINOUS CONCRETE
DBM	— DENSE BITUMINOUS MACADAM
WMM	— WET MIX MACADAM



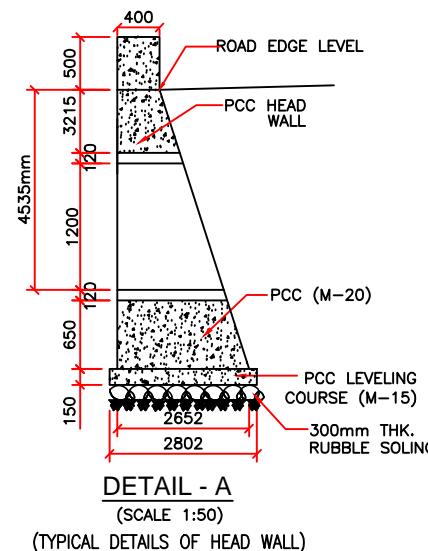
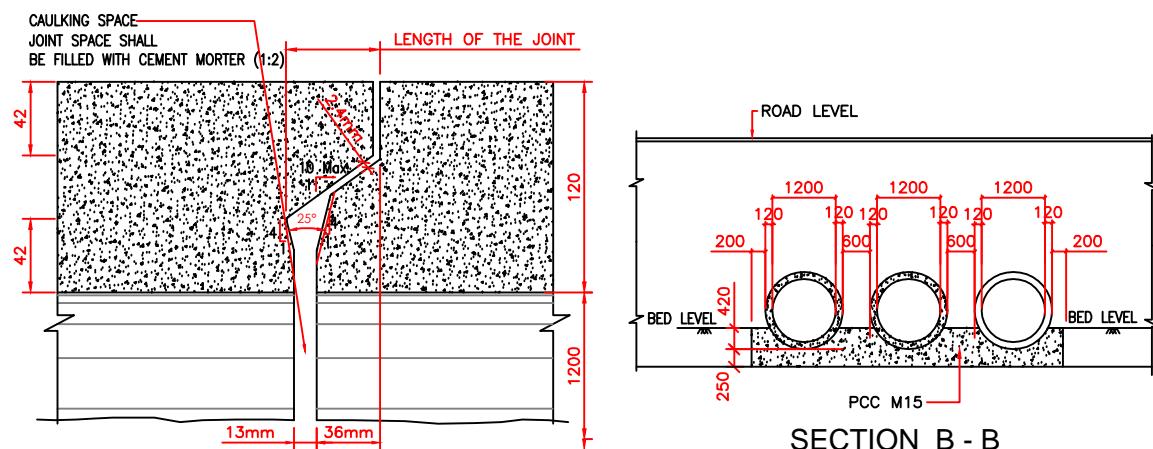
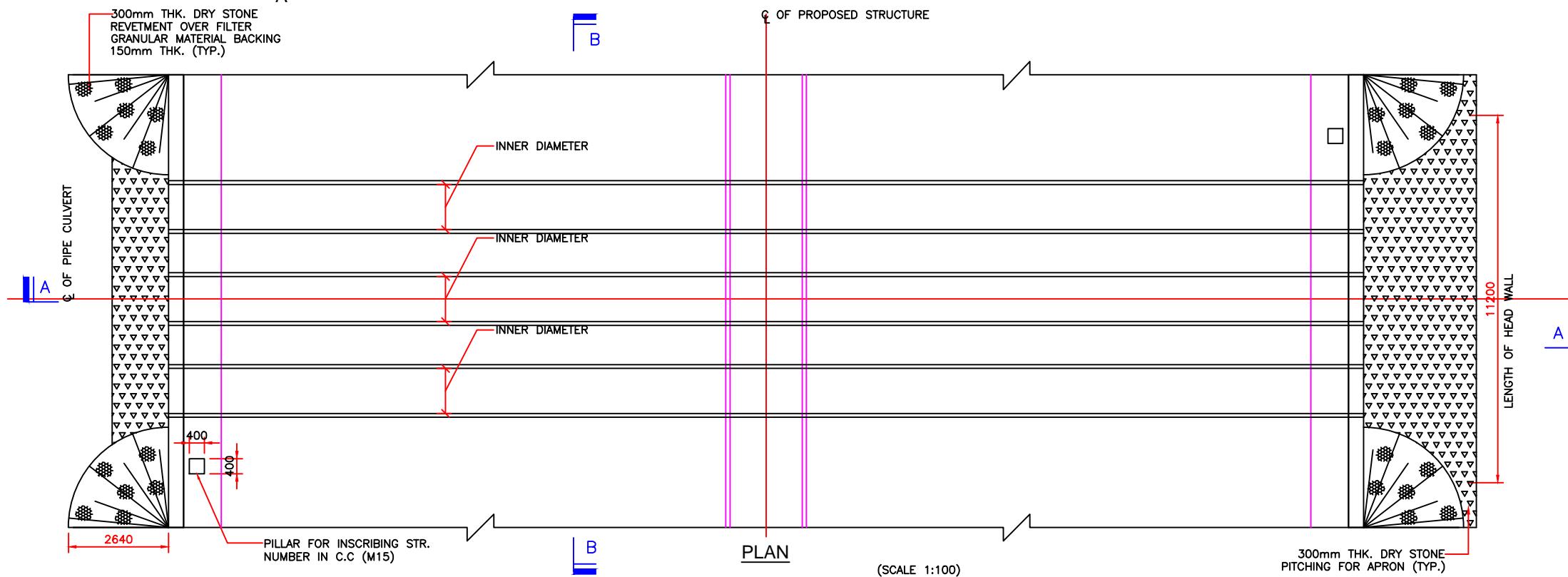
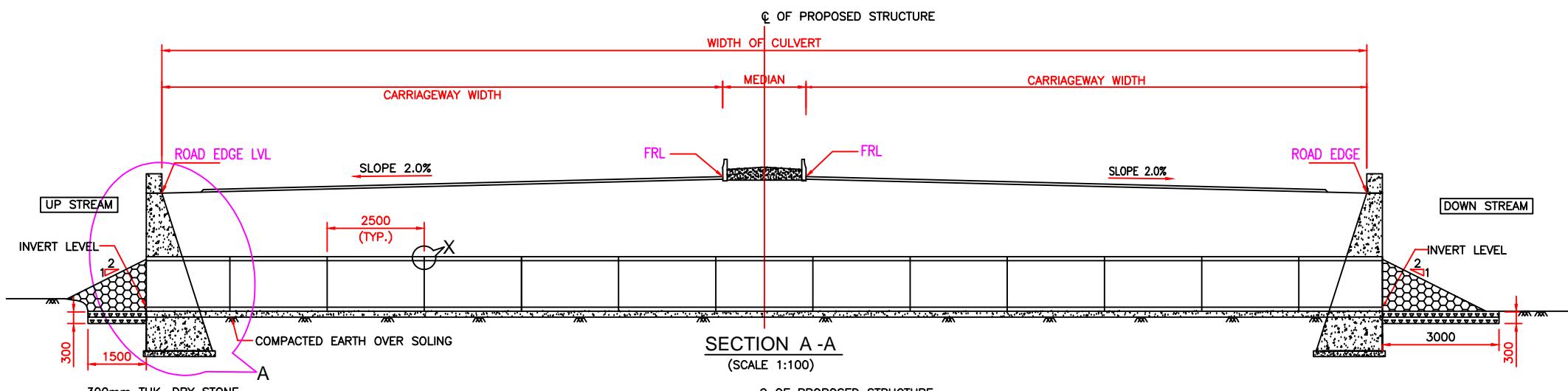
**CONSULTANT:**  
 QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614

**CLIENT:** JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai 400021

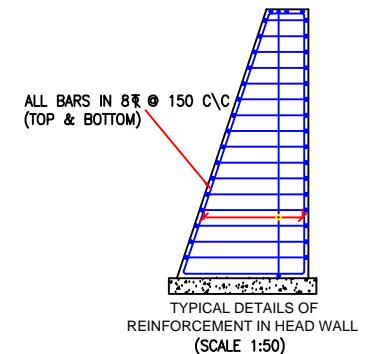
	NAME	SIGNATURE
CHECKED BY:-		
APPROVED BY:-		

KEY PLAN  
(SCALE 1:1)

o gradation of roads and drainage system outside custom  
ound area at Jawaharlal Nehru Port Trust.



- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS MENTIONED OTHERWISE.
  2. DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY DRAWINGS. FRL & CAMBER / SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DWG. DISCREPANCY, IF ANY, IS TO BE IMMEDIATELY BROUGHT TO THE NOTICE OF ENGINEER FOR NECESSARY MODIFICATION IN THE DRAWING.
  4. WIDTH OF MEDIAN SHALL BE CHECKED AS PER ROAD CROSS SECTION AT THAT PARTICULAR STRUCTURE LOCATION.
  5. NP4 CLASS PIPE CONFORMING TO IS:458 SHALL BE USED.
  6. LONGITUDINAL SLOPE OF PIPE SHALL BE 1 : 1000 (MIN.)
  7. LENGTH, LOCATION, ORIENTATION & INVERT LEVEL OF PIPE CULVERT SHALL BE ADJUSTED TO SUIT SITE CONDITION AND AS APPROVED BY THE ENGINEER.
  8. TRENCHES SHALL BE BACKFILLED IMMEDIATELY AFTER THE PIPES HAVE BEEN LAID AND THE JOINING MATERIAL HAS HARDENED.
  9. PIPE SHALL BE JOINED BY FLUSH JOINT METHOD AS PER THE DETAILS GIVEN IN SECTION 2906 OF MORT&H SPECIFICATIONS OF ROAD & BRIDGE WORKS.
  10. SKIN REINFORCEMENT @ 2.5kg/m<sup>2</sup> IN BOTH HOR. & VERTICAL DIRECTION
  11. MINIMUM HEIGHT OF CUSHION ABOVE PIPE SHALL BE 600mm EXCLUDING ROAD CRUST FOR NEW/RECONSTRUCTED CULVERTS. IN CASE THE CUSHION IS INSUFFICIENT, THE HUME PIPE SHALL BE ENCASED USING M15 PCC. REF DWG. NO: PWD-MH / DCSPL/ HPC/A



**STRUCTURE LIST - HPC**

Sr. No.	Bridge No.	Design Ch. (knt)	No. of Pipe	Dia. of Pipe in (m)	Prop. RTI.	Prop. U/S	Prop. D/S	Remark
<b>Section (A-B-C) (Road From Karal Junction to Y Junction)</b>								
1	3	0.097	2	1.20				
<b>Section (C-E) (Road from Y Junction to Central Gate)</b>								
2	10	2.235	3	1.20	6.500	4.600	4.195	
3	18	2.633	3	1.20	7.266	4.300	3.895	
<b>Section (B-F) (Passenger Corridor)</b>								
4	12	0.480	2	1.20		4.000	3.870	
5	13	1.215	2	1.20		4.000	3.870	
6	14	1.576	2	1.20	6.000	5.000	4.875	
7	15	1.603	2	1.20	6.080	3.700	3.575	
8	16	2.200	2	1.20	6.530	4.500	4.375	
9	17	2.620	1	1.20	6.420	4.500	4.375	

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**CONSULTANT:**

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Email: qmaxconsultants@gmail.com

**CLIENT:**

JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai - 400021

**PROJECT:-**

Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

DRAWN BY:-

CHECKED BY:-

TITLE :- GAD FOR PIPE CULVERT  
HPC - 3x1200mm<sup>Ø</sup>

DESIGNED BY:-

APPROVED BY:-

PURPOSE OF DRAWING  
FOR PLANNING

CHECKED BY:-

DATE:-

DRG.NO:DPR\_JNPT\_QTCPL\_HPC\_02

NO. DATE

REVISION/PURPOSE

DRAWN

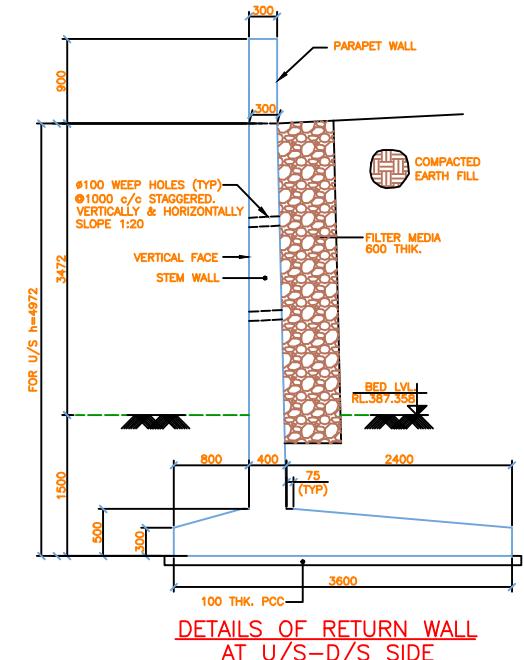
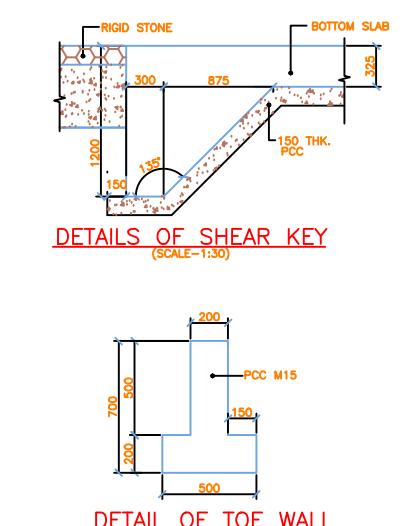
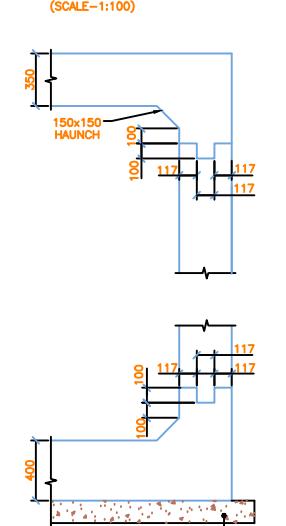
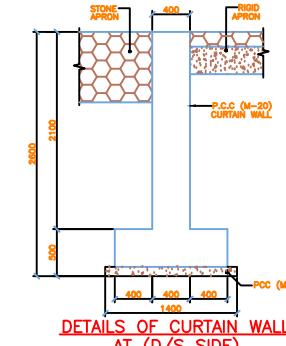
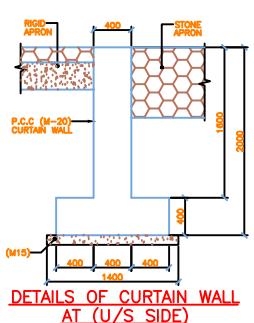
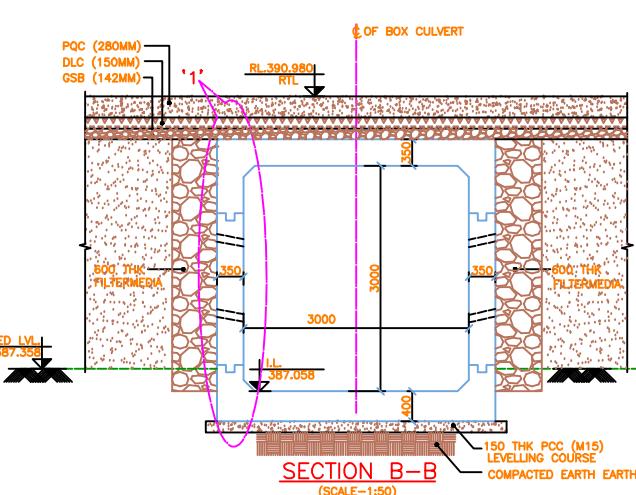
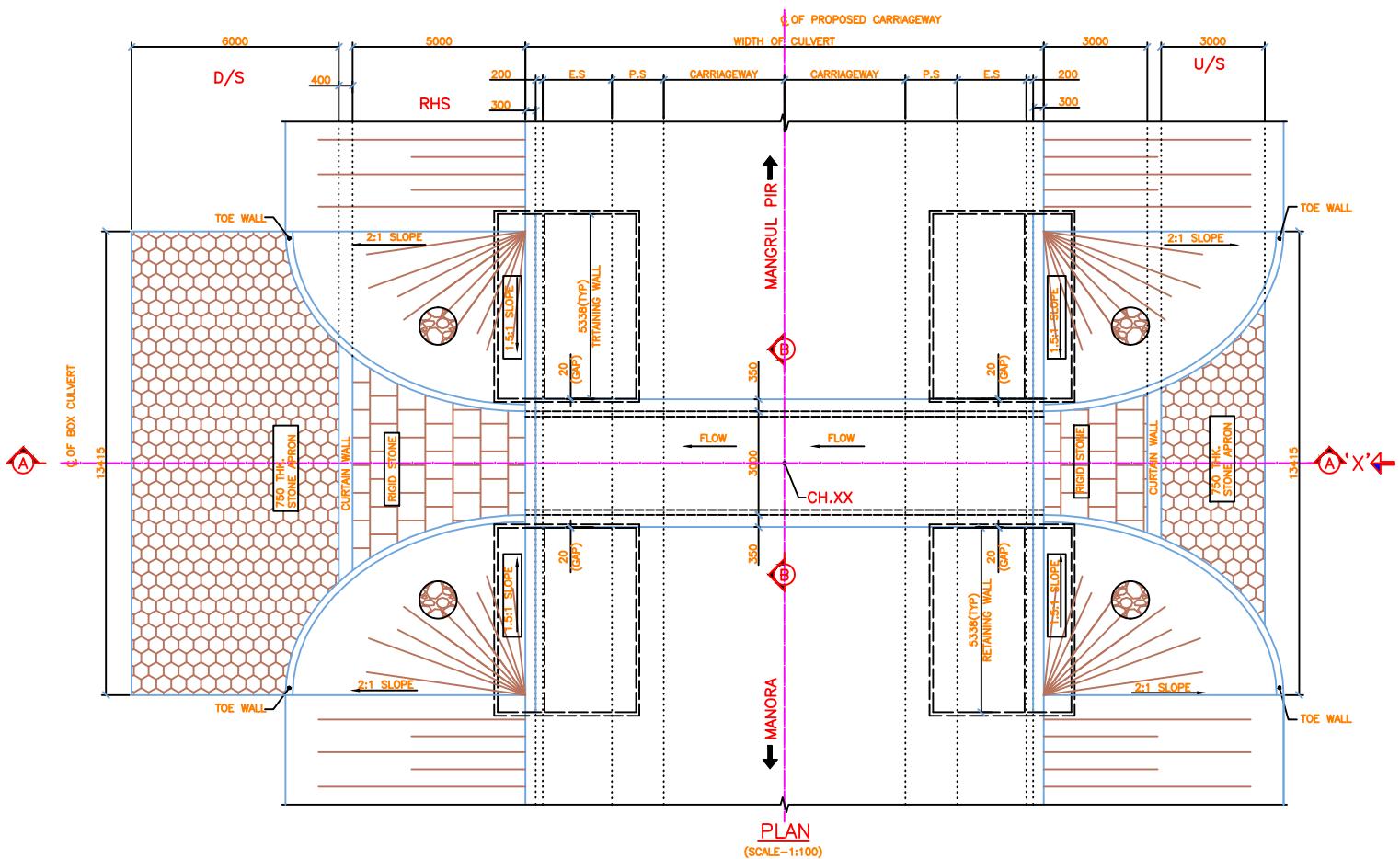
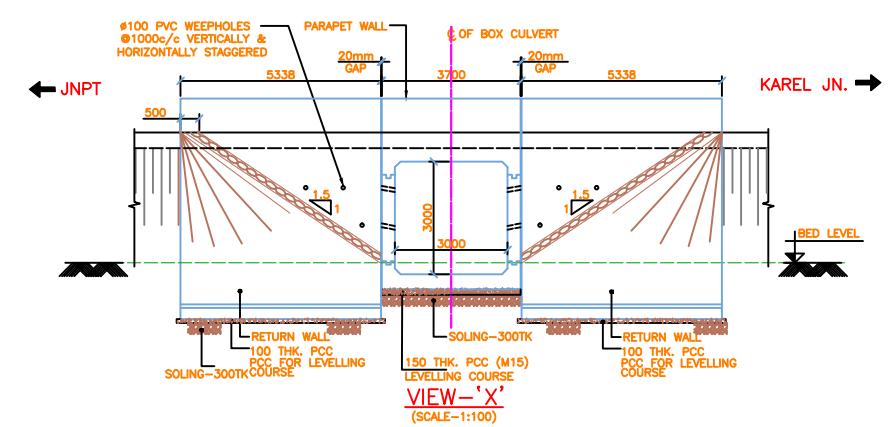
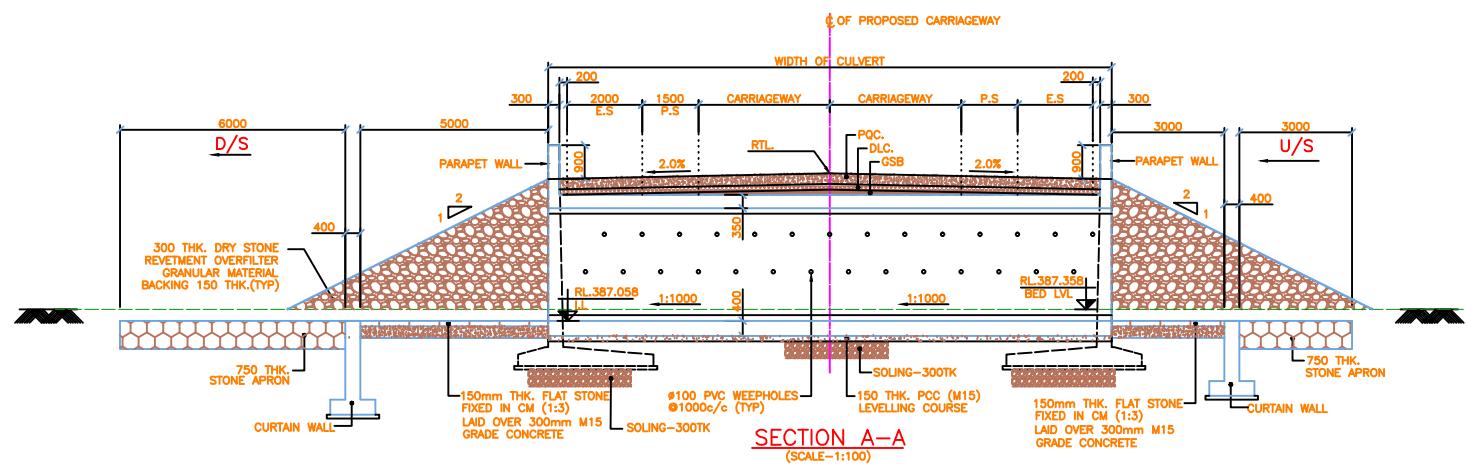
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SCALE: AS SHOWN

ISSUE RO

DATE: FEB-2020



**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METERS, UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. CONCRETE GRADE : M30 FOR BOX CELL & RETURN WALL.
4. CONCRETE MIX M15 FOR P.C.C. WORKS, AS INDICATED.
5. CLEAR COVER TO REINFORCEMENT : ON SOIL FACE -75mm.
6. REINFORCING STEEL SHALL BE BARS OF GRADE Fe500 CONFORMING TO IS:1786.
7. LAP LENGTH SHALL BE PROVIDED AS 40 x DIA. OF BARS AND NOT MORE THAN 50% OF THE BARS SHALL BE LOCATED IN SAME LAYER.
8. PROPERLY GRADED FILTER MEDIA OF 0.8M THICK SIDE WALL SHALL BE PROVIDED BEHIND THE RETURN WALL & SIDE WALL AS PER IRC:78.
9. WEEP HOLES OF 100MM DIA AC PIPE AT 1M C/C BOTH WAYS STAGGERED SHALL BE PROVIDED ON BOTH FACES OF BOX & RETURN ABOVE GROUND LEVEL.
10. DRAINAGE, DREDGING AND PROTECTION WORKS SHALL BE IN ACCORDANCE WITH MORTH SPECIFICATIONS & AS PER IRC:89 AND PROVIDED AS PER INSTRUCTIONS OF ENGINEER IN CHARGE.
11. DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS OF FRIL, INVERT LEVEL, GL, LONGITUDINAL GRADIENT, ROADWAY DIA, etc.
12. PITCHING/REVESTMENT ON SLOPES TO BE PROVIDED AS PER MORTH SPECIFICATION.
13. NET SAFE BEARING CAPACITY OF 20T/M<sup>2</sup> HAS BEEN CONSIDERED FOR THE DESIGN OF NEW STRUCTURE.
14. BACK FILLING SHALL BE DONE SIMULTANEOUSLY ON BOTH SIDES OF BOX CULVERT.
15. BACK FILLING AS PER CLAUSE 2503 OF MORTH SHOULD BE USED IN THE FORM OF INVERTED FILTER, IT SHOULD BE PROVIDED BOTH U/S & D/S. WEIGHT OF STONE IN APRON SHOULD NOT BE LESS THAN 40Kg.
16. BACK FILLING BEHIND RETURN WALLS CONSISTS OF EARTH CONFORMING TO APPENDIX : 6 OF IRC:78-2014. HAVING PROPERTIES C=0,  $\phi=30^\circ$  AND  $y=1.8$  t/m<sup>2</sup>. HOWEVER 10 t/m<sup>2</sup> IS CONSIDERED FOR LOAD CALCULATION PURPOSE.
17. THE CARRIAGEWAY PROPOSED BRIDGE IS DESIGNED FOR 70R TRACKED, 70R WHEELED VEHICLES AND CLASS A VEHICLES LOADING, 2 LANE OF 70R VEHICLES, 4 LANE OF CLASS A VEHICLES.
18. SALTEX BOARD OF 20MM TO BE FIXED ALONG WITH BONDING AGENT BETWEEN RETAINING WALL & BOX CULVERT.
19. SHEAR KEY DETAIL SHOWN IN THE DRAWING AS PER IRC GUIDELINE BUT ACTUAL CONSTRUCTION AT SITE SHALL BE DONE AS PER REQUIREMENT WITH PRIOR APPROVAL OF AUTHORITY ENGINEER.
20. ANY EXISTING POLE/HOUSE FOUNDING LEVEL WILL BE REMOVED COMPACTED AND FILLED WITH GRANULAR MATERIAL / PCC M15 AS DECIDED BY ENGINEER.
21. ENSURE INVERT LEVEL AND FLOW DIRECTION ON SITE BEFORE EXECUTION IF ANY DISCREPANCY FOUND, IMMEDIATELY BROUGHT TO NOTICE OF DESIGN ENGINEER FOR NECESSARY MODIFICATION IN THE DRAWING.
22. ROW SHALL BE VERIFIED AT SITE, IF TOE LINE OF EMBANKMENT CROSSES ROW, RETAINING WALLS/RETURN WALL PROVIDED BEHIND CULVERTS SHALL BE EXTENDED UNTIL TOE LINE DOES NOT CROSS THE ROW.

#### REFERENCE DRAWINGS (LATEST REVISION)

REINFORCEMENT DETAILS OF BOX, PARAPET - 232-QTCPL-1005
REINFORCEMENT DETAILS OF RETAINING WALL - 232-QTCPL-STD-2001

#### LEGENDS:-

- CENTER LINE
- RTL — ROAD TOP LEVEL
- GL — GROUND LEVEL
- U/S — UP STREAM
- D/S — DOWN STREAM
- PS — PAVED SHOULDER
- ES — EARTHEN SHOULDER
- TYP. — TYPICAL
- THK. — THICK
- POC — PAVEMENT QUALITY CONCRETE
- DLC — DRY LEAN CONCRETE

#### STRUCTURE LIST - BOX CULVERT

Sr. No.	Bridge No.	Design Ch. (km XX)	Type of Structure	No. of Cell	Size (m) of Culvert	Prop. RTL	Prop. U/S	Prop. D/S
<b>Section (B-G) (Road from CES Junction to CES)</b>								
1	1	0.305	Box Culvert	I	3.00 x 3.00	6.563	3.218	2.991
2	2	0.653	Box Culvert	2	3.00 x 3.00	6.38	2.784	2.699
<b>Section (C-D) (Road from Y - Junction to North Gate)</b>								
3	5	0.609	Box Culvert	I	3.00 x 3.00	7.534	3.25	3.00
4	6	1.500	Box Culvert	I	3.00 x 3.00	7.272	3.911	3.25
5	7	1.650	Box Culvert	I	3.00 x 3.00	7.38	3.94	3.29
6	8	2.455	Box Culvert	I	3.00 x 3.00	7.59	4.311	3.65

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4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

R0	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

#### CONSULTANT:

QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

#### CLIENT:

JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FP Marg,  
Nariman Point, Mumbai - 400021

#### PROJECT:-

Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

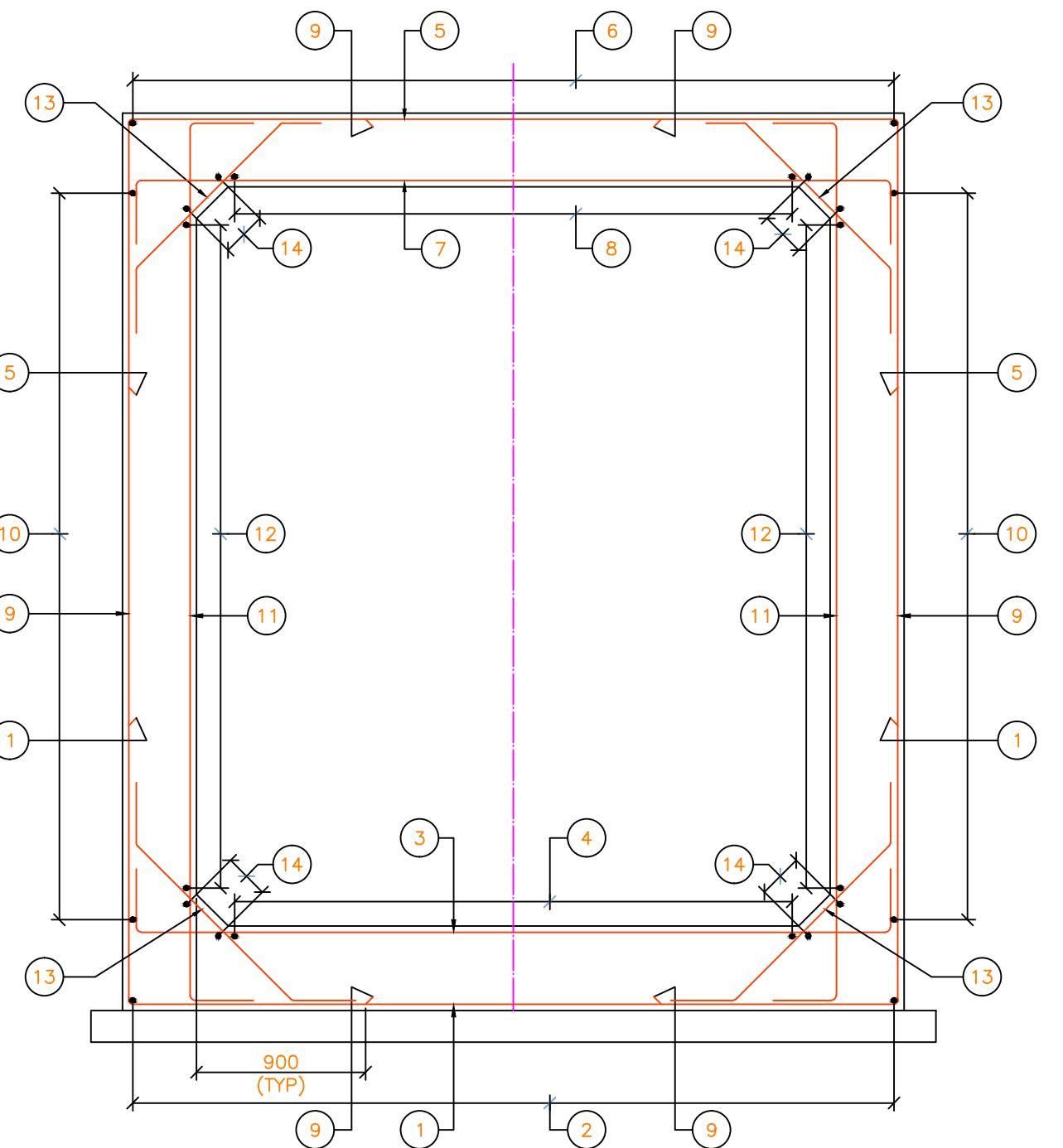
#### TITLE :- GAD FOR BOX CULVERT

#### PURPOSE OF DRAWING FOR PLANNING

DRG.NO:DPR\_JNPT\_QTCPL\_BOX\_01

SCALE: AS SHOWN ISSUE R0

DATE: FEB-2020



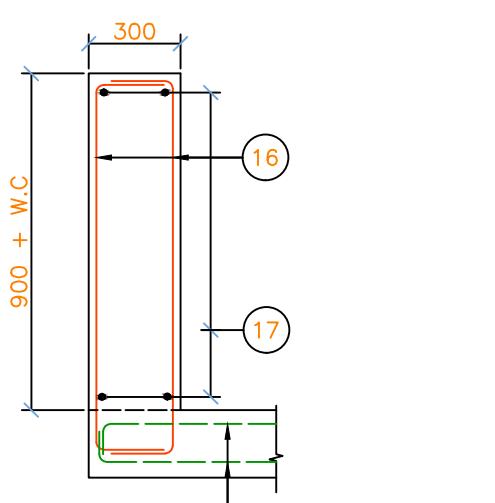
**TYPICAL CROSS SECTION**  
(SHOWING REINFORCEMENT DETAILS)  
(SCALE-1:30)

**LEGENDS:-**

TYP - TYPICAL  
W.C - WEARING COAT

**NOTES:**

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- DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- CONCRETE GRADE : M30 FOR BOX CELL.
- CONCRETE MIX M15 FOR P.C.C. WORKS, AS INDICATED.
- CLEAR COVER TO REINFORCEMENT :  
ON SOIL FACE -75mm.  
ON FREE FACE -40mm.  
TOP SLAB -40mm.
- LAP LENGTH SHALL BE PROVIDED AS  $50 \times \text{DIA. OF BARS}$  AND NOT MORE THAN 50% OF THE BARS SHALL BE LAPPED AT SAME LOCATION.
- WEEP HOLES OF 100mm DIA AC PIPE AT 1M C/C BOTH WAYS STAGGERED SHALL BE PROVIDED ON BOTH FACES OF BOX CULVERT ABOVE GROUND LEVEL.
- THE FOUNDATION SHALL BE LAID ON NATURAL STRATA AND NOT ON FILL MATERIAL. THE SBC OF STRATA SHALL BE MIN 20t/m<sup>2</sup>.
- FOR REINFORCEMENT DETAILS OF RETAINING WALL REFER DRAWING 232/PWD/QTCL/STD/2001
- DEVELOPEMENT LENGTH 'LD' SHALL BE  $40 \times 1.43 \times \text{DIA.}$



**DETAIL OF PARAPET WALL**  
(W.C. - WEARING COAT)  
(SCALE-1:25)

**SCHEDULE OF REINFORCEMENT**

BAR MARK	SIZE	NOS./SPACING	SHAPE	REMARKS
1	H12	@200c/c		
2	H8	@200c/c		
3	H16	@200c/c		
4	H8	@200c/c		
5	H10	@200c/c		
6	H8	@200c/c		
7	H16	@200c/c		
8	H8	@200c/c		
9	H12	@200c/c		
10	H8	@200c/c		
11	H12	@200c/c		
12	H8	@200c/c		
13	H10	@200c/c		
14	H8	4x2 NOS.		
15				NOT USED
16	H16	@150c/c		
17	H10	@250c/c		

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**CLIENT:**



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1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai - 400021

**PROJECT:-**

Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

**DRAWN BY:-**

NAME

SIGNATURE

**CHECKED BY:-**

NAME

SIGNATURE

**DESIGNED BY:-**

NAME

SIGNATURE

**APPROVED BY:-**

NAME

SIGNATURE

**CHECKED BY:-**

NAME

SIGNATURE

**DATE:-**

NAME

SIGNATURE

**TITLE :- GA & RC DETAILS**

**PURPOSE OF DRAWING**

BOX CULVERT - 1 x 3.0 x 3.0m

**FOR PLANNING**

DRG.NO:DPR\_JNPT\_QTCPL\_BOX\_02

**ISSUE**

SCALE: AS SHOWN

R0

R0	FEB-2020	FOR REVIEW			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

CHECKED BY:-

NAME

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DATE:-

NAME

SIGNATURE

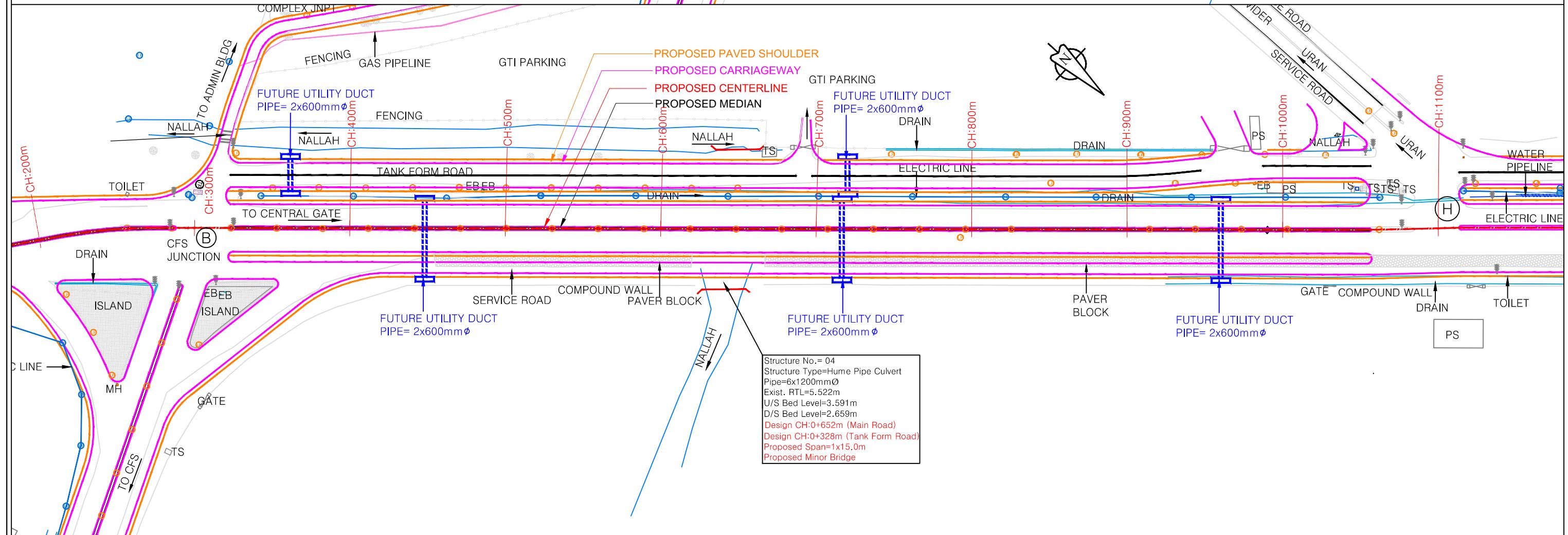
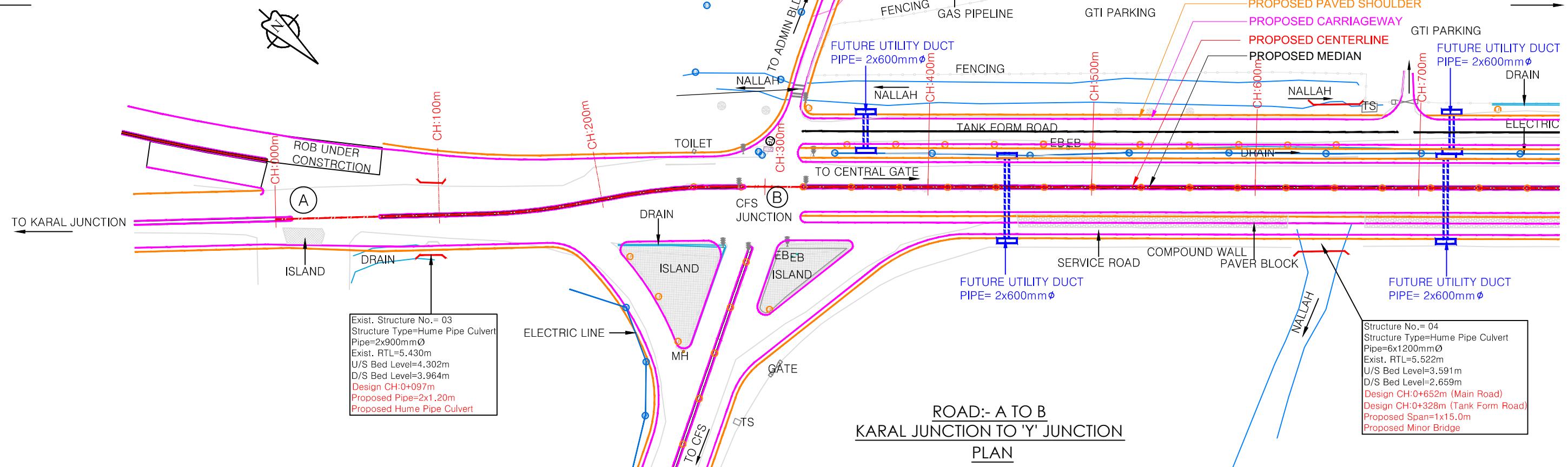
DATE: FEB-2020

