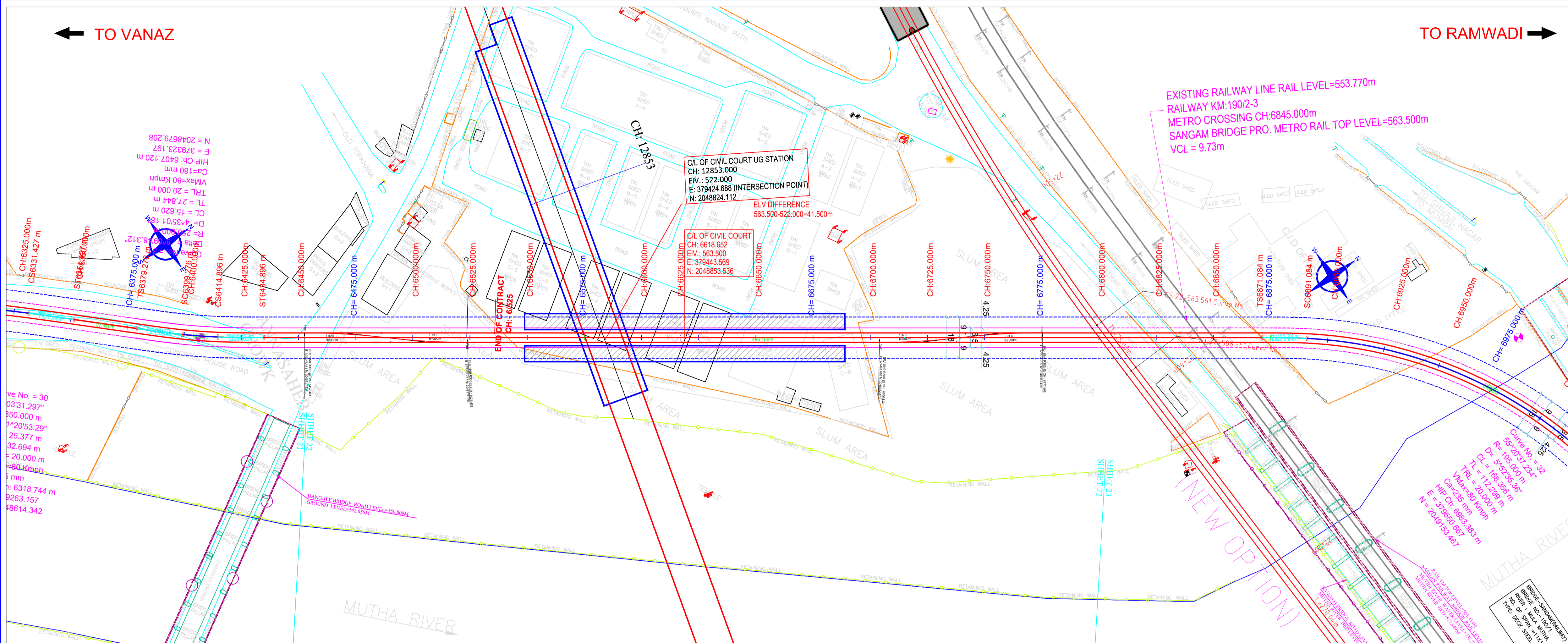


TO VANAZ ←

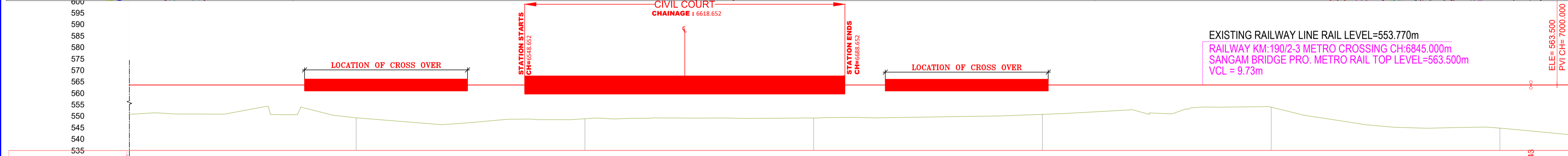
TO RAMWADI →



KEY PLAN

NOTES:

- ALL DIMENSIONS, LEVELS AND CHAINAGES ARE IN METRES UNLESS OTHERWISE MENTIONED.
  - DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  - THE SPAN ARRANGEMENT SHOWN MAY CHANGE AT CERTAIN LOCATIONS DEPENDING ON SITE CONSTRAINTS.
  - THE L-SECTION HAS BEEN PREPARED WITH RAIL LEVEL AT MINIMUM 9.75M AND 13.75M HEIGHT ABOVE THE EXISTING ROAD LEVEL AT VIADUCT AND STATIONS RESPECTIVELY. THESE RAIL LEVELS MAY CHANGE AT PORTALS, CANTILEVER PIERS, OBLIGATORY SPAN LOCATIONS ETC. DEPENDING ON THE THICKNESS OF GIRDER TO BE DECIDED BY EXECUTING AGENCY/DDC ENSURING 5.5M VERTICAL CLEARANCE OVER THE EXISTING ROAD LEVEL.
  - THE GAD IS BASED ON THE EXISTING SURVEY DATA AVAILABLE WITH NMRCL. DTM HAS BEEN PREPARED ACCORDINGLY. CONTRACTOR TO ENSURE THE GROUND/ROAD LEVELS ETC. DURING DETAILED DESIGN AND EXECUTION.
  - RAIL TOP LEVEL TO PIER TOP DIMENSION IS BASED ON FOLLOWING:  
RAIL + RAIL PLINTH = 0.467m.  
BEARING + PEDESTAL = 0.4m.  
DEPTH OF BOX GIRDER = 2.0m.
  - TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRCL/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017
- P = STANDARD PIER  
CP = CANTILEVER PIER  
PP = PORTAL PIER  
CS = CURVE TO SPIRAL  
ST = SPIRAL TO TANGENT  
TS = TANGENT TO SPIRAL  
SC = SPIRAL TO CURVE  
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HIP = HORIZONTAL INTERSECTION POINT  
D = DEFLECTION ANGLE  
L = GRADE LENGTH  
TRL = TRANSITION LENGTH  
TL = TANGENT LENGTH  
R = RADIUS  
CA = APPLIED CANT  
CD = CANT DEFICIENCY  
PVI = POINT OF VERTICAL CURVE  
SRJ = STOCK RAIL JOINT  
CH = CHAINAGE  
DELTA = DEFLECTION ANGLE  
--- TRACK CENTER LINE  
--- VIADUCT OUTER LINE  
--- ROW LINE
- (X) X = PIER TYPE  
(Y) Y = PIER No.



VERTICAL_ALIGN	HORIZONTAL_ALIGN	DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
630	630				6400
635	635				6425
640	640				6450
645	645				6475
650	650				6500
655	655				6525
660	660				6550
665	665				6575
670	670				6600
675	675				6625
680	680				6650
685	685				6675
690	690				6700
695	695				6725
700	700				6750
705	705				6775
710	710				6800
715	715				6825
720	720				6850
725	725				6875
730	730				6900
735	735				6925
740	740				6950
745	745				6975
750	750				7000



LONGITUDINAL PROFILE

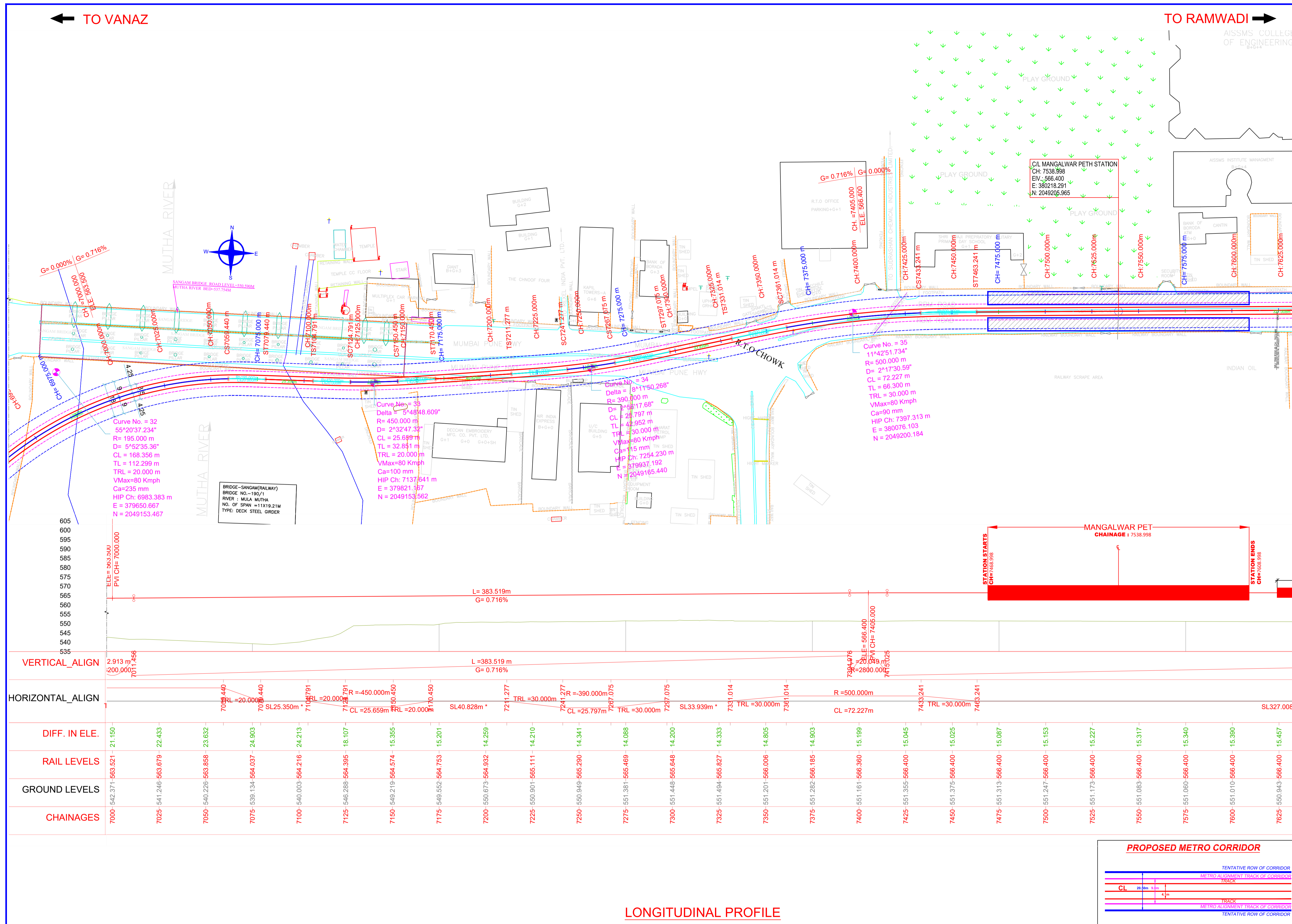
<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Maha metro pune office, 1st floor, Orion Building, opp. Dorn Boreo Youth centre, Korangam park, Pune, india - 411001 Phone No. 2202651074					<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWING AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL					OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>			PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO															
E-W CORRIDOR CPM					Addl. GM Planning		Chief Survey Expert		Alignment Expert		Chief structural Expert for viaduct		CONTRACT ID: ----			ISSUE RECORD		APPROVED												
DGM (Design) for E-W Corridor viaduct					JGM (Design) for station.		Chief structural Expert for station		Chief Architect		PD/Dy.PD		Survey Expert		Alignment Expert		Authorised signatory of the contractor		Structural Designer											
PREPARED BY					CHECKED BY					APPROVED BY					ISSUED BY					DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>			REV. R3		TENDER DRAWINGS		DESIGN DEVELOPMENT		PRELIMINARY DESIGN	
DATE : 14/07/2018					SCALE : 1:1					SHEET NO. :					AS-BUILT			GOOD FOR CONST			TENDER DRAWINGS			DESIGN DEVELOPMENT			PRELIMINARY DESIGN			

REV.	DATE	DESCRIPTION
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
R4	13.03.2018	With respect to mail dated 07/03/2018 joint site visit Kalyani Nagar and Ramwadi station modified Ramwadi station fowling on under pass
R3	01.12.2017	X-Over locations has been shifted as per revised alignment on dated 01.12.2017
R2	23.09.2017	VERTICAL ALIGNMENT REVISED
R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.