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# **DETAILED UTILITY RELOCATION PLAN**

TO PANVEL

TO NORTH GATE



**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
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NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
RO	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
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307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
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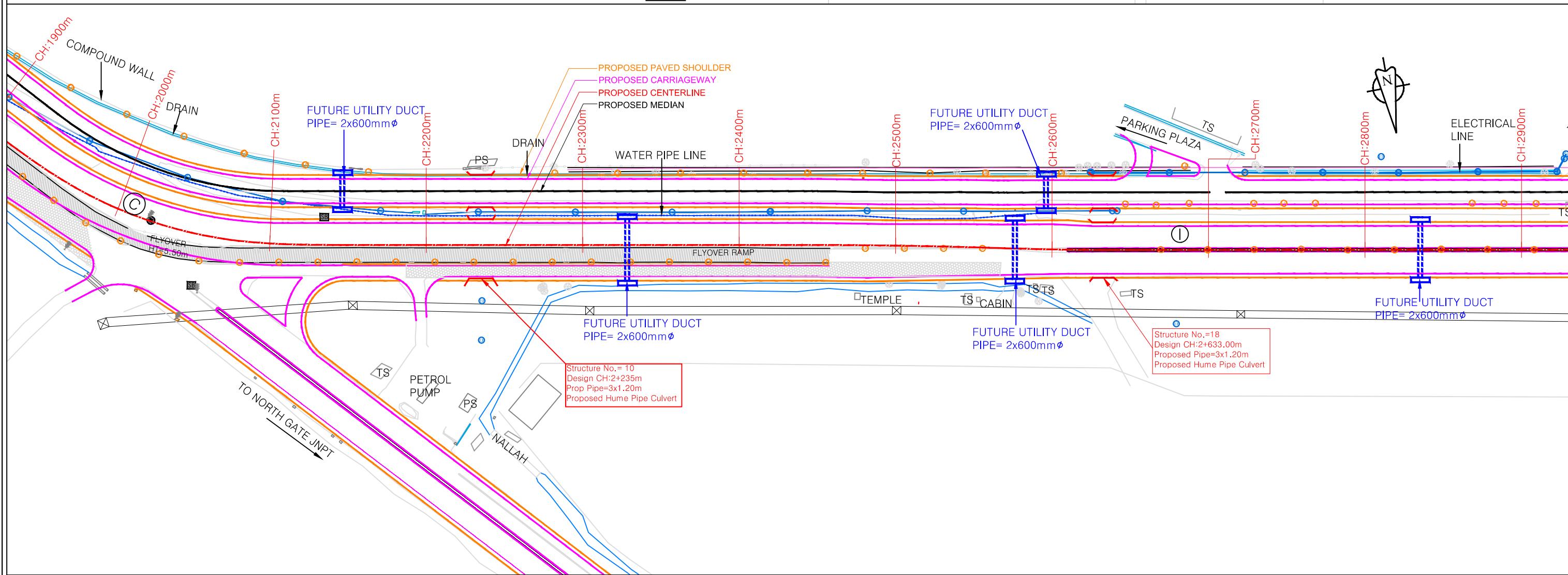
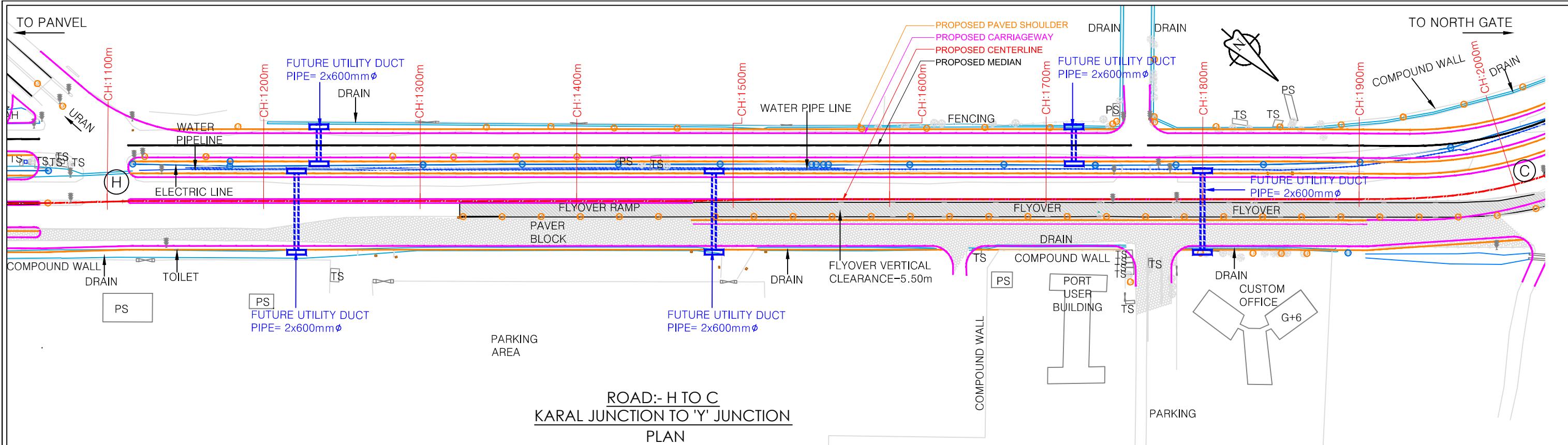
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	NAME	SIGNATURE
MVJ		
CHECKED BY:-	NAME	SIGNATURE
AMS		

**CLIENT:**  
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

NAME	SIGNATURE	
APPROVED BY:-	NAME	SIGNATURE
DATE:-	NAME	SIGNATURE

**PROJECT:-**  
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- DETAILED UTILITY RELOCATION PLAN	PURPOSE OF DRAWING
FROM CH:0.00m TO CH:1100.00m	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_DURP_01	SCALE: H=1:2500 ISSUE R0
DATE: FEB-2020	



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 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email : qmaxconsultants@gmail.com

DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	MVJ	
CHECKED BY:-	AMS	

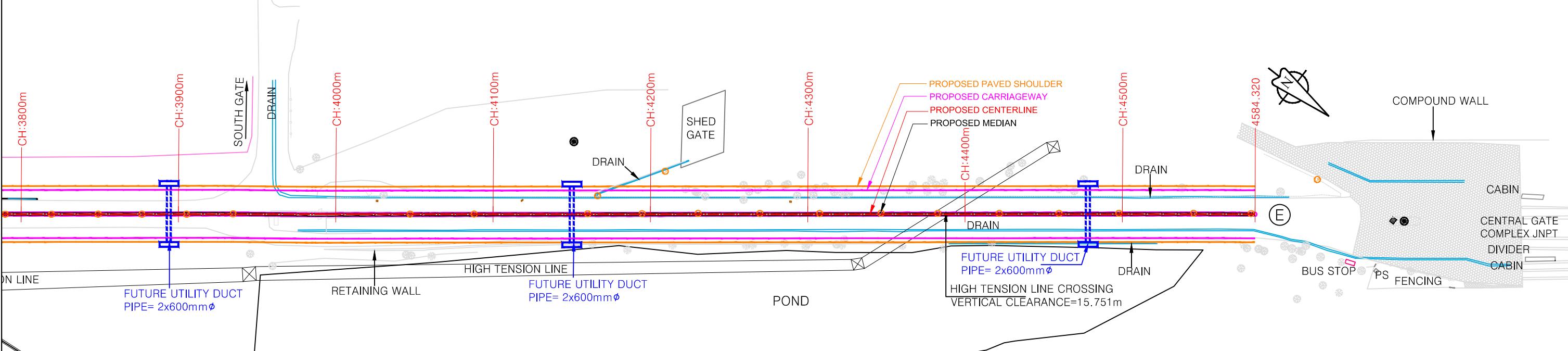
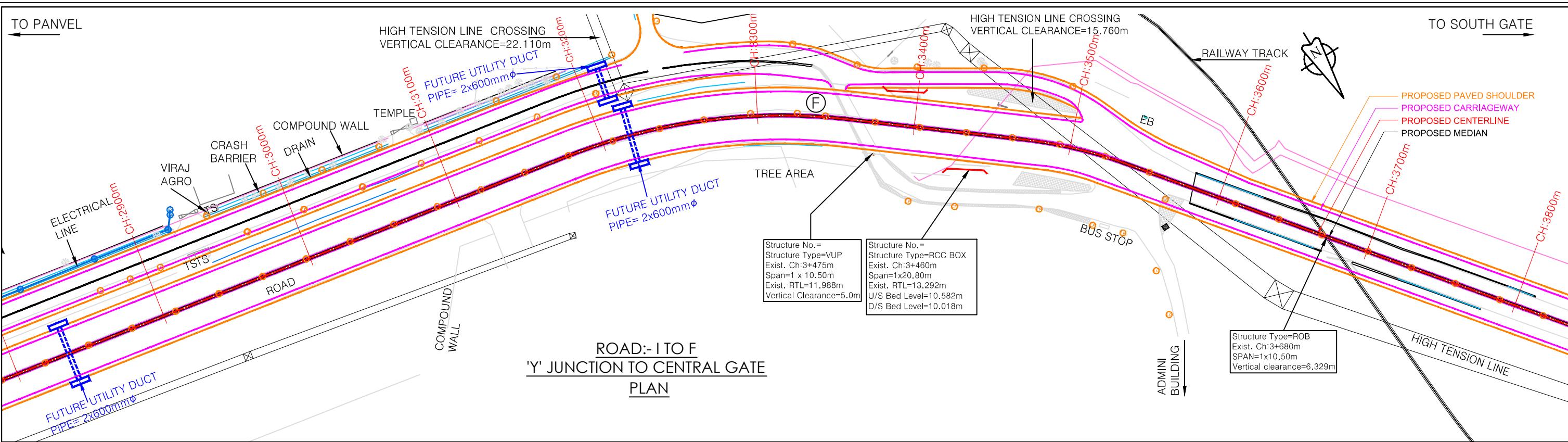
**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai-400021

NAME	SIGNATURE

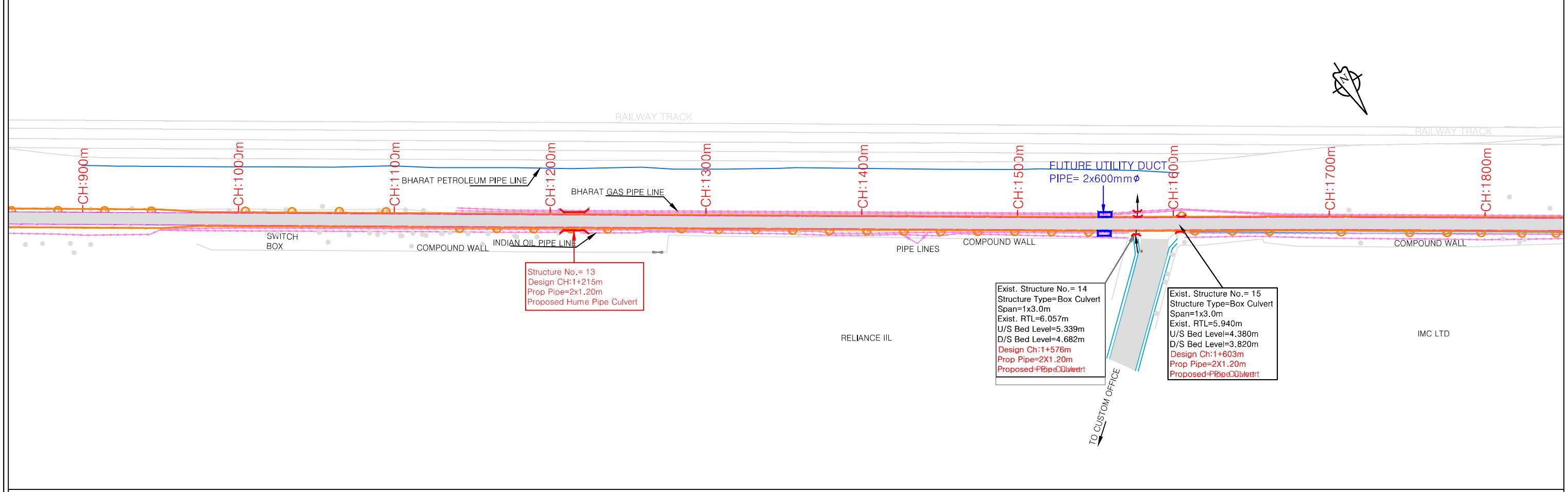
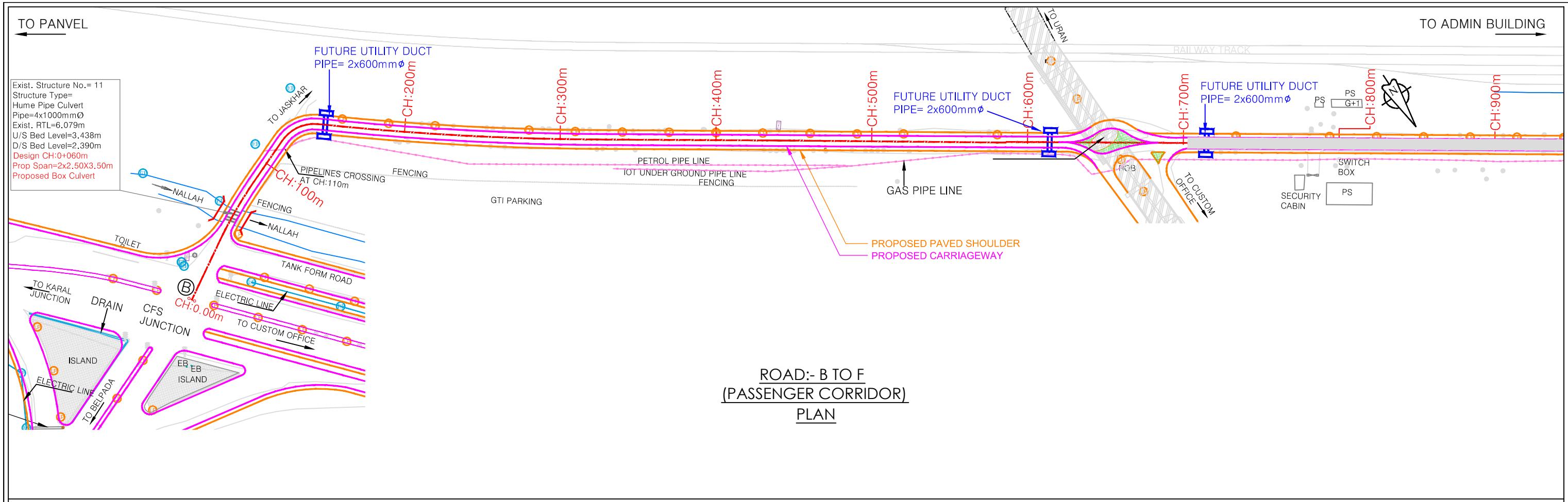
**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- DETAILED UTILITY RELOCATION PLAN	PURPOSE OF DRAWING
FROM CH:1100m TO CH:2900m	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_DURP_02	SCALE: H=1:2500 ISSUE
	SCALE: V=1:250 R0

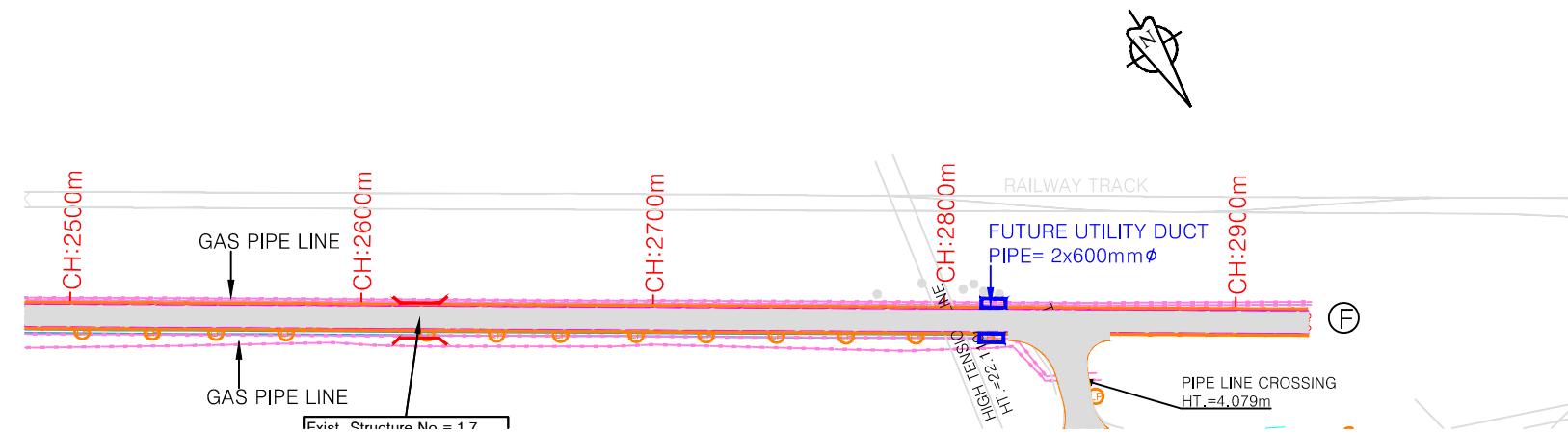
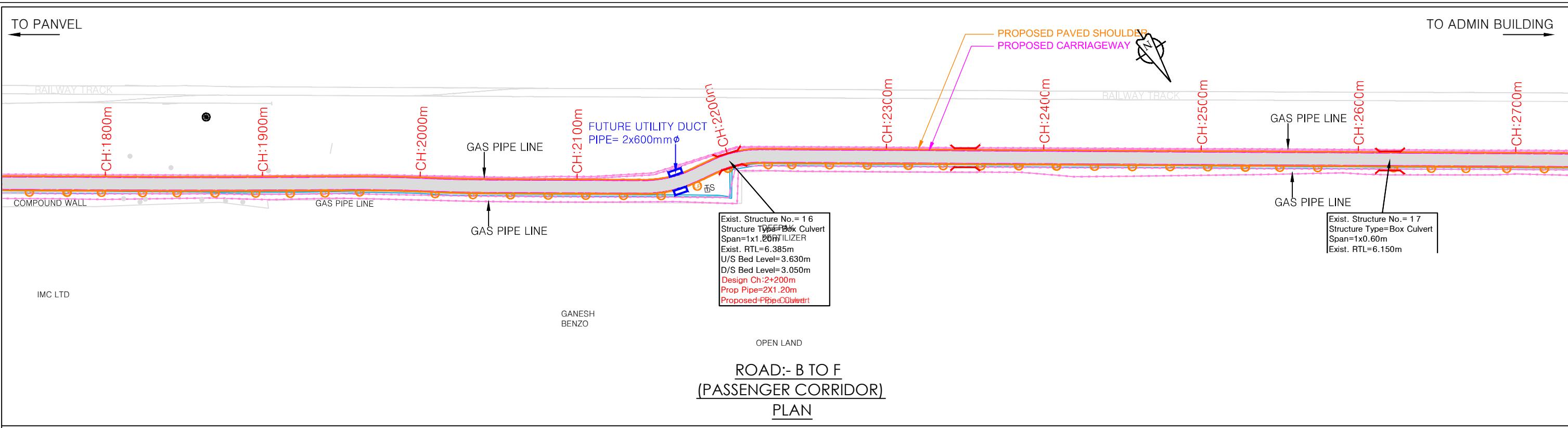
R0	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED



NOTES:					CONSULTANT:			CLIENT:			PROJECT:-	
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	DRAWN BY:-	NAME	SIGNATURE	CLIENT:	PROJECT:-	TITLE :- DETAILED UTILITY RELOCATION PLAN	PURPOSE OF DRAWING	
RO	FEB-2020	FOR REVIEW			DRAWN BY:-	MVP		JAWAHARLAL NEHRU PORT TRUST	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	FROM CH:2900m TO CH:4584.820m	FOR PLANNING	
					DESIGNED BY:-	MVJ		1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021		DRG.NO:DPR_JNPT_QTCPL_DURP_03	SCALE: H=1:2500 ISSUE	
					CHECKED BY:-	AMS				DATE: FEB-2020	SCALE: V=1:250 R0	



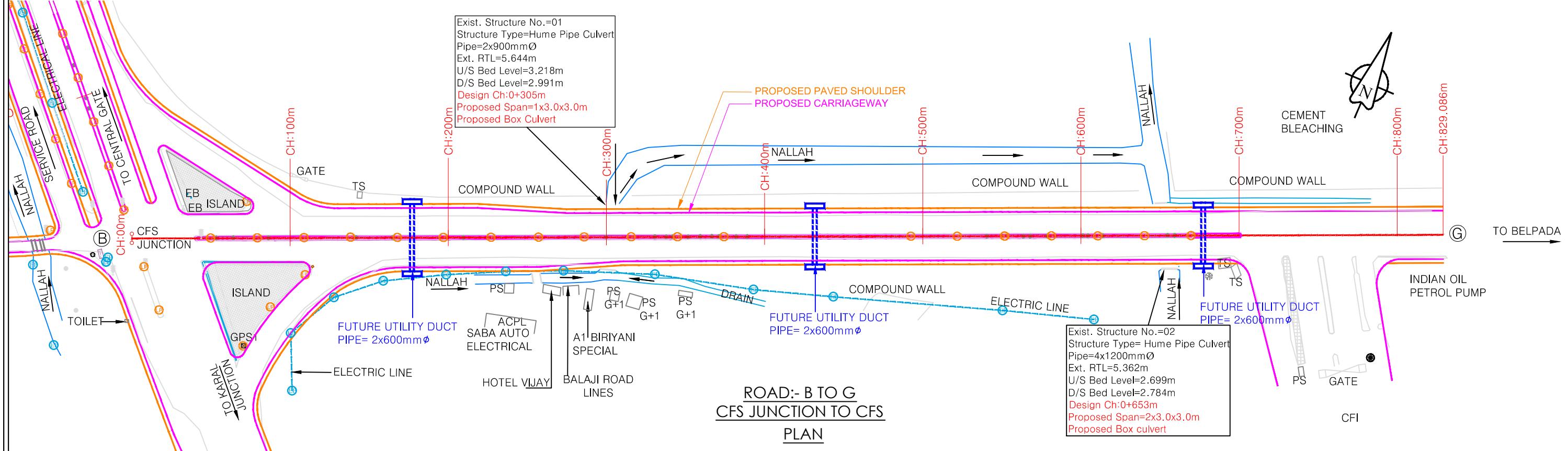
NOTES:						CONSULTANT:			CLIENT:			PROJECT:-		
1. All dimensions and levels are in meters unless otherwise specified.						 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com			 JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021			Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.		
2. Any discrepancy in drawing please bring it to notice.														
3. All levels are w.r.t. GTS bench mark.														
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						NAME	SIGNATURE		NAME	SIGNATURE		TITLE :- DETAILED UTILITY RELOCATION PLAN FROM CH:0.00m TO CH:1800.00m	PURPOSE OF DRAWING FOR PLANNING	
R0	FEB-2020	FOR REVIEW				DRAWN BY:-		CHECKED BY:-				DRG.NO:DPR_JNPT_QTCPL_DURP_01	H=1:2500	ISSUE
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DESIGNED BY:-		APPROVED BY:-				SCALE: V=1:250		RO
						CHECKED BY:-		DATE:-				DATE: FEB-2020		



NOTES:						CONSULTANT:			CLIENT:			PROJECT:-				
						QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com			JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021			Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			PURPOSE OF DRAWING FOR PLANNING	
						DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- DETAILED UTILITY RELOCATION PLAN FROM CH:1800.00m TO CH:2900.00m			SCALE: H=1:2500 ISSUE V=1:250 R0	
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	DRG.NO:DPR_JNPT_QTCPL_DURP_02			DATE: FEB-2020	
R0	FEB-2020	FOR REVIEW				DRAWN BY:-			CHECKED BY:-			DRG.NO:DPR_JNPT_QTCPL_DURP_02			SCALE: H=1:2500 ISSUE V=1:250 R0	
						DESIGNED BY:-			APPROVED BY:-			DRG.NO:DPR_JNPT_QTCPL_DURP_02			DATE: FEB-2020	
						CHECKED BY:-			DATE:-			DRG.NO:DPR_JNPT_QTCPL_DURP_02			SCALE: H=1:2500 ISSUE V=1:250 R0	

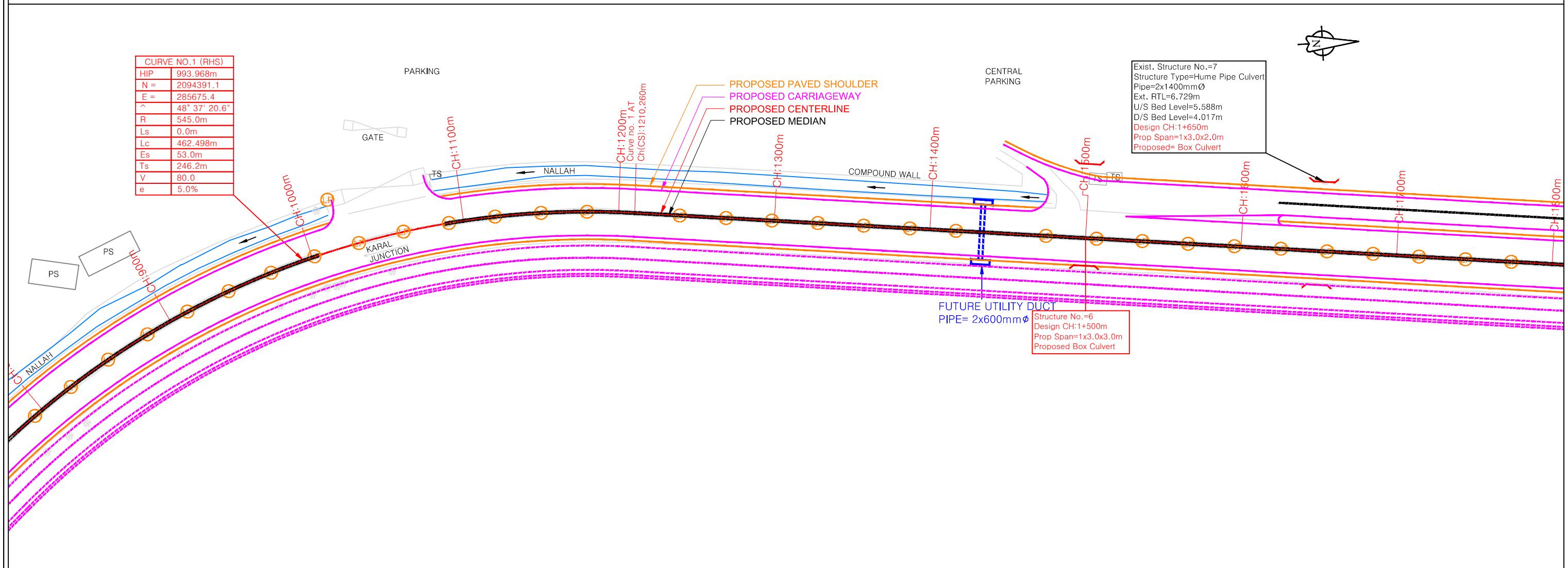
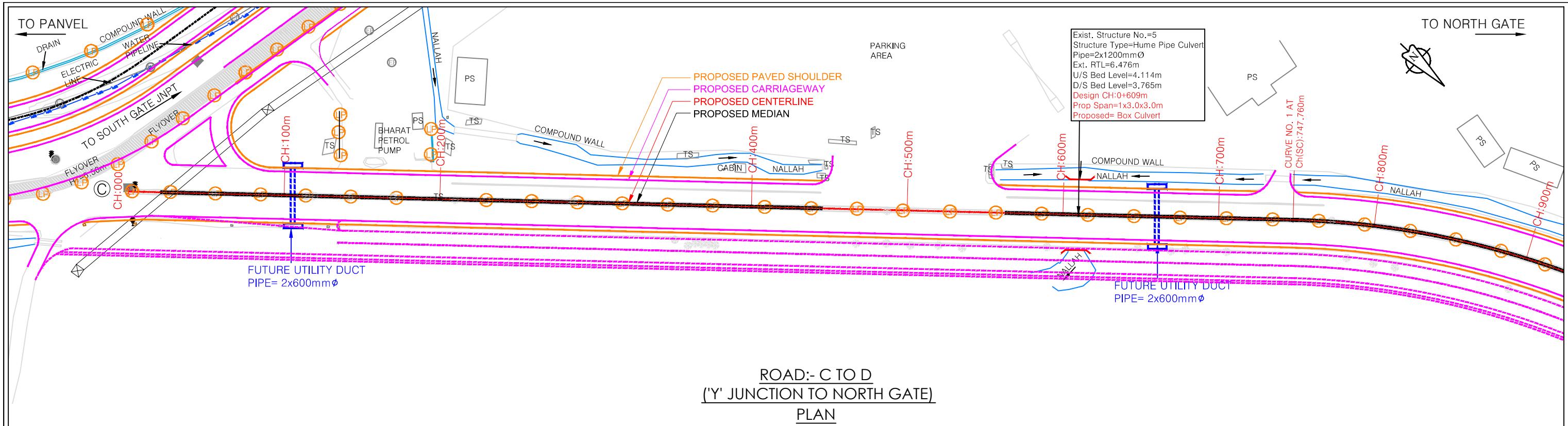
TO PANVEL

TO BELPADA



NOTES:				
1. All dimensions and levels are in meters unless otherwise specified.				
2. Any discrepancy in drawing please bring it to notice.				
3. All levels are w.r.t. GTS bench mark.				
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.				

RO	FEB-2020	FOR REVIEW			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED



**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

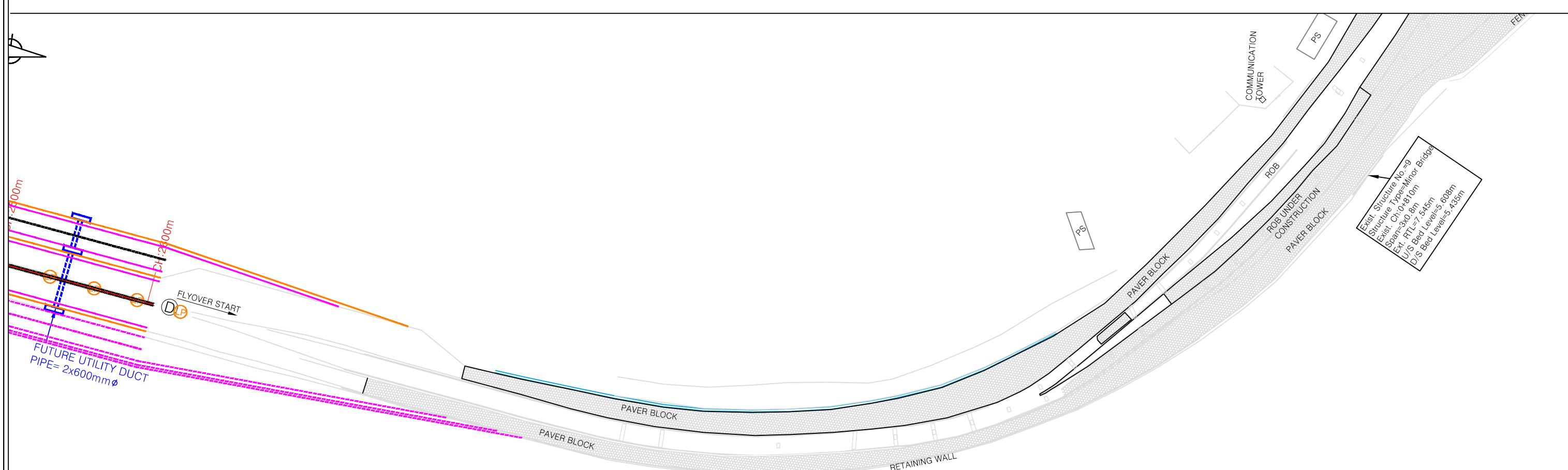
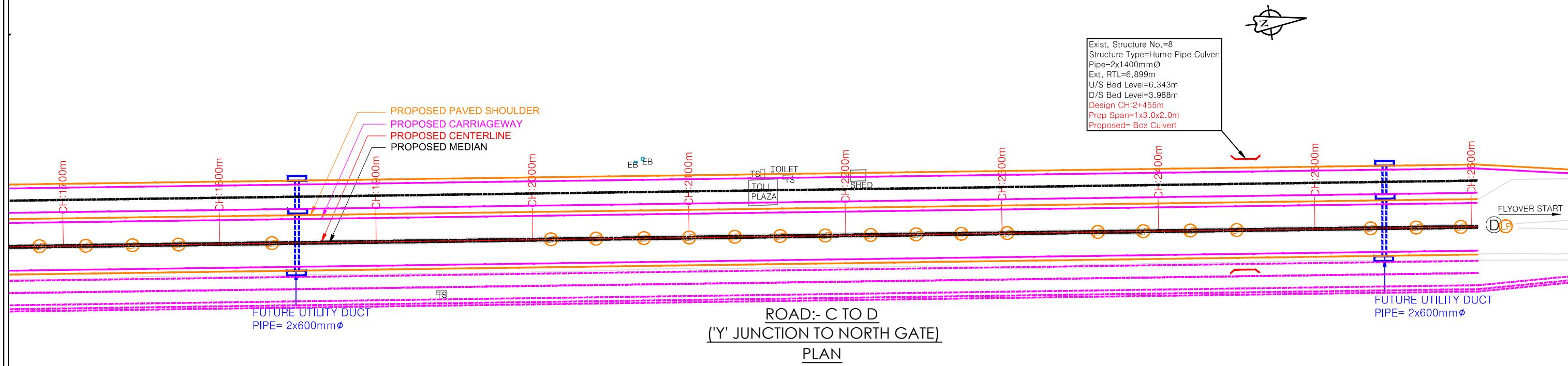
R0	FEB-2020	FOR REVIEW					
10	100%	TECHNICAL REPORT	DATA SHEET	APPENDIX	APPENDIX	APPENDIX	APPENDIX

CONSULTANT:		CLIENT:
	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHAR 1107,F Nariman
	NAME	SIGNATURE
DRAWN BY:-		CHECKED BY:-
DESIGNED BY:-		APPROVED BY:-

PROJECT:-	
LAL NEHRU PORT TRUST Seja centre,FPJ Marg, Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
NAME	SIGNATURE
	TITLE :- DETAILED UTILITY RELOCATION PLAN FROM CH:0.00m TO CH:900.00m
	DRG.NO:DPR_JNPT_QTCPL_DURP_01
	PURPOSE OF DRAWING FOR PLANNING SCALE : H=1:2500 ISSUE

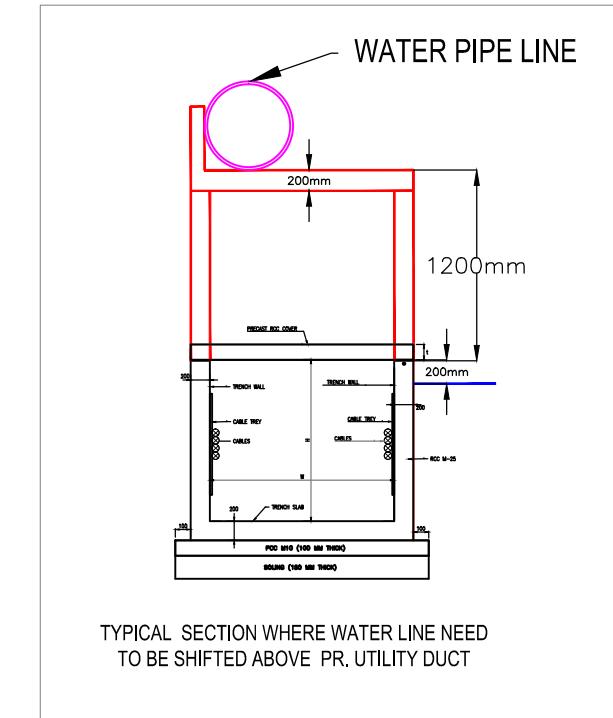
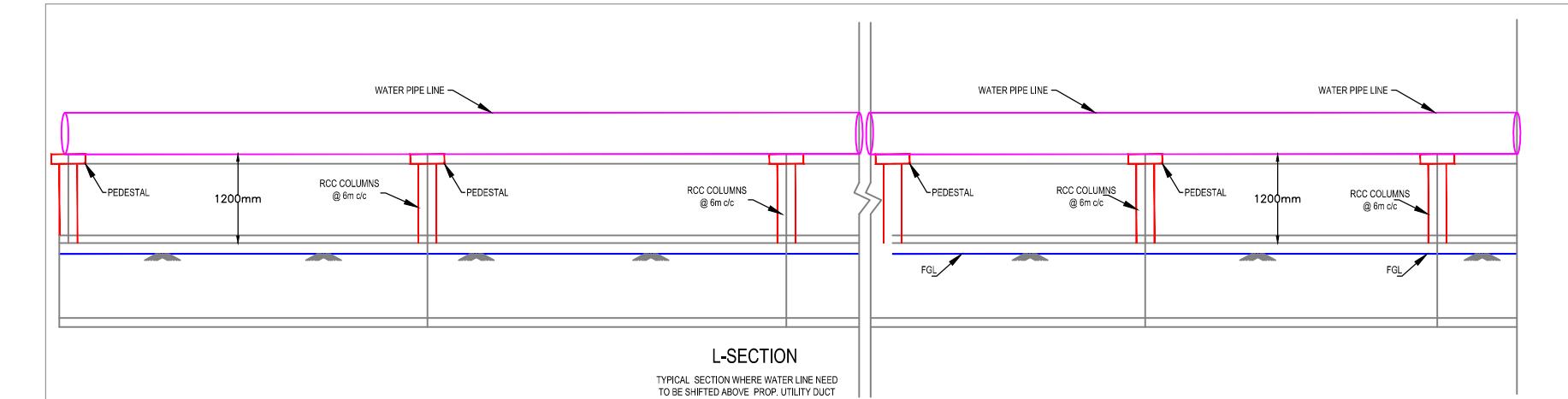
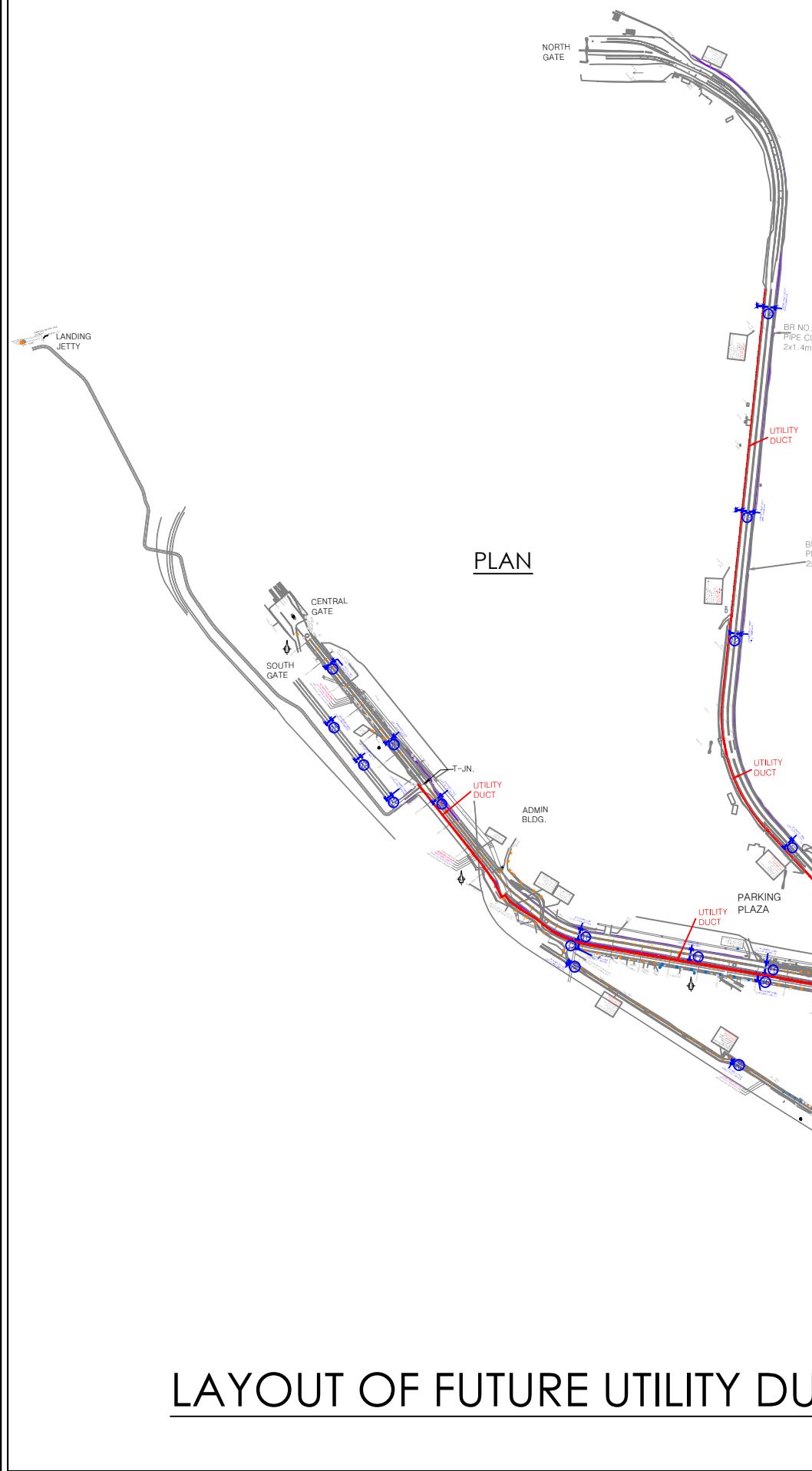
TO PANVEL

TO NORTH GATE

**L - SECTION**

- NOTES:**
- All dimensions and levels are in meters unless otherwise specified.
  - Any discrepancy in drawing please bring it to notice.
  - All levels are w.r.t. GTS bench mark.
  - All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

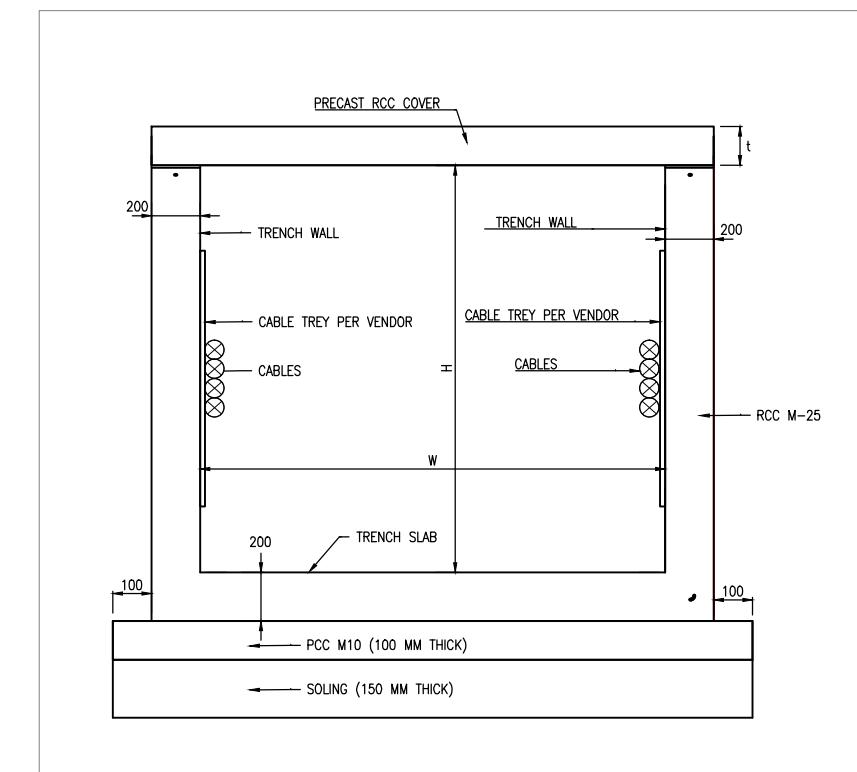
						CONSULTANT:	CLIENT:			PROJECT:-			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	NAME	SIGNATURE	JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-40021	NAME	SIGNATURE	TITLE :- DETAILED UTILITY RELOCATION PLAN FROM CH:1800.00m TO CH:2603.916m	PURPOSE OF DRAWING FOR PLANNING
RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED	DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	DRG.NO:DPR_JNPT_QTCPL_DURP_02	SCALE:H=1:2500 ISSUE V=1:250 R0
						DESIGNED BY:-			APPROVED BY:-			DATE: FEB-2020	
						CHECKED BY:-			DATE:-				



TRENCH SCHEDULE			
TRENCH SIZE	W (MM)	H (MM)	t (MM)
900 X 900	900	900	125
1200 X 1000	1200	1000	150

**NOTES:**  
 1. ALL DIMENSIONS ARE IN MM  
 2. GRADE OF CONCRETE= M25  
 3. GRADE OF STEEL= FE500  
 4. CLEAR COVER TO TRENCH WALL REINFORCEMENT ON SOIL SIDE = 50 MM  
 5. TRENCH SLAB REINFORCEMENT CAN BE PROVIDED AT CENTER OF SLAB.  
 6. DESIGN IS APPLICABLE TO ONLY TRENCH SIZES SPECIFIED IN TRENCH SCHEDULE.

DETAILS OF FUTURE UTILITY DUCT (TRENCH)			
SR. NO.	TRENCH LOCATION	SIZE OF TRENCH (WxH) IN MM	LENGTH IN M
1	KARAL JN. TOT-JN. (ALONG TANK FARM)	1200 X 1000	3950
2	CFS ROAD (LHS)	900 X 900	750
3	Y JN. TO NORTH GATE (LHS)	900 X 900	2650
4	CFS IN. TO Y-JN. (RHS)	900 X 900	1810



## LAYOUT OF FUTURE UTILITY DUCT

**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE			

**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email: qmaxconsultants@gmail.com



**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai - 400021



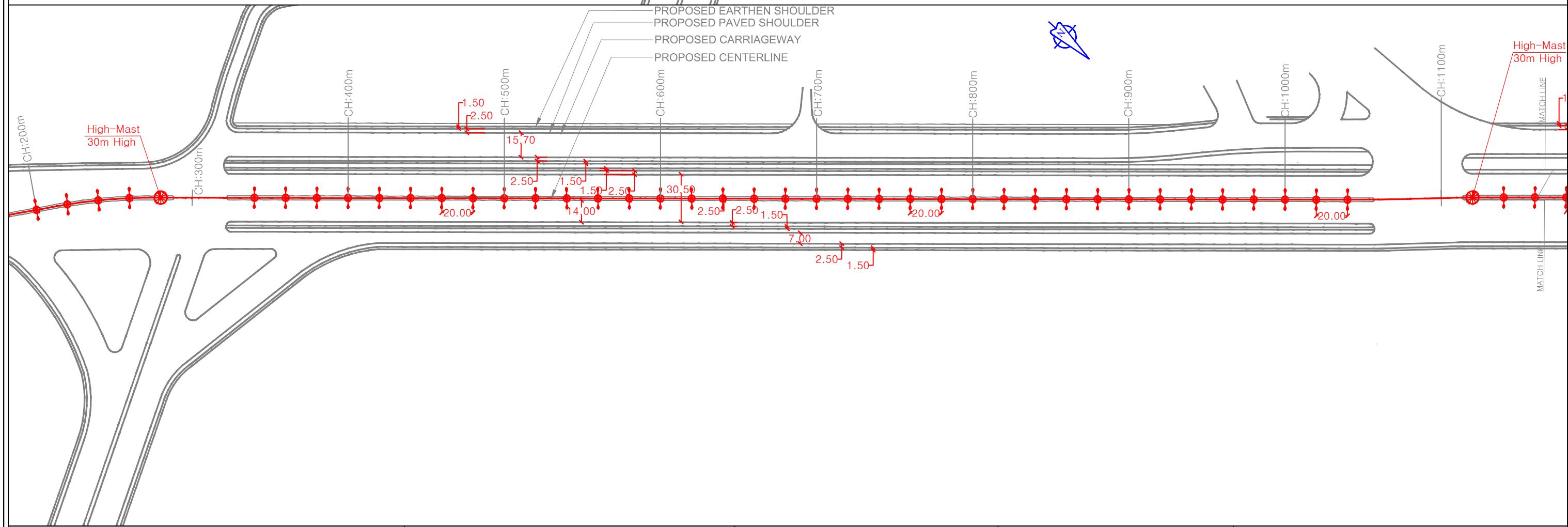
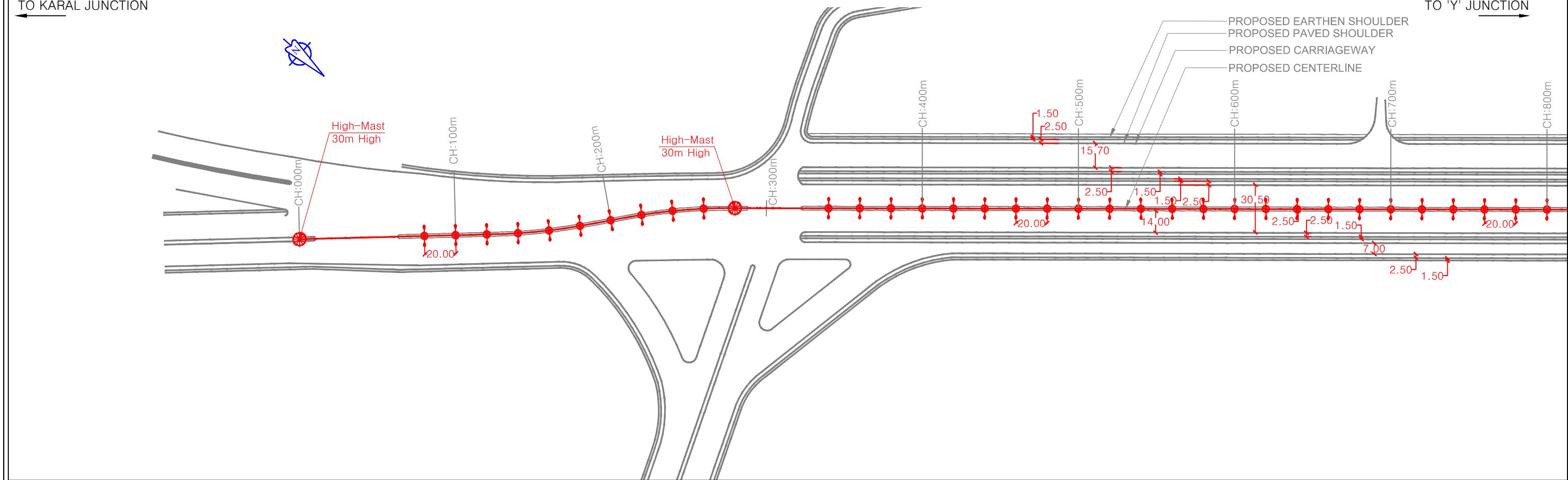
**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- DETAILED UTILITY DUCTS PLAN		PURPOSE OF DRAWING
FOR PLANNING		
DRG.NO:DPR_JNPT_QTCPL_DURP_		
SCALE: H=1:2500	ISSUE	
V=1:250		
RO		

# ELECTRICAL DRAWINGS

TO KARAL JUNCTION

TO 'Y' JUNCTION



NOTES:	
1.	All dimensions and levels are in meters unless otherwise specified.
2.	Any discrepancy in drawing please bring it to notice.
3.	All levels are w.r.t. GTS bench mark.
4.	All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

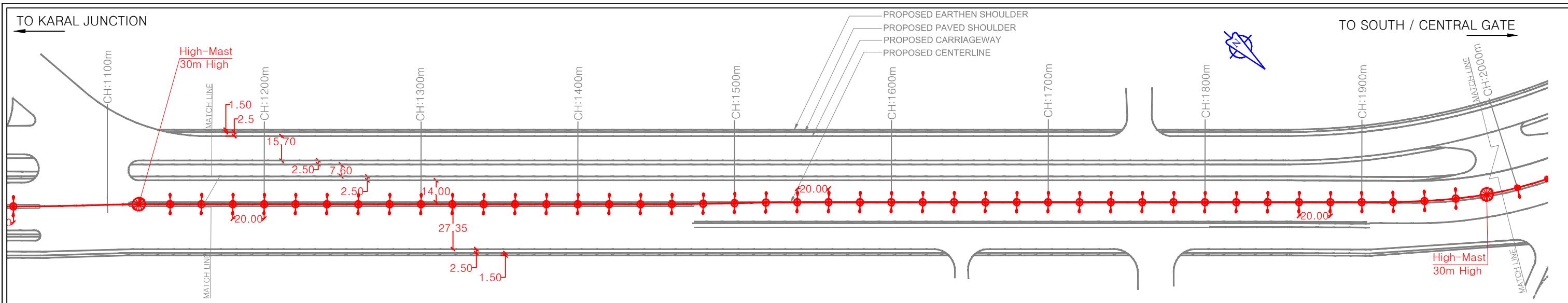
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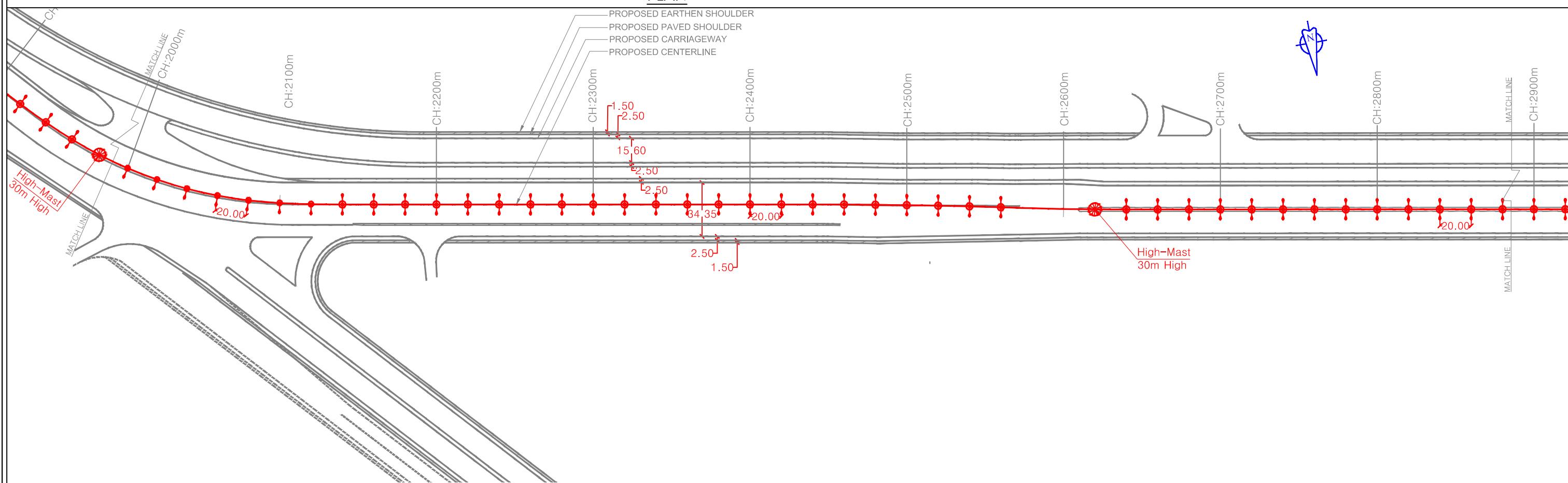
CONSULTANT:		
QMAX TECHNO-CONSULTANTS PVT. LTD.		CLIENT:
307-308, 3rd Floor, Foundation Tower, Plot No. 20,	JAWAHARLAL NEHRU PORT TRUST	PROJECT:-
Sector - 11, CBD Belapur, Navi Mumbai 400 614	1107,Raheja centre,FPJ Marg,	Up gradation of Roads and Drainage system outside custom
Email : qmaxconsultants@gmail.com	Nariman Point, Mumbai-400021	bound area at Jawaharlal Nehru Port Trust.
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	NAME	SIGNATURE
MVJ		
CHECKED BY:-	NAME	SIGNATURE
AMS		

CLIENT:		
QMAX TECHNO-CONSULTANTS PVT. LTD.		PROJECT:-
307-308, 3rd Floor, Foundation Tower, Plot No. 20,	JAWAHARLAL NEHRU PORT TRUST	Up gradation of Roads and Drainage system outside custom
Sector - 11, CBD Belapur, Navi Mumbai 400 614	1107,Raheja centre,FPJ Marg,	bound area at Jawaharlal Nehru Port Trust.
Email : qmaxconsultants@gmail.com	Nariman Point, Mumbai-400021	
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	NAME	SIGNATURE
MVJ		
CHECKED BY:-	NAME	SIGNATURE
AMS		

TITLE :- PROP STREET LIGHT(ROAD A TO E)		PURPOSE OF DRAWING
FROM CH:0.00m TO CH:1100.00m		FOR EXECUTION
DRG.NO:DPR_JNPT_QTCPL_P&P_01/01		SCALE:H=1:2500 ISSUE
DATE: SEPT-2020		SCALE:V=1:250 R0
NOTES:		



ROAD:- H TO C  
KARAL JUNCTION TO 'Y' JUNCTION  
PLAN



**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**LEGEND:**



**CONSULTANT:**

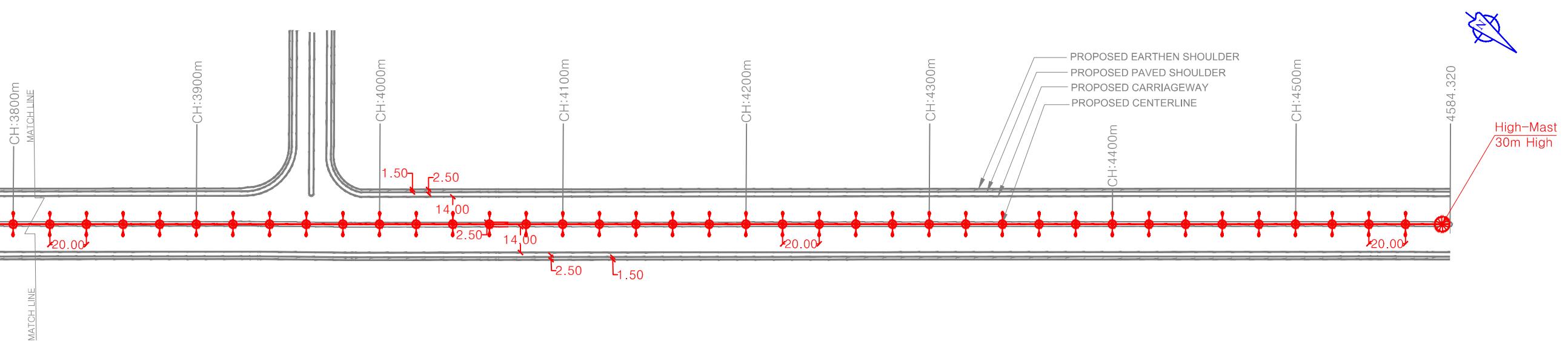
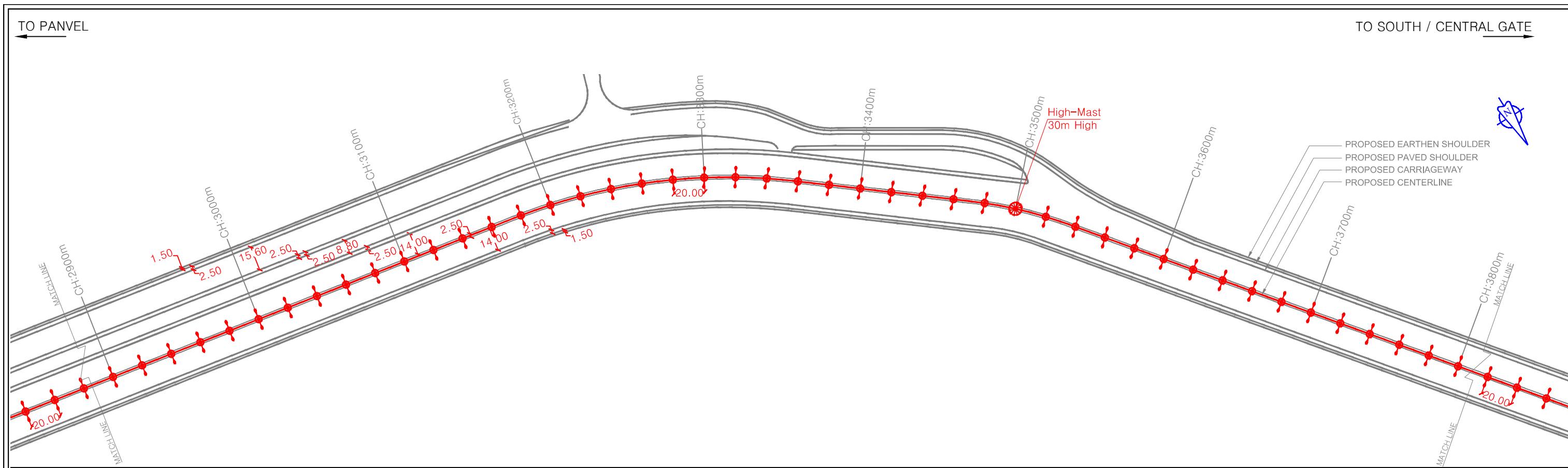
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

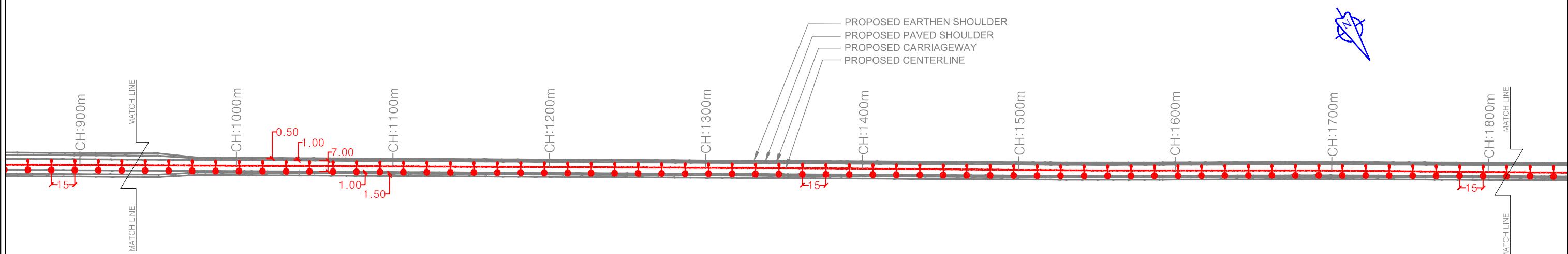
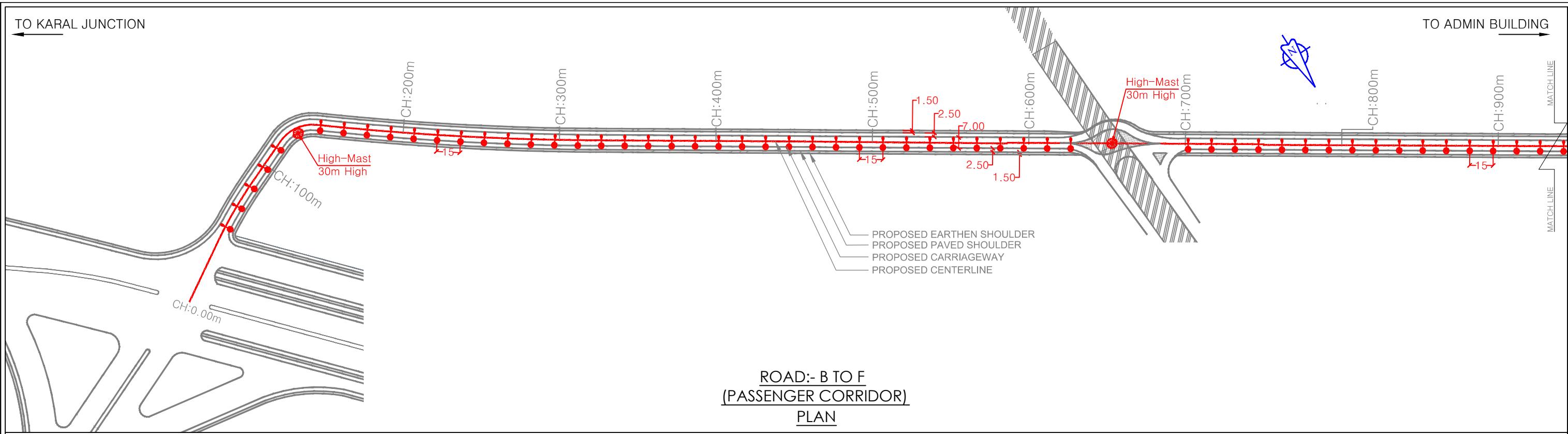
**PROJECT:-**

Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

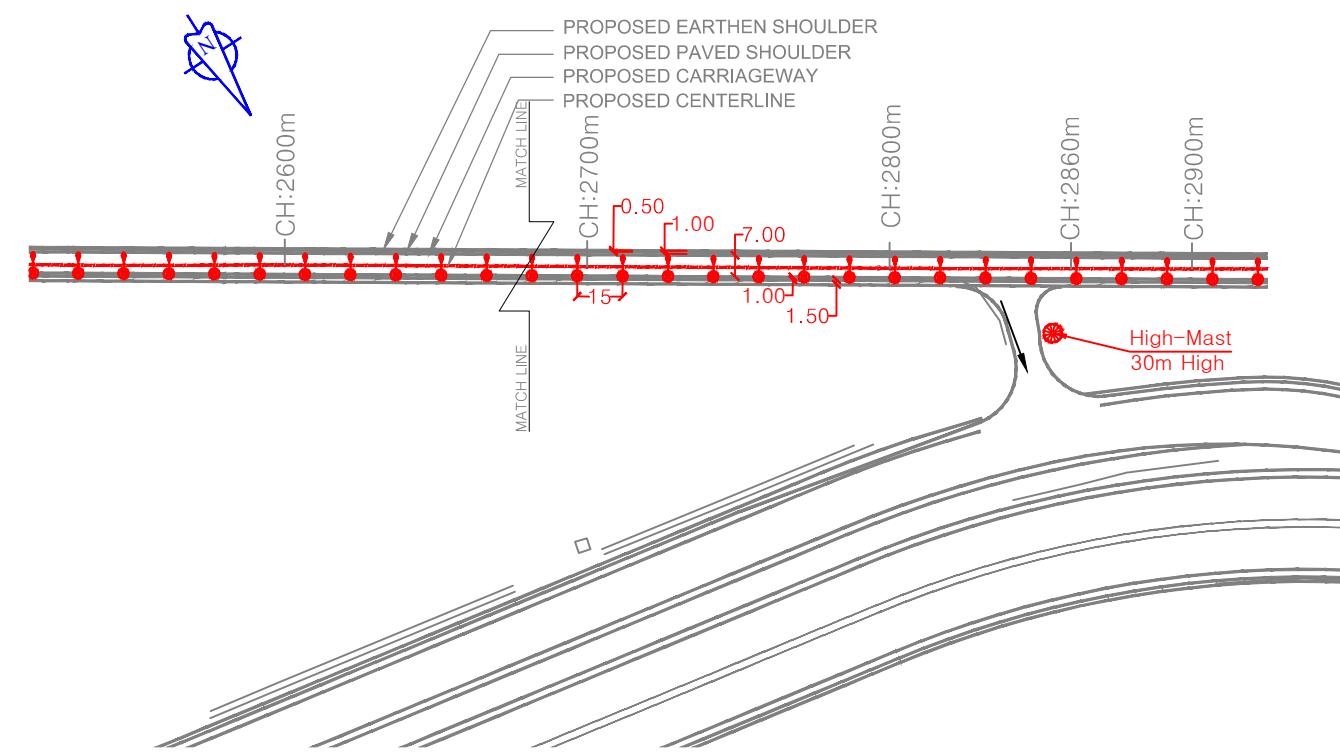
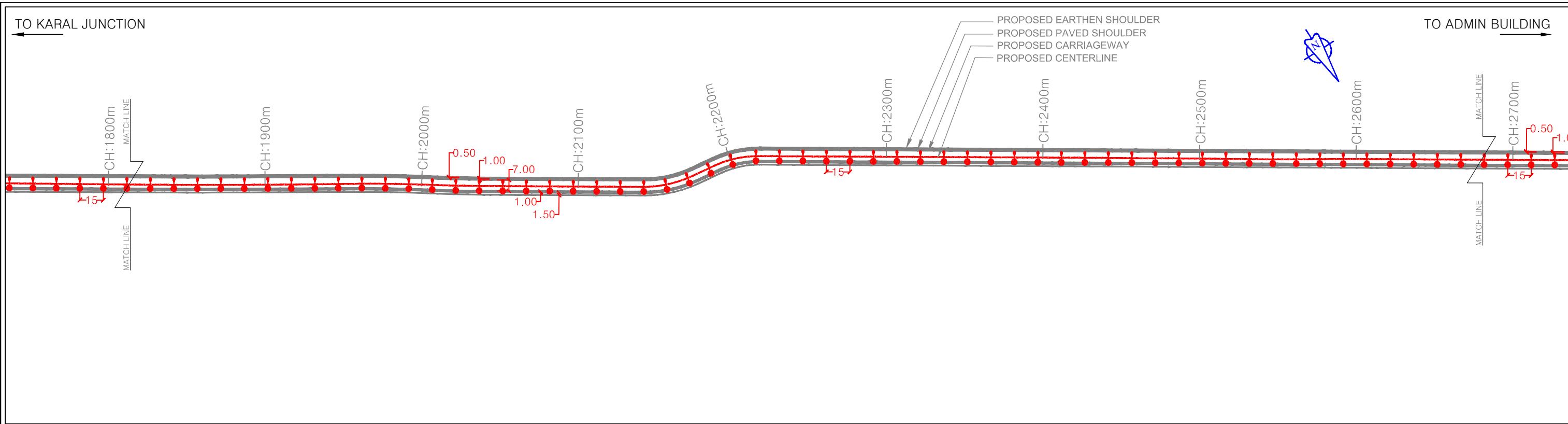
DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- PROP STREET LIGHT(ROAD A TO E)	PURPOSE OF DRAWING
DESIGNED BY:-	MVJ		APPROVED BY:-			FROM CH:1100m TO CH:2900m	FOR EXECUTION
CHECKED BY:-	AMS		DATE:-			DRG.NO:DPR_JNPT_QTCPL_P&P_01/02	SCALE: H=1:2500 ISSUE R0



LEGEND:		CONSULTANT:	CLIENT:	PROJECT:-			
NOTES: 1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT  HIGH MUST POLE 	<b>QMAX TECHNO-CONSULTANTS PVT. LTD.</b> 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			
		NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PROP STREET LIGHT(ROAD A TO E)	PURPOSE OF DRAWING
	DRAWN BY:-	MVP		CHECKED BY:-		FROM CH:2900m TO CH:4584.320m	FOR EXECUTION
	DESIGNED BY:-	MVJ		APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_P&P_01/03	SCALE: H=1:2500 ISSUE
	CHECKED BY:-	AMS		DATE:-		DATE: SEPT-2020	SCALE: V=1:250 RO



NOTES:	LEGEND:	CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT HIGH MUST POLE	<b>QMAX TECHNO-CONSULTANTS PVT. LTD.</b> 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	<b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
		DRAWN BY:-	NAME	SIGNATURE
		DESIGNED BY:-		
		CHECKED BY:-		
		APPROVED BY:-		
		CHECKED BY:-	DATE:-	
				TITLE :- PROP STREET LIGHT(ROAD B TO F) FROM CH:0.00m TO CH:1800.00m FOR EXECUTION
				DRG.NO:DPR_JNPT_QTCPL_P&P_02/01 SCALE:H=1:2500 V=1:250 ISSUE R0 DATE: SEPT-2020

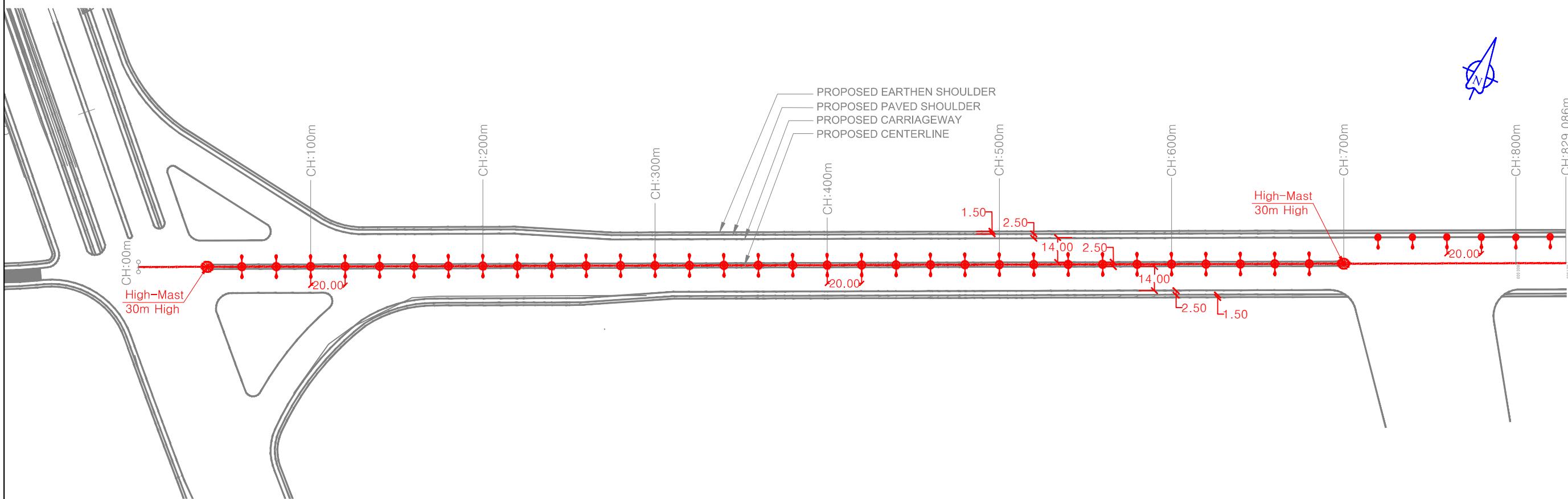


### L - SECTION

NOTES:	LEGEND:	CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT HIGH MUST POLE	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
		NAME	SIGNATURE	
	DRAWN BY:-			CHECKED BY:-
	DESIGNED BY:-			APPROVED BY:-
	CHECKED BY:-			DATE:-
				TITLE :- PROP STREET LIGHT(ROAD B TO F) PURPOSE OF DRAWING FROM CH:1800.00m TO CH:2924.95m FOR EXECUTION
				DRG.NO:DPR_JNPT_QTCPL_P&P_02/02
				SCALE: H=1:2500 ISSUE V=1:250 R0
				DATE: SEPT-2020

TO CFS JUNCTION

TO BELPADA



NOTES:	
1.	All dimensions and levels are in meters unless otherwise specified.
2.	Any discrepancy in drawing please bring it to notice.
3.	All levels are w.r.t. GTS bench mark.
4.	All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

## LEGEND:

PROP STREET LIGHT

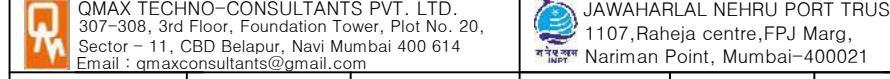


HIGH MUST POLE



## CONSULTANT:

QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com



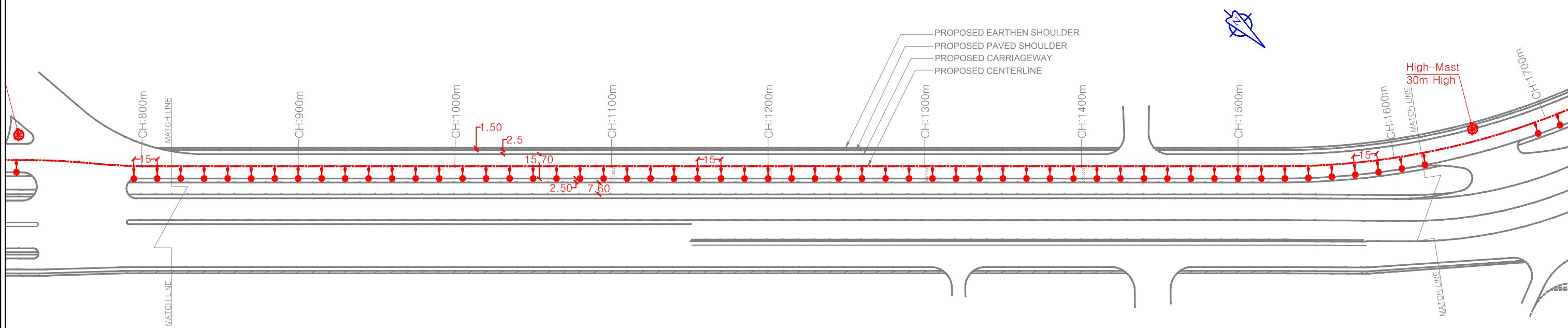
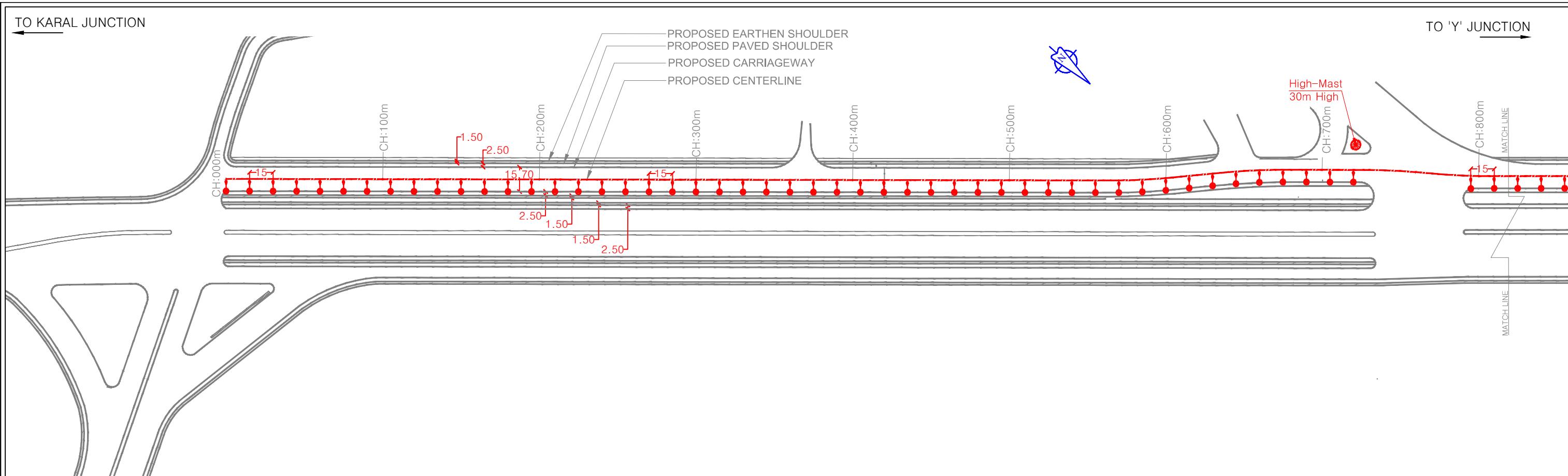
## CLIENT:

JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

## PROJECT:-

Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- PROP STREET LIGHT(ROAD B TO G)	PURPOSE OF DRAWING
DRAWN BY:-	MVP		CHECKED BY:-			FROM CH:0.00m TO CH:829.086m	FOR EXECUTION
DESIGNED BY:-	AJ		APPROVED BY:-			DRG.NO:DPR_JNPT_QTCPL_P&P_03/01	SCALE:H=1:2500 ISSUE
CHECKED BY:-	AMS		DATE:-			DATE: SEPT-2020	SCALE:V=1:250 R0