← TO VANAZ

TO RAMWADI →

SHEET NO.14



KEY PLAN

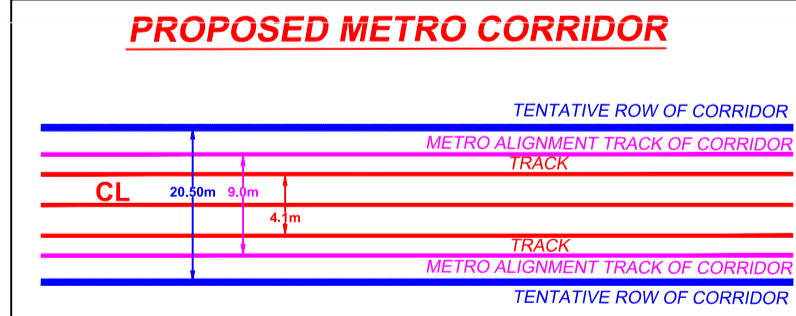
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  - THE L-SECTION HAS BEEN PREPARED WITH RAIL LEVEL AT MINIMUM 9.75M AND 13.75M HEIGHT ABOVE THE EXISTING ROAD LEVEL AT VIADUCT AND STATIONS RESPECTIVELY. THESE RAIL LEVELS MAY CHANGE AT PORTALS, CANTILEVER PIERS, OBLIGATORY SPAN LOCATIONS ETC. DEPENDING ON THE THICKNESS OF GIRDER TO BE DECIDED BY EXECUTING AGENCY/DDC ENSURING 5.5M VERTICAL CLEARANCE OVER THE EXISTING ROAD LEVEL.
  - THE GAD IS BASED ON THE EXISTING SURVEY DATA AVAILABLE WITH NMRC. DTM HAS BEEN PREPARED ACCORDINGLY. CONTRACTOR TO ENSURE THE GROUND/ROAD LEVELS ETC. DURING DETAILED DESIGN AND EXECUTION.
  - RAIL TOP LEVEL TO PIER TOP DIMENSION IS BASED ON FOLLOWING:  
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  - TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRC/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017
- P = STANDARD PIER  
HIP = HORIZONTAL INTERSECTION POINT  
D = DEFLECTION ANGLE  
L = GRADE LENGTH  
TRL = TRANSITION LENGTH  
TL = TANGENT LENGTH  
R = RADIUS  
CA = APPLIED CANT  
CD = CANT DEFICIENCY  
PVI = POINT OF VERTICAL CURVE  
SRJ = STOCK RAIL JOINT  
CH = CHAINAGE  
DELTA = DEFLECTION ANGLE
- TRACK CENTER LINE  
--- VIADUCT OUTER LINE  
--- ROW LINE
- (XY) X = PIER TYPE  
Y = PIER No.

REVISION CONTROL

REV.	DATE	DESCRIPTION
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R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.

LONGITUDINAL PROFILE

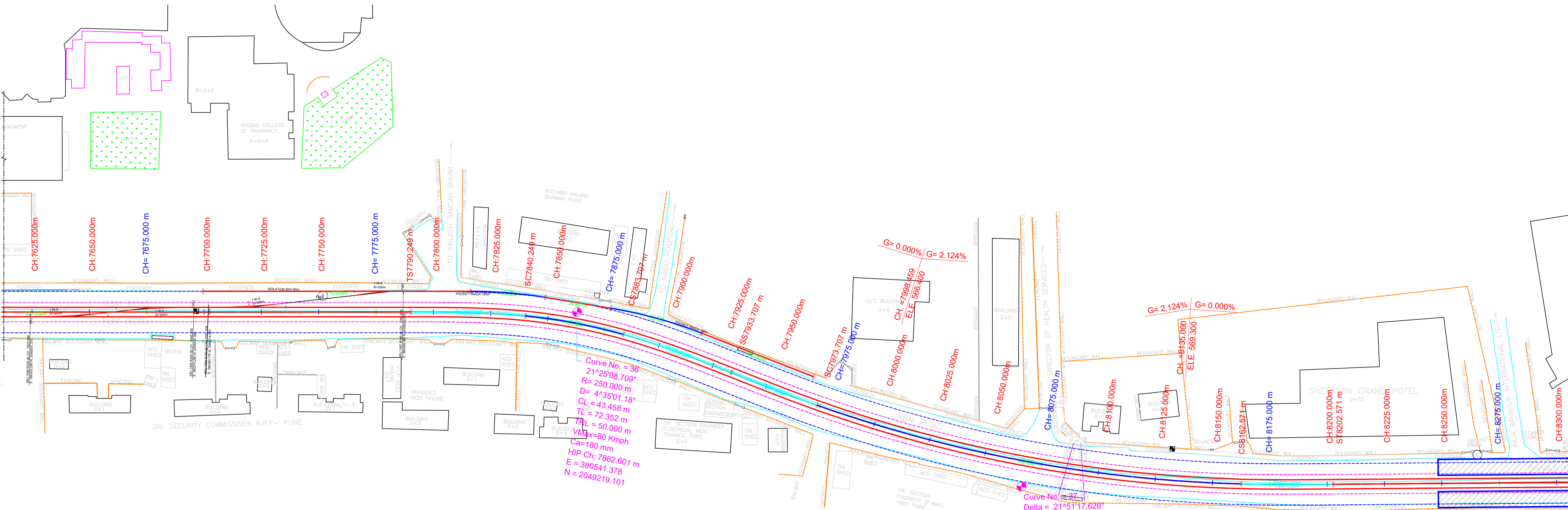


<b>NO OBJECTION FOR CONSTRUCTION</b> 		<b>GENERAL ENGINEERING CONSULTANT</b> <b>CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES</b> THE DESIGN AND DRAWINGS ARE CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER. CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			<b>OFFICE OF ORIGIN</b> <b>PUNE</b>		<b>CLIENT :</b> <b>PUNE METRO RAIL CORP. LTD.</b>			<b>PROJECT NAME:</b> DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO		
<b>E-W CORRIDOR CPM</b> Addl. GM Planning		Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct	Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer	DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>	<b>ISSUE RECORD</b> AS-BUILT GOOD FOR CONST TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN		<b>APPROVED</b>
<b>DGM (Design) for E-W Corridor viaduct</b> JGM (Design) for station.		Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>	REV. : <b>R3</b>	<b>ISSUED BY</b>	
FILE NAME:		SHEET SIZE: A1		PLOTTING SCALE: 1:1		DATE : 14/07/2018			SCALE : 1:1		SHEET NO. :	

← TO VANAZ

TO RAMWADI →

SHEET NO.15

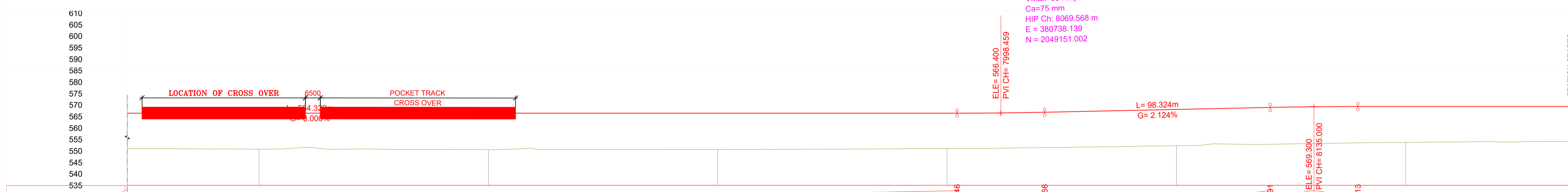


KEY PLAN

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- TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRC/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017

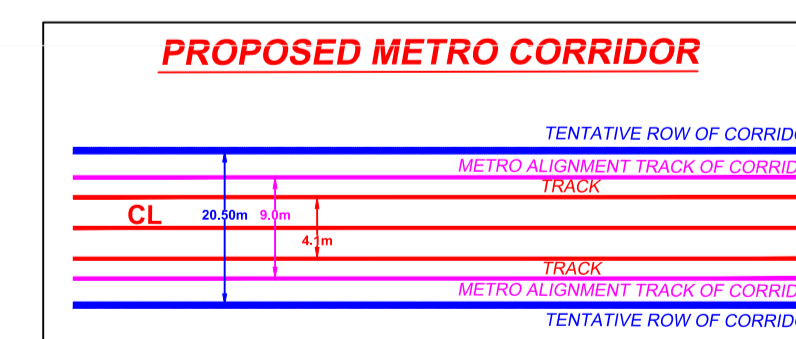
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DELTA = DEFLECTION ANGLE
- TRACK CENTER LINE  
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--- ROW LINE
- (XY) X = PIER TYPE  
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VERTICAL_ALIGN	HORIZONTAL_ALIGN
L=564.322 m G=0.000%	TRL=327.008m*
	7790.249
	TRL=50.000m
	7840.249
	R=250.000m
	CL=43.458m
	7883.707
	TRL=50.000m
	7933.707
	TRL=40.000m
	7973.707
	L=38.222 m R=1800.000
	7979.346
	8017.966
	L=98.324 m G=2.124%
	8115.691
	L=38.222 m R=1800.000
	8154.113
	8162.571
	TRL=40.000m
	8202.571

DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
15.457	566.400	550.943	7625
15.555	566.400	550.845	7650
15.698	566.400	550.702	7675
15.166	566.400	551.234	7700
15.615	566.400	550.785	7725
15.775	566.400	550.625	7750
15.930	566.400	550.470	7775
15.853	566.400	550.547	7800
15.844	566.400	550.556	7825
15.835	566.400	550.565	7850
15.808	566.400	550.592	7875
15.756	566.400	550.644	7900
15.667	566.400	550.733	7925
15.536	566.400	550.864	7950
15.396	566.400	551.004	7975
15.332	566.518	551.186	8000
15.516	566.964	551.448	8025
15.683	567.495	551.812	8050
15.818	568.026	552.208	8075
15.644	568.557	552.913	8100
16.037	569.065	553.028	8125
15.880	569.295	553.415	8150
15.651	569.300	553.649	8175
15.387	569.300	553.913	8200
15.357	569.300	553.943	8225
15.320	569.300	553.971	8250