**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**LEGEND:**

PROP STREET LIGHT



HIGH MUST POLE



**CONSULTANT:**

QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

DRAWN BY:-

MVP

DESIGNED BY:-

MVJ

CHECKED BY:-

AMS

NAME

SIGNATURE

NAME

SIGNATURE

NAME

SIGNATURE

NAME

SIGNATURE

APPROVED BY:-

JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

CHECKED BY:-

**PROJECT:-**

Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :-

PROP STREET LIGHT(TANK FARM ROAD)

PURPOSE OF DRAWING

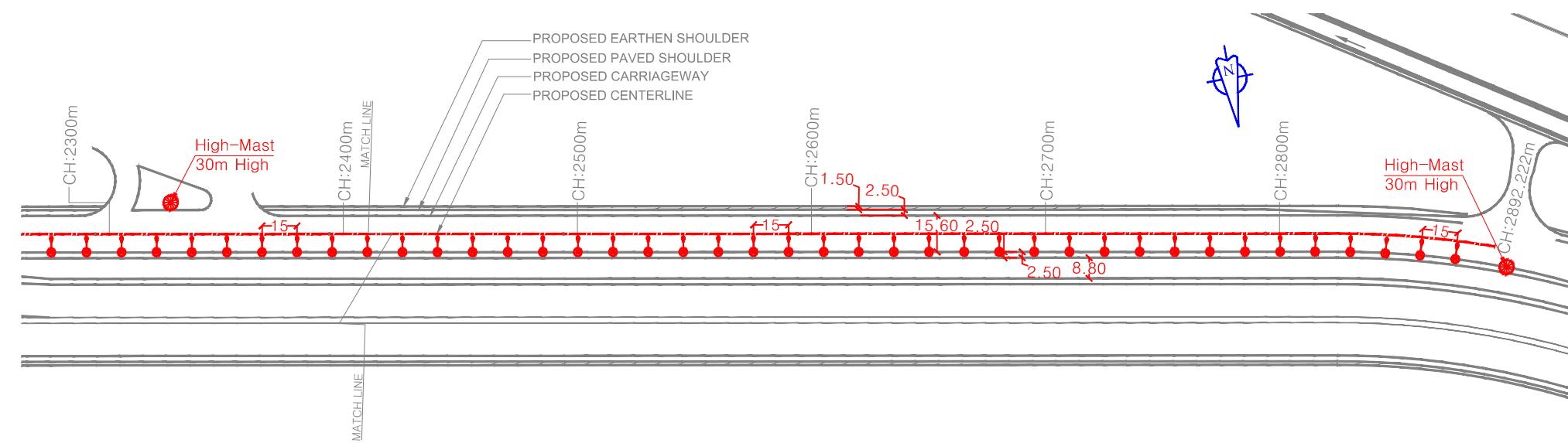
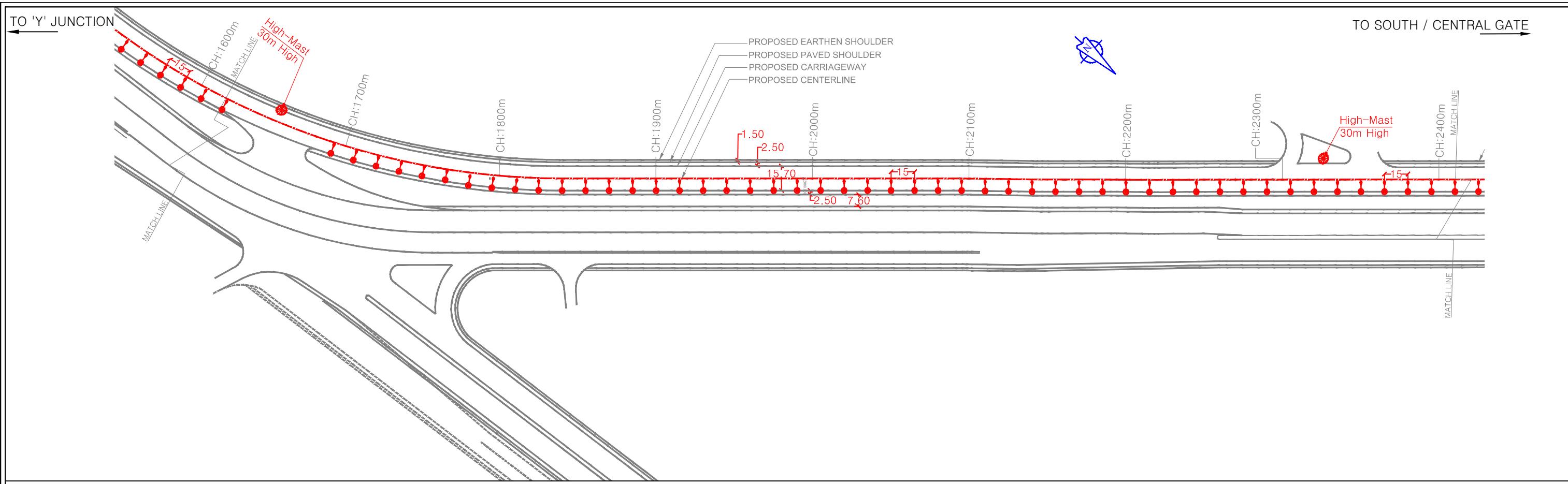
FROM CH:000m TO CH:800m

FOR EXECUTION

DRG.NO:DPR\_JNPT\_QTCPL\_P&P\_04/01

SCALE: H=1:2500 ISSUE

V=1:250 R0



**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

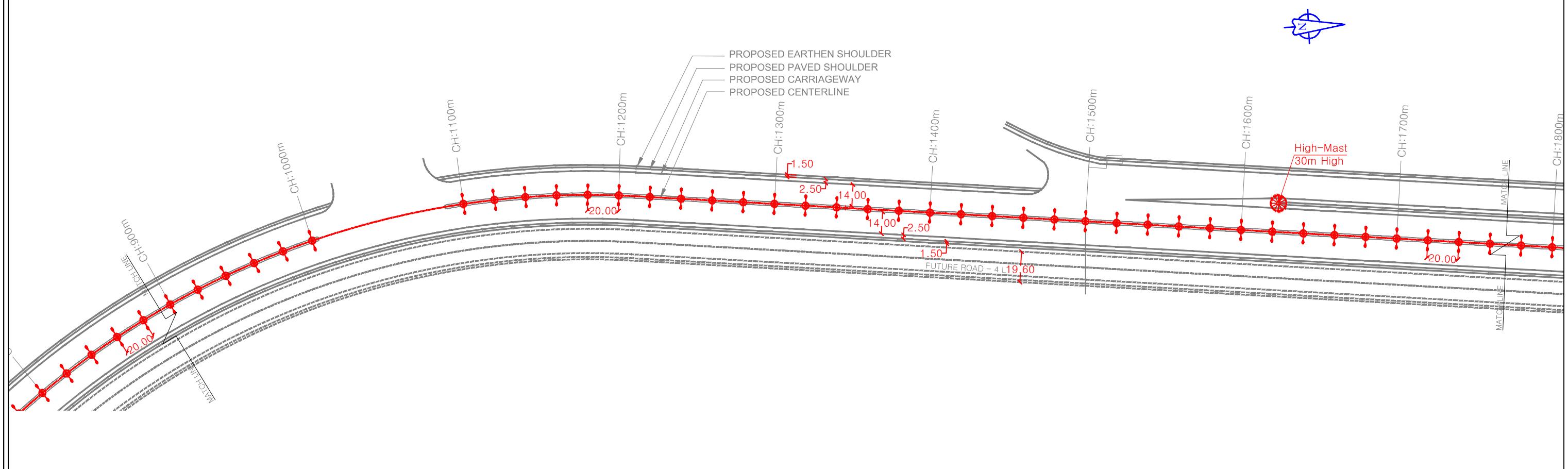
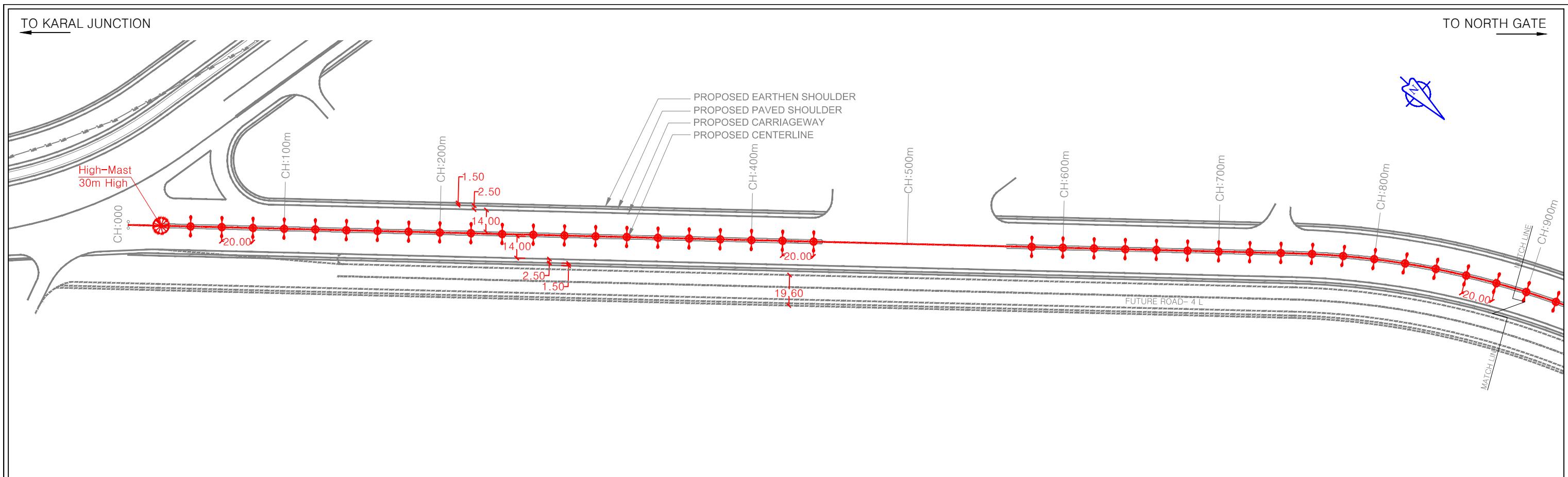
**LEGEND:**

- PROP STREET LIGHT
- HIGH MUST POLE

**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

**CLIENT:**  
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai - 400021

PROJECT:-			PURPOSE OF DRAWING		
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			TITLE :- PROP STREET LIGHT(TANK FARM ROAD) FROM CH:1600m TO CH:2892.222m FOR EXECUTION		
DRAWN BY:-	MVP	SIGNATURE	CHECKED BY:-	DATE:-	ISSUE NO.
DESIGNED BY:-	MVJ		APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_P&P_04/02
CHECKED BY:-	AMS		DATE:-		SCALE: H=1:2500 V=1:250 R0

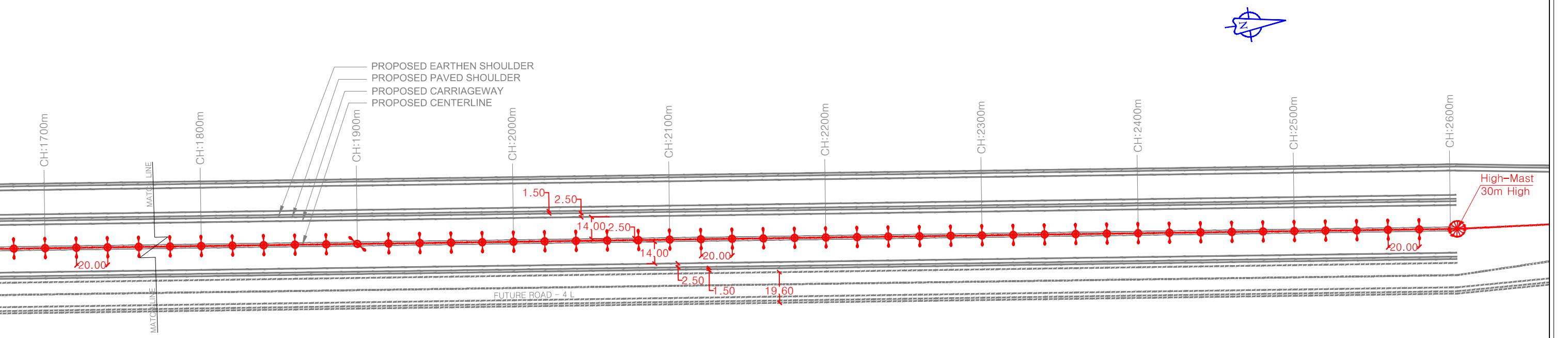


L - SECTION

NOTES:	LEGEND:	CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT  HIGH MUST POLE 	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021 	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
		NAME	SIGNATURE	TITLE :- PROP STREET LIGHT(ROAD C TO D)
	DRAWN BY:-		CHECKED BY:-	FROM CH:0.00m TO CH:1800.00m
	DESIGNED BY:-		APPROVED BY:-	FOR EXECUTION
	CHECKED BY:-		DATE:-	DRG.NO:DPR_JNPT_QTCPL_P&P_05/01
				H=1:2500 ISSUE
				SCALE: V=1:250 R0
				DATE: SEPT-2020

TO 'Y' JUNCTION

TO NORTH GATE



## NOTES:

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

## LEGEND:



## CONSULTANT:

 QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

## CLIENT:

 JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai - 400021

## PROJECT:-

Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

## DRAWN BY:-

DESIGNED BY:-

CHECKED BY:-

## NAME

APPROVED BY:-

DATE:-

## SIGNATURE

## NAME

## SIGNATURE

## TITLE :- PROP STREET LIGHT(ROAD C TO D) PURPOSE OF DRAWING

FROM CH:1800.00m TO CH:2603.916m FOR EXECUTION

DRG.NO:DPR\_JNPT\_QTCPL\_P&amp;P\_05/02 ISSUE

SCALE: H=1:2500 V=1:250 R0

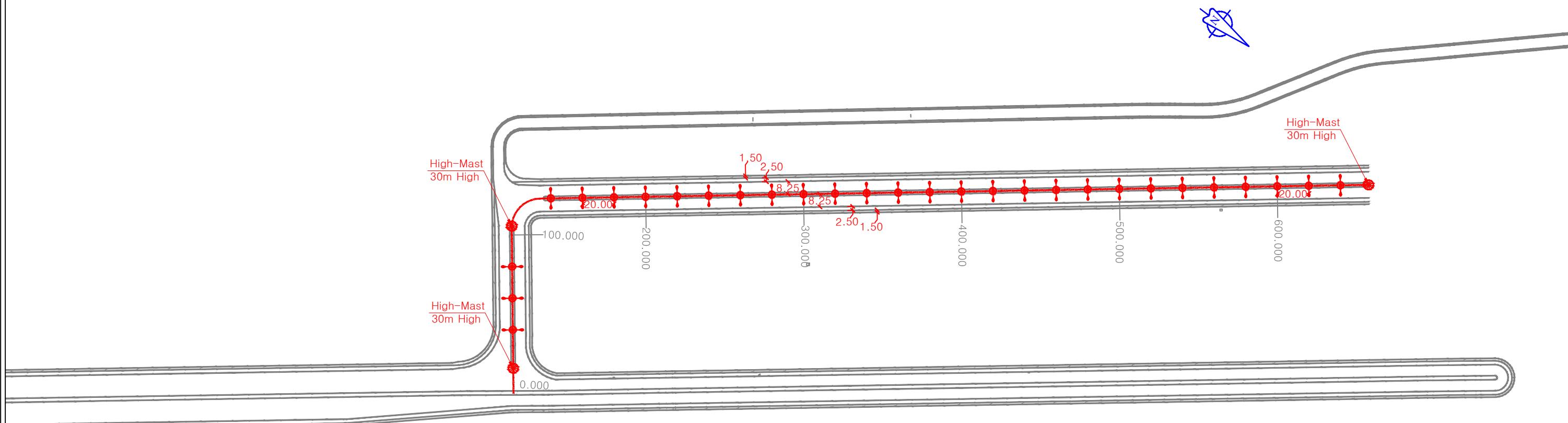
CHECKED BY:-

DATE:-

DATE: SEPT-2020

TO KARAL JUNCTION

TO JETTY



## NOTES:

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

## LEGEND:

- PROP STREET LIGHT  
HIGH MUST POLE

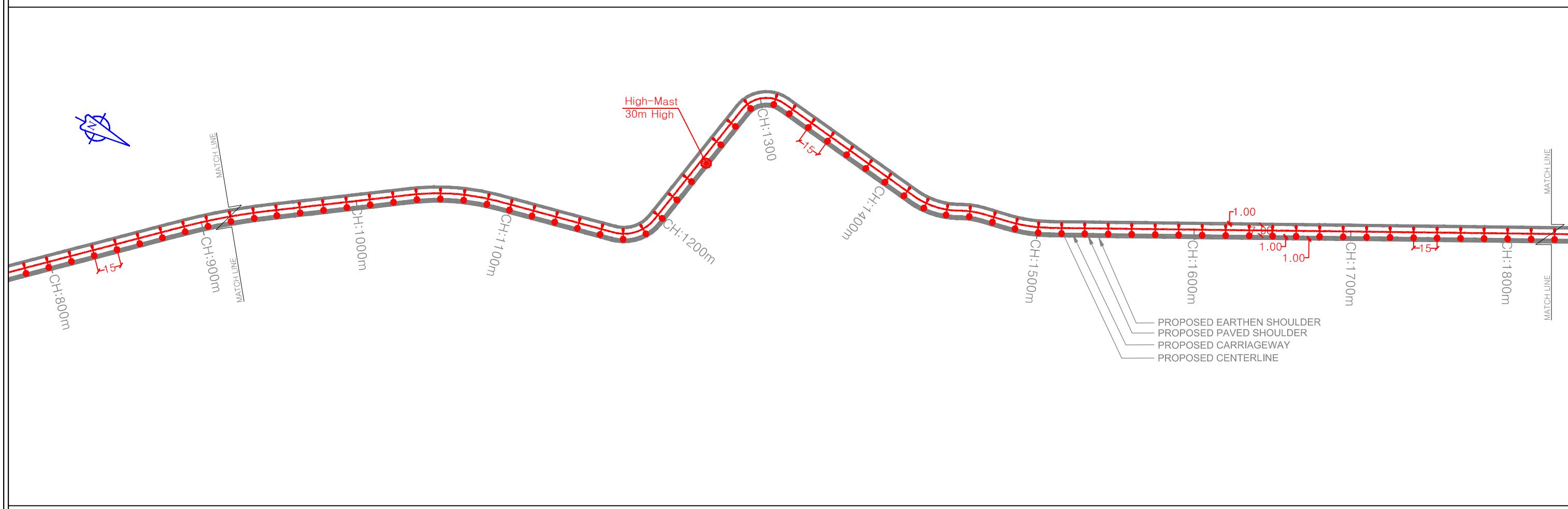
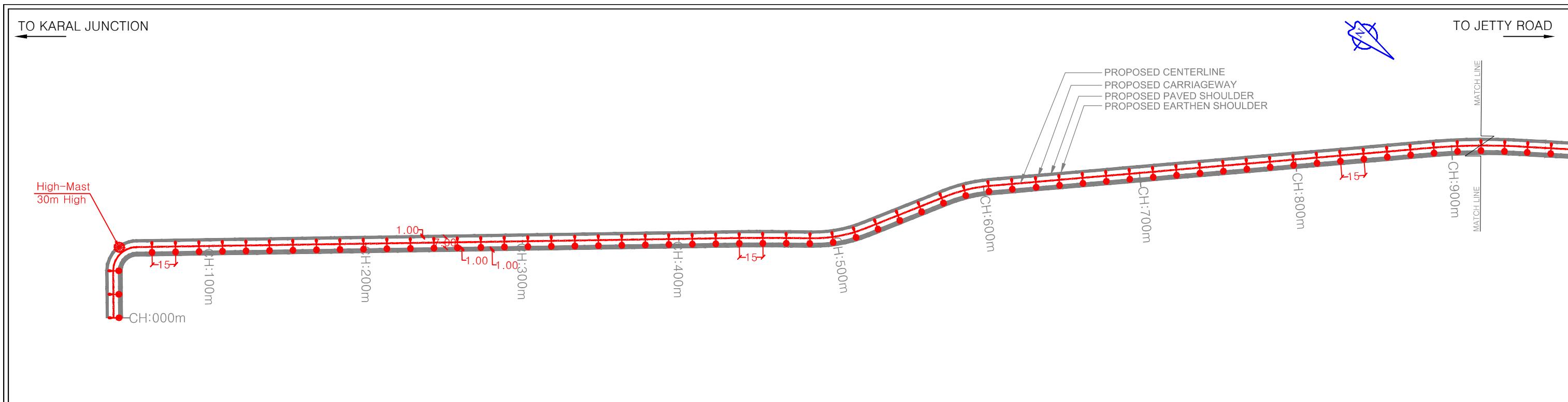


## CONSULTANT:

QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

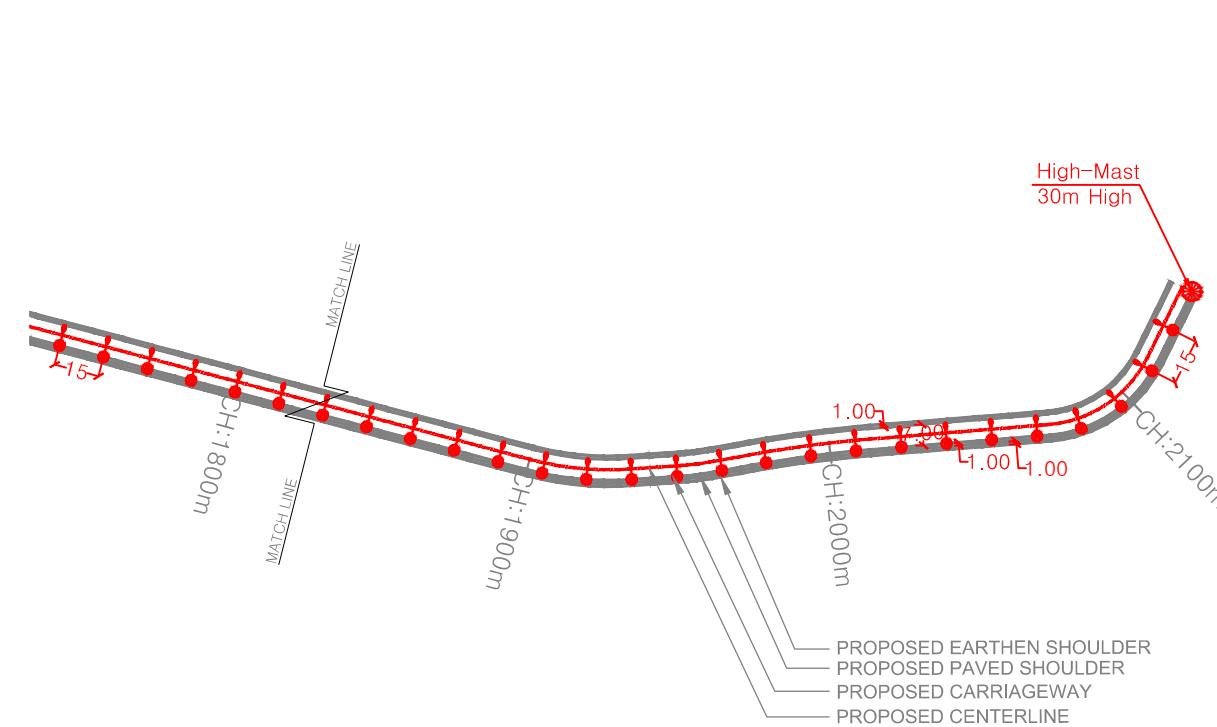
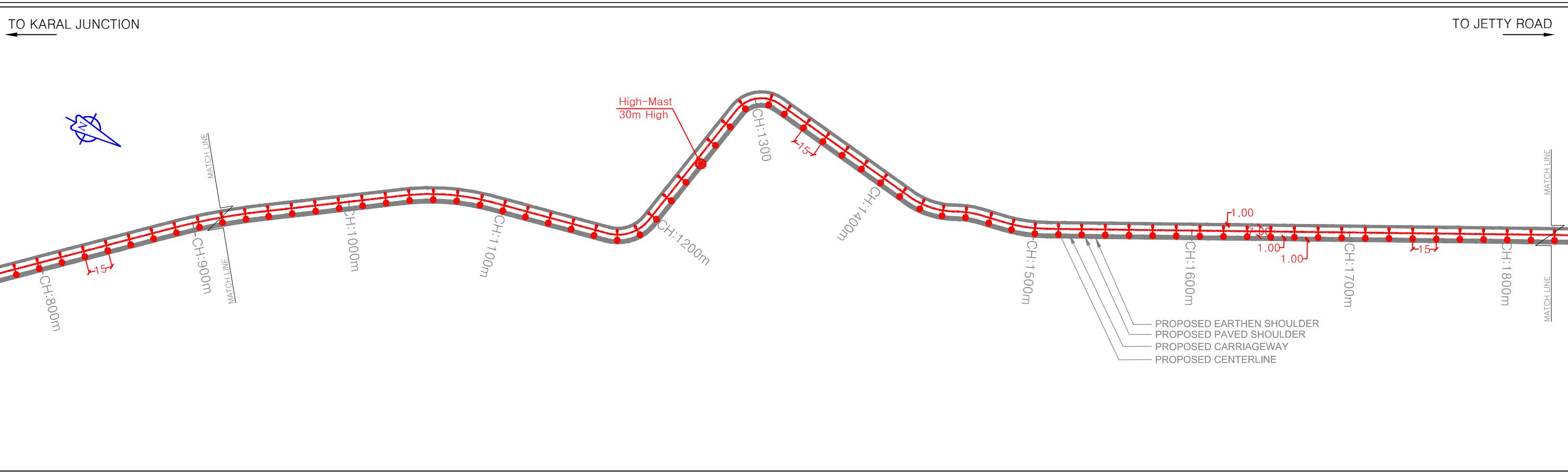
NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PROP STREET LIGHT (SOUTH GATE)	PURPOSE OF DRAWING
DRAWN BY:-		CHECKED BY:-		FROM CH:00.00m TO CH:658.106m	FOR EXECUTION
DESIGNED BY:-		APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_P&P_06/01	SCALE:H=1:2500 ISSUE
CHECKED BY:-		DATE:-		DATE: SEPT-2020	R0

JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021



## L - SECTION

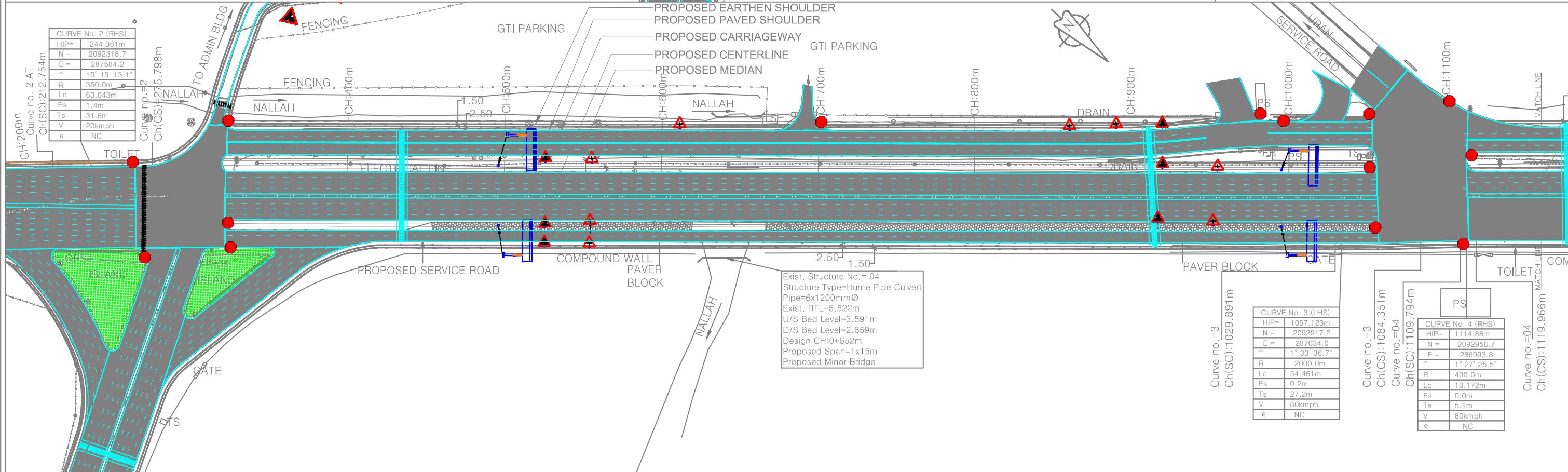
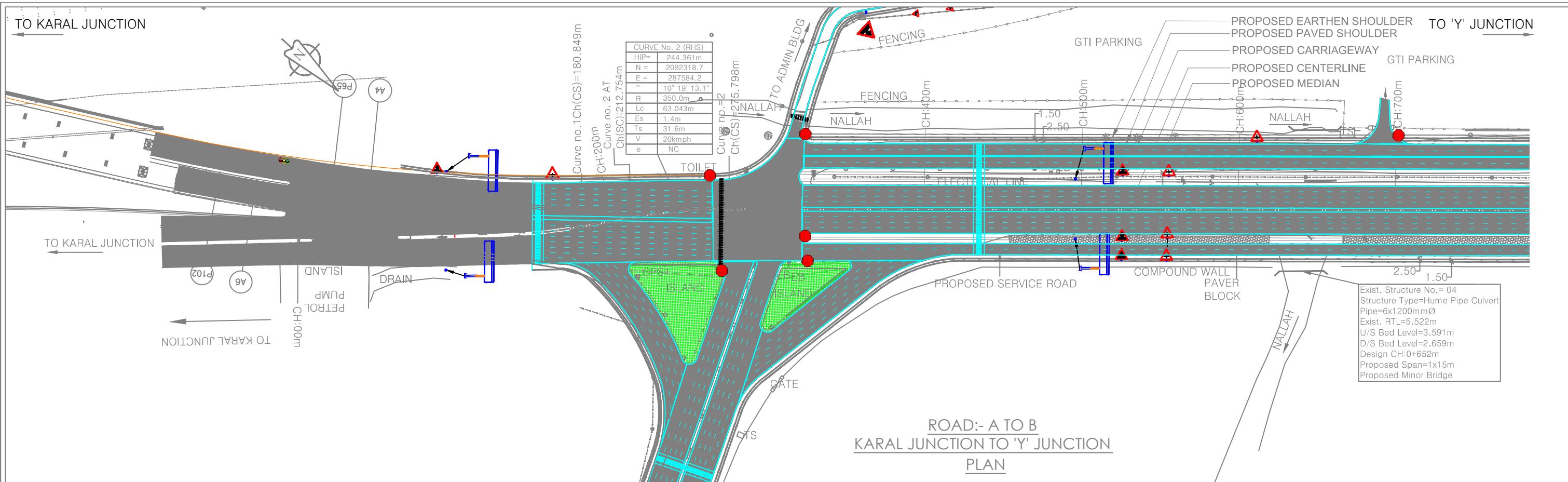
NOTES:	LEGEND:	CONSULTANT:	CLIENT:	PROJECT:-			
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT  HIGH MUST POLE 	 <b>QMAX TECHNO-CONSULTANTS PVT. LTD.</b> 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 <b>JAWAHARLAL NEHRU PORT TRUST</b> 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			
		NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PROP STREET LIGHT(JETTY ROAD) FROM CH:0000.00m TO CH:900.00m FOR EXECUTION	PURPOSE OF DRAWING
	DRAWN BY:-		CHECKED BY:-			DRG.NO:DPR_JNPT_QTCPL_P&P_07/01	SCALE: H=1:2500 ISSUE
	DESIGNED BY:-		APPROVED BY:-				SCALE: V=1:250 R0
	CHECKED BY:-		DATE:-			DATE: SEPT-2020	



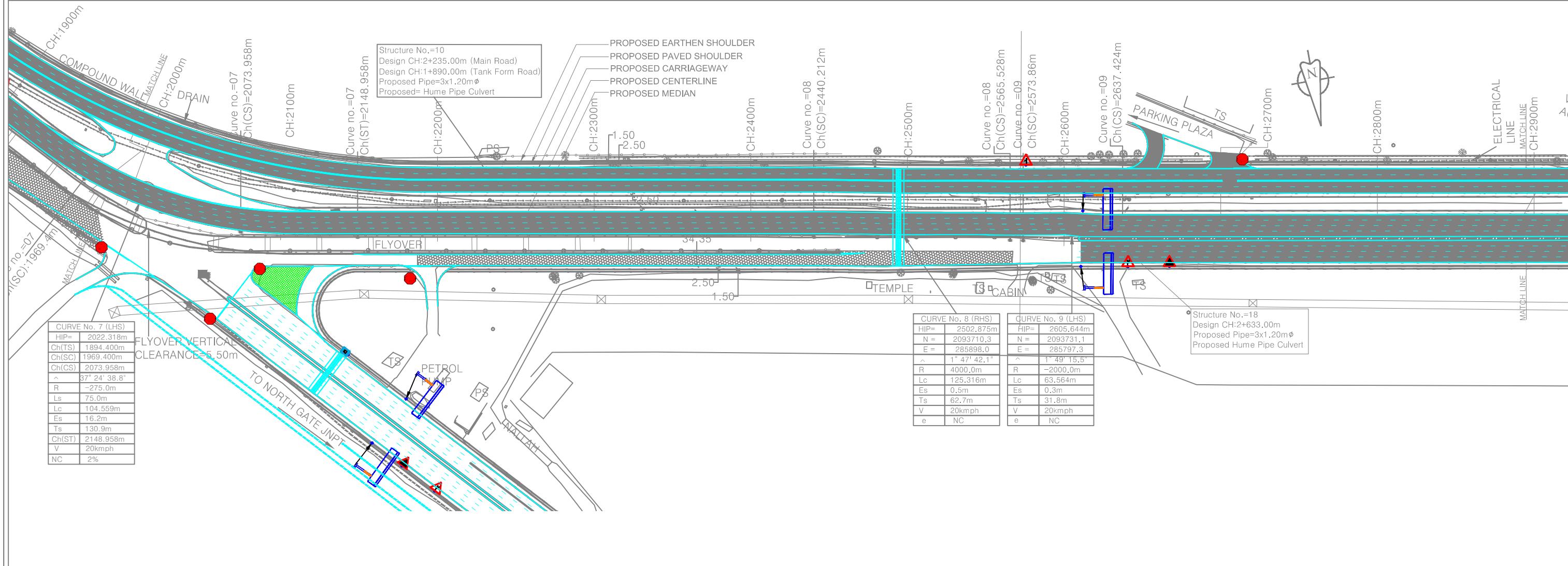
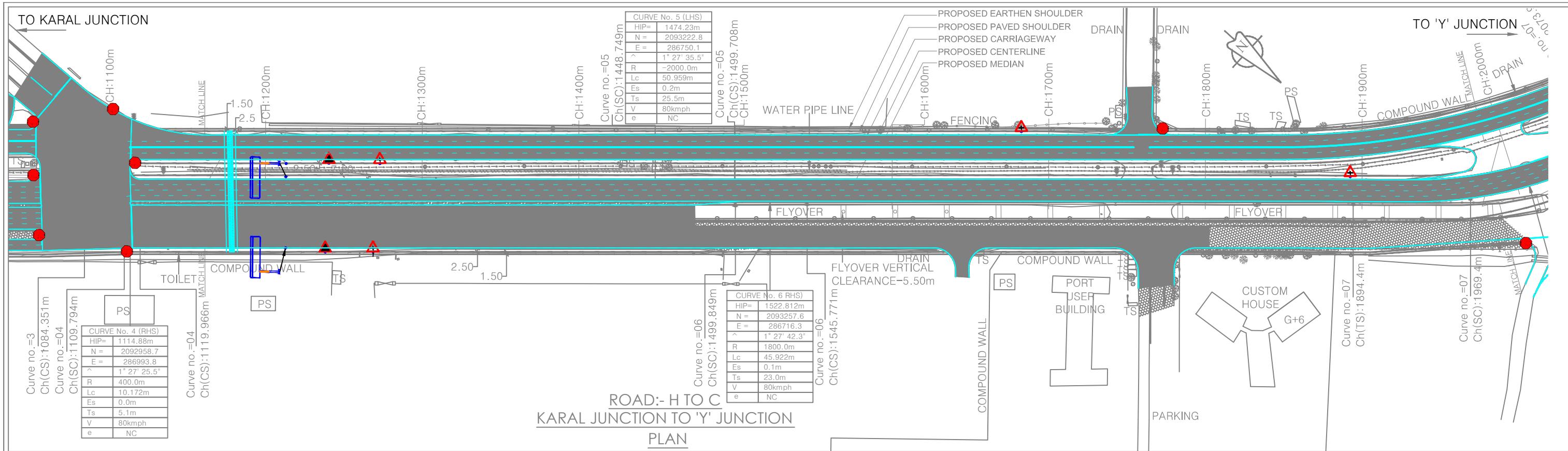
### L - SECTION

NOTES:	LEGEND:	CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	PROP STREET LIGHT HIGH MUST POLE	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
		DRAWN BY:-	NAME	SIGNATURE
		DESIGNED BY:-		
		CHECKED BY:-		
		APPROVED BY:-		
		DATE:-		
		TITLE :- PROP STREET LIGHT(JETTY ROAD)	PURPOSE OF DRAWING	FROM CH:900.00m TO CH:2140.032m FOR EXECUTION
		DRG.NO:DPR_JNPT_QTCPL_P&P_07/02	SCALE: H=1:2500	ISSUE R0 V=1:250
		DATE: SEPT-2020		

# **LANE MARKING & SIGNAGE MARKING**



NOTES:	CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified.	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai - 400021	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
2. Any discrepancy in drawing please bring it to notice.	DRAWN BY:- MVP	CHECKED BY:-	TITLE:- LANE MARKING & SIGNAGE MARKING
3. All levels are w.r.t. GTS bench mark.	DESIGNED BY:- MVJ	APPROVED BY:-	KARAL JN TO CENTRAL GATE (ROAD A TO E)
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.	CHECKED BY:- AMS	DATE:-	DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_01
	DATE:- FEB-2020	FOR REVIEW	SCALE: H=1:2500 ISSUE R0
	NO. DATE	REVISION/PURPOSE	DRAWN CHECKED APPROVED



**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

R0	FEB-2020	FOR REVIEW			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

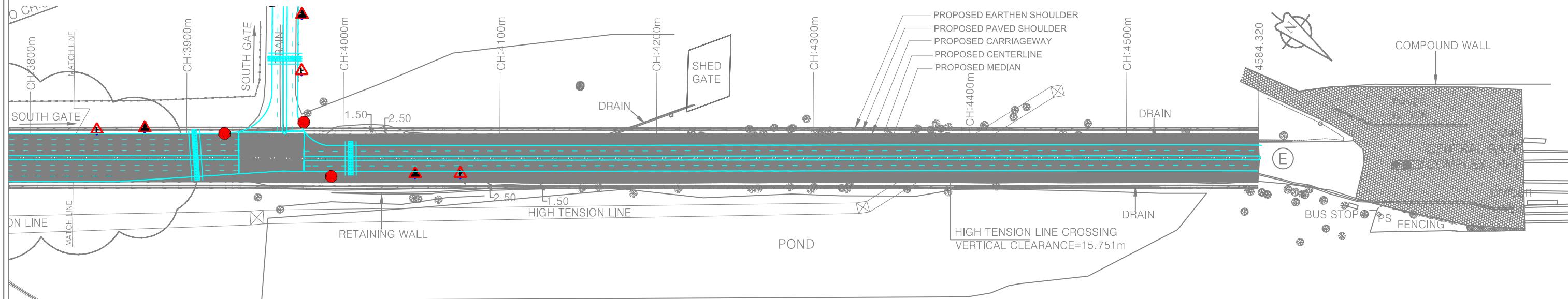
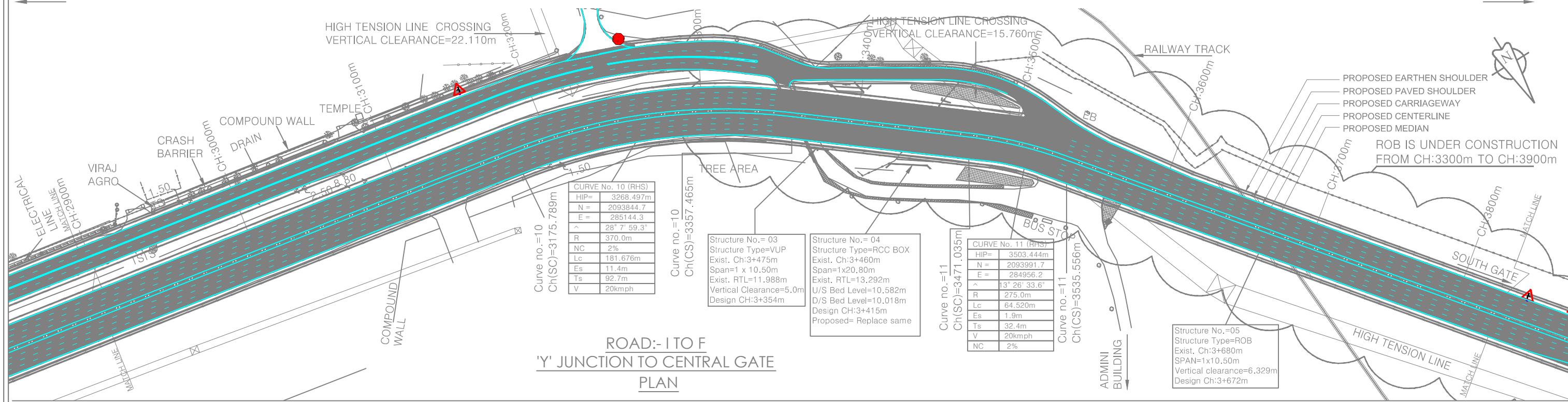
<b>CONSULTANT:</b>	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	
DRAWN BY:-	NAME	SIGNATURE
DESIGNED BY:-	MVP	C
CHECKED BY:-	MVJ	A
	AMS	D