LONGITUDINAL PROFILE



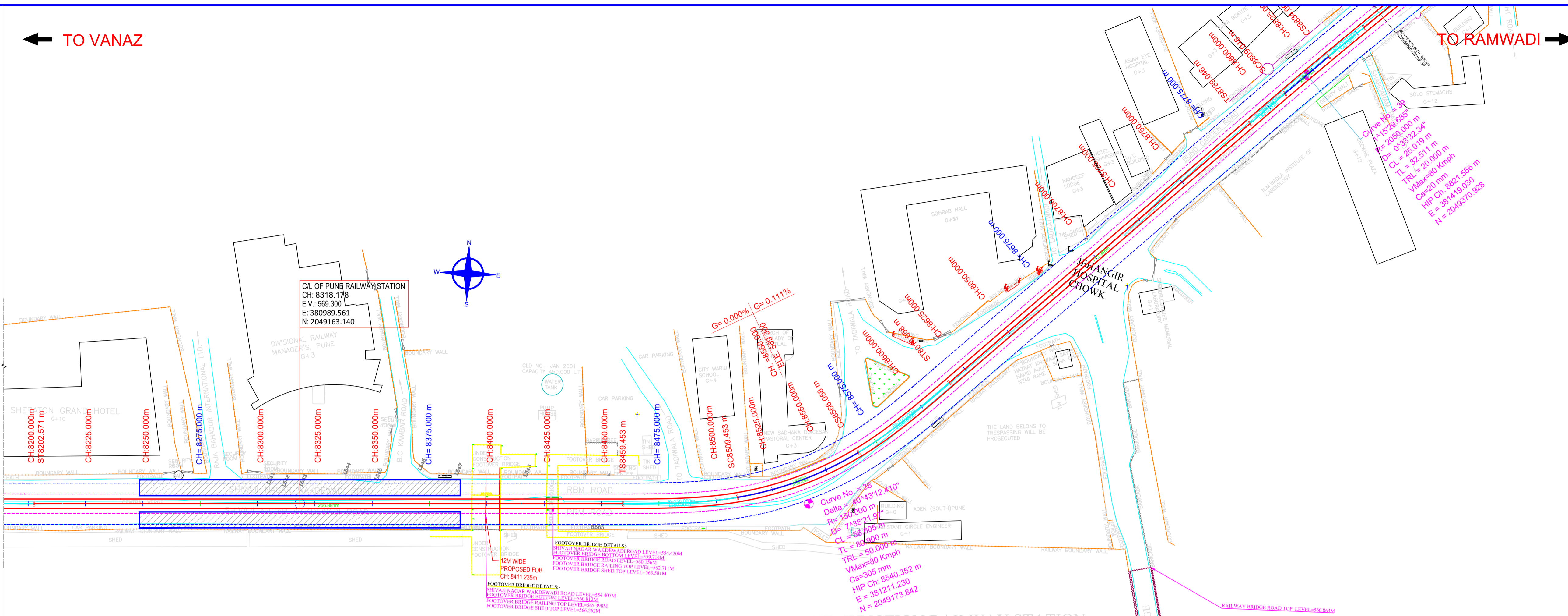
REVISION CONTROL

REV.	DATE	DESCRIPTION
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REV.	DATE	DESCRIPTION

ISSUED BY

<b>NO OBJECTION FOR CONSTRUCTION</b> 		<b>GENERAL ENGINEERING CONSULTANT</b> <b>CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES</b> THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			<b>OFFICE OF ORIGIN</b> <b>PUNE</b>		<b>CLIENT :</b> <b>PUNE METRO RAIL CORP . LTD.</b>			<b>PROJECT NAME:</b> DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO			
<b>E-W CORRIDOR CPM</b>		<b>Chief Survey Expert</b>		<b>Chief structural Expert for viaduct</b>		<b>Structural Designer</b>		<b>CONTRACT ID: ---</b>		<b>ISSUE RECORD</b>		<b>APPROVED</b>	
<b>ADDL. GM PLANNING</b>		<b>ALIGNMENT EXPERT</b>		<b>CHIEF ARCHITECT</b>		<b>AUTHORIZED SIGNATORY OF THE CONTRACTOR</b>		<b>DRAWING NAME/TITLE :</b> <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>		<b>AS-BUILT</b>			
<b>DGM (Design) for E-W Corridor viaduct</b>		<b>CHIEF STRUCTURAL EXPERT FOR STATION</b>		<b>PD/DY.PD</b>		<b>PREPARED BY</b>		<b>DRAWING NO. :</b> <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>		<b>TENDER DRAWINGS</b>			
<b>JGM (Design) for station.</b>		<b>CHIEF ARCHITECT</b>				<b>CHECKED BY</b>		<b>REV. R3</b>		<b>DESIGN DEVELOPMENT</b>			
						<b>APPROVED BY</b>		<b>DATE : 14/07/2018</b>		<b>SCALE : 1:1</b>		<b>PRELIMINARY DESIGN</b>	
						<b>ISSUED BY</b>		<b>SCALE : 1:1</b>		<b>SHEET NO. :</b>			

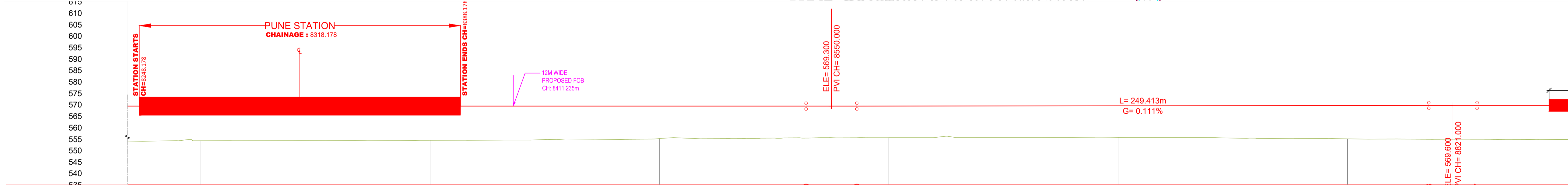
TO VANAZ ←      → TO RAMWADI



**KEY PLAN**

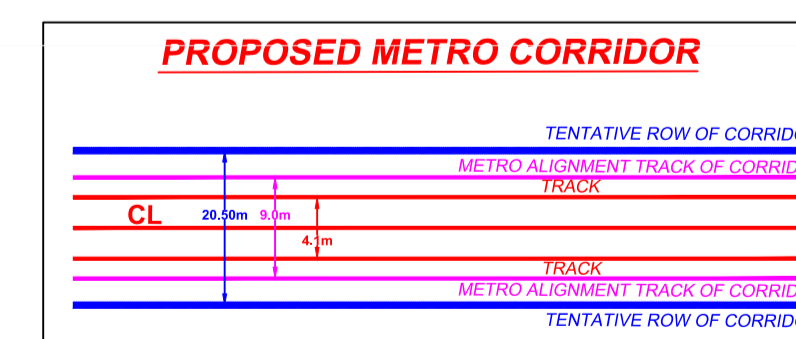
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VERTICAL_ALIGN	L=384.817m G=0.000%		L=249.413m G=0.111%		L=249.413m G=0.111%	
HORIZONTAL_ALIGN	SL256.881m*	TRL=50.000m	R=150.000m	TRL=50.000m	SL172.988m*	SL20.000m*
DIFF. IN ELE.	15.329	15.190	15.107	15.077	15.095	14.913
RAIL LEVELS	569.300	569.300	569.300	569.300	569.300	569.300
GROUND LEVELS	553.971	554.170	554.193	554.223	554.205	554.387
CHAINAGES	8250	8275	8300	8325	8350	8375

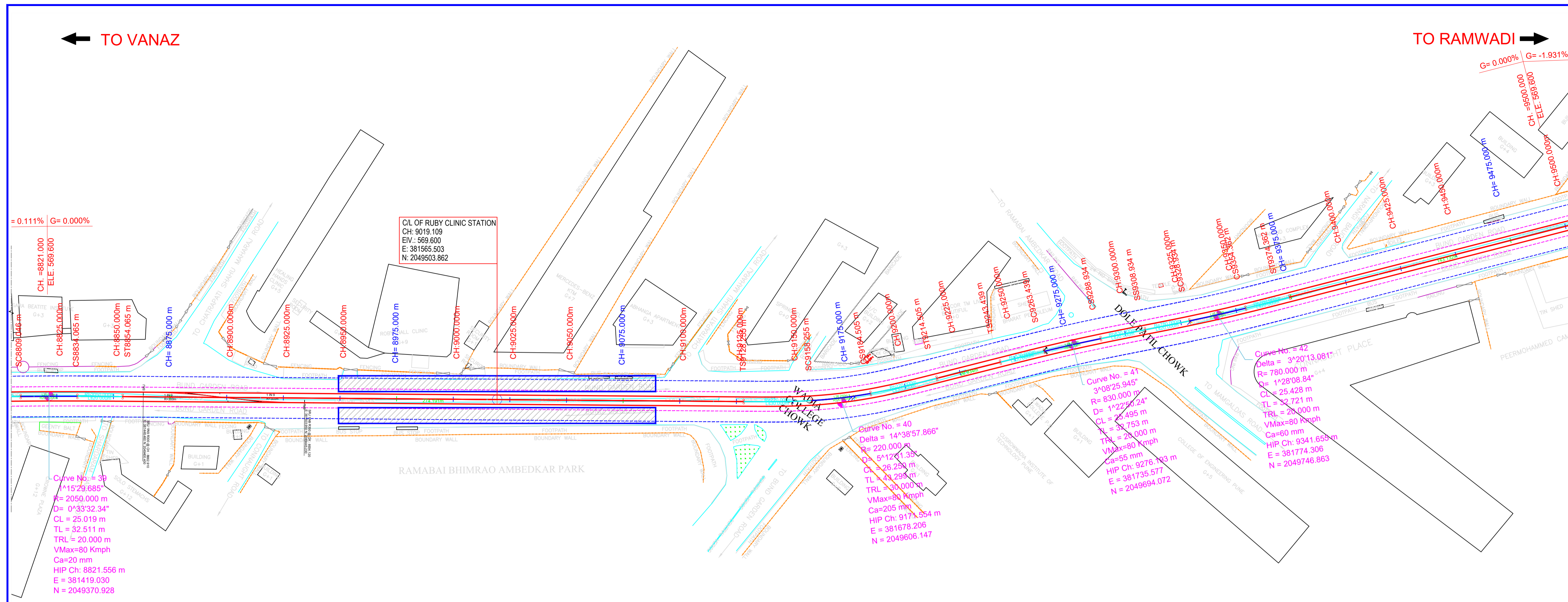
**LONGITUDINAL PROFILE**



REVISION CONTROL		
REV.	DATE	DESCRIPTION
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REV.	DATE	DESCRIPTION

ISSUED BY

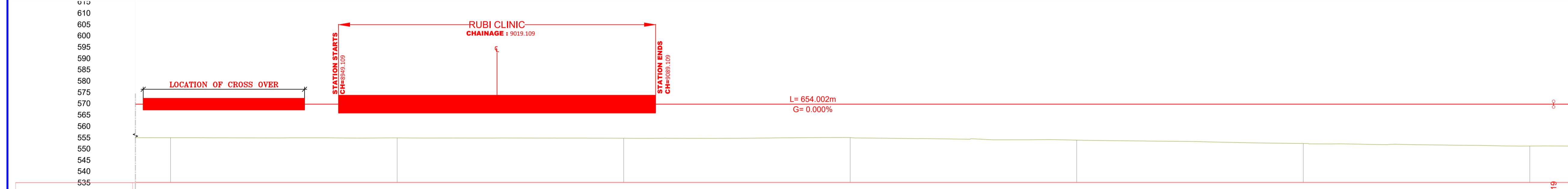
<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro pylon office, 1st floor, Orion Building, opp. Dorn Biscoo Youth center, Koregaon park,Pune, India - 411001 Phone No. 20226051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWING AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL		OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>		PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO		
E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct	Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer	CONTRACT ID: ---	
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>	
					DATE : 14/07/2018		SCALE : 1:1		SHEET NO. :	
					ISSUE RECORD		APPROVED		AS-BUILT	
					TENDER DRAWINGS		DESIGN DEVELOPMENT		GOOD FOR CONST	
					PRELIMINARY DESIGN				✓	



**KEY PLAN**

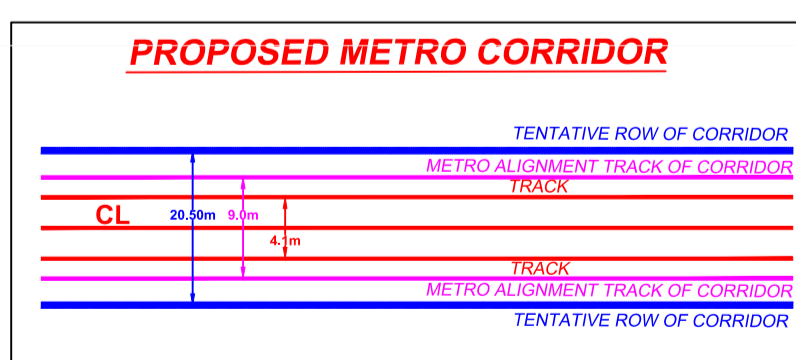
**NOTES:**

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  - DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  - THE SPAN ARRANGEMENT SHOWN MAY CHANGE AT CERTAIN LOCATIONS DEPENDING ON SITE CONSTRAINTS.
  - THE L-SECTION HAS BEEN PREPARED WITH RAIL LEVEL AT MINIMUM 9.75M AND 13.75M HEIGHT ABOVE THE EXISTING ROAD LEVEL AT VIADUCT AND STATIONS RESPECTIVELY. THESE RAIL LEVELS MAY CHANGE AT PORTALS, CANTILEVER PIERS, OBLIGATORY SPAN LOCATIONS ETC. DEPENDING ON THE THICKNESS OF GIRDER TO BE DECIDED BY EXECUTING AGENCY/DCC ENSURING 5.5M VERTICAL CLEARANCE OVER THE EXISTING ROAD LEVEL.
  - THE GAD IS BASED ON THE EXISTING SURVEY DATA AVAILABLE WITH NMRC. DTM HAS BEEN PREPARED ACCORDINGLY. CONTRACTOR TO ENSURE THE GROUND/ROAD LEVELS ETC. DURING DETAILED DESIGN AND EXECUTION.
  - RAIL TOP LEVEL TO PIER TOP DIMENSION IS BASED ON FOLLOWING:  
RAIL + RAIL PLINTH = 0.467m.  
BEARING + PEDESTAL = 0.4m.  
DEPTH OF BOX GIRDER = 2.0m.
  - TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRC/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017
- P = STANDARD PIER  
CP = CANTILEVER PIER  
PP = PORTAL PIER  
CS = CURVE TO SPIRAL  
ST = SPIRAL TO TANGENT  
TS = TANGENT TO SPIRAL  
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DELTA = DEFLECTION ANGLE
- TRACK CENTER LINE  
--- VIADUCT OUTER LINE  
--- ROW LINE
- (XY) X = PIER TYPE  
Y = PIER No.



VERTICAL_ALIGN	L=654.002m G=0.000%																							
HORIZONTAL_ALIGN	SL274.191m*																							
DIFF. IN ELE.	14.863	14.896	14.924	14.949	14.936	14.981	14.981	15.023	15.085	15.085	14.886	14.806	15.207	15.487	15.757	15.919	16.243	16.497	17.060	17.418	17.707	17.943	18.221	18.536
RAIL LEVELS	554.737	554.704	554.676	554.651	554.664	554.619	554.619	554.577	554.515	554.515	554.732	554.794	554.393	554.113	553.843	553.681	553.357	553.103	552.540	552.182	551.893	551.657	551.379	551.064
GROUND LEVELS	554.737	554.704	554.676	554.651	554.664	554.619	554.619	554.577	554.515	554.515	554.732	554.794	554.393	554.113	553.843	553.681	553.357	553.103	552.540	552.182	551.893	551.657	551.379	551.064
CHAINAGES	8875	8900	8925	8950	8975	9000	9025	9050	9075	9100	9125	9150	9175	9200	9225	9250	9275	9300	9325	9350	9375	9400	9425	9450

**LONGITUDINAL PROFILE**



**REVISION CONTROL**

REV.	DATE	DESCRIPTION
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
R4	13.03.2018	With respect to mail dated 07/03/2018 joint site visit Kalyani Nagar and Ramwadi station modified Ramwadi station following on under pass
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R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.

**ISSUED BY**

NO OBJECTION FOR CONSTRUCTION		GENERAL ENGINEERING CONSULTANT CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES		
PUNE METRO RAIL PROJECT		THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL		
E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD

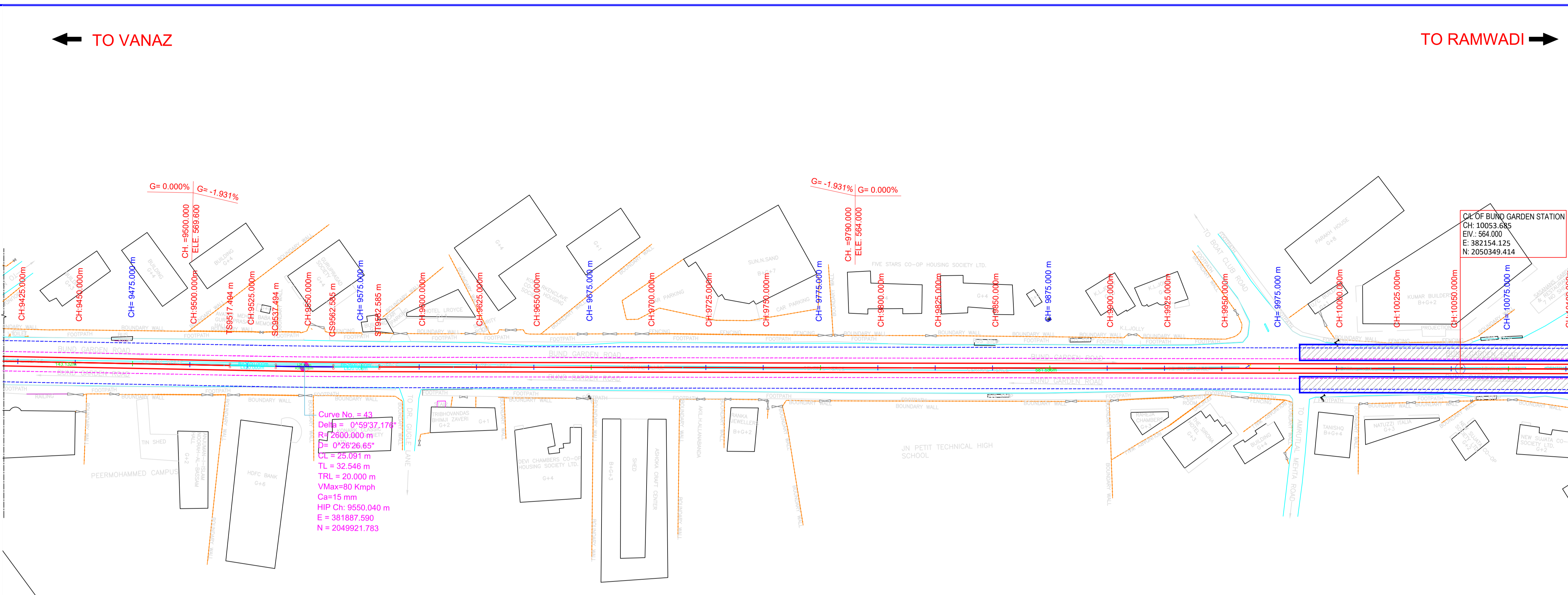
OFFICE OF ORIGIN			CLIENT :
PUNE			PUNE METRO RAIL CORP . LTD.
Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer
PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY

CONTRACT ID :	---
DRAWING NAME/TITLE :	GAD (ALIGNMENT PLAN & VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR
DRAWING NO. :	PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01
DATE :	14/07/2018
SCALE :	1:1
SHEET NO. :	R3

PROJECT NAME:	
DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO	
ISSUE RECORD	APPROVED
AS-BUILT	
GOOD FOR CONST	
TENDER DRAWINGS	
DESIGN DEVELOPMENT	✓
PRELIMINARY DESIGN	