	CLIENT: JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	
CHECKED BY:-	NAME	SIGNATURE
APPROVED BY:-		
DATE:-		

PROJECT:-	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
TITLE:- LANE MARKING & SIGNAGE MARKING KARAL JN TO CENTRAL GATE (ROAD A TO E)	PURPOSE OF DRAWING FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_02	SCALE: H=1:2500 V=1:250
DATE: FEB-2020	ISSUE NO: R0

TO PANVEL

TO SOUTH / CENTRAL GATE

**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

**CONSULTANT:**

QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

**CLIENT:**

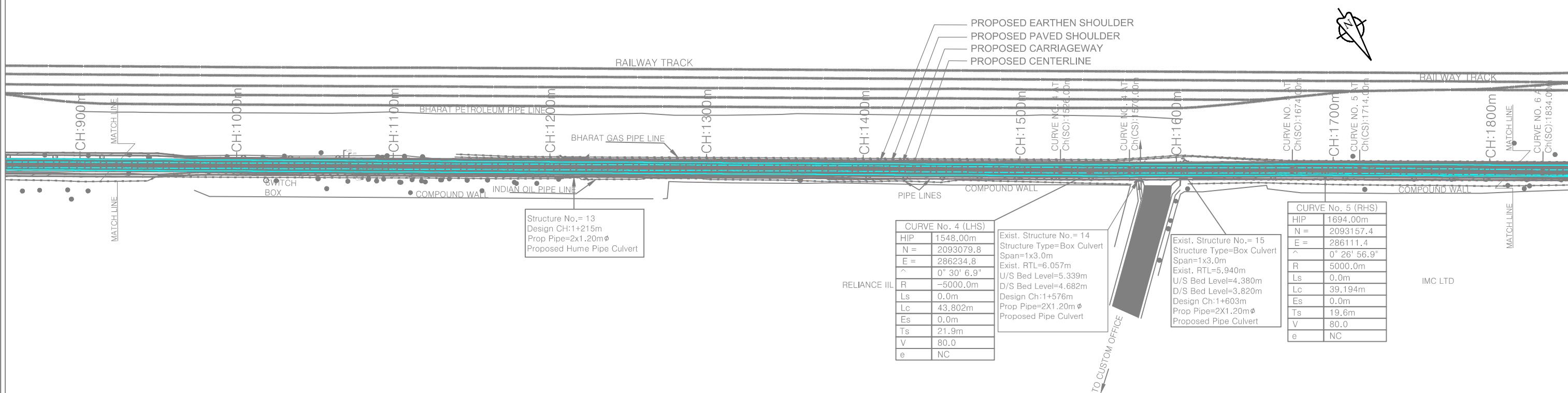
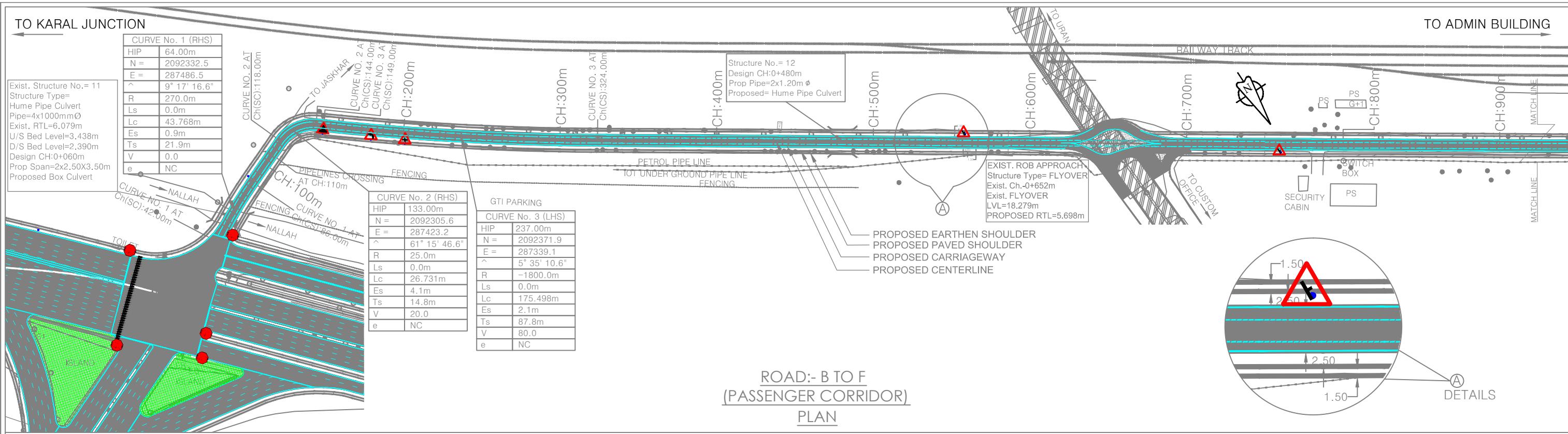
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

**PROJECT:-**

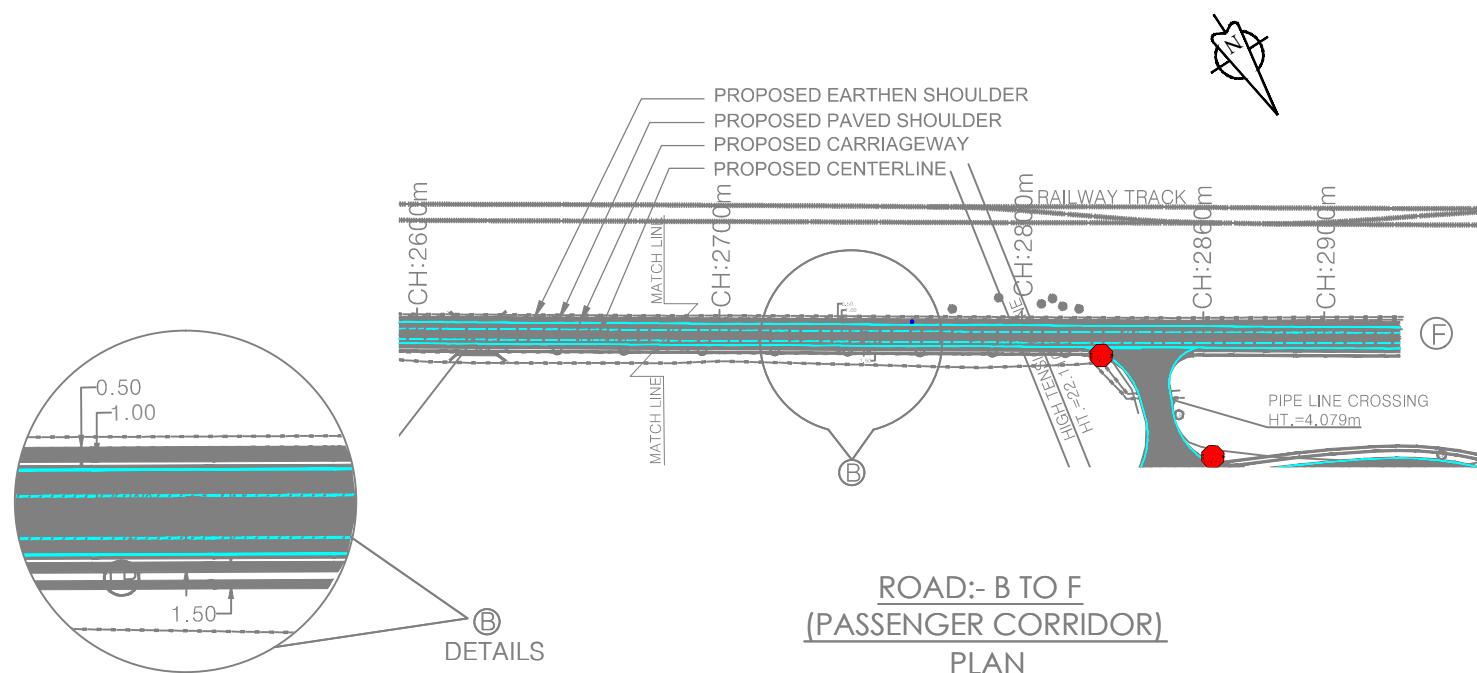
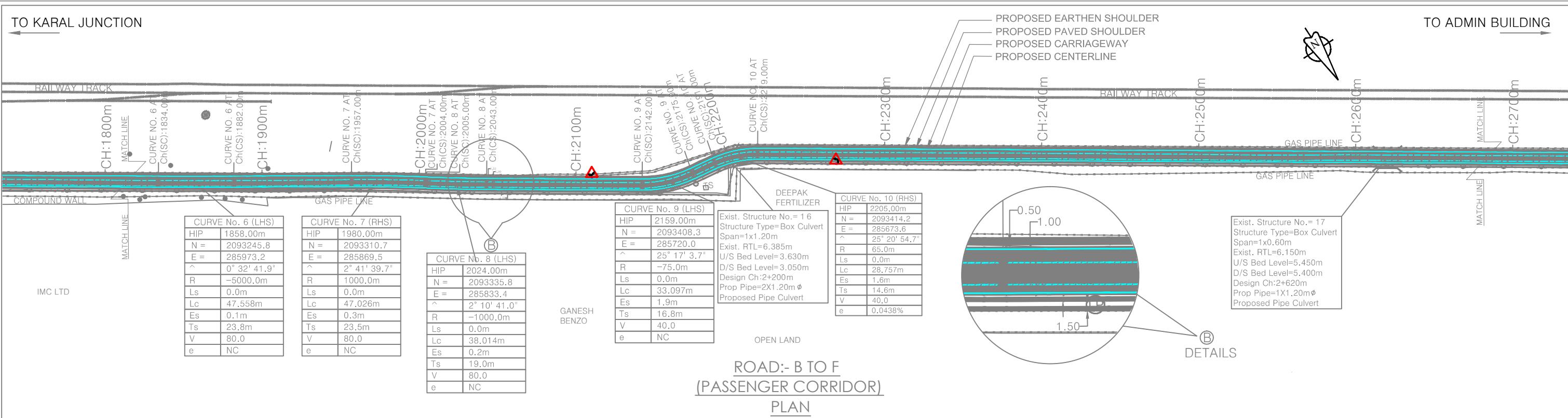
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
R0	FEB-2020	FOR REVIEW			

TITLE:- LANE MARKING & SIGNAGE MARKING	PURPOSE OF DRAWING
KARAL JN TO CENTRAL GATE (ROAD A TO E)	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_03	SCALE: H=1:2500 ISSUE
DATE: FEB-2020	SCALE: V=1:250 R0



					CONSULTANT:	CLIENT:			PROJECT:-		
NAME	NAME	SIGNATURE	NAME	SIGNATURE	JAWAHARLAL NEHRU PORT TRUST	1107, Raheja centre, FPJ Marg,	Nariman Point, Mumbai-400021	TITLE :- LANE MARKING & SIGNAGE MARKING KARAL JN TO JNPT ADMIN BLDG(RD B TO F)	PURPOSE OF DRAWING FOR PLANNING		
DRAWN BY:-			CHECKED BY:-								
DESIGNED BY:-			APPROVED BY:-								
CHECKED BY:-			DATE:-								
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED						

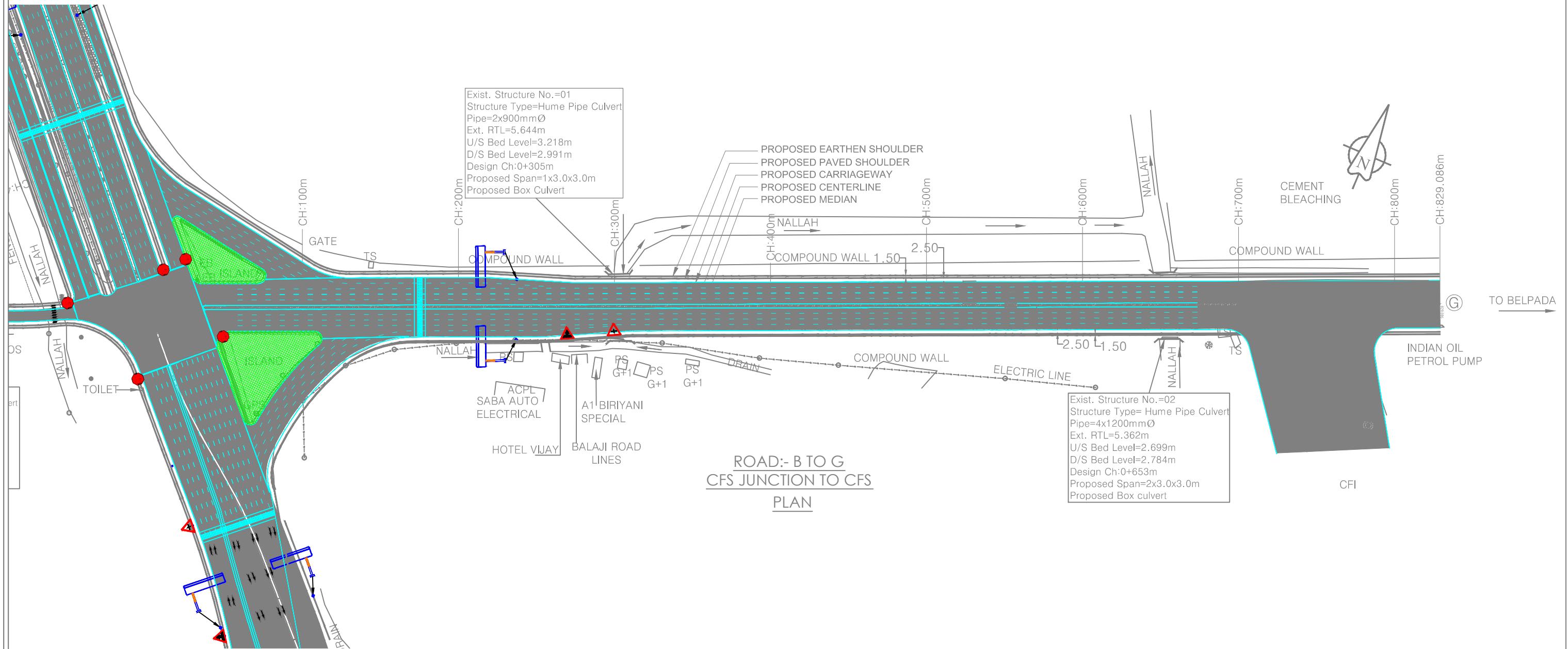


### L - SECTION

NOTES:					CONSULTANT:			CLIENT:			PROJECT:-				
1. All dimensions and levels are in meters unless otherwise specified.					QMAX TECHNO-CONSULTANTS PVT. LTD.	307-308, 3rd Floor, Foundation Tower, Plot No. 20,	Sector - 11, CBD Belapur, Navi Mumbai 400 614	Email :	JAWAHARLAL NEHRU PORT TRUST	1107, Raheja centre, FPJ Marg,	Nariman Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			
2. Any discrepancy in drawing please bring it to notice.					DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- LANE MARKING & SIGNAGE MARKING KARAL JN TO JNPT ADMIN BLDG(RD B TO F)				
3. All levels are w.r.t. GTS bench mark.					DESIGNED BY:-			APPROVED BY:-			PURPOSE OF DRAWING FOR PLANNING				
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.					CHECKED BY:-			DATE:-			DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_02				
	NO.	RO	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED					SCALE: H=1:2500 ISSUE R0			
												DATE: FEB-2020			

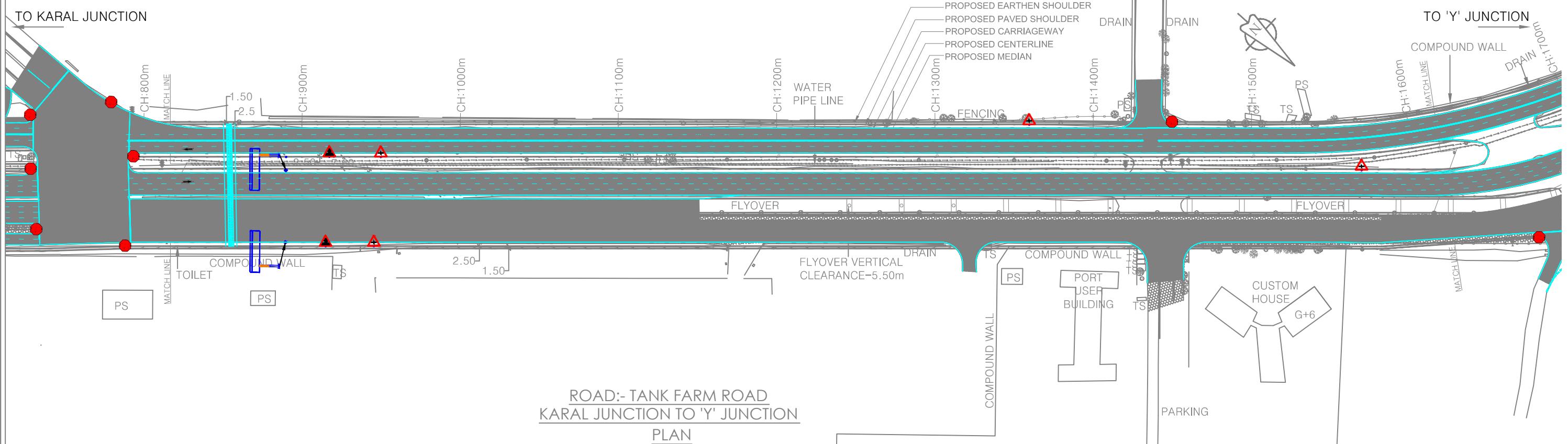
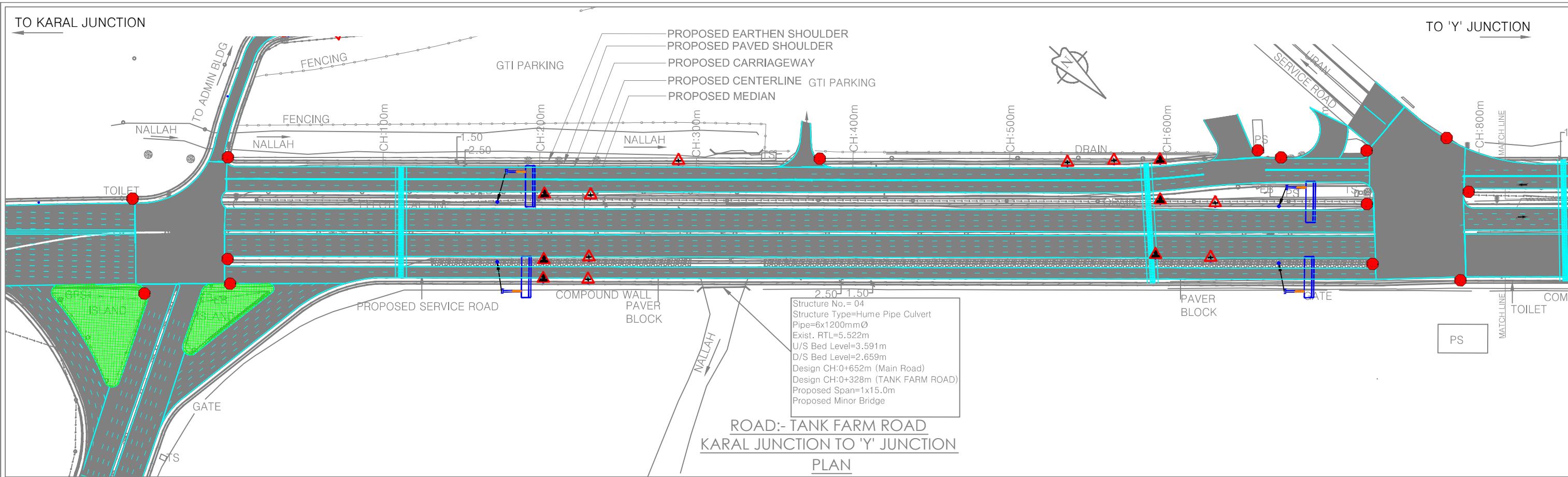
TO CFS JUNCTION

TO BELPADA



NOTES:	RO	FEB-2020	FOR REVIEW			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	

NOTES:	DRAWN BY:-	NAME	SIGNATURE	CLIENT:	PROJECT:-	TITLE :- LANE MARKING & SIGNAGE MARKING	PURPOSE OF DRAWING
	MVP			JAWAHARLAL NEHRU PORT TRUST	Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	KARAL JN TO CFS JN (ROAD B TO G)	FOR PLANNING
	AJ			1107, Raheja centre, FPJ Marg,	Nariman Point, Mumbai-400021	DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_01	ISSUE
	AMS						



**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
R0	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email: qmaxconsultants@gmail.com

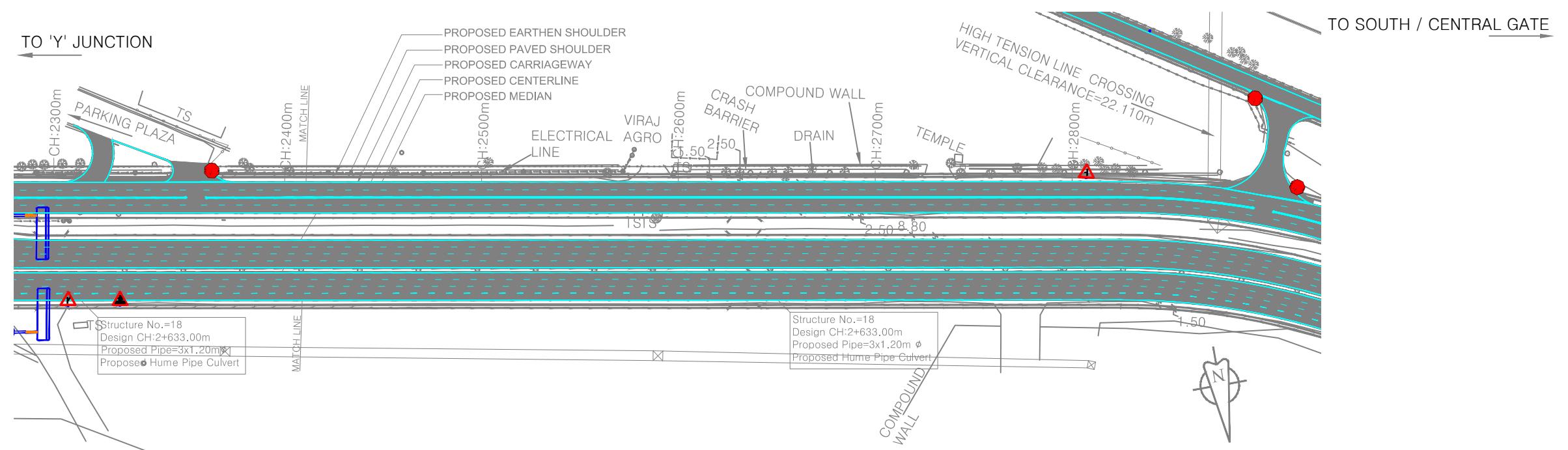
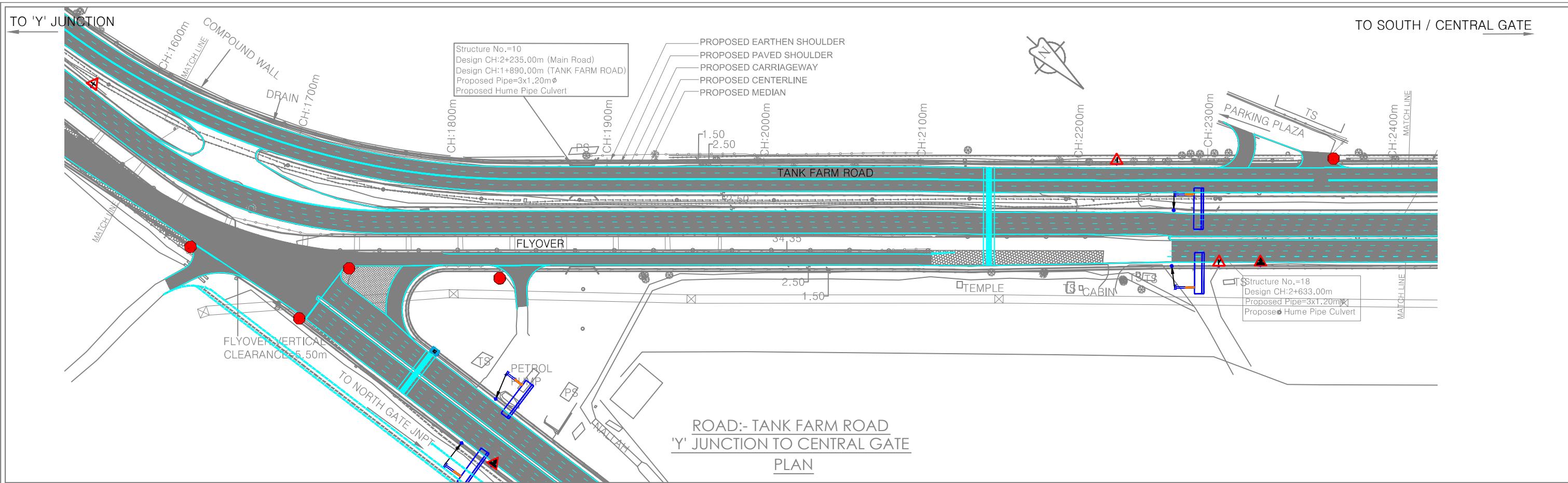
DRAWN BY:- MVP  
 DESIGNED BY:- MVJ  
 CHECKED BY:- AMS

**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai-40021

CHECKED BY:-  
 APPROVED BY:-  
 DATE:-

**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

<b>TITLE:- LANE MARKING &amp; SIGNAGE MARKING TANK FARM ROAD (ROAD B TO F)</b>	<b>PURPOSE OF DRAWING FOR PLANNING</b>
DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_01	SCALE: H=1:2500 ISSUE V=1:250 R0
DATE: FEB-2020	



**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
R0	FEB-2020	FOR REVIEW			

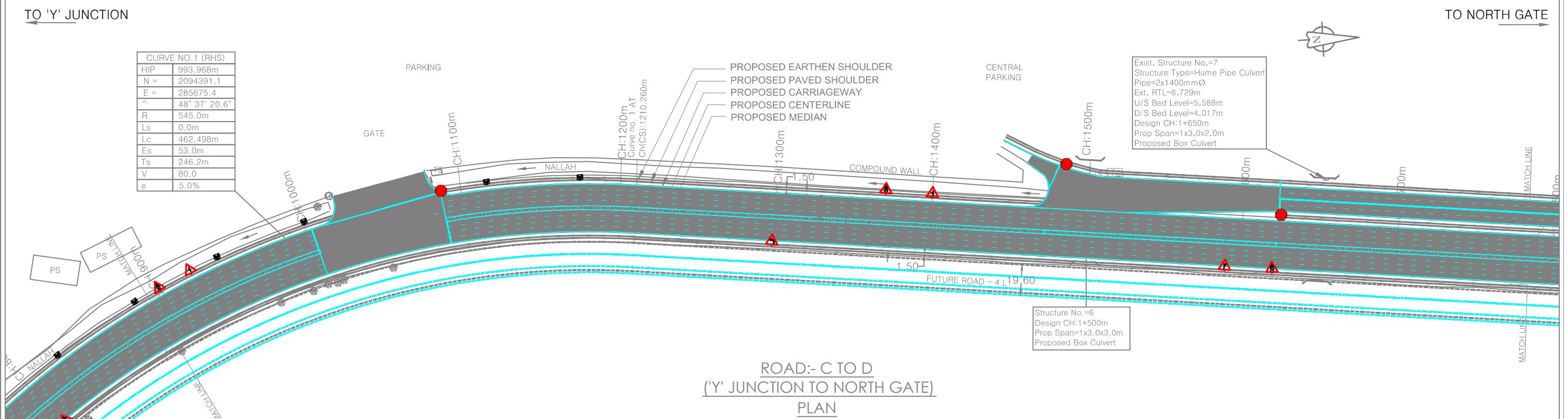
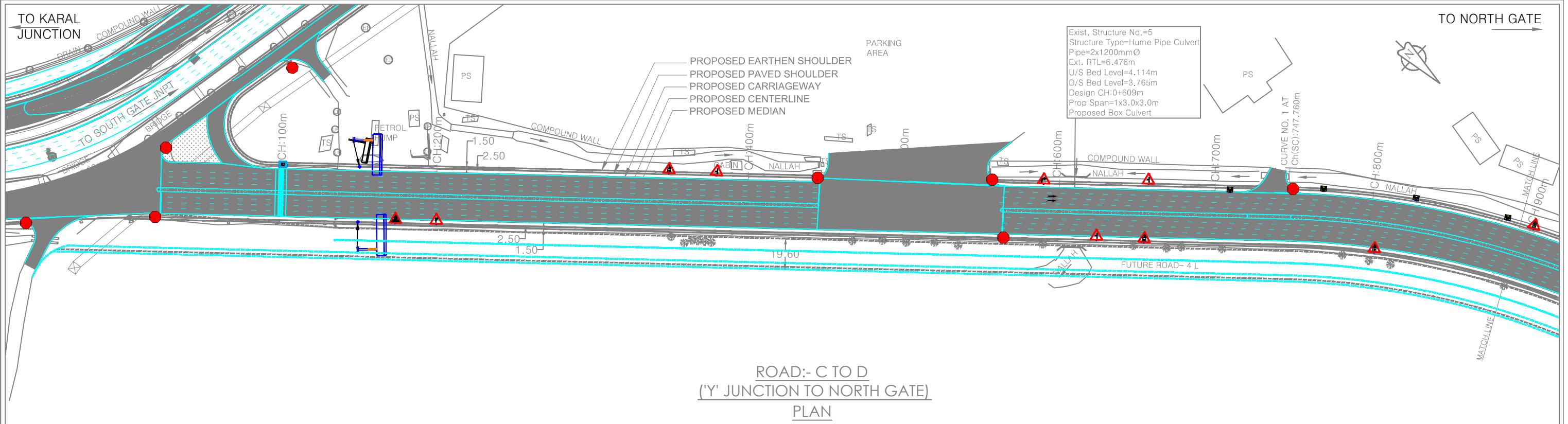


**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email : qmaxconsultants@gmail.com

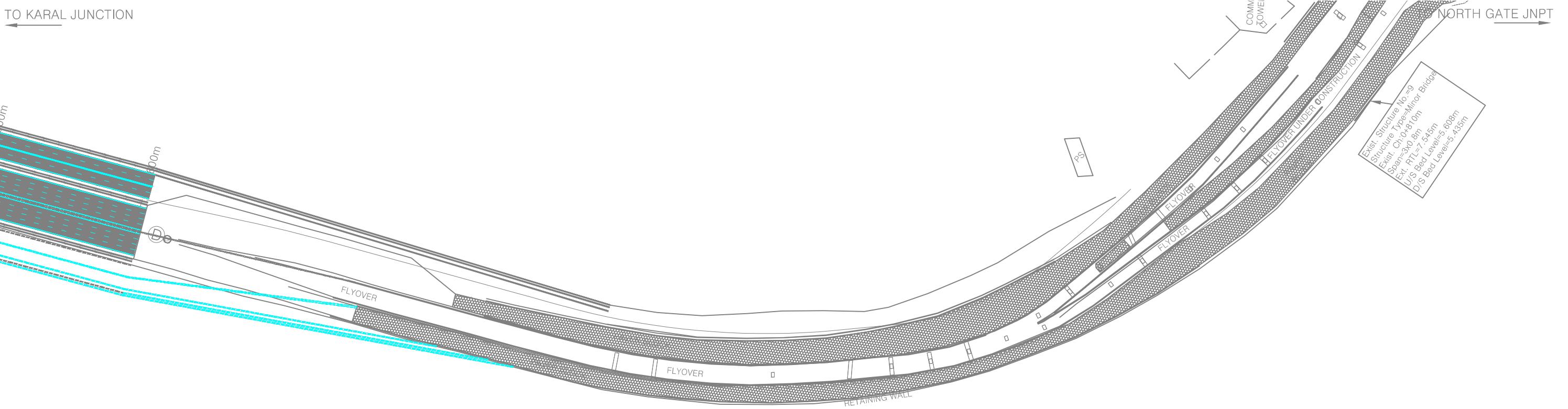
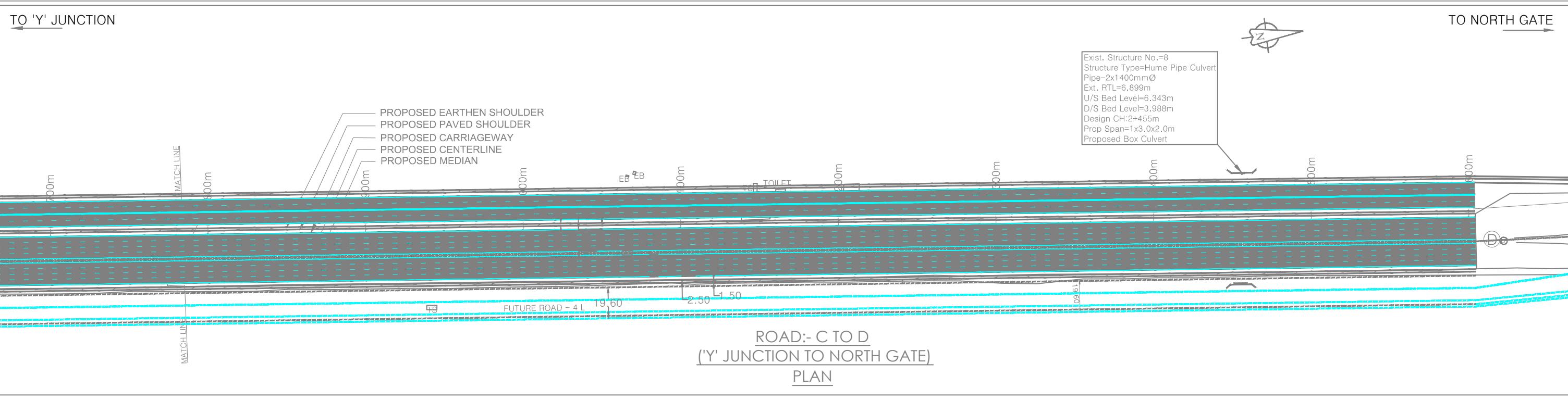
**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai-400021

**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

<b>TITLE:- LANE MARKING &amp; SIGNAGE MARKING</b>	<b>PURPOSE OF DRAWING</b>
<b>TANK FARM ROAD (ROAD B TO F)</b>	<b>FOR PLANNING</b>
DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_02	SCALE: H=1:2500 ISSUE
DATE: FEB-2020	SCALE: V=1:250 R0



L - SECTION										
<b>NOTES:</b> <ol style="list-style-type: none"> <li>All dimensions and levels are in meters unless otherwise specified.</li> <li>Any discrepancy in drawing please bring it to notice.</li> <li>All levels are w.r.t. GTS bench mark.</li> <li>All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.</li> </ol>					<b>CONSULTANT:</b>  QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com		<b>CLIENT:</b>  JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FP Marg, Nariman Point, Mumbai-400021		<b>PROJECT:-</b> Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	
RO	FEB-2020	FOR REVIEW			DRAWN BY:-	NAME	SIGNATURE	TITLE:- LANE MARKING & SIGNAGE MARKING		
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	DESIGNED BY:-	APPROVED BY:-	DATE:-	PURPOSE OF DRAWING		
								'Y' JN TO NORTH GATE (ROAD C TO D)		
								FOR PLANNING		
								DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_01		
								SCALE: H:1:2500 ISSUE R0		
								DATE: FEB-2020		



#### L - SECTION

**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE			

#### CONSULTANT:



QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

#### NAME

#### SIGNATURE

#### DRAWN BY:-

#### DESIGNED BY:-

#### CHECKED BY:-

#### NAME

#### SIGNATURE

#### CHECKED BY:-

#### APPROVED BY:-

#### DATE:-

#### CLIENT:



JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

#### NAME

#### SIGNATURE

#### CHECKED BY:-

#### APPROVED BY:-

#### DATE:-

#### PROJECT:-

Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

#### TITLE:-

LANE MARKING & SIGNAGE MARKING

'Y' JN TO NORTH GATE (ROAD C TO D)

FOR PLANNING

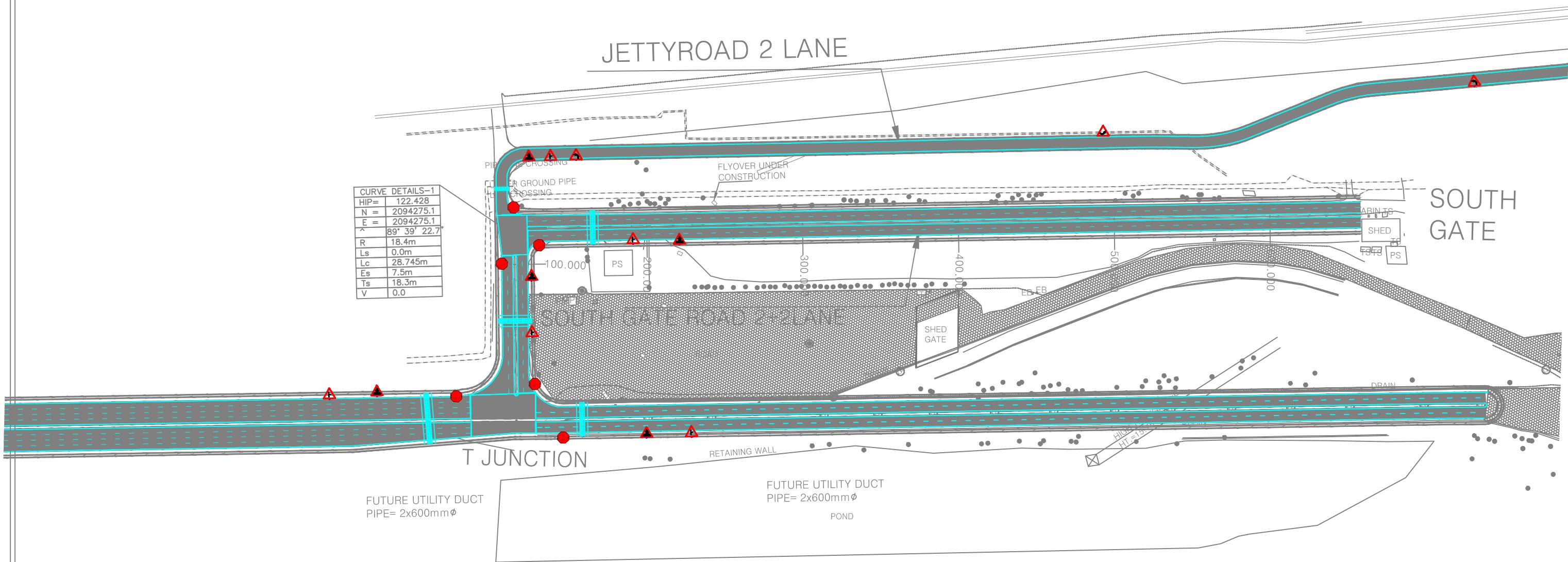
DRG.NO:DPR\_JNPT\_QTCPL\_Ln&Sign\_mrk\_02