← TO VANAZ

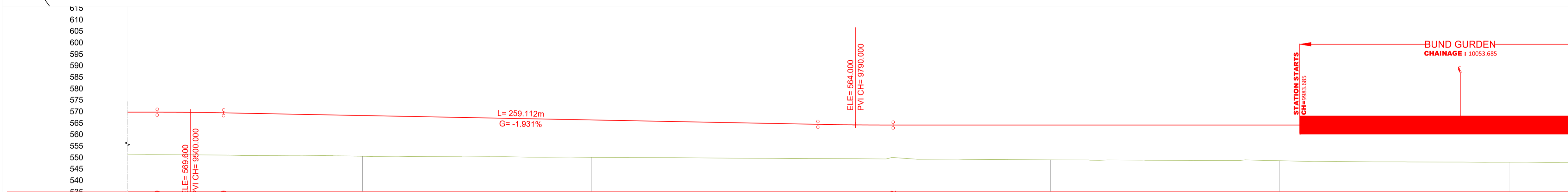
TO RAMWADI →



**KEY PLAN**

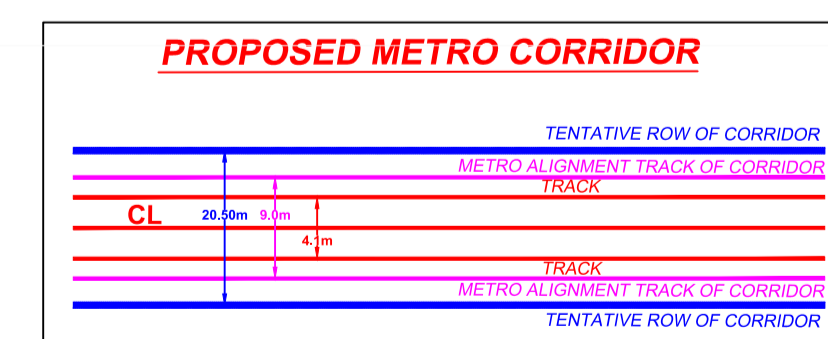
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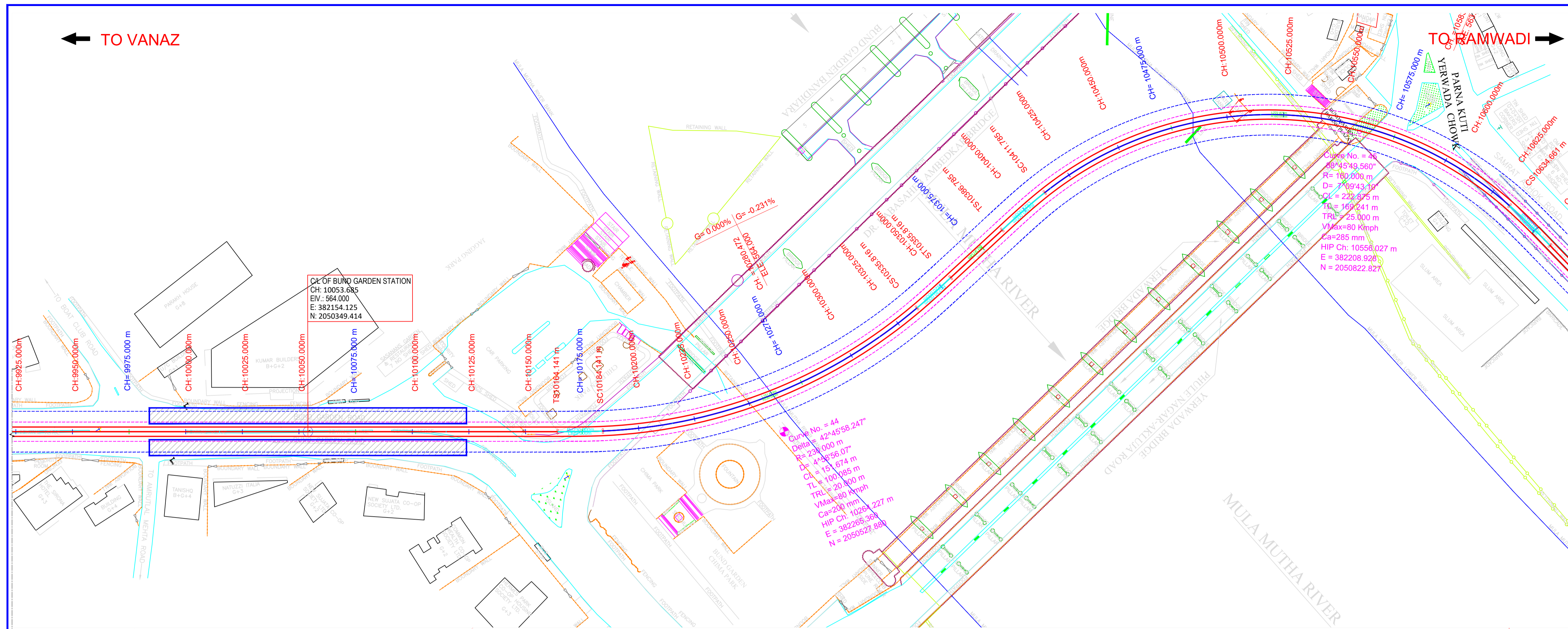
VERTICAL_ALIGN	HORIZONTAL_ALIGN	DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
L=28.960m R=1500.000 ELE=569.800 PVI CH=9500.000	9485.519	18.536	569.800	551.064	9475
L=259.112m G=-1.931%	9514.479	18.501	569.530	551.029	9500
L=259.112m G=-1.931%	9539.591	18.364	569.117	550.753	9525
L=259.112m G=-1.931%	9564.703	18.010	568.634	550.624	9550
L=259.112m G=-1.931%	9589.815	17.731	568.152	550.421	9575
L=259.112m G=-1.931%	9614.927	17.385	567.669	550.284	9600
L=259.112m G=-1.931%	9640.039	17.012	567.186	550.174	9625
L=259.112m G=-1.931%	9665.151	16.686	566.703	550.017	9650
L=259.112m G=-1.931%	9690.263	16.245	566.221	549.976	9675
L=259.112m G=-1.931%	9715.375	15.930	565.738	549.808	9700
L=259.112m G=-1.931%	9740.487	15.589	565.255	549.666	9725
L=259.112m G=-1.931%	9765.599	15.235	564.772	549.537	9750
L=259.112m G=-1.931%	9790.711	14.903	564.290	549.387	9775
L=259.112m G=-1.931%	9815.823	14.761	564.012	549.251	9800
L=259.112m G=-1.931%	9840.935	14.877	564.000	549.123	9825
L=259.112m G=-1.931%	9866.047	14.975	564.000	549.025	9850
L=259.112m G=-1.931%	9891.159	15.159	564.000	548.841	9875
L=259.112m G=-1.931%	9916.271	15.214	564.000	548.786	9900
L=259.112m G=-1.931%	9941.383	15.341	564.000	548.659	9925
L=259.112m G=-1.931%	9966.495	15.411	564.000	548.589	9950
L=259.112m G=-1.931%	9991.607	15.531	564.000	548.469	9975
L=259.112m G=-1.931%	10016.719	15.903	564.000	548.097	10000
L=259.112m G=-1.931%	10041.831	16.034	564.000	547.966	10025
L=259.112m G=-1.931%	10066.943	16.129	564.000	547.871	10050
L=259.112m G=-1.931%	10092.055	16.182	564.000	547.818	10075
L=259.112m G=-1.931%	10117.167	16.222	564.000	547.778	10100

**LONGITUDINAL PROFILE**



REVISION CONTROL		
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<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro gauge office, 1st floor, Orion Building, opp. Dasm Biscoo Youth center, Koregaon park,Pune, India - 411001 Phone No. 20226051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL		OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>		PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO	
E-W CORRIDOR CPM Addl. GM Planning Chief Survey Expert Alignment Expert Chief structural Expert for viaduct		Chief structural Expert for station Chief Architect PD/Dy.PD		Survey Expert Alignment Expert Authorised signatory of the contractor Structural Designer		DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>		ISSUE RECORD AS-BUILT GOOD FOR CONST TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN	
DGM (Design) for E-W Corridor viaduct JGM (Design) for station.		Chief structural Expert for station Chief Architect PD/Dy.PD		PREPARED BY CHECKED BY APPROVED BY ISSUED BY		DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>		REV. R3 DATE : 14/07/2018 SCALE : 1:1 SHEET NO. :	



**KEY PLAN**

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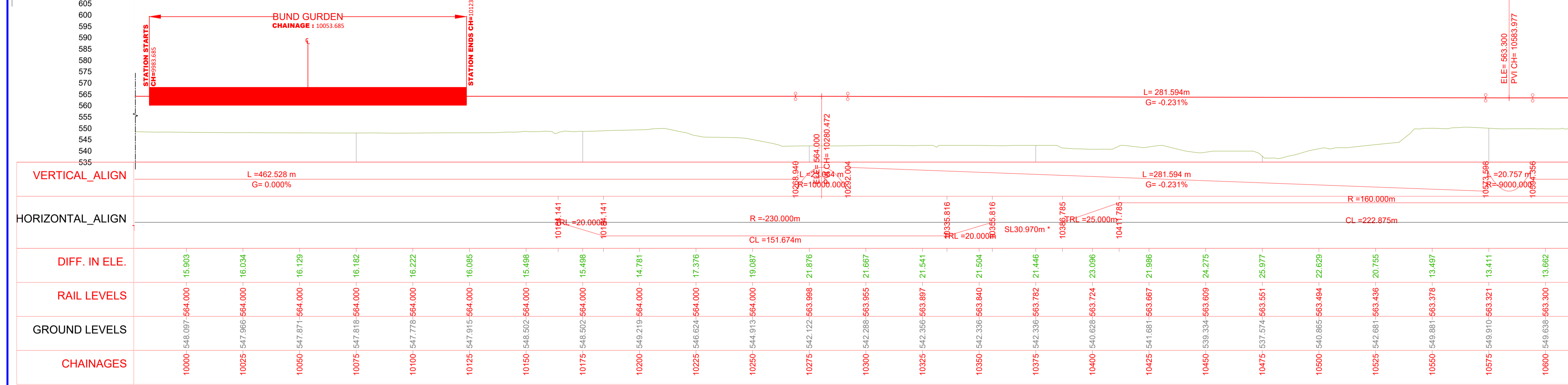
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(XY) X = PIER TYPE  
 Y = PIER No.

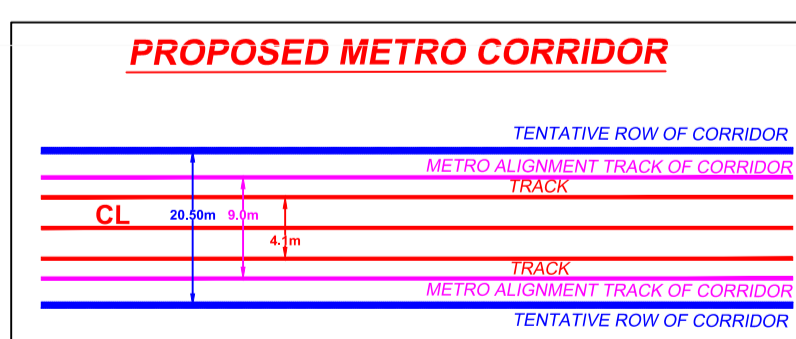
**REVISION CONTROL**

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R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
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**ISSUED BY**



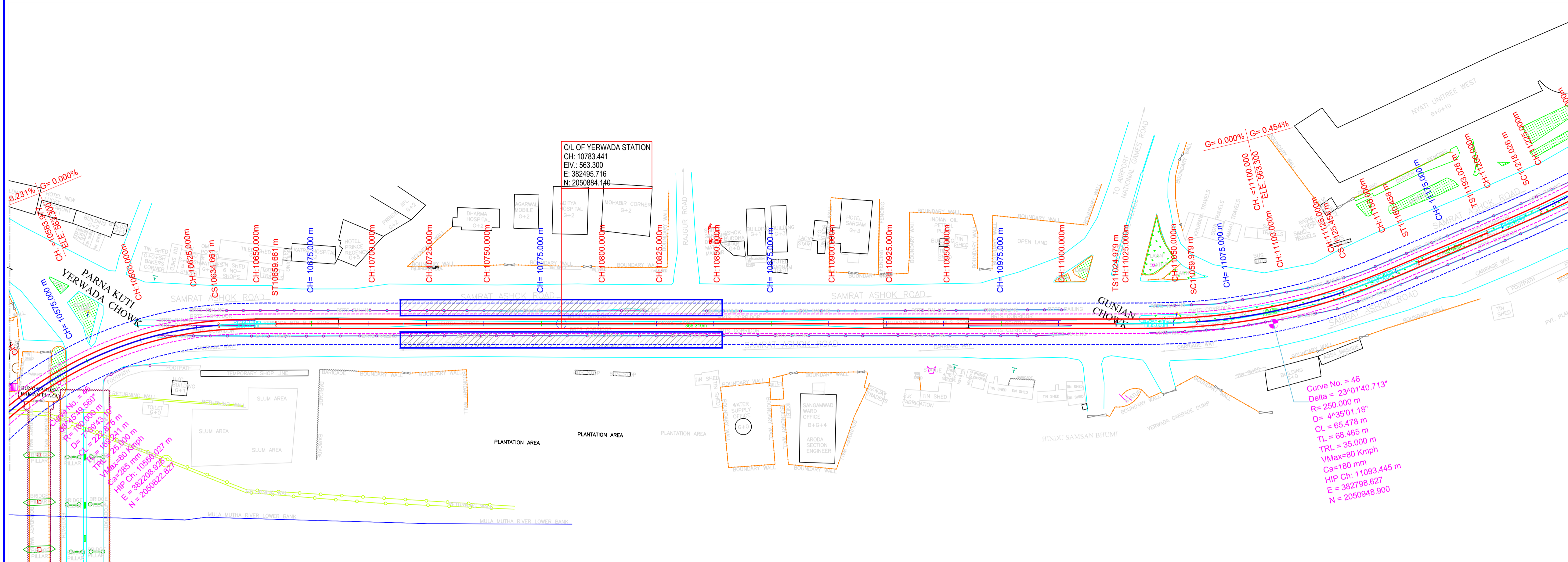
**LONGITUDINAL PROFILE**



<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro pune office, 1st floor, Orion Building, opp. Dorn Biscoo Youth center, Koregaon park,Pune, India - 411001 Phone No. 20226051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>			PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO			
E-W CORRIDOR CPM		Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct	Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer	CONTRACT ID: ---		ISSUE RECORD	APPROVED
DGM (Design) for E-W Corridor viaduct		JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>	DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>	REV. R3	AS-BUILT GOOD FOR CONST TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN
DATE : 14/07/2018										SCALE : 1:1	SHEET NO. :	SHEET SIZE: A1	PLOTTING SCALE 1:1

← TO VANAZ

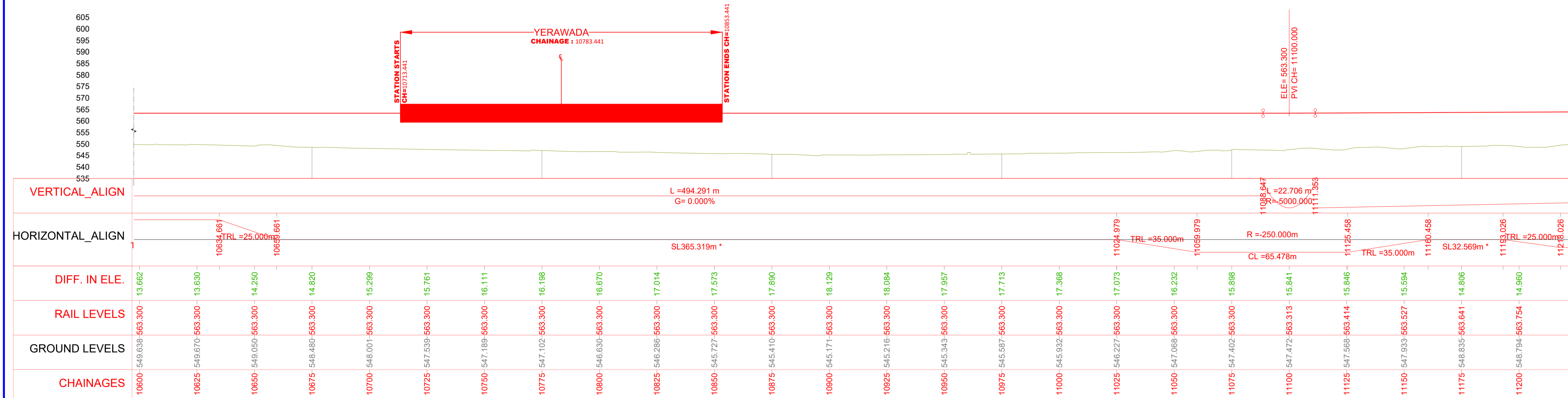
TO RAMWADI →



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**LONGITUDINAL PROFILE**

VERTICAL_ALIGN	L=494.291m G=0.000%	
HORIZONTAL_ALIGN	SL365.319m*	TRL=35.000m
		R=-250.000m
		CL=65.478m
		TRL=35.000m
		SL32.569m*
		TRL=25.000m
		R=250.000m

DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
13.662	563.300	549.638	10600
13.630	563.300	549.670	10625
14.250	563.300	549.050	10650
14.820	563.300	548.480	10675
15.299	563.300	548.001	10700
15.761	563.300	547.539	10725
16.111	563.300	547.189	10750
16.198	563.300	547.102	10775
16.670	563.300	546.630	10800
17.014	563.300	546.286	10825
17.573	563.300	545.727	10850
17.890	563.300	545.410	10875
18.129	563.300	545.171	10900
18.084	563.300	545.216	10925
17.957	563.300	545.343	10950
17.713	563.300	545.587	10975
17.368	563.300	545.932	11000
17.073	563.300	546.227	11025
16.232	563.300	547.068	11050
15.898	563.300	547.402	11075
15.841	563.313	547.472	11100
15.846	563.414	547.568	11125
15.594	563.527	547.933	11150
14.806	563.641	548.835	11175
14.960	563.754	548.794	11200
14.248	563.868	549.620	11225

REVISION CONTROL		
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
R4	13.03.2018	With respect to mail dated 07/03/2018 joint site visit Kalyani Nagar and Ramwadi station modified Ramwadi station following on under pass
R3	01.12.2017	X-Over locations has been shifted as per revised alignment on dated 01.12.2017
R2	23.09.2017	VERTICAL ALIGNMENT REVISED
R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.
REV.	DATE	DESCRIPTION

NO OBJECTION FOR CONSTRUCTION	
PUNE METRO RAIL PROJECT	
Maha metro pune office, 1st floor, Orion Building, opp. Datta Bhoosa Youth center, Koregaon park,Pune, India - 411001	
Phone No. 20202051074	

GENERAL ENGINEERING CONSULTANT			
CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES			
THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			
E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Chief structural Expert for viaduct
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect

OFFICE OF ORIGIN		
PUNE		
Survey Expert	Alignment Expert	Authorised signatory of the contractor
PREPARED BY	CHECKED BY	APPROVED BY

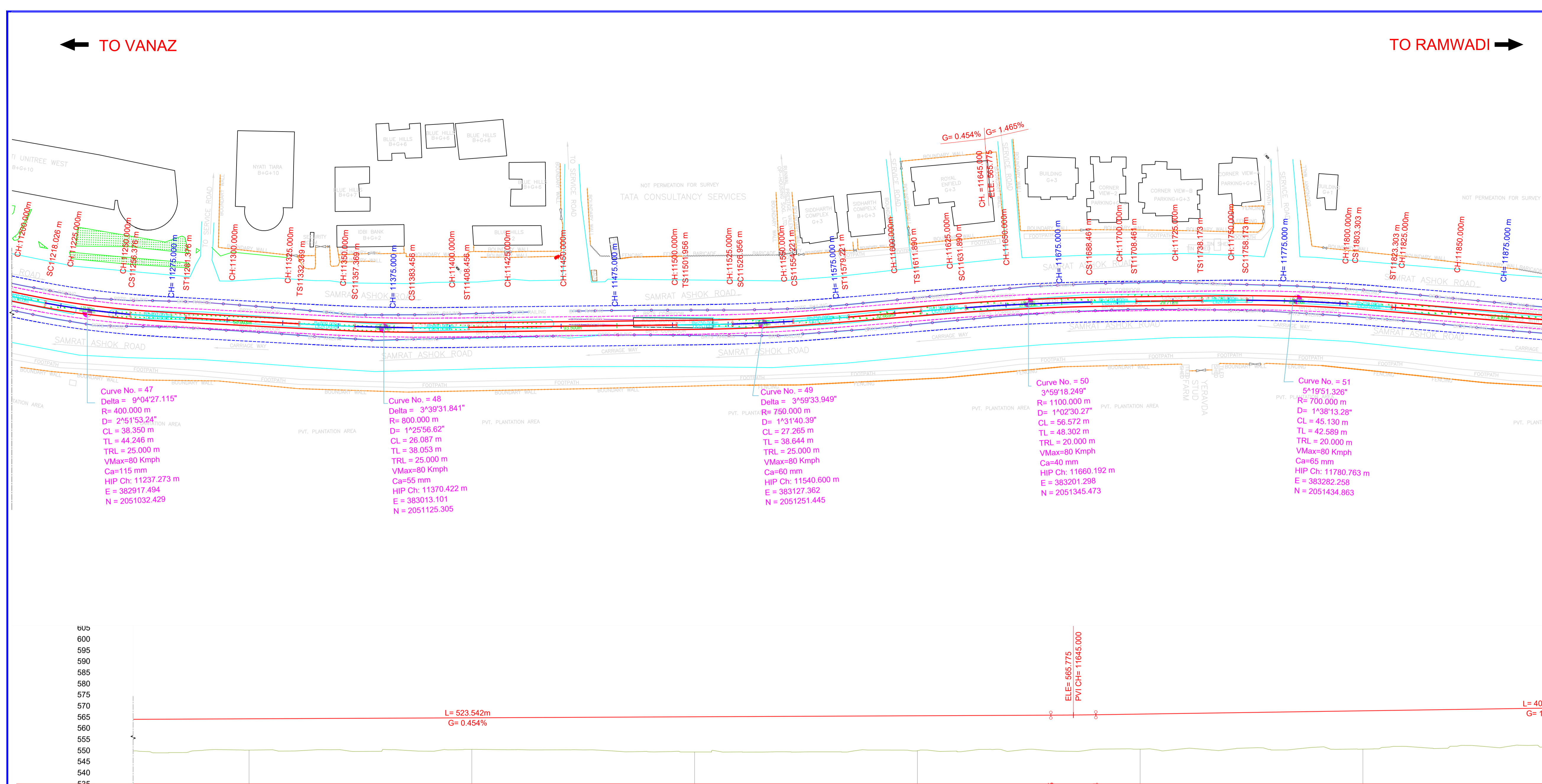
CLIENT :	
PUNE METRO RAIL CORP . LTD.	
CONTRACT ID :	---
DRAWING NAME/TITLE :	
GAD (ALIGNMENT PLAN & VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR	
DRAWING NO. :	PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01
REV.	R3
DATE :	14/07/2018
SCALE :	1:1
SHEET NO. :	

PROJECT NAME:	
DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO	
ISSUE RECORD	
AS-BUILT	APPROVED
GOOD FOR CONST	
TENDER DRAWINGS	
DESIGN DEVELOPMENT	✓
PRELIMINARY DESIGN	