SCALE:H=1:2500 ISSUE

SCALE:V=1:250 R0

TO KARAL JUNCTION

TO JETTY

**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE			

**CONSULTANT:**

 QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

**CLIENT:**

 JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

**PROJECT:-**

Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

DRAWN BY:-

NAME

SIGNATURE

DRAWN BY:-

NAME

SIGNATURE

TITLE :- LANE MARKING &amp; SIGNAGE MARKING

PURPOSE OF DRAWING

DESIGNED BY:-

APPROVED BY:-

CHECKED BY:-

NAME

SIGNATURE

FOR PLANNING

SCALE: H=1:2500 ISSUE

CHECKED BY:-

DATE:-

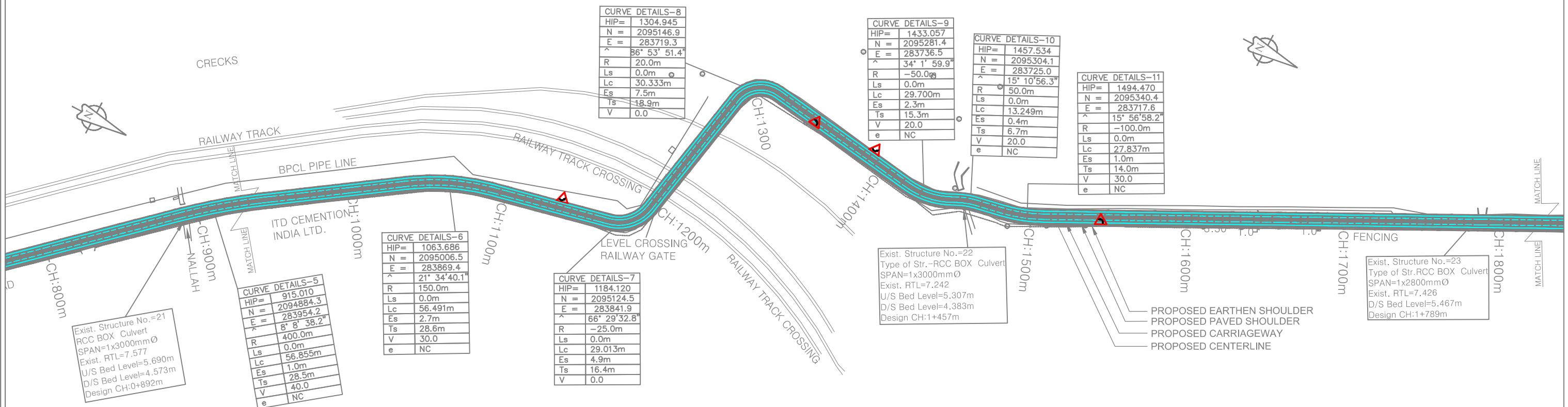
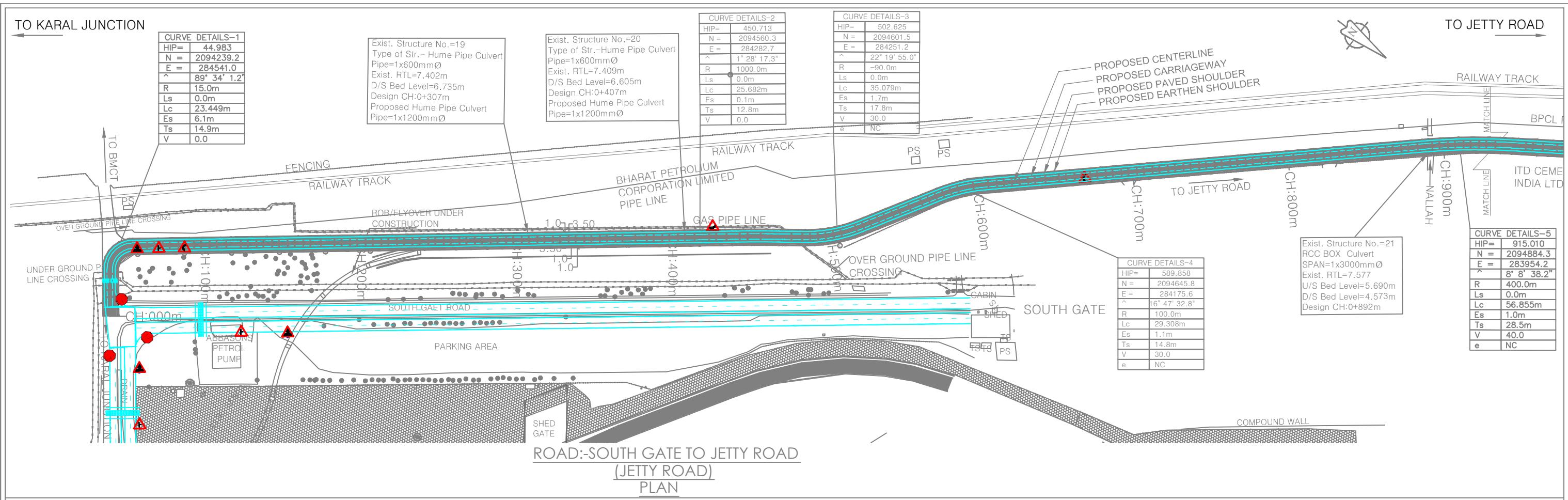
DRAWN BY:-

NAME

SIGNATURE

DRG.NO:DPR\_JNPT\_QTCPL\_Ln&amp;Sign\_mrk\_01

SCALE: V=1:250 DATE: FEB-2020



**NOTES:**

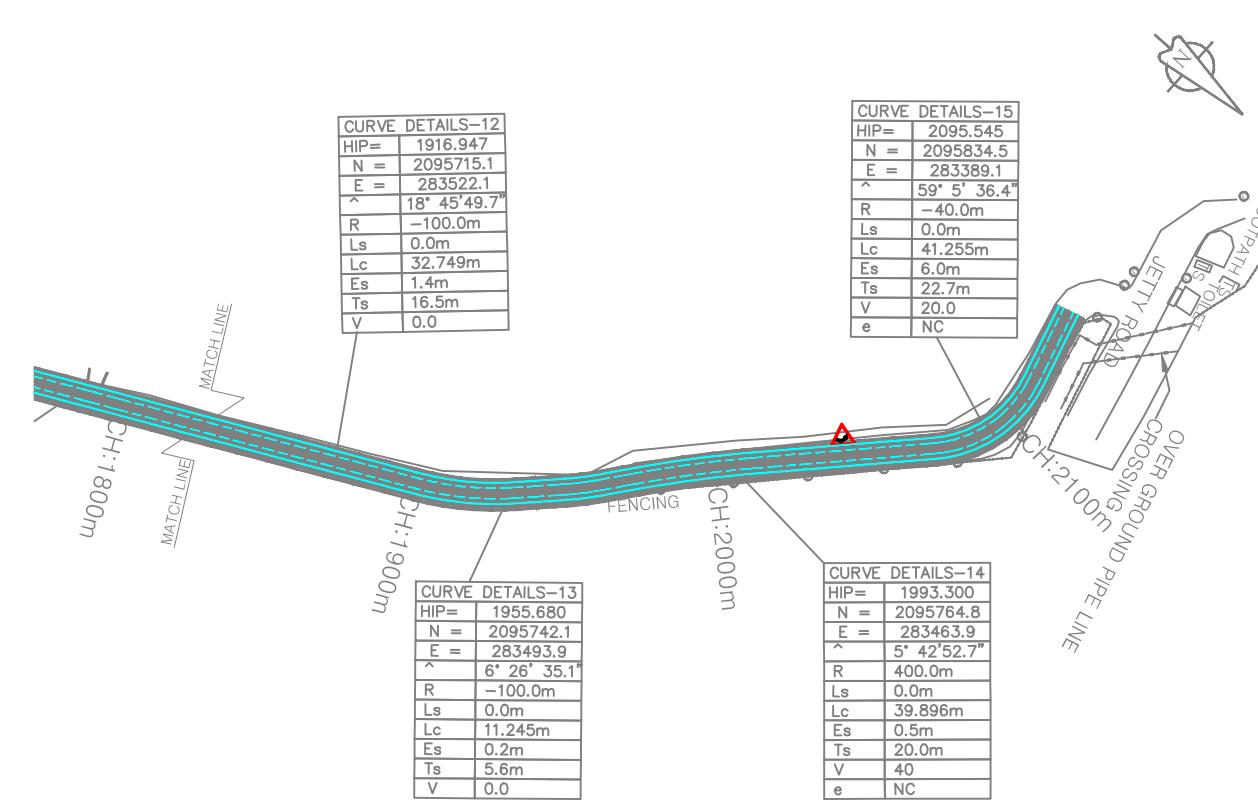
1. All dimensions and levels are in meters unless otherwise specified.
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

<b>CONSULTANT:</b>			<b>CLIENT:</b>
	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com		JAWAHAR 1107,Rah Nariman P
DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-
DESIGNED BY:-			APPROVED BY:-

PROJECT:-	
LAL NEHRU PORT TRUST Seja centre,FPJ Marg, Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
NAME	SIGNATURE
	TITLE :-LANE MARKING & SIGNAGE MARKING SOUTH GATE TO JETTY (JETTY ROAD)
	DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_01
	PURPOSE OF DRAWING FOR PLANNING
	SCALE :H=1:2500
	ISSUE

TO KARAL JUNCTION

TO JETTY ROAD



ROAD:-SOUTH GATE TO JETTY ROAD  
(JETTY ROAD)  
PLAN

L - SECTION

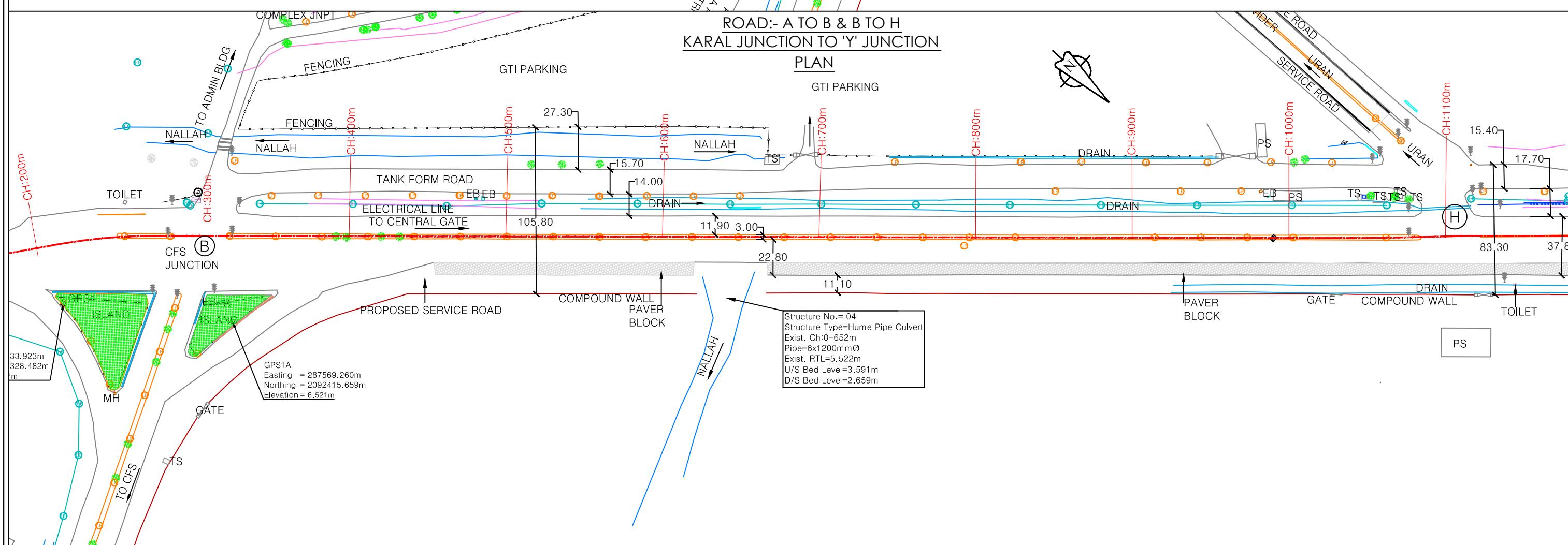
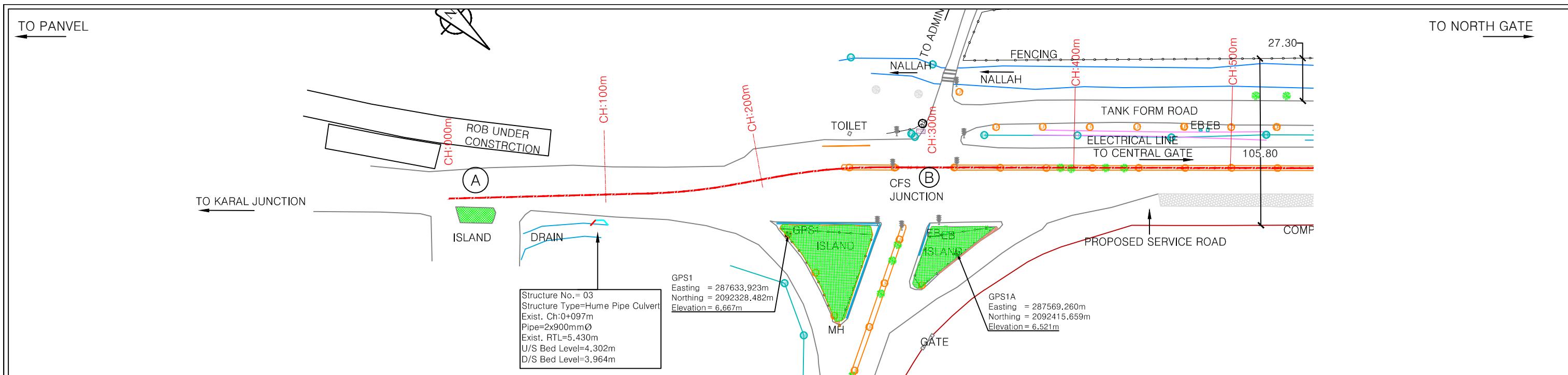
NOTES:					
1. All dimensions and levels are in meters unless otherwise specified.					
2. Any discrepancy in drawing please bring it to notice.					
3. All levels are w.r.t. GTS bench mark.					
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.					

RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	APPROVED
NO.	DATE	REVISION/PURPOSE			

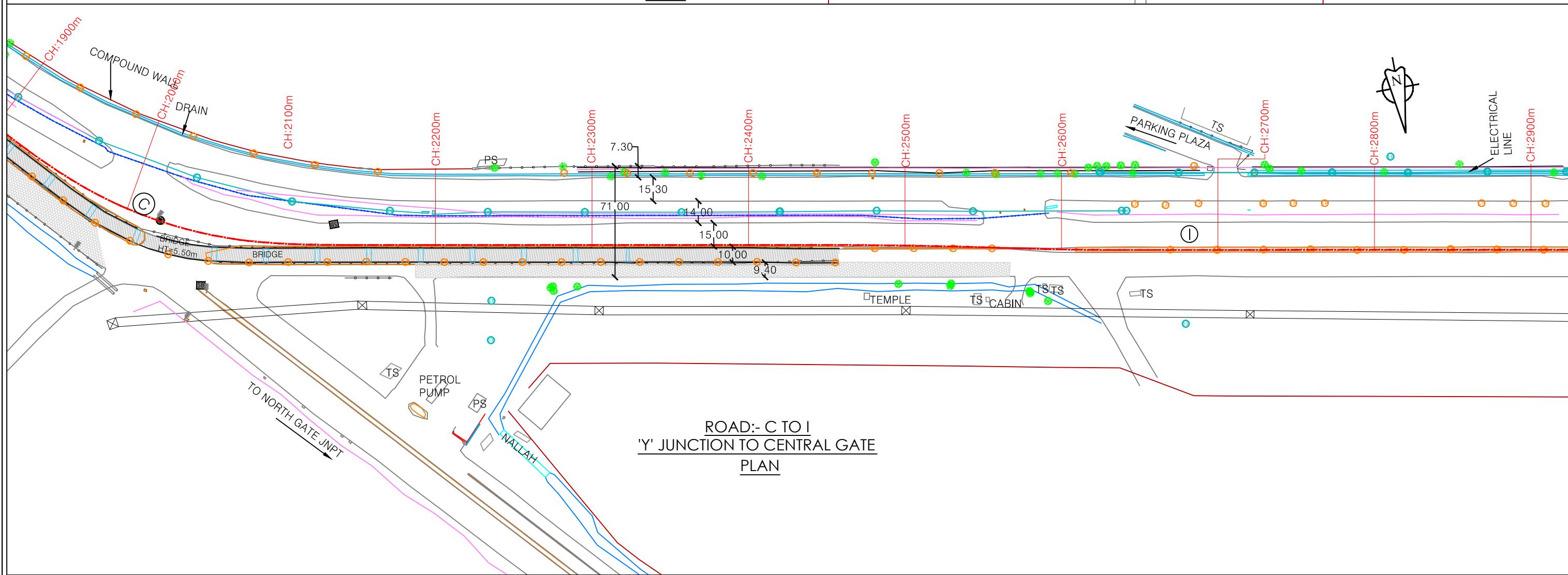
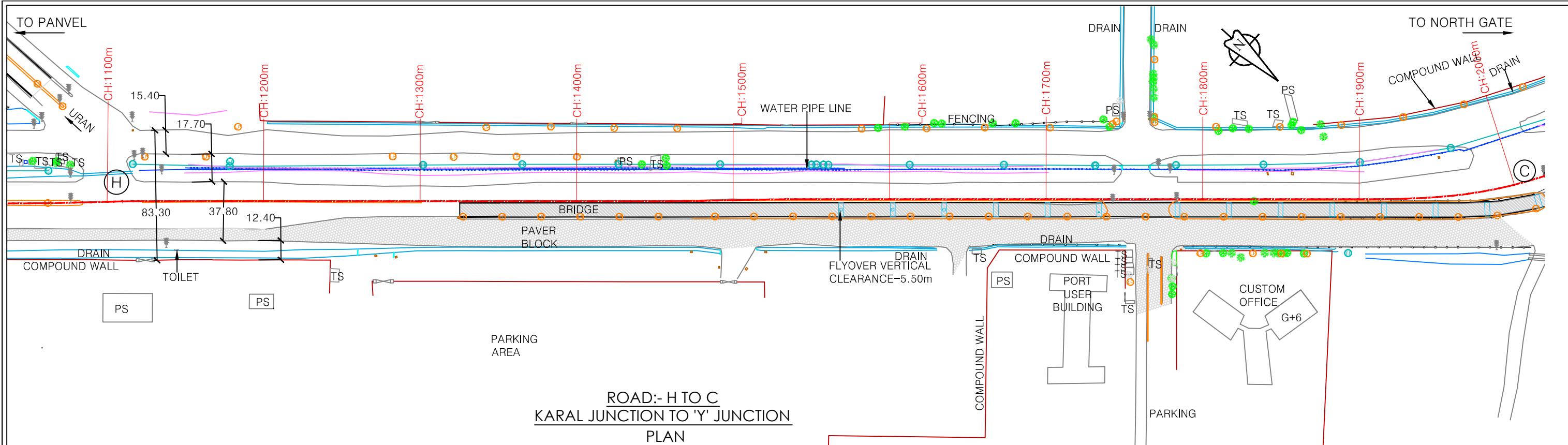
CONSULTANT:	CLIENT:	PROJECT:-
 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021 	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
DRAWN BY:-	NAME	SIGNATURE
DESIGNED BY:-		CHECKED BY:-
CHECKED BY:-		APPROVED BY:-

TITLE :- LANE MARKING & SIGNAGE MARKING SOUTH GATE TO JETTY (JETTY ROAD)			PURPOSE OF DRAWING FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_Ln&Sign_mrk_02			SCALE:H=1:2500 ISSUE
NO.	DATE	REVISION/PURPOSE	SCALE:V=1:250 R0

# **SURVEY PLAN**



NOTES:						CONSULTANT:			CLIENT:			PROJECT:-			
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400614 Email : qmaxconsultants@gmail.com			 JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021			Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- SURVEY PLAN (ROAD A TO H)		PURPOSE OF DRAWING	
						DESIGNED BY:-	MJV		APPROVED BY:-			FROM CH:0.00m TO CH:1100.00m	FOR PLANNING	DRG.NO:DPR_JNPT_QTCPL_SP_01/01	
R0	FEB-2020	FOR REVIEW				CHECKED BY:-	AMS		DATE:-			H=1:2500	ISSUE	SCALE: V=1:250	RO



**NOTES:**  
 1. All dimensions and levels are in meters unless otherwise specified.  
 2. Any discrepancy in drawing please bring it to notice.  
 3. All levels are w.r.t. GTS bench mark.  
 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
RO	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
 307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
 Sector - 11, CBD Belapur, Navi Mumbai 400 614  
 Email : qmaxconsultants@gmail.com

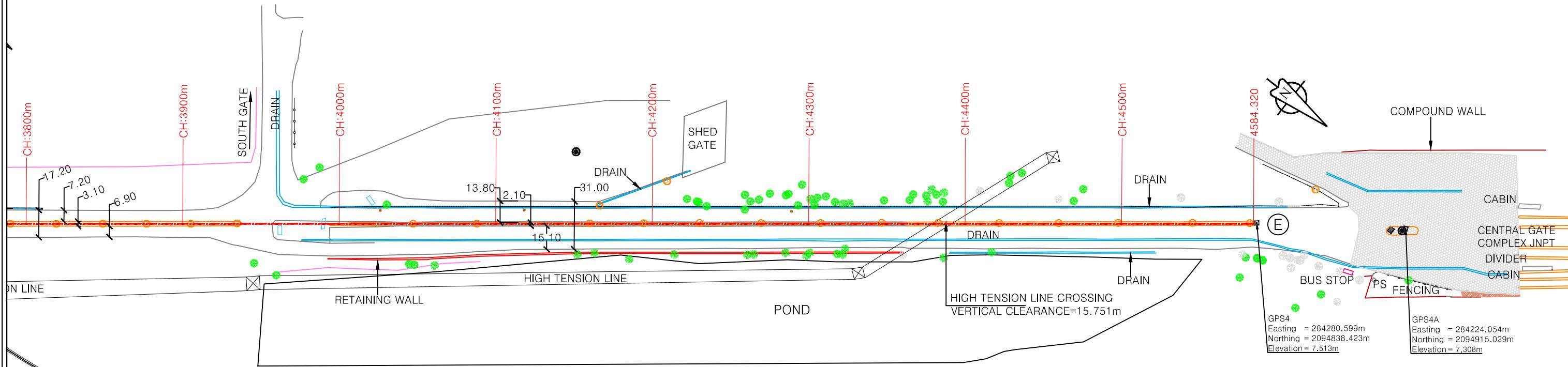
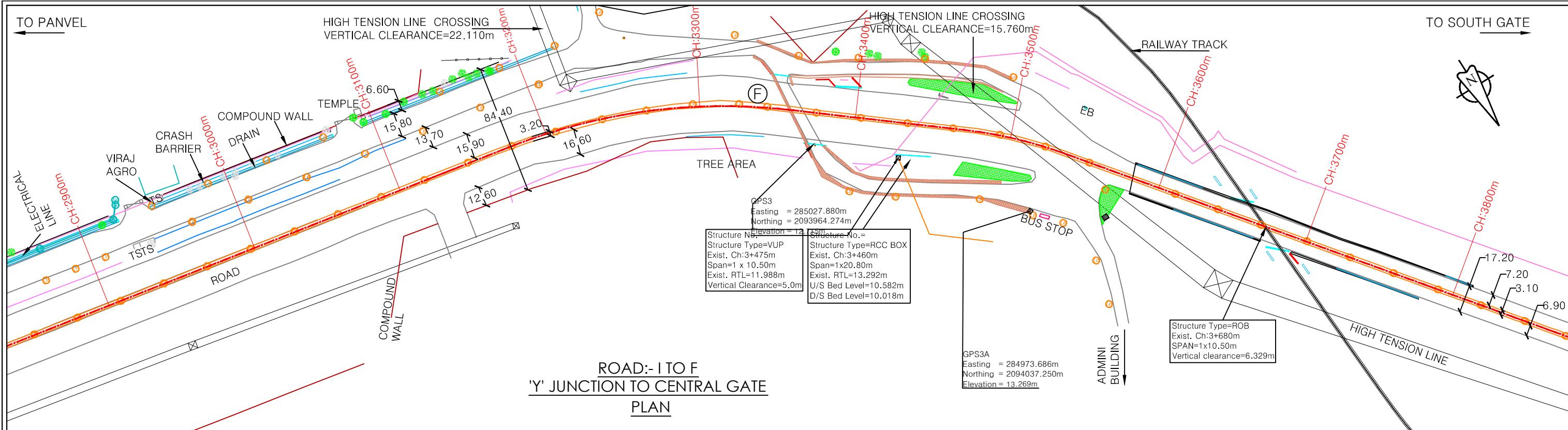
DRAWN BY:-	NAME	SIGNATURE
MVP		
DESIGNED BY:-	NAME	SIGNATURE
MVJ		
CHECKED BY:-	NAME	SIGNATURE
AMS		

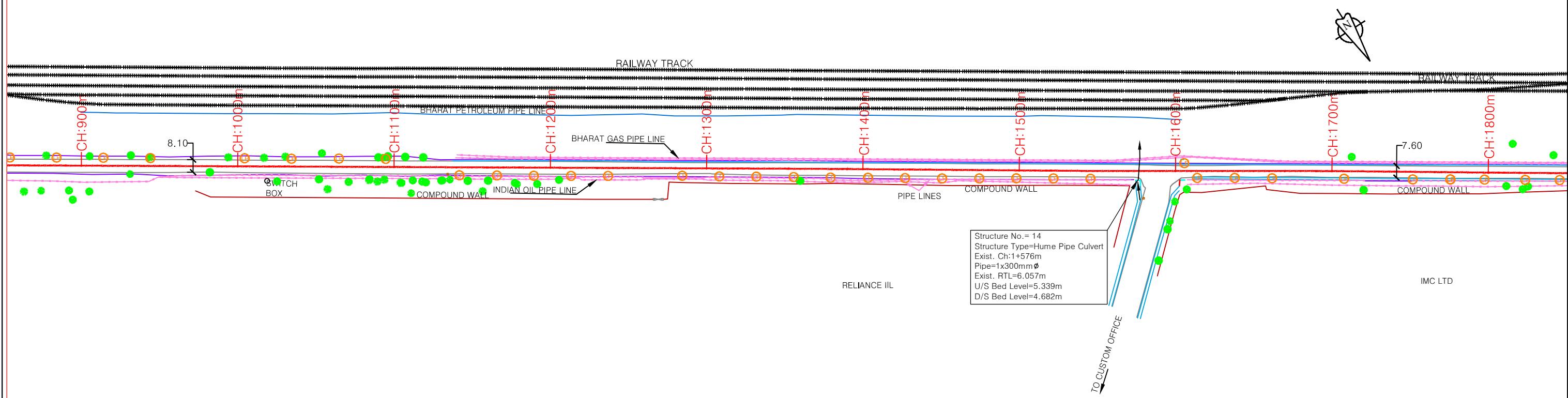
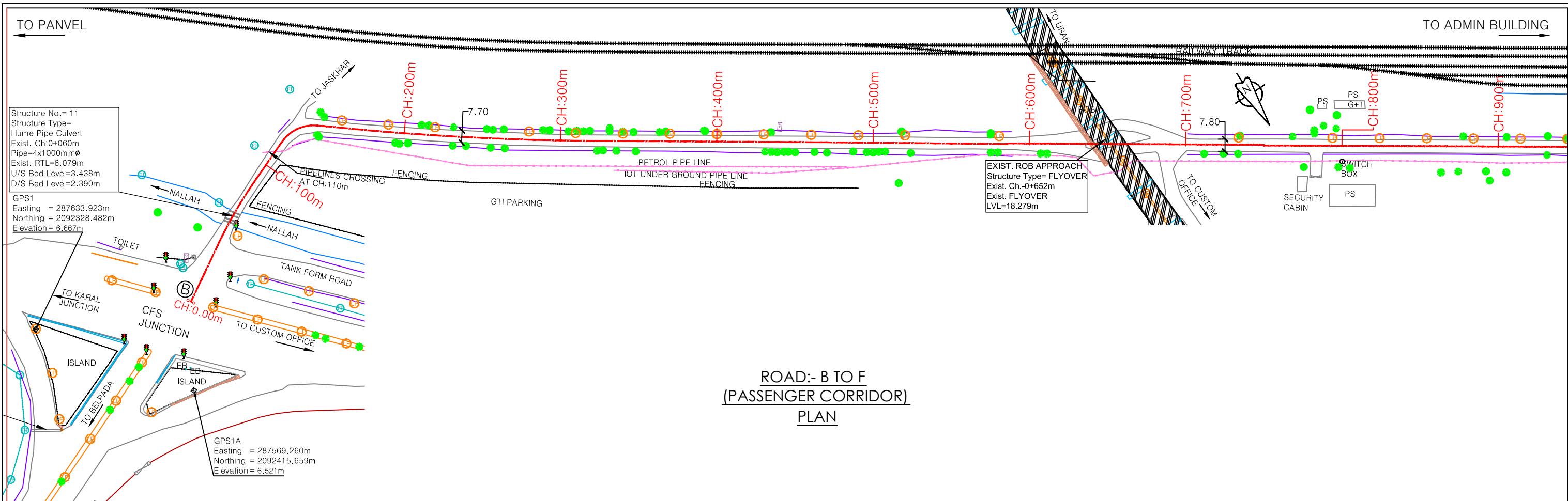
**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
 1107, Raheja centre, FPJ Marg,  
 Nariman Point, Mumbai-400021

CHECKED BY:-	NAME	SIGNATURE
APPROVED BY:-	NAME	SIGNATURE
DATE:-	NAME	SIGNATURE

**PROJECT:-**  
 Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

TITLE :- SURVEY PLAN (ROAD H TO I)		PURPOSE OF DRAWING
FROM CH:1100m TO CH:2900m		FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_SP_01/02		SCALE: H=1:2500 ISSUE
		SCALE: V=1:250 R0



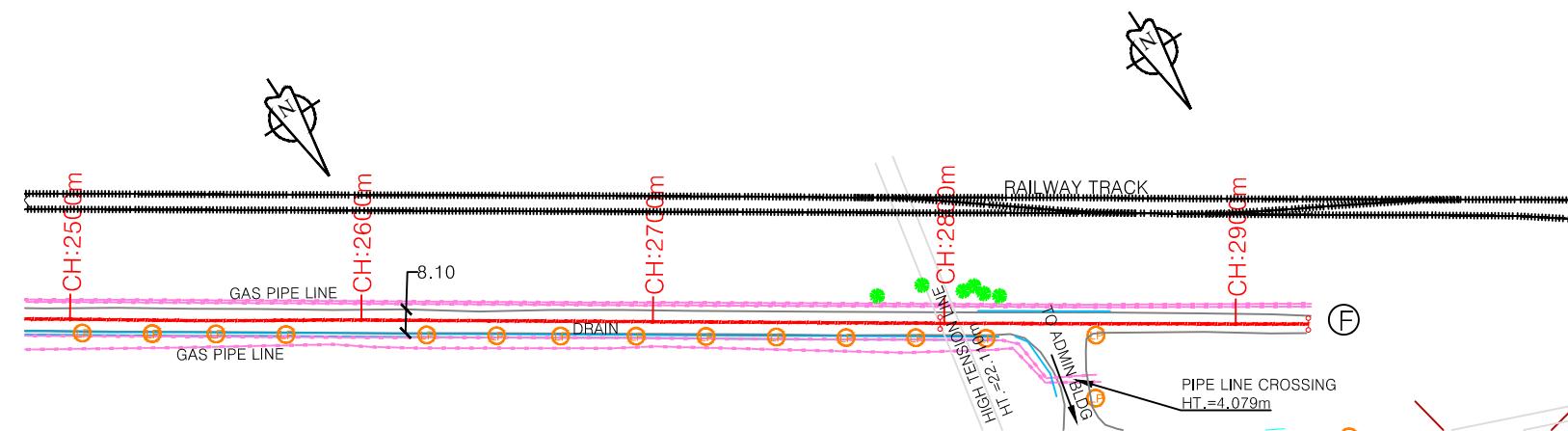
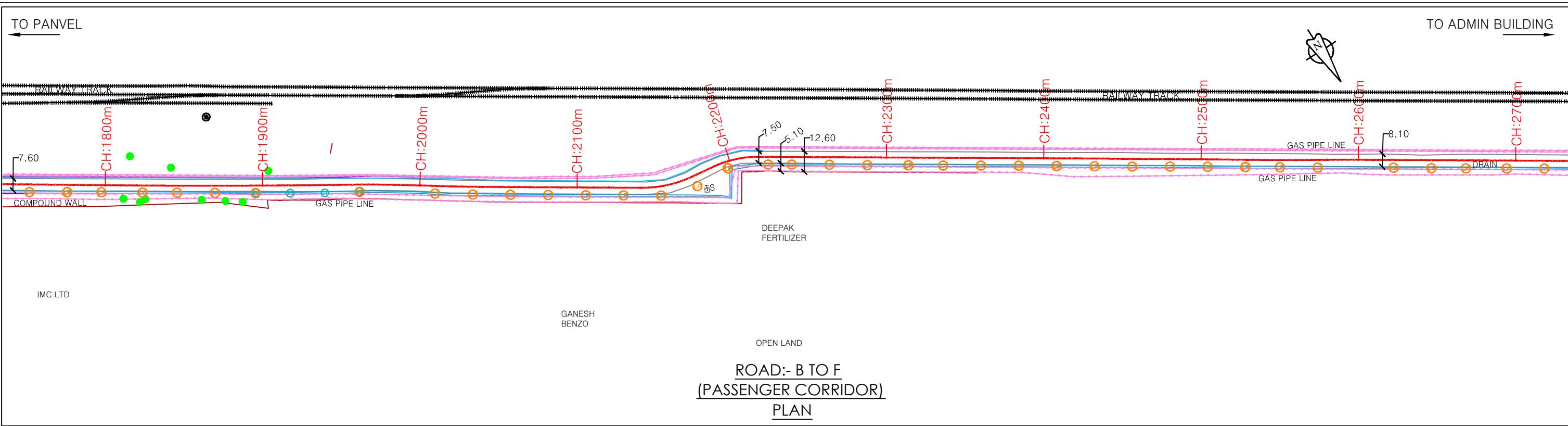


**L - SECTION**

**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

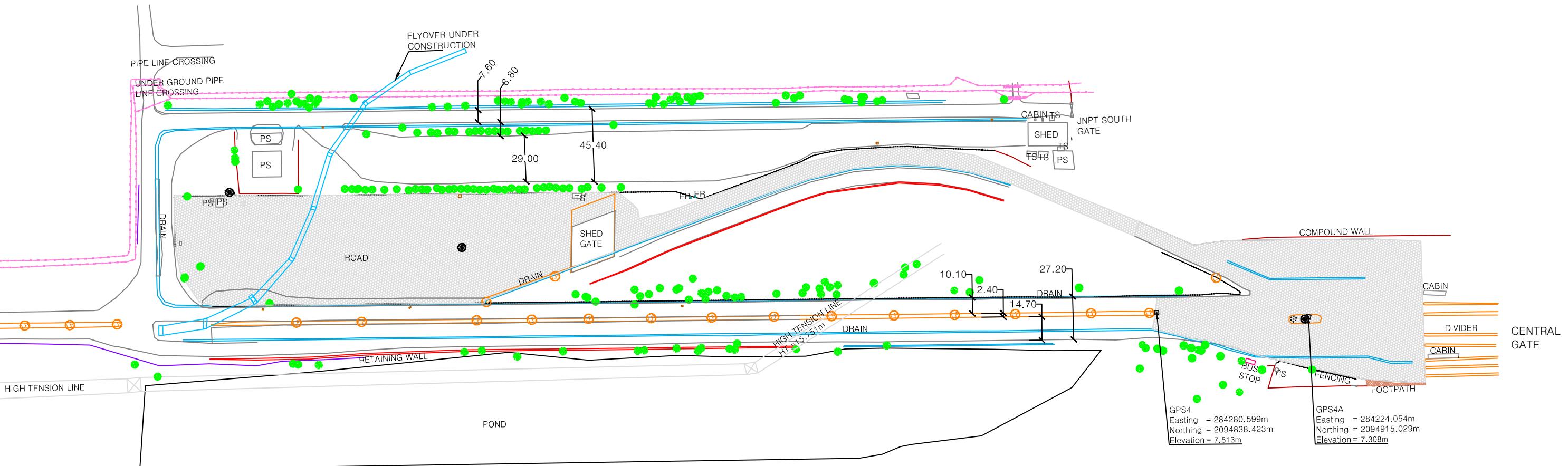
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					QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com			JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-40021			Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.		
RO	FEB-2020	FOR REVIEW	DRAWN	CHECKED	NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- PLAN & PROFILE (ROAD B TO F) FROM CH:0.00m TO CH:1800.00m		PURPOSE OF DRAWING FOR PLANNING		
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	DRG.NO:DPR_JNPT_QTCPL_P&P_02/01	
						DESIGNED BY:-			APPROVED BY:-			SCALE:H=1:2500 ISSUE R0 DATE: FEB-2020	
						CHECKED BY:-			DATE:-				



NOTES:							CONSULTANT:			CLIENT:			PROJECT:-		
							QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com			JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021			Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.		
							DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- PLAN & PROFILE (ROAD B TO F) FROM CH:1800.00m TO CH:2900.00m		
RO	FEB-2020	FOR REVIEW		DRAWN	CHECKED	APPROVED	DESIGNED BY:-			APPROVED BY:-			DRG.NO:DPR_JNPT_QTCPL_P&P_02/02		
NO.	DATE	REVISION/PURPOSE					CHECKED BY:-			DATE:-			DATE: FEB-2020		
													SCALE: H=1:2500	ISSUE	RO
													V=1:250		

TO PANVEL

TO ADMIN BUILDING



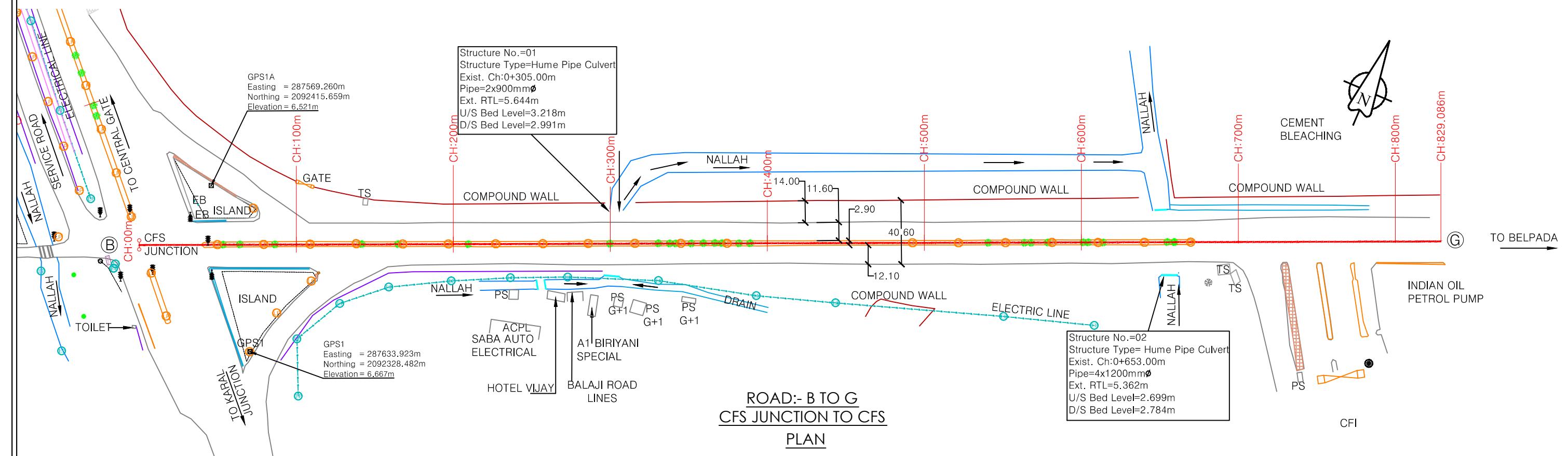
## ROAD:- B TO F (SOUTH GATE) (PASSENGER CORRIDOR)