← TO VANAZ

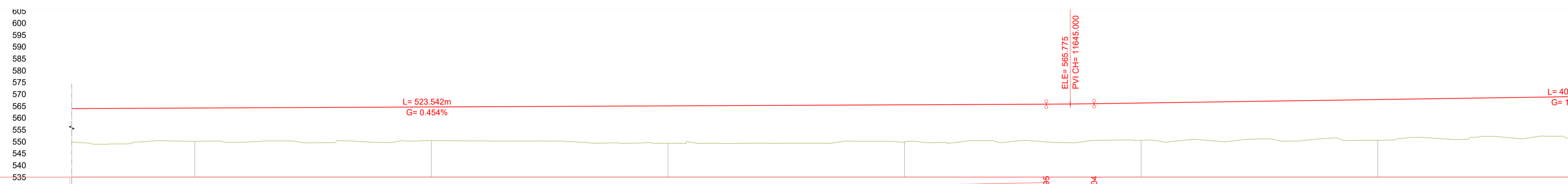
TO RAMWADI →



**KEY PLAN**

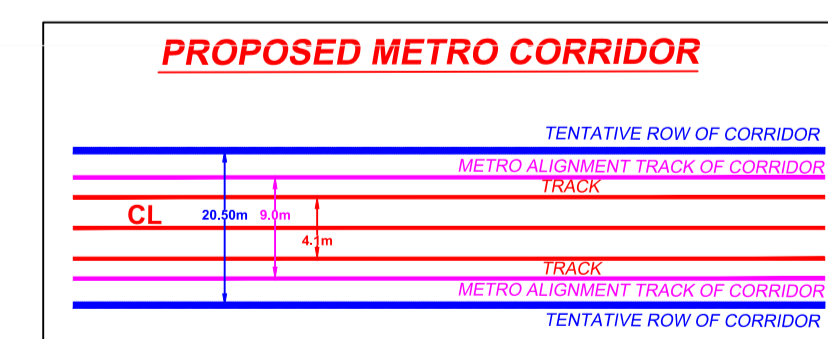
**NOTES:**

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  - DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  - THE SPAN ARRANGEMENT SHOWN MAY CHANGE AT CERTAIN LOCATIONS DEPENDING ON SITE CONSTRAINTS.
  - THE L-SECTION HAS BEEN PREPARED WITH RAIL LEVEL AT MINIMUM 9.75M AND 13.75M HEIGHT ABOVE THE EXISTING ROAD LEVEL AT VIADUCT AND STATIONS RESPECTIVELY. THESE RAIL LEVELS MAY CHANGE AT PORTALS, CANTILEVER PIERS, OBLIGATORY SPAN LOCATIONS ETC. DEPENDING ON THE THICKNESS OF GIRDER TO BE DECIDED BY EXECUTING AGENCY/DCC ENSURING 5.5M VERTICAL CLEARANCE OVER THE EXISTING ROAD LEVEL.
  - THE GAD IS BASED ON THE EXISTING SURVEY DATA AVAILABLE WITH NMRC. DTM HAS BEEN PREPARED ACCORDINGLY. CONTRACTOR TO ENSURE THE GROUND/ROAD LEVELS ETC. DURING DETAILED DESIGN AND EXECUTION.
  - RAIL TOP LEVEL TO PIER TOP DIMENSION IS BASED ON FOLLOWING:  
RAIL + RAIL PLINTH = 0.467m.  
BEARING + PEDESTAL = 0.4m.  
DEPTH OF BOX GIRDER = 2.0m.
  - TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRC/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017
- P = STANDARD PIER  
CP = CANTILEVER PIER  
PP = PORTAL PIER  
CS = CURVE TO SPIRAL  
ST = SPIRAL TO TANGENT  
TS = TANGENT TO SPIRAL  
SC = SPIRAL TO CURVE  
SS = SPIRAL TO SPIRAL  
SL = STRAIGHT LENGTH  
ELE = ELEVATION  
E = EASTING  
N = NORTHING  
HIP = HORIZONTAL INTERSECTION POINT  
D = DEFLECTION ANGLE  
L = GRADE LENGTH  
TRL = TRANSITION LENGTH  
TL = TANGENT LENGTH  
R = RADIUS  
CA = APPLIED CANT  
CD = CANT DEFICIENCY  
PVI = POINT OF VERTICAL CURVE  
SRJ = STOCK RAIL JOINT  
CH = CHAINAGE  
DELTA = DEFLECTION ANGLE
- TRACK CENTER LINE  
--- VIADUCT OUTER LINE  
--- ROW LINE
- (XY) X = PIER TYPE  
Y = PIER No.



VERTICAL_ALIGN	L=523.542 m G=0.454%		L=403 G=1.0	
HORIZONTAL_ALIGN	R=400.000m CL=38.350m	TRL=25.000m	SL50.993m*	SL93.500m*
DIFF. IN ELE.	14.248	14.265	14.037	14.299
RAIL LEVELS	549.620	549.716	550.058	550.208
GROUND LEVELS	549.620	549.716	550.058	550.208
CHAINAGES	11225	11250	11275	11300

**LONGITUDINAL PROFILE**



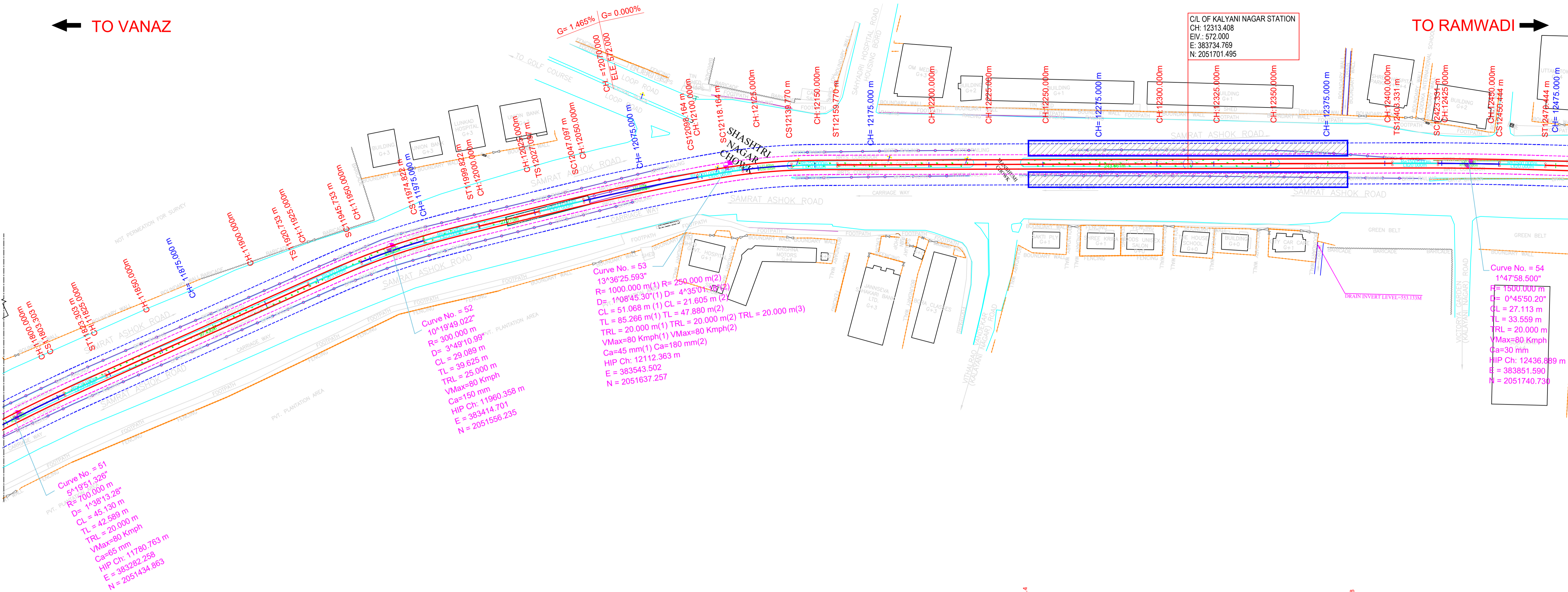
REVISION CONTROL		
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
R4	13.03.2018	With respect to mail dated 07/03/2018 joint site visit Kalyani Nagar and Ramwadi station modified Ramwadi station following on under pass
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R2	23.09.2017	VERTICAL ALIGNMENT REVISED
R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.
REV.	DATE	DESCRIPTION

ISSUED BY

<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Make metro gauge office, 1st floor, Orion Building, opp. Dasm Bhoosa Youth center, Koregaon park, Pune, India - 411001 Phone No. 02026051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP. LTD.</b>			PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO			
E-W CORRIDOR CPM Addl. GM Planning		Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct	Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer	CONTRACT ID: ---		ISSUE RECORD		APPROVED
DGM (Design) for E-W Corridor viaduct		JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>	DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>	REV. R3	AS-BUILT GOOD FOR CONST TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN
DATE : 14/07/2018		SCALE : 1:1		SHEET NO. :		SHEET SIZE: A1		PLOTTING SCALE 1:1					

← TO VANAZ

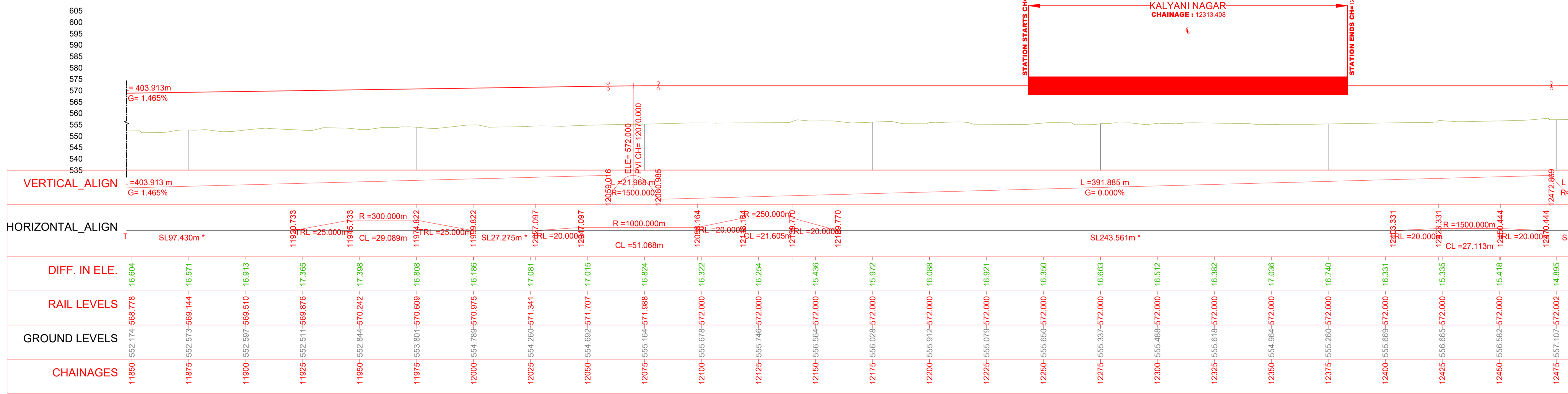
TO RAMWADI →



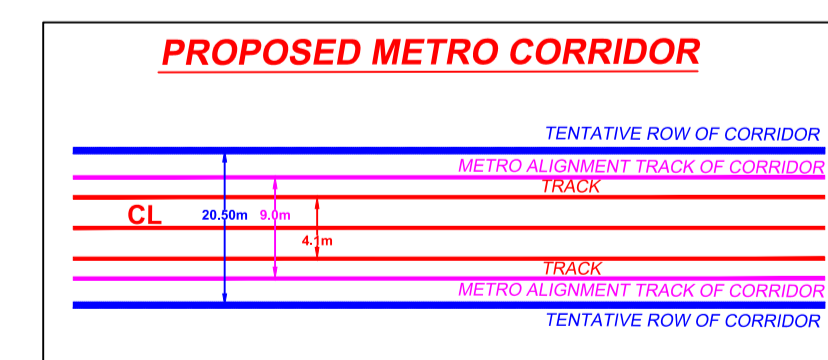
**KEY PLAN**

**NOTES:**

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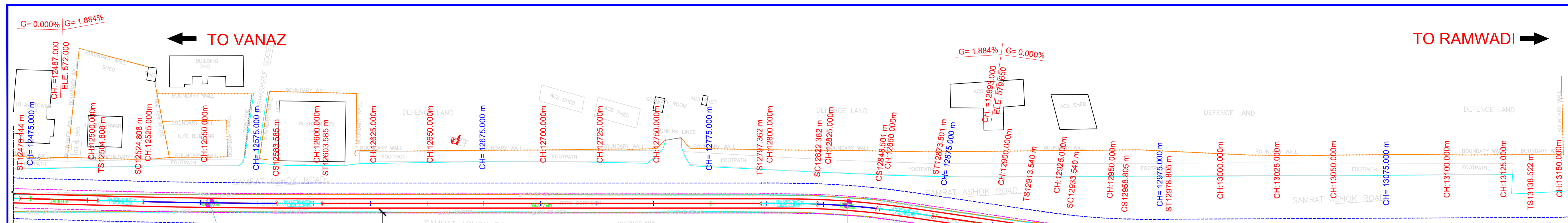
**LONGITUDINAL PROFILE**