## L - SECTION

NOTES:-						CONSULTANT:	CLIENT:	PROJECT:-
1. All dimensions and levels are in meters unless otherwise specified.						 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021	Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.
2. Any discrepancy in drawing please bring it to notice.								
3. All levels are w.r.t. GTS bench mark.								
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.								
						NAME	SIGNATURE	TITLE :- PLAN & PROFILE (SOUTH GATE) FROM CH:0000.00m TO CH:00.00m
						DRAWN BY:-	CHECKED BY:-	PURPOSE OF DRAWING FOR PLANNING
R0	FEB-2020	FOR REVIEW				DESIGNED BY:-	APPROVED BY:-	DRG.NO:DPR_JNPT_QTCPL_P&P_02/03
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	CHECKED BY:-	DATE:-	SCALE: H=1:2500 V=1:250 ISSUER: R0

TO CFS JUNCTION

## TO BELPADA



**NOTES:**

1. All dimensions and levels are in meters unless otherwise specified
2. Any discrepancy in drawing please bring it to notice.
3. All levels are w.r.t. GTS bench mark.
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

R0	FEB-2020	FOR REVIEW		
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED
				APPR

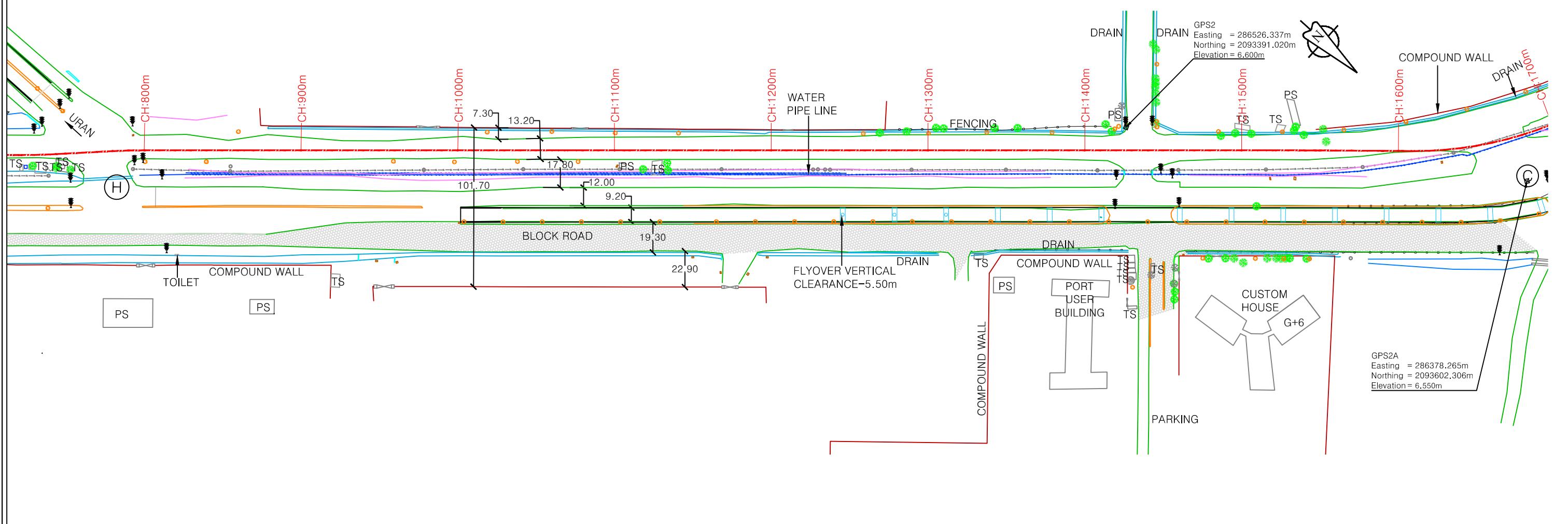
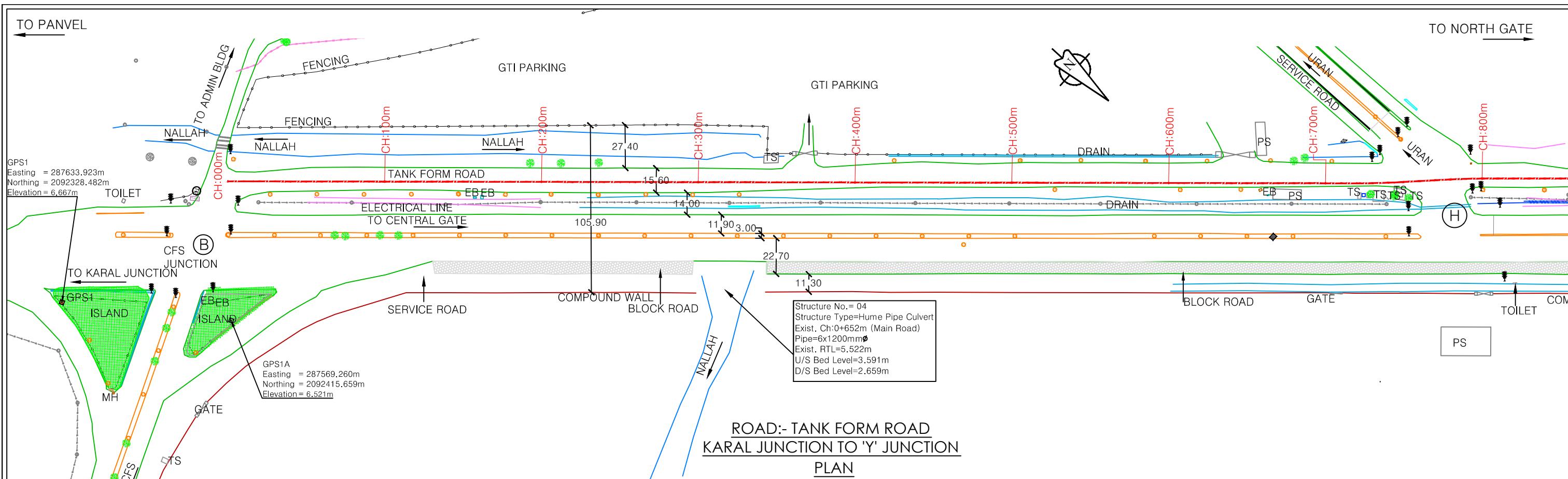
**CONSULTANT:**  
 QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

	NAME	SIGNATURE
D	DRAWN BY:-	MVP
	DESIGNED BY:-	AJ
	CHECKED BY:-	AMS

**CLIENT:**  
 JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

	NAME	SIGNATURE
CHECKED BY:-		
APPROVED BY:-		
DATE:-		

PROJECT:-	
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	
TITLE :- SURVEY PLAN (ROAD B TO G) FROM CH:0.00m TO CH:829.086m	PURPOSE OF DRAWING FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_SP_03/01	SCALE: H=1:2500 V=1:250
DATE: FEB-2020	ISSUE R0



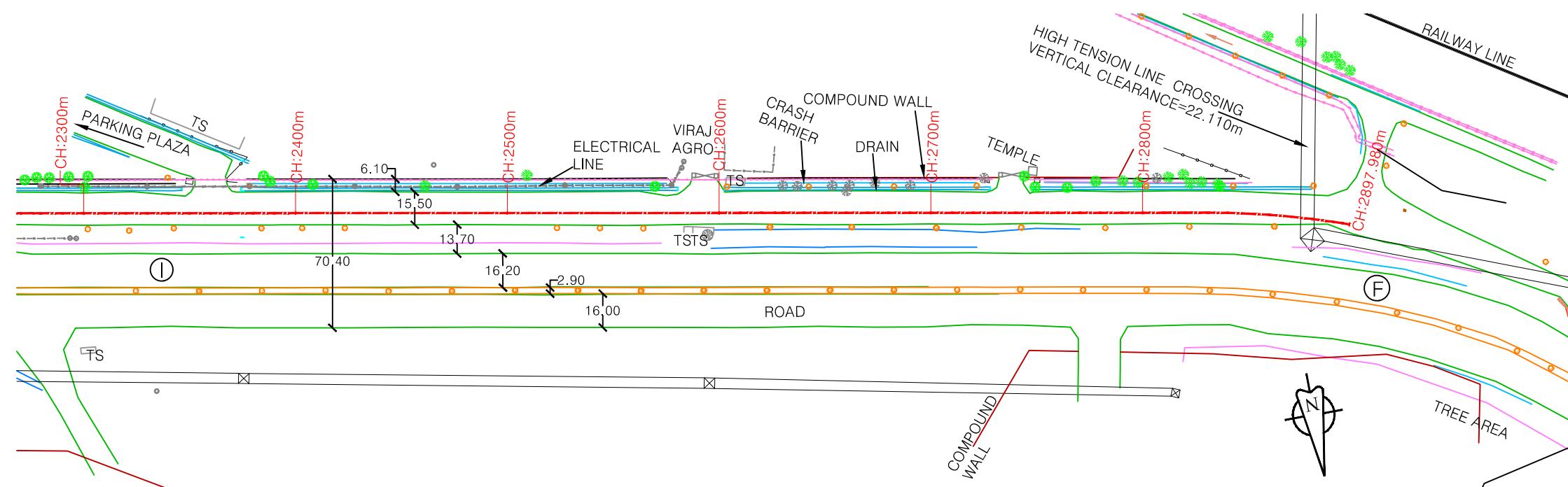
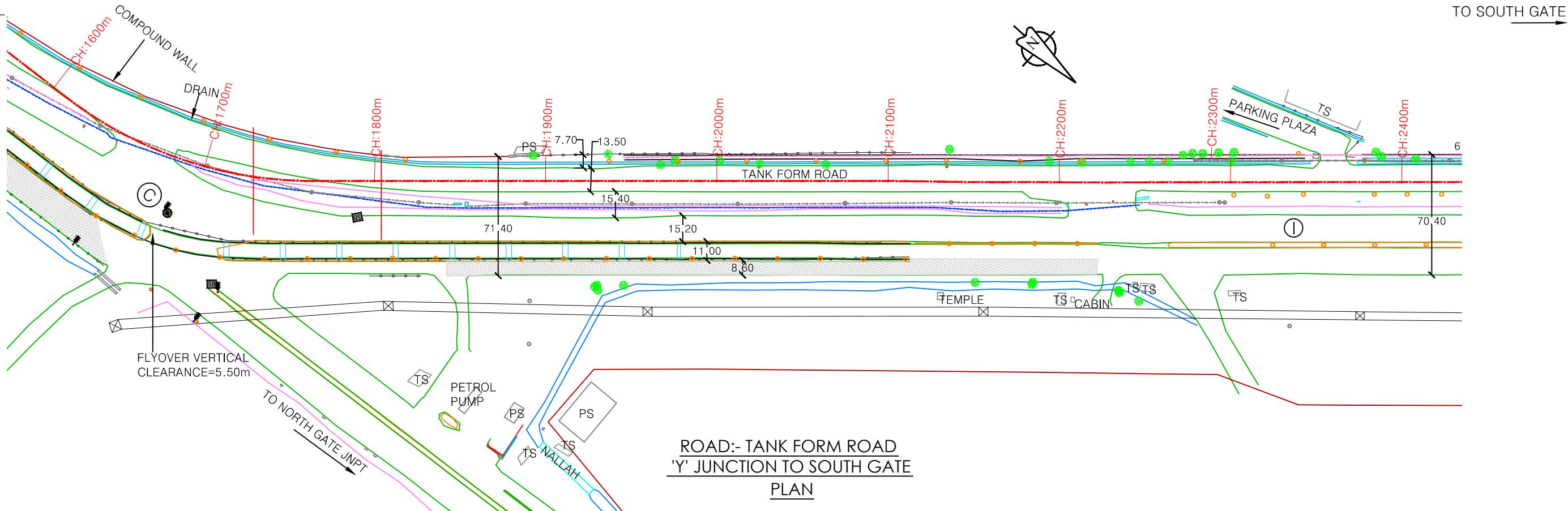
NOTES:				
1. All dimensions and levels are in meters unless otherwise specified.				
2. Any discrepancy in drawing please bring it to notice.				
3. All levels are w.r.t. GTS bench mark.				
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.				

NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
RO	FEB-2020	FOR REVIEW			

CONSULTANT:	
	QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email: qmaxconsultants@gmail.com
DRAWN BY:-	MVP
DESIGNED BY:-	MVJ
CHECKED BY:-	AMS

CLIENT:	
	JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021
NAME	SIGNATURE
NAME	SIGNATURE
NAME	SIGNATURE

PROJECT:-	
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	
TITLE :- PLAN & PROFILE (TANK FORM ROAD)	PURPOSE OF DRAWING
FROM CH:000m TO CH:1600m	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_P&P_03/01	SCALE: H:1:2500 ISSUE
DATE: FEB-2020	SCALE: V:1:250 R0



**NOTES:**

- All dimensions and levels are in meters unless otherwise specified.
- Any discrepancy in drawing please bring it to notice.
- All levels are w.r.t. GTS bench mark.
- All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.

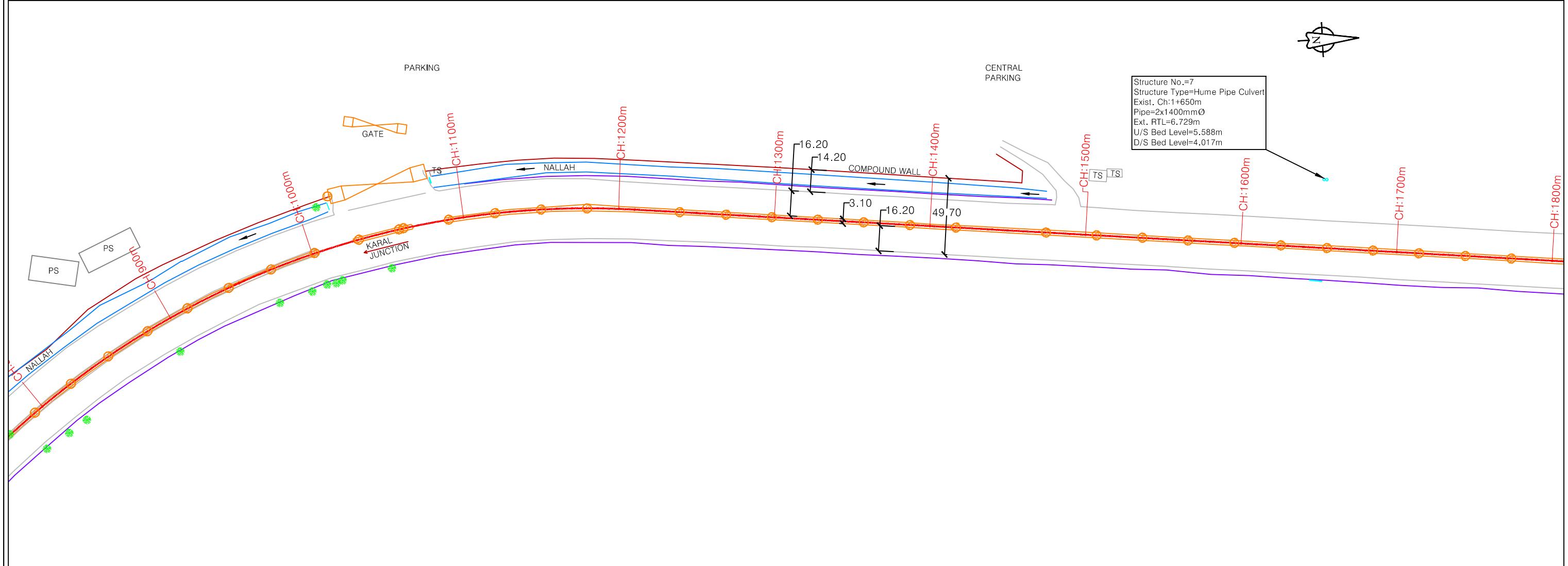
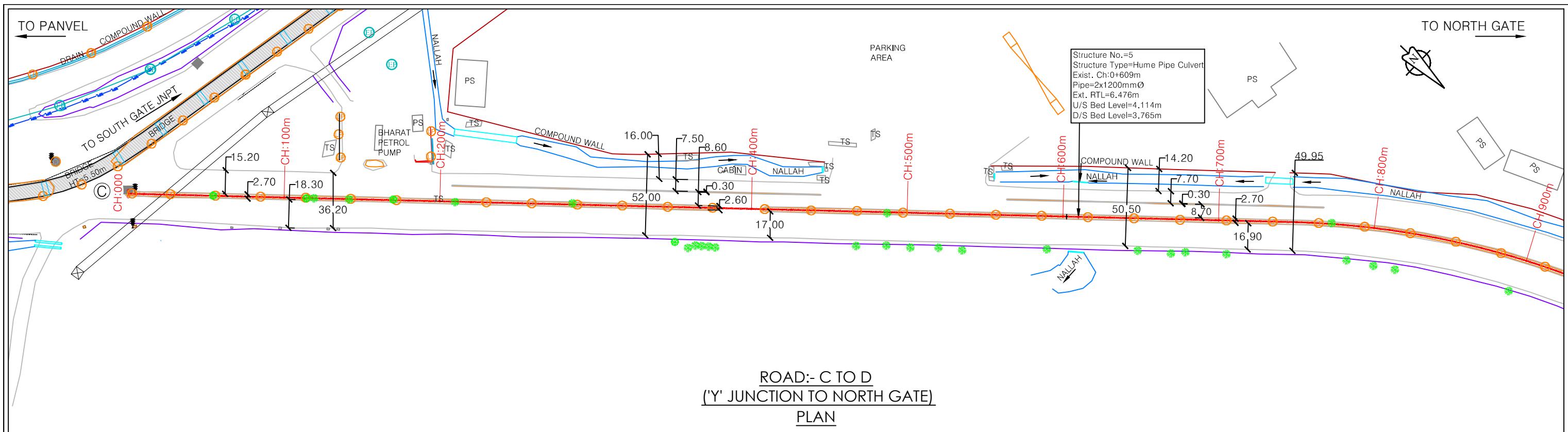
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED
RO	FEB-2020	FOR REVIEW			

**CONSULTANT:**  
**QMAX TECHNO-CONSULTANTS PVT. LTD.**  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
Sector - 11, CBD Belapur, Navi Mumbai 400 614  
Email : qmaxconsultants@gmail.com

**CLIENT:**  
**JAWAHARLAL NEHRU PORT TRUST**  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

**PROJECT:-**  
Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

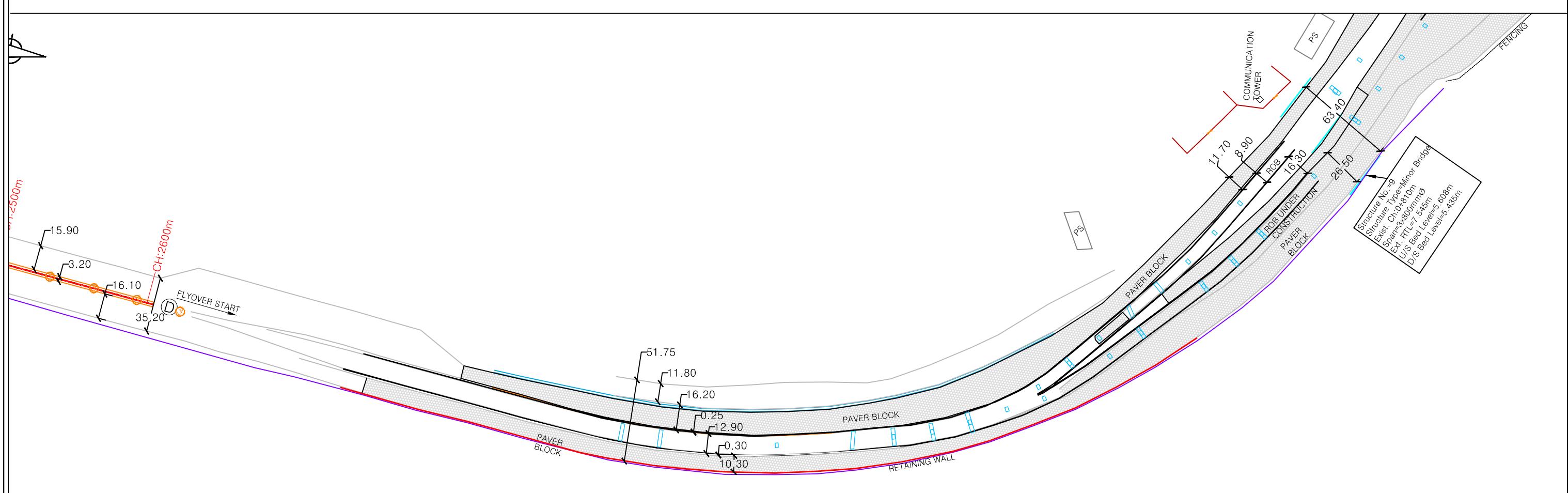
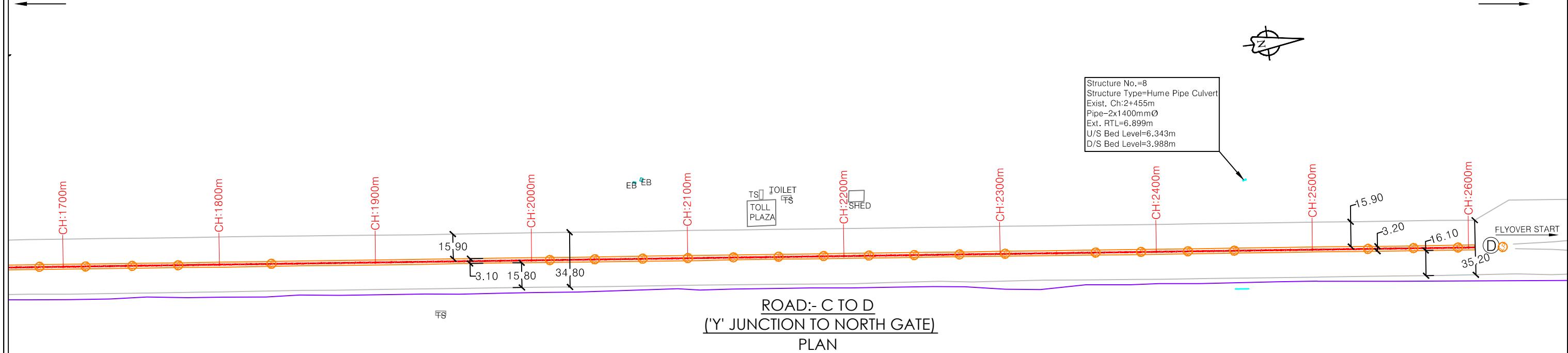
TITLE :- PLAN & PROFILE (TANK FORM ROAD)	PURPOSE OF DRAWING
FROM CH:1600m TO CH:2897.980m	FOR PLANNING
DRG.NO:DPR_JNPT_QTCPL_P&P_04/02	ISSUE
SCALE:H=1:2500	V=1:250
DATE: FEB-2020	RO



NOTES:						CONSULTANT:		CLIENT:		PROJECT:-	
1. All dimensions and levels are in meters unless otherwise specified.						 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com		 JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021		Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.	
2. Any discrepancy in drawing please bring it to notice.											
3. All levels are w.r.t. GTS bench mark.						NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- SURVEY PLAN (ROAD C TO D) FROM CH:0.00m TO CH:900.00m FOR PLANNING	
4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						DRAWN BY:-		CHECKED BY:-			
R0	FEB-2020	FOR REVIEW				DESIGNED BY:-		APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_SP_05/01	H=1:2500 ISSUE
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	CHECKED BY:-		DATE:-		DATE: FEB-2020	SCALE: V=1:250 R0

TO PANVEL

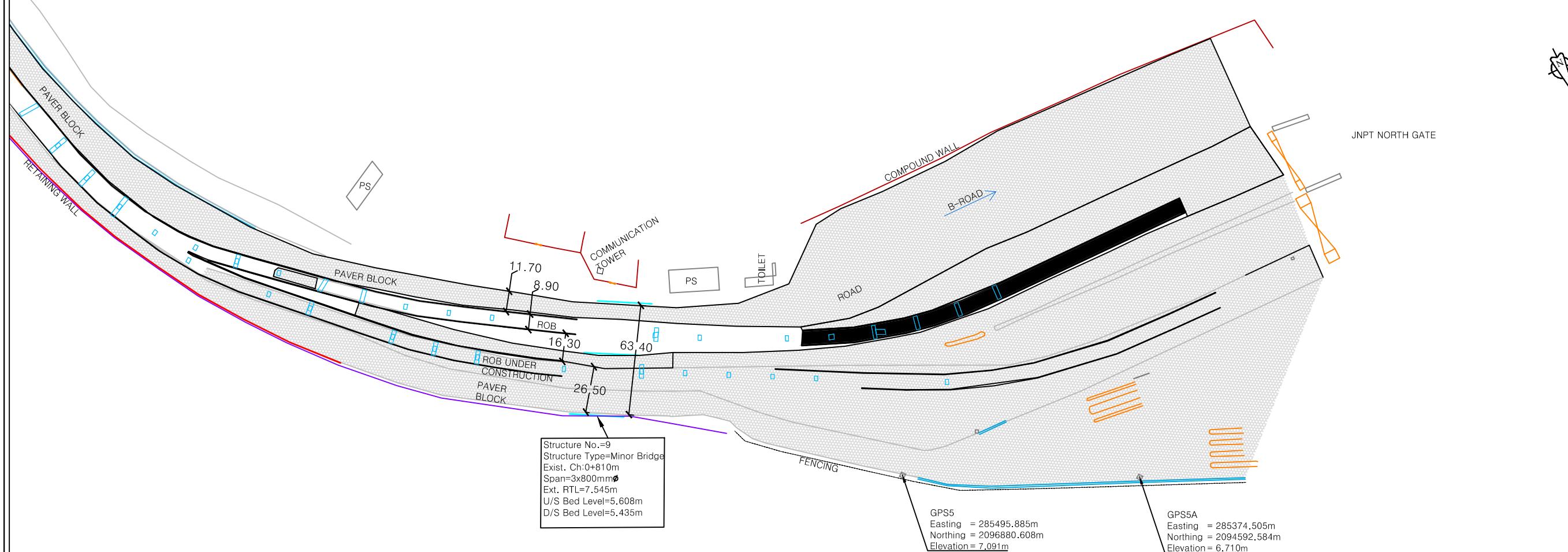
TO NORTH GATE



## L - SECTION

TO PANVEL

TO NORTH GATE

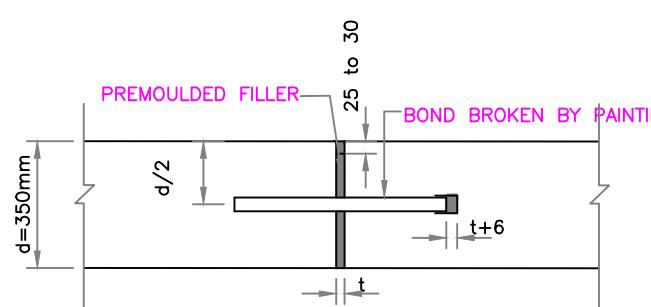
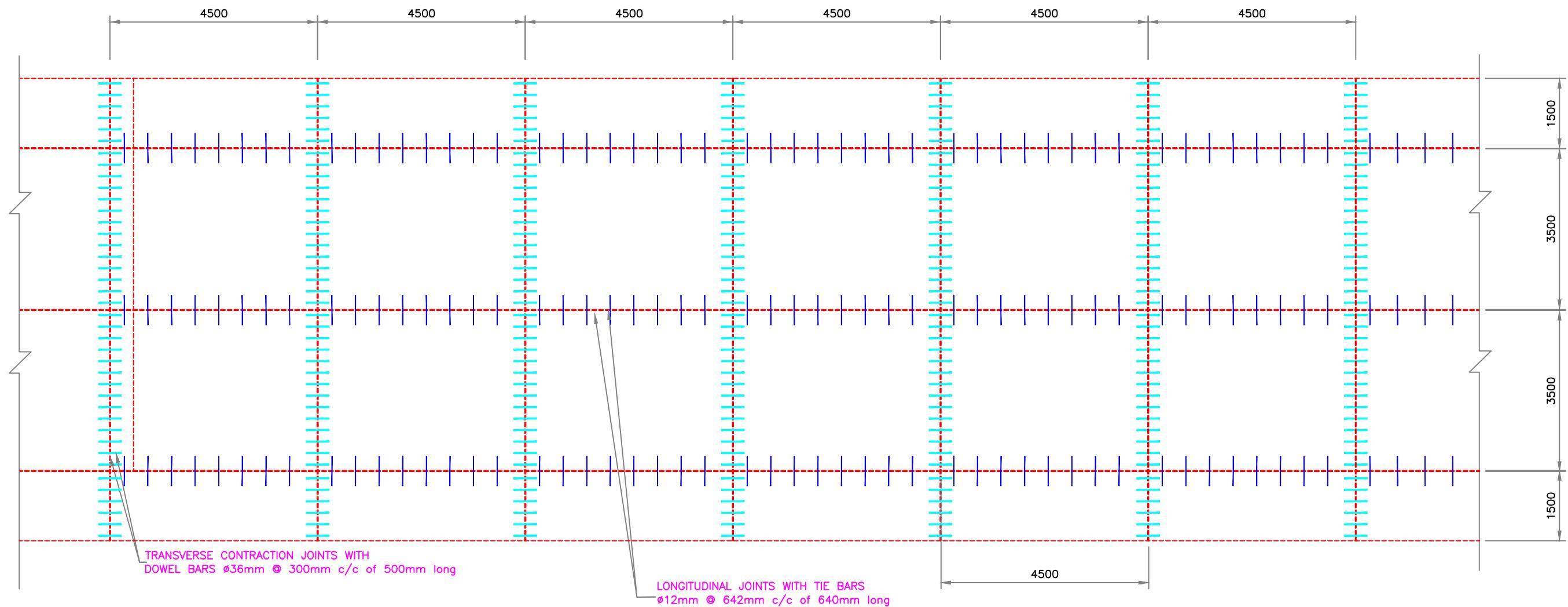


ROAD:- C TO D  
('Y' JUNCTION TO NORTH GATE)  
PLAN

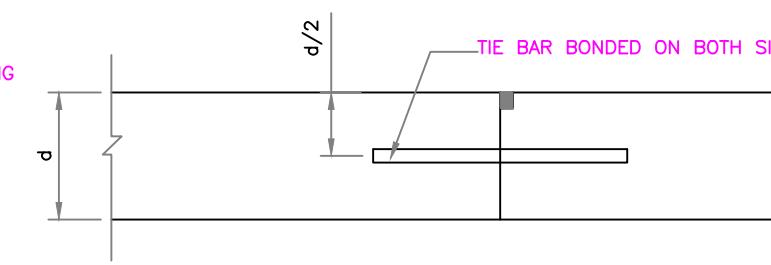
## L - SECTION

NOTES:						CONSULTANT:			CLIENT:			PROJECT:-			
1. All dimensions and levels are in meters unless otherwise specified. 2. Any discrepancy in drawing please bring it to notice. 3. All levels are w.r.t. GTS bench mark. 4. All co ordinates are w.r.t. Global Positioning System of WGS-84 DATUM.						QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021			Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.					
RO	FEB-2020	FOR REVIEW				DRAWN BY:-	NAME	SIGNATURE	CHECKED BY:-	NAME	SIGNATURE	TITLE :- SURVEY PLAN (ROAD C TO D)	PURPOSE OF DRAWING		
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DESIGNED BY:-			APPROVED BY:-			FOR PLANNING			
						CHECKED BY:-			DATE:-			DRG.NO:DPR_JNPT_QTCPL_SP_03/03	SCALE:H=1:2500	ISSUE	
												DATE: FEB-2020	V=1:250	RO	

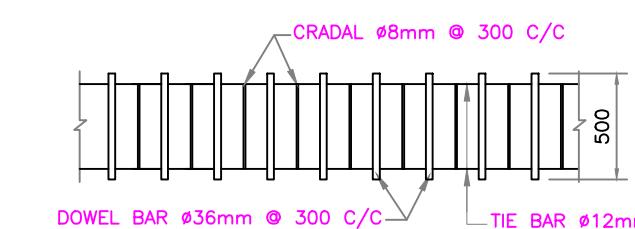
# MISCELLANEOUS DRAWINGS



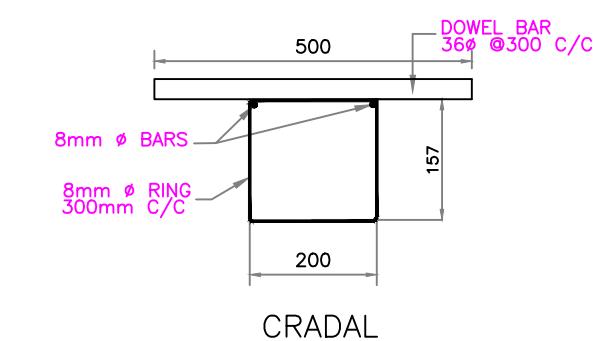
EXPANSION JOINT WITH DOWEL BAR



BUTT JOINT WITH TIE BAR



DETAIL 'A'



NOTE:-  
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.



CONSULTANT:  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
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Email : qmaxconsultants@gmail.com

CLIENT:  
JAWAHARLAL NEHRU PORT TRUST  
1107, Raheja centre, FPJ Marg,  
Nariman Point, Mumbai-400021

PROJECT:-  
Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.

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NO. DATE

FOR REVIEW  
REVISION/PURPOSE

DRAWN

CHECKED

APPROVED

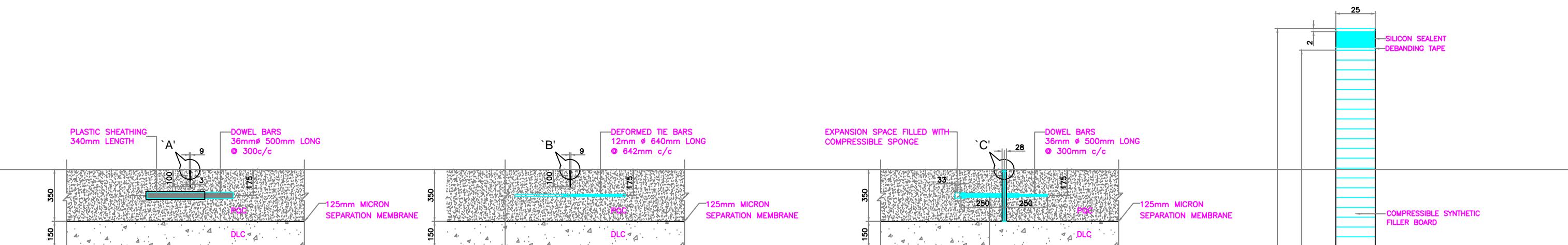
DRAWN BY:-  
DESIGNED BY:-  
CHECKED BY:-  
APPROVED BY:-  
DATE:-

NAME  
SIGNATURE

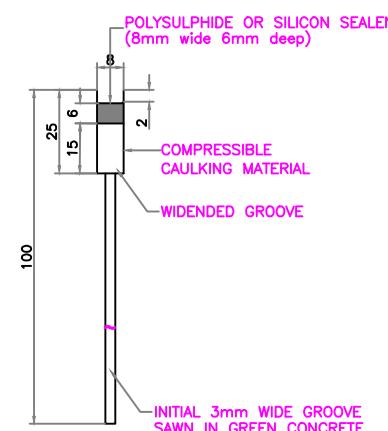
NAME  
SIGNATURE

TITLE :- DETAILS ARRANGEMENT OF PANEL  
DOWEL & TIE BAR  
DRG.NO:DPR\_JNPT\_QTCPL\_D&T\_01  
DATE: FEB-2020

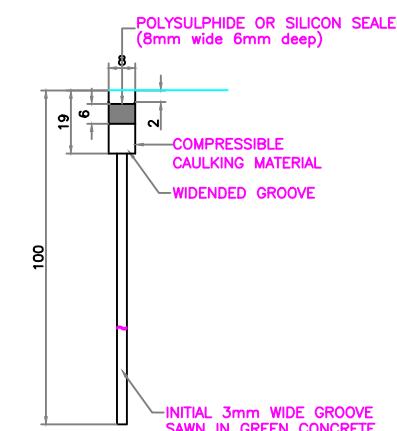
PURPOSE OF DRAWING  
FOR PLANNING  
SCALE: AS SHOWN ISSUE  
RO



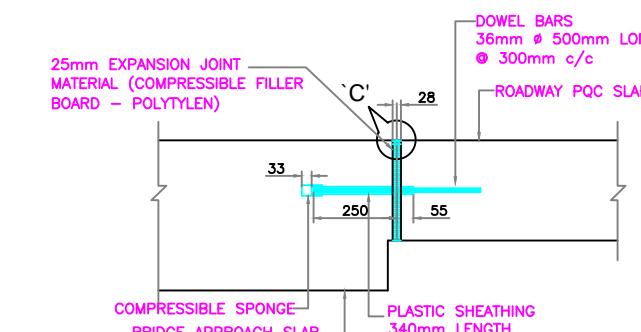
## TRANSVERSE CONTRACTION AND CONSTRUCTION JOINTS WITH DOWEL BARS



## JOINT DETAIL 'A'



JOINT DETAIL 'B'  
LONGITUDINAL JOINT



## EXPANSION JOINT CROSS SECTION

### AT BRIDGE APPROACHES

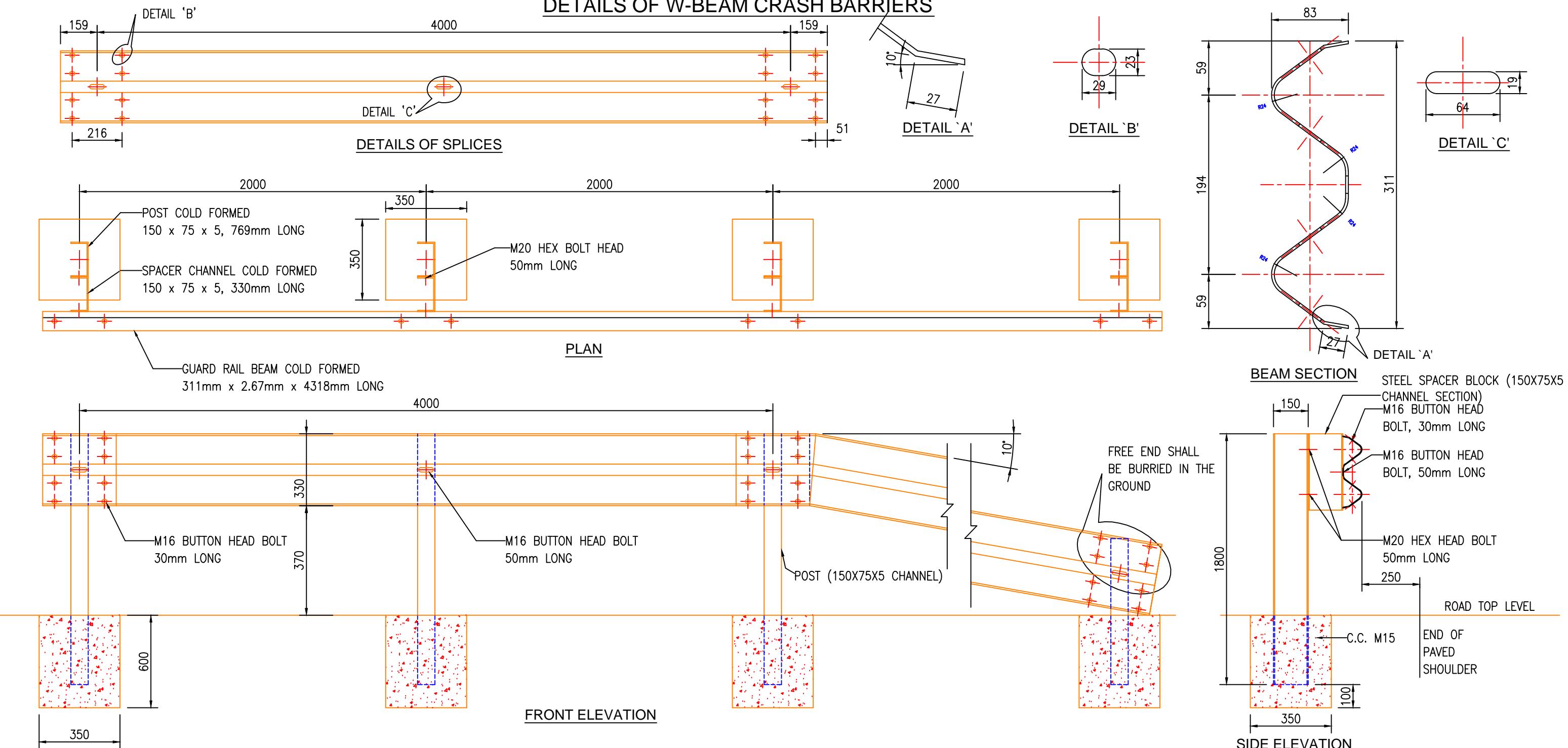
JOINT DETAIL 'C'  
EXPANSION JOINT

## NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
  2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.
  3. THE TRANSVERSE CONSTRUCTION JOINTS WILL BE LOCATED AS THE STRUCTURES AS DIRECTED BY THE ENGINEER.  
CONSTRUCTION JOINT SHOULD BE PROVIDED AT 99m OR AT THE END OF DAY'S WORK, WHICHEVER IS LESS. ALSO, IF THERE IS STOPPAGE OR POURING MORE THAN 30 min. CONSTRUCTION JOINT SHALL BE PROVIDED.
  4. CONCRETE GRADE FOR PAVEMENT SHALL BR M-40.  
USE OF FLY ASH CONFORMING TO IS:3812-GRADE-1 AS CEMENTATION MATERIAL IN CONCRETE IS PERMITTED UP TO 40% OF TOTAL CEMENTATION MATERIAL i.e.(CEMENT+FLY ASH).
  5. MAXIMUM ALLOWABLE CONTENTS FOR FLY ASH SHALL BE 160 kg/m OF CONCRETE MIX.  
IN CASE OF FLY ASH USED, CONFORMANCE OF FLY ASH CONCRETE TO TECHNICAL SPECIFICATION SP-16 & MORTH SPECIFICATION.  
CONCRETE SHALL ACHIEVE MIN. 28 DAYS FLEXURAL STRENGTH OF 45 kg/cm.
  6. LONGITUDINAL JOINT SHALL BE FORMED JOINT.
  7. PAVING SHALL BE DONE IN TWO LONGITUDINAL POURS.
  8. ROAD LEVEL AT THE INTERFACE OF RIGID & FLEXIBLE PAVEMENT SHALL BE MATCHED EITHER BY CUTTING THE FLEXIBLE PAVEMENT OR BY LAYING BITUMINOUS LAYER OVER EXISTING PAVEMENT AS PER SITE CONDITION.
  9. DOWEL BAR SHALL BE PLACED WITH AUTOMATIC DOWEL BAR INSERTER.

CONSULTANT:	CLIENT:	PROJECT:-								
		Up gradation of roads and drainage system outside custom bound area at Jawaharlal Nehru Port Trust.								
 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 JAWAHARLAL NEHRU PORT TRUST 1107,Raheja centre,FPJ Marg, Nariman Point, Mumbai-400021									
NAME	SIGNATURE	NAME	SIGNATURE							
DRAWN BY:-		CHECKED BY:-								
RO FEB-2020	FOR REVIEW	DESIGNED BY:-	APPROVED BY:-	DRG.NO:DPR_JNPT_QTCPL_D&T_02						
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	CHECKED BY:-	DATE:-	DATE: FEB-2020	SCALE: AS SHOWN	ISSUE RO

## DETAILS OF W-BEAM CRASH BARRIERS

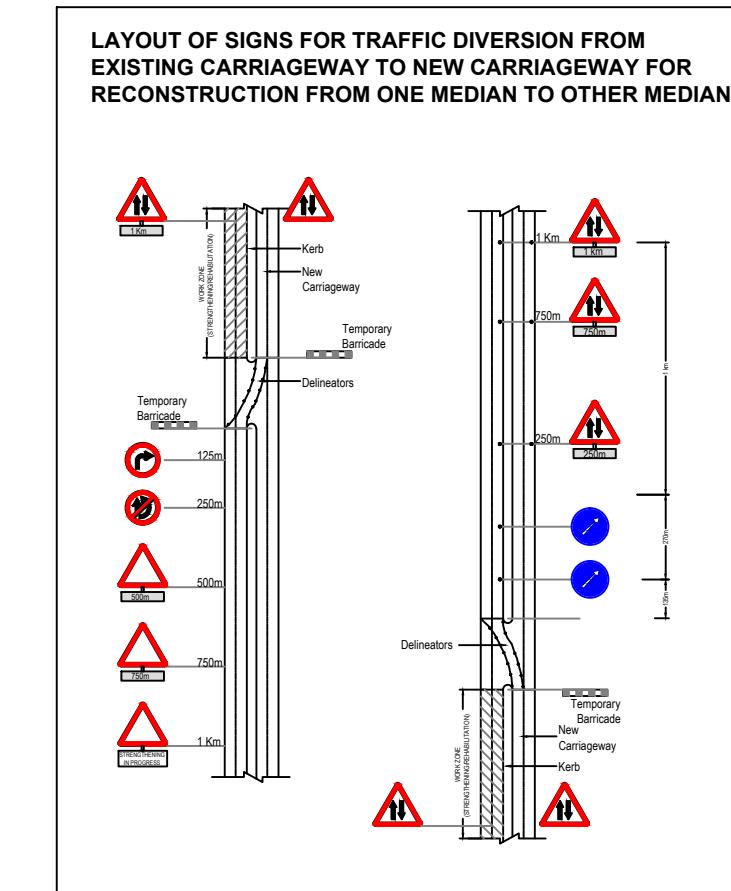
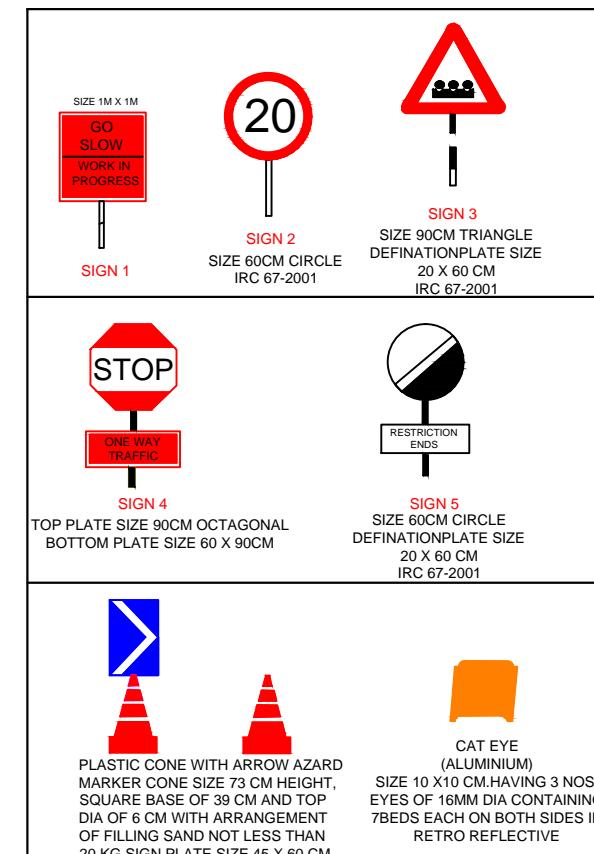
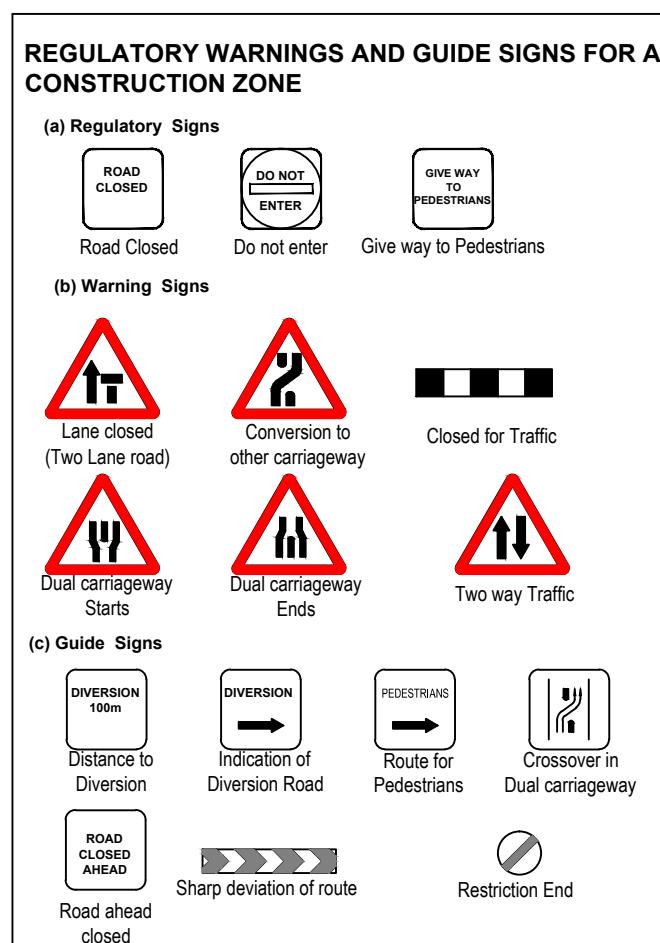
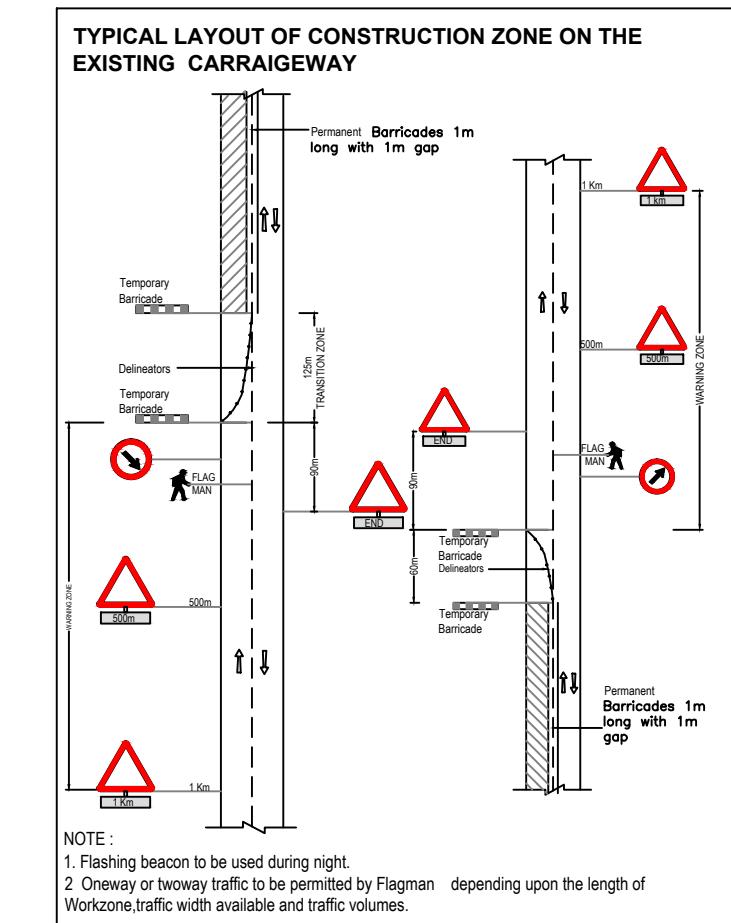
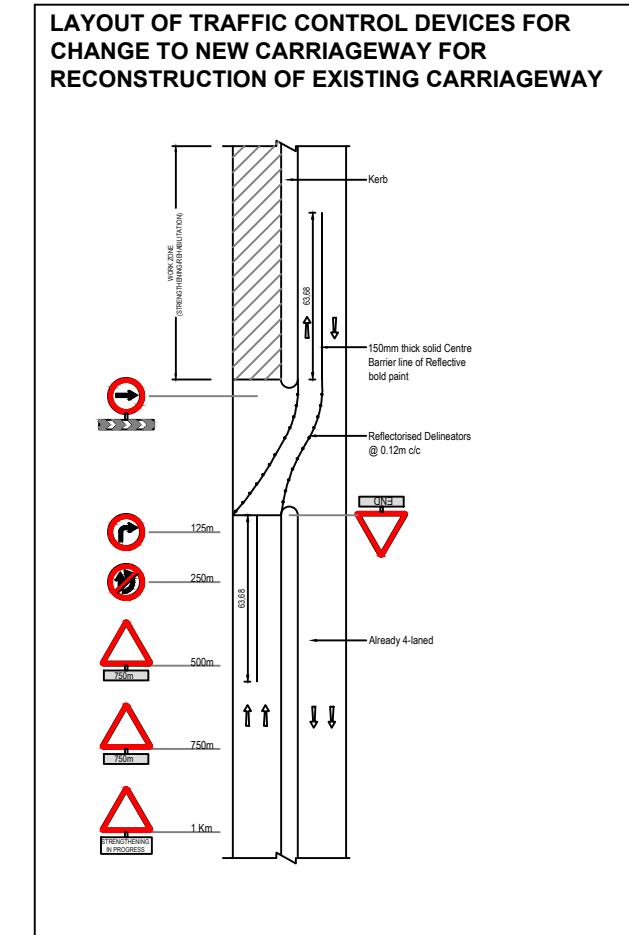
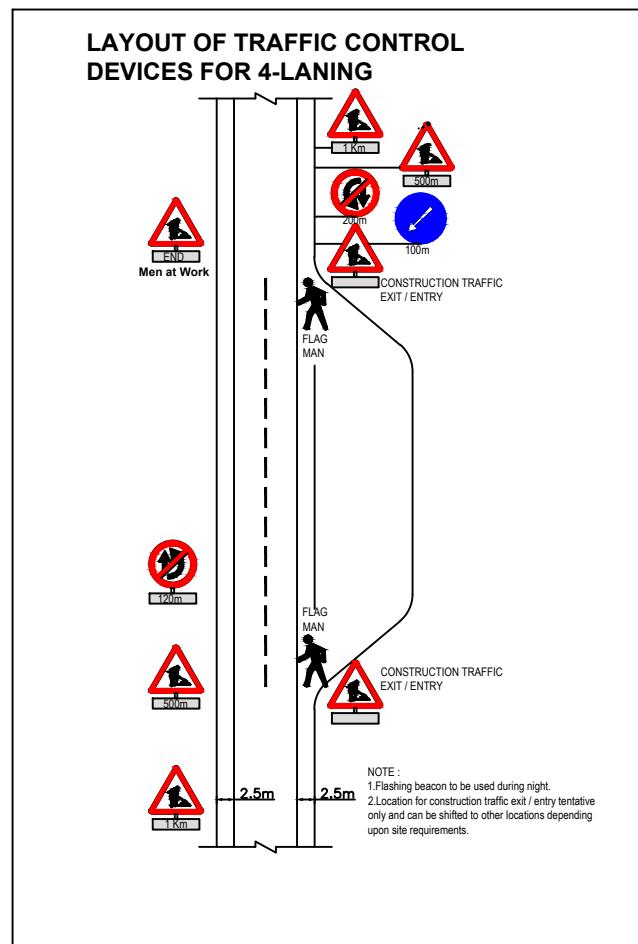


### NOTE:

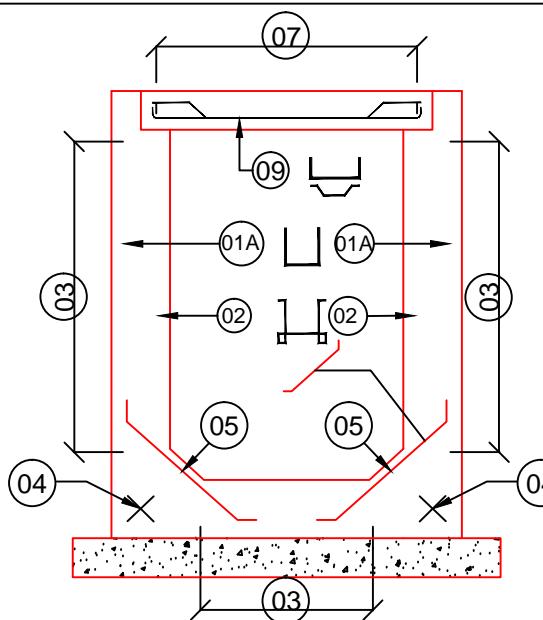
1. SPACING OF POSTS SHOULD BE 2.0m C/C.
2. 1 No. SPACER CHANNEL SHOULD BE PLACED AT EACH POST.
3. W-PROFILE FORMED CORRUGATED BEAMS (EFFECTIVE LENGTH OF 4318mm), 311mm x 83mm.
4. POST CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5.
5. SPACER CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5, 330mm LONG.
6. BUTTON HEAD BOLTS M16 x 30mm LONG, 8 Nos FOR THE SPLICING OF THE W PROFILE AT EACH LOCATION.
7. BUTTON HEAD BOLTS M16 x 50mm LONG, 1 No AT THE CONNECTION OF THE W BEAM TO SPACER.
8. HEX HEAD BOLTS M20 x 50mm LONG , 2 Nos AT THE CONNECTION OF THE SPACER TO POST.

9. THE BEAM ELEMENTS SHALL BE FORMED SHEETS HAVING NOMINAL WIDTH OF 483mm.
10. THE BASE MATERIAL OF THE CORRUGATED BEAM SHALL COMPLY TO FOLLOWING MECHANICAL PROPERTIES:-
  - I. TENSILE STRENGTH, MIN=483 MPa.
  - II. ELONGATION, in 2 inches, MIN = 12%
  - III. YIELD, MIN=345 MPa.
11. ALL MEMBERS OF THE SYSTEM SHOULD BE HOT DIPPED GALVANIZED AND TO HAVE A MINIMUM COATING OF 550g/Sq m, EACH FACE IN CONFORMANCE TO M.O.R.T & H. SPECIFICATIONS (CLAUSE 810).
12. BEAMS TO BE ERECTED ON A RADIUS OF 46m (150') OR LESS SHALL BE SHAPE CURVED TO APPROPRIATE CURVATURE.
13. CRASH BARRIERS ARE POSTED ON ALL SECTION OF EMBANKMENT WHOSE HEIGHT IS  $\geq$  TO 3m, HORIZONTAL CURVES OF RADIUS < 360m AND ALSO AT ALL BRIDGE APPROACHES FOR LENGTH OF 50m ON BOTH SIDES FOR MAJOR & 25m FOR MINOR BARIDGE.
14. BEAM SURFACE FACING THE TRAFFIC IS PAINTED WITH ALTERNATE BANDS (500mm WIDE) OF BLACK & YELLOW COLOUR REFLECTORIFIED PAINT CONFORMING CL.803.5 OF M.O.R.T & H SPEC.

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	DRAWN BY:-	NAME	SIGNATURE	DRAWN BY:-	NAME	SIGNATURE	TITLE :- Details of W-Beam Crash barrier			PURPOSE OF DRAWING FOR PLANNING	
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	DESIGNED BY:-	MVJ	APPROVED BY:-	DRG.NO:DPR_JNPT_QTCPL_WBCB_03	SCALE: NTS	ISSUE R0
RO	FEB-2020	FOR REVIEW				CHECKED BY:-	AMS	DATE:-		DATE: FEB-2020	

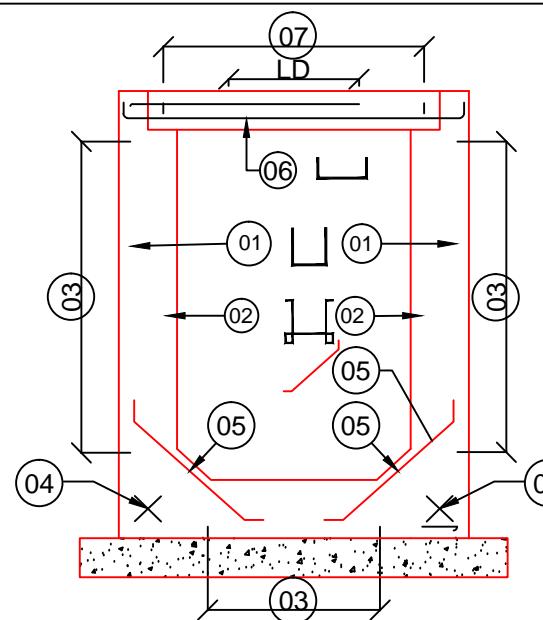


						CONSULTANT:			CLIENT:			PROJECT:-			
 <b>QMAX TECHNO-CONSULTANTS PVT. LTD.</b> 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com															
													Up gradation of Roads and Drainage system outside custom bound area at Jawaharlal Nehru Port Trust.		
R0   FEB-2020   FOR REVIEW  NO.   DATE   REVISION/PURPOSE   DRAWN   CHECKED   APPROVED							NAME	SIGNATURE		NAME	SIGNATURE		TITLE :- TYPICAL DETAILS OF ROAD SIGN FOR PLANNING		PURPOSE OF DRAWING
	DRAWN BY:-	MVP					CHECKED BY:-								FOR PLANNING
	DESIGNED BY:-	MVJ					APPROVED BY:-						DRG.NO:DPR_JNPT_QTCPL_TYP_04		SCALE: NTS
	CHECKED BY:-	AMS					DATE:-						DATE: FEB-2020		RO



**SECTION A-A**

REINFORCEMENT DETAILS OF DRAIN  
AT MANHOLE OPENING OF 600X900



**TYPICAL SECTION OF DRAIN**

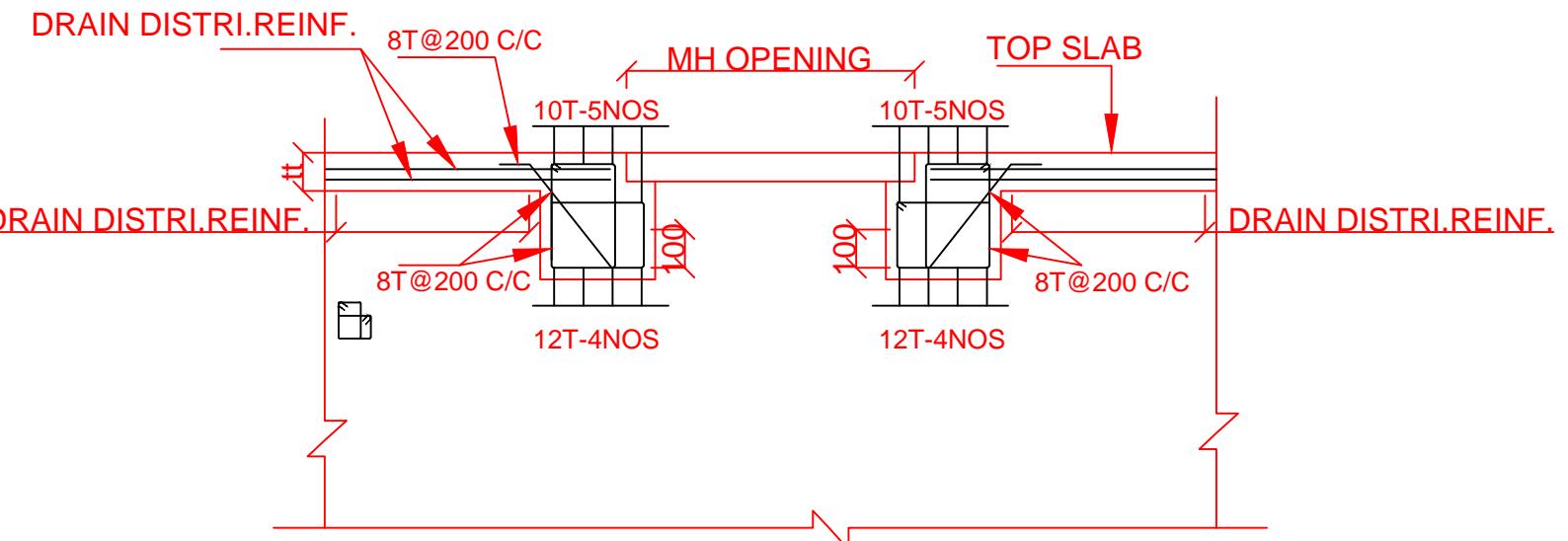
REINFORCEMENT DETAILS OF DRAIN  
OTHER THAN MANHOLE LOCATION

**TABLE SHOWING REINFORCEMENT FOR DRAIN**

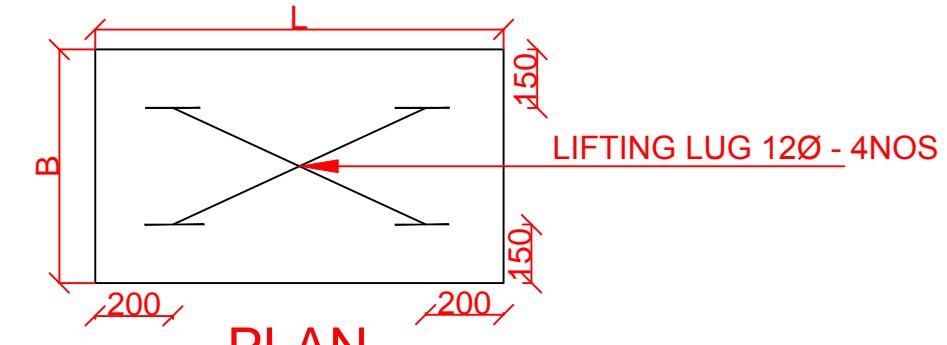
SR NO.	W (WIDTH)	H (HEIGHT)	①	①A	②	③	④	⑤	⑥	⑦	⑧	⑨
01	900	UP TO 750	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @200 C/C
		750 TO 1500	8 Ø @125 C/C	8 Ø @125 C/C	8 Ø @250 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @200 C/C
		1500 TO 2000	8 Ø @100 C/C	8 Ø @100 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
		2000 TO 2500	10 Ø @150 C/C	10 Ø @150 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
02	1500	UP TO 750	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @250 C/C	8 Ø @200 C/C
		750 TO 1500	8 Ø @150 C/C	8 Ø @150 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @150 C/C	8 Ø @200 C/C	8 Ø @300 C/C	8 Ø @150 C/C
		1500 TO 2000	8 Ø @125 C/C	8 Ø @125 C/C	8 Ø @250 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @200 C/C	8 Ø @200 C/C
		2000 TO 2500	10 Ø @100 C/C	10 Ø @100 C/C	10 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
03	2000	UP TO 1500	10 Ø @200 C/C	10 Ø @200 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
		1500 TO 2000	10 Ø @175 C/C	10 Ø @175 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @175 C/C	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @175 C/C
		2000 TO 2500	10 Ø @125 C/C	10 Ø @125 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @200 C/C	8 Ø @200 C/C
		2500 TO 3000	10 Ø @100 C/C	10 Ø @100 C/C	8 Ø @100 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
04	2500	UP TO 2500	10 Ø @125 C/C	10 Ø @125 C/C	8 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C	8 Ø @250 C/C	8 Ø @200 C/C	8 Ø @200 C/C
		2500 TO 3000	10 Ø @100 C/C	10 Ø @100 C/C	8 Ø @100 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			
		3000 TO 3500	12 Ø @100 C/C	12 Ø @100 C/C	12 Ø @200 C/C	8 Ø @200 C/C	8 Ø - 4X2 NOS	8 Ø - 1X2 NOS	8 Ø @200 C/C			

**NOTES:**

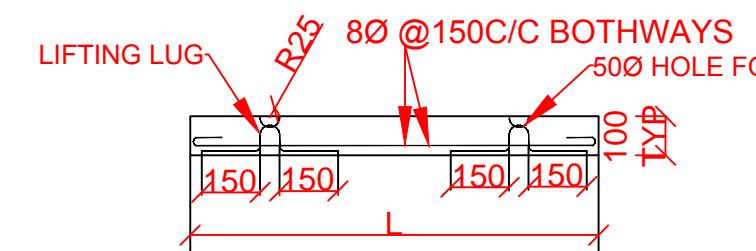
- ALL DIMENSION ARE IN MILLIMETERS (mm) UNLESS OTHERWISE MENTIONED
- DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER.
- CLEAR COVER THE REINFORCEMENT SHALL BE 30MM.
- GRADE OF REINFORCED CONCRETE USED SHALL BE M-30 (fck=30MPa)
- GRADE OF STEEL SHALL BE Fe-500 CONFIRMING TO IS:1786.
- DRAIN SECTION SHOWN IN THIS DRAWING IS DESIGNED FOR EARTH PRESSURE & LL SURCHARGE ONLY. FOR DRAIN SUBJECT TO DIRECT VEHICULAR LOAD THEN OTHER RELEVANT DRAWING SHALL BE REFERED.
- DEVELOPMENT LENGTH (LAP) "Ld" SHALL BE 46 X DIAMETER OF BAR. AT THAT LOCATION.
- SIZE & FIXING ARRANGEMENT DETAILS OF DRAIN MANHOLE COVER SHOWN INDICATIVE HOWEVER , IT SHALL BE VERIFIED TO CONTRACT SPECIFICATIONS.



**TYPICAL DETAILS OF REINF. AT MH COVER OPENING**  
(TYPICAL DETAILS AT MH COVER)



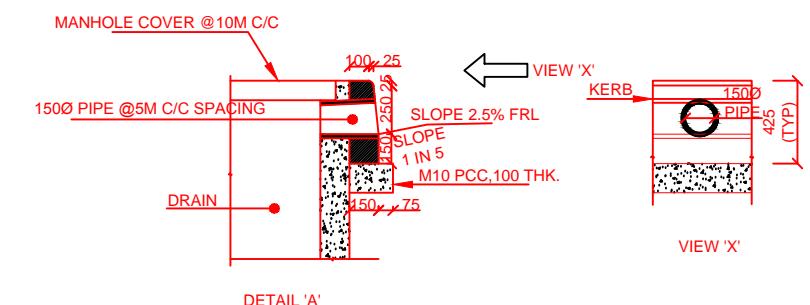
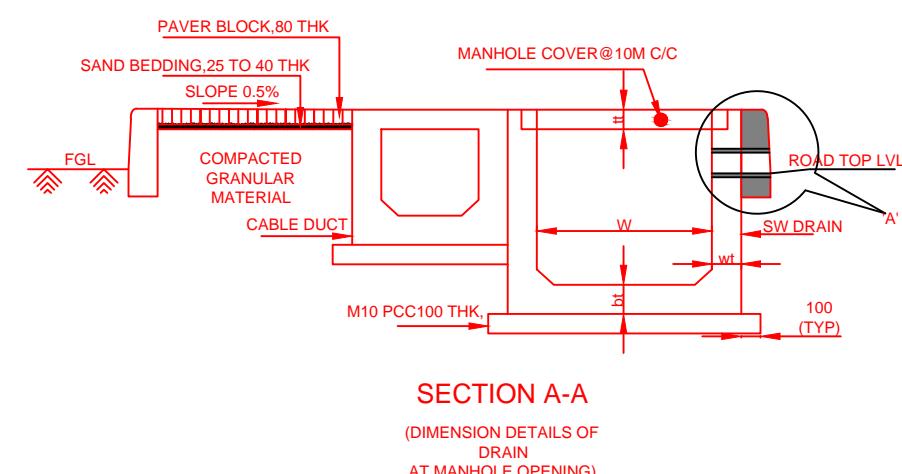
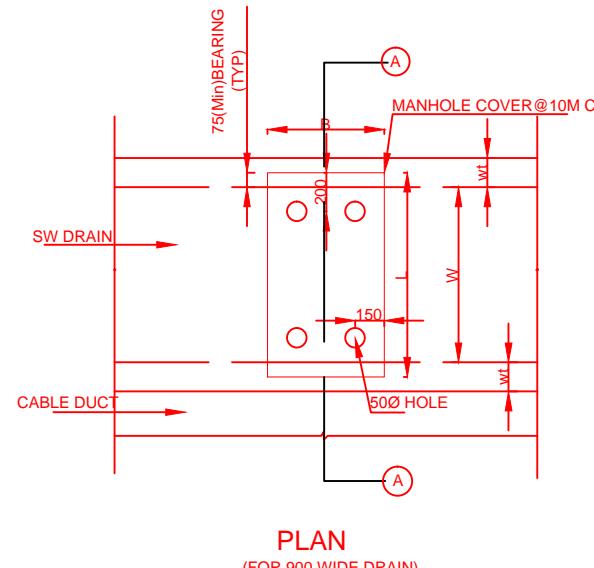
**PLAN**



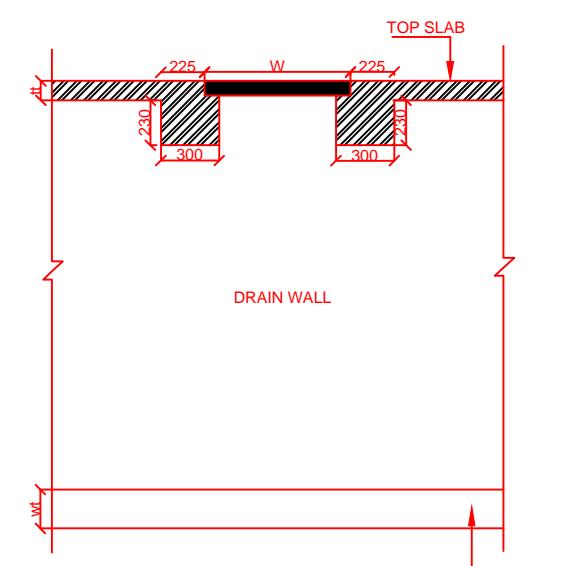
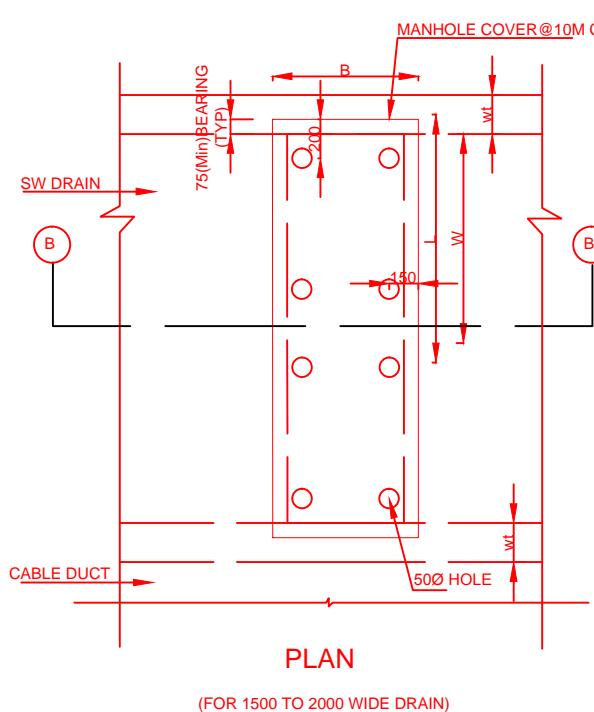
**SECTIONAL VIEW**

**DETAILS OF MANHOLE COVER**

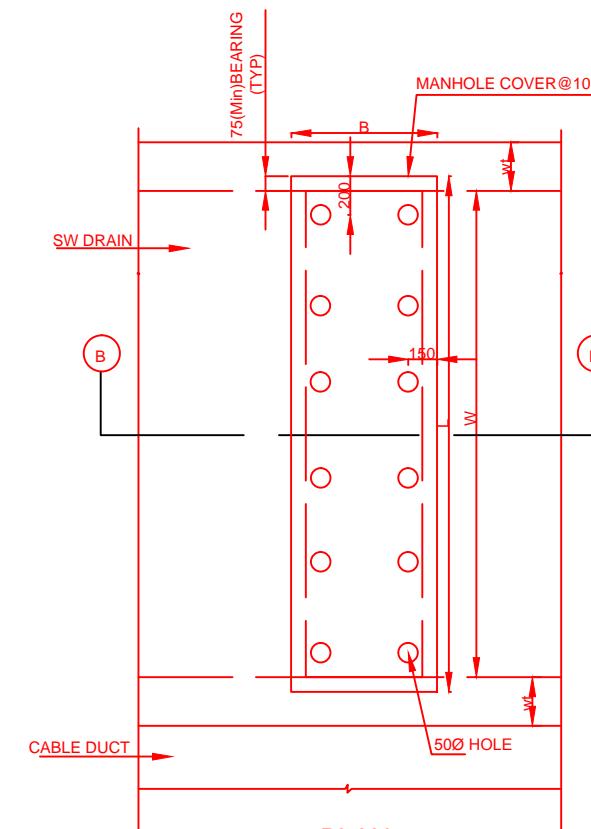
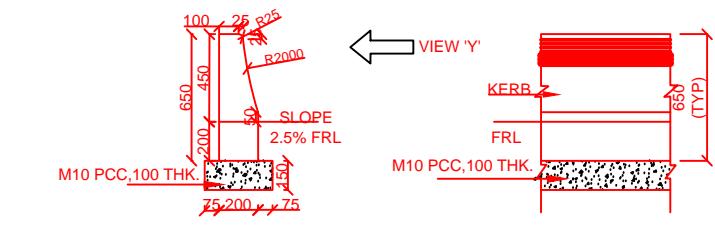
					CONSULTANT:	CLIENT:			PROJECT:-			
					 QMAX TECHNO-CONSULTANTS PVT. LTD. 307-308, 3rd Floor, Foundation Tower, Plot No. 20, Sector - 11, CBD Belapur, Navi Mumbai 400 614 Email : qmaxconsultants@gmail.com	 JAWAHARLAL NEHRU PORT TRUST 1107, Raheja centre, FPJ Marg, Nariman Point, Mumbai-400021				TITLE :- Details of Drain and Kerb		PURPOSE OF DRAWING
					NAME	SIGNATURE	NAME	SIGNATURE	TITLE :- Details of Drain and Kerb		FOR PLANNING	
DRAWN BY:-	MVP	CHECKED BY:-		DESIGNED BY:-	MVJ	APPROVED BY:-		DRG.NO:DPR_JNPT_QTCPL_D&K_05	H=1:1000	ISSUE		
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	CHECKED BY:-	AMS	DATE:-	DATE: MARCH-2020		R0	
RO	FEB-2020	FOR REVIEW										
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED	CHECKED BY:-	AMS	DATE:-				



DIMENSION TABLE (FOR DRAIN SIZE)						
SR NO.	W (WIDTH)	H (HEIGHT)	wt (SIDE WALL)	bt (BOT. THK)	tt (TOP. THK)	
01	900	UP TO 750	125	125	100	
		750 TO 1500	150	150	100	
		1500 TO 2000	175	175	100	
		2000 TO 2500	225	225	125	
02	1500	UP TO 750	125	125	100	
		750 TO 1500	150	150	100	
		1500 TO 2000	200	200	100	
		2000 TO 2500	225	225	125	
03	2000	UP TO 1500	150	150	100	
		1500 TO 2000	200	200	100	
		2000 TO 2500	225	225	125	
		2500 TO 3000	250	250	150	
04	2500	UP TO 2500	225	225	125	
		2500 TO 3000	250	250	150	
		3000 TO 3500	275	275	150	



DIMENSION TABLE (FOR MH COVER)				
SR NO.	DRAIN WIDTH(W)	B (COVER WIDTH)	L (COVER LENGTH)	NOS
01	900	600	1050	01
02	1500	750	825	02
03	2000	750	1075	02
04	2500	750	883	03



#### NOTES:-

- ALL DIMENSION ARE IN MILLIMETERS (mm) UNLESS OTHERWISE MENTIONED.
- DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER.
- GRADE OF REINFORCED CONCRETE USED SHALL BE M-30 (fck=30MPa)
- GRADE OF STEEL SHALL BE Fe-500 CONFIRMING TO IS:1786.
- DRAIN SECTION SHOWN IN THIS DRAWING IS DESIGNED FOR EARTH PRESSURE & LL SURCHARGE ONLY. FOR DRAIN SUBJECTED TO DIRECT VEHICULAR LOAD THEN OTHER RELEVANT DRAWING SHALL BE REFERRED
- SIZE AND FIXING ARRANGEMENT DETAILS OF DRAIN MANHOLE COVER SHOWN ARE TENTATIVE HOWEVER ,IT SHALL BE VERIFIED TO MANUFACTURER'S SPECIFICATIONS.
- CONSTRUCTION SEQUENCE:-
  - CASTING OF DRAIN BOTTOM SLAB FOLLOWED BY VERTICAL WALLS AND TOP SLAB RESPECTIVELY.
  - BACKFILLING OF MATERIALS BEHIND DRAIN WALLS SIMULTANEOUSLY ON EITHER SIDE OF THE DRAIN.

**CONSULTANT:**  
QMAX TECHNO-CONSULTANTS PVT. LTD.  
307-308, 3rd Floor, Foundation Tower, Plot No. 20,  
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Email : qmaxconsultants@gmail.com

**CLIENT:**  
JAWAHARLAL NEHRU PORT TRUST  
1107,Raheja centre,FPJ Marg,  
Nariman Point, Mumbai-400021

**PROJECT:-**  
Up gradation of Roads and Drainage system outside  
custom bound area at Jawaharlal Nehru Port Trust.

R0	FEB-2020	FOR REVIEW			
NO.	DATE	REVISION/PURPOSE	DRAWN	CHECKED	APPROVED

TITLE :- Details of Drain and Kerb			PURPOSE OF DRAWING		
FOR PLANNING					
DRG.NO:DPR_JNPT_QTCPL_D&K/GAD_06			SCALE:V=1:250 ISSUE		
			DATE: FEB-2020		