REVISION CONTROL		
REV.	DATE	DESCRIPTION
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
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REV.	DATE	DESCRIPTION

ISSUED BY

<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro pune office, 1st floor, Orion Building, opp. Dasm Biscoo Youth center, Koregaon park,Pune, India - 411001 Phone No. 02026051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>		PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO			
E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct	Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer	CONTRACT ID: --- DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>		ISSUE RECORD AS-BUILT GOOD FOR CONST TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN	
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DATE : 14/07/2018	SCALE : 1:1	SHEET NO. :	APPROVED

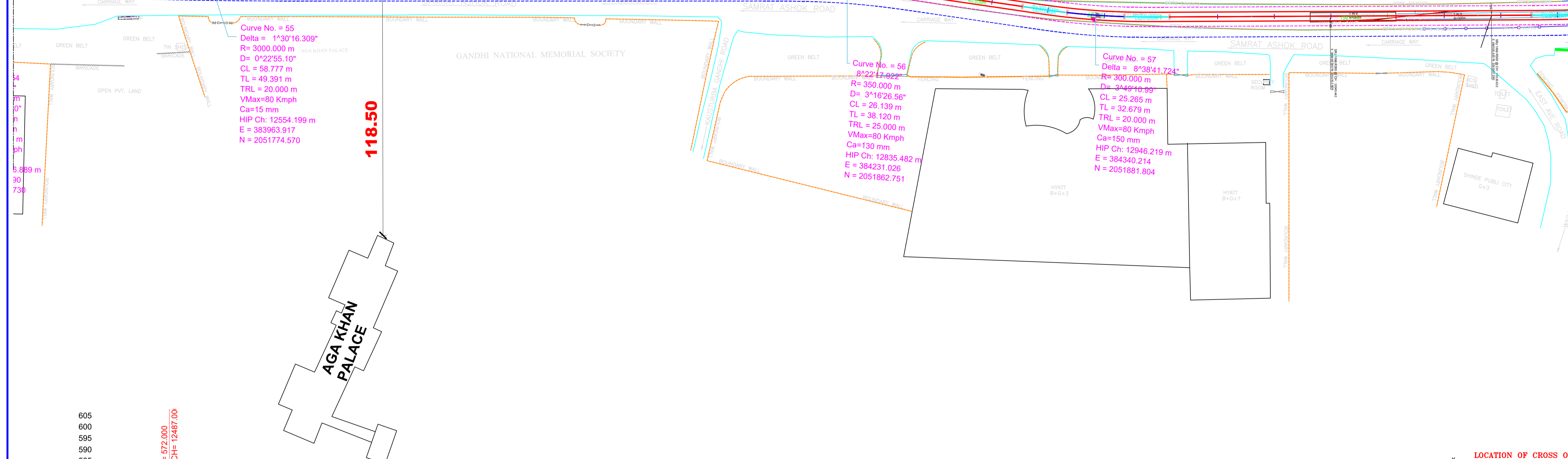


**KEY PLAN**

**NOTES:**

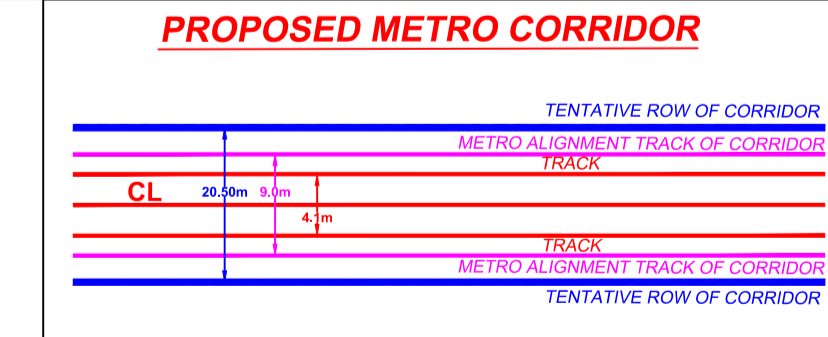
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VERTICAL_ALIGN	HORIZONTAL_ALIGN	DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
L=28.259 m R=1500.000 ELE=572.000 PVI,CH=12487.00	SL34.364m * L=20.000 R=3000.000 CL=58.777m TRL=20.000	14.895 14.140 14.200 14.596 14.133 14.616 14.790 14.639 15.302 14.816 16.127 16.980 17.011 17.407 17.722 17.631 18.035 18.509 18.438 18.460 18.433 17.924 18.465 18.432 18.276 18.496	572.002 572.245 572.716 573.187 573.658 574.129 574.600 575.071 575.542 576.013 576.484 576.956 577.427 577.898 578.369 578.840 579.311 579.782 580.253 580.724 581.195 581.666 582.137 582.608 583.079 583.550	557.107 558.510 559.510 559.511 559.525 559.810 560.432 560.240 561.197 560.357 560.647 560.376 561.209 561.276 561.209 561.124 561.212 561.190 561.217 561.154 561.185 561.218 561.372 561.154	12475 12500 12525 12550 12575 12600 12625 12650 12675 12700 12725 12750 12775 12800 12825 12850 12875 12900 12925 12950 12975 13000 13025 13050 13075 13100

**LONGITUDINAL PROFILE**



**REVISION CONTROL**

REV.	DATE	DESCRIPTION
R5	22.03.2018	Pune station is shifted 5m based MOM 15.03.2018
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R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.

**NO OBJECTION FOR CONSTRUCTION**

**PUNE METRO RAIL PROJECT**  
 Maharashtra Metro Rail Corporation Limited  
 B-10, 1st Floor, Orion Building, 400, Daxin  
 B-10, 1st Floor, Orion Building, 400, Daxin  
 B-10, 1st Floor, Orion Building, 400, Daxin  
 Phone No. 02026051074

**GENERAL ENGINEERING CONSULTANT**  
**CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES**  
 THE DESIGN AND DRAWING AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL

E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD

**OFFICE OF ORIGIN**  
**PUNE**

**CLIENT :**  
**PUNE METRO RAIL CORP . LTD.**

**CONTRACT ID :** ---

**DRAWING NAME/TITLE :**  
**GAD (ALIGNMENT PLAN & VERTICAL PROFILE ) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR**

**DRAWING NO. :**  
**PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01**

**REV. R3**

**DATE :** 14/07/2018 **SCALE :** 1:1 **SHEET NO. :**

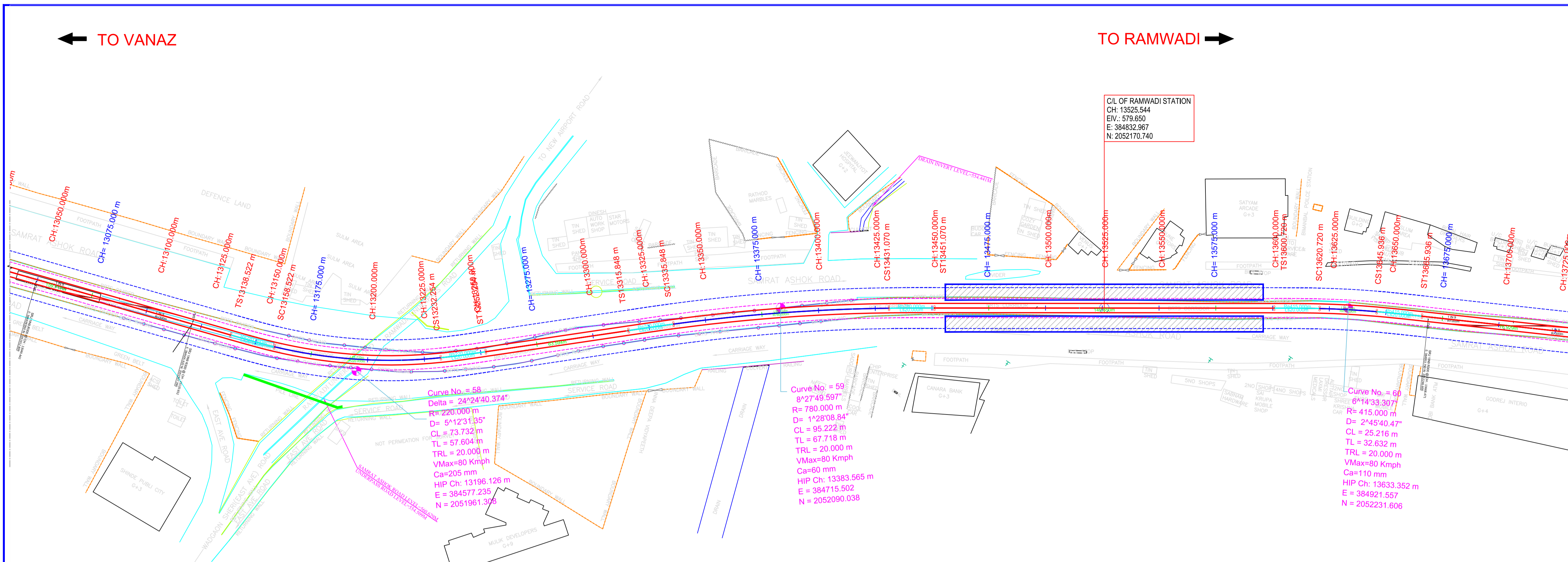
PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY

**PROJECT NAME:**  
 DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO

<b>ISSUE RECORD</b>	<b>APPROVED</b>
AS-BUILT	
GOOD FOR CONST	
TENDER DRAWINGS	
DESIGN DEVELOPMENT	✓
PRELIMINARY DESIGN	

← TO VANAZ

TO RAMWADI →

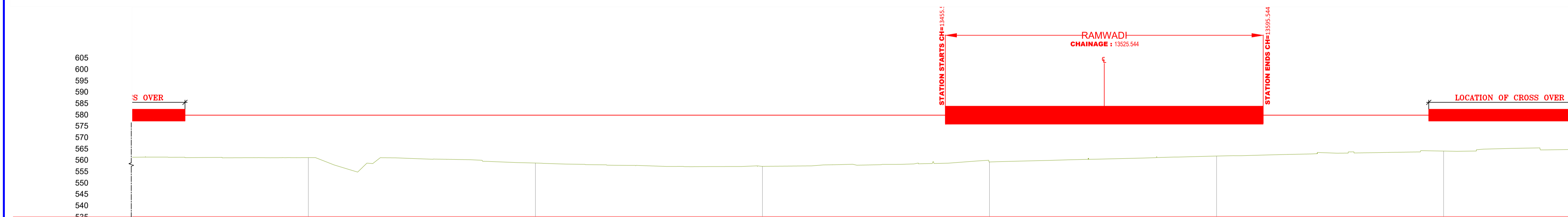


**KEY PLAN**

**NOTES:**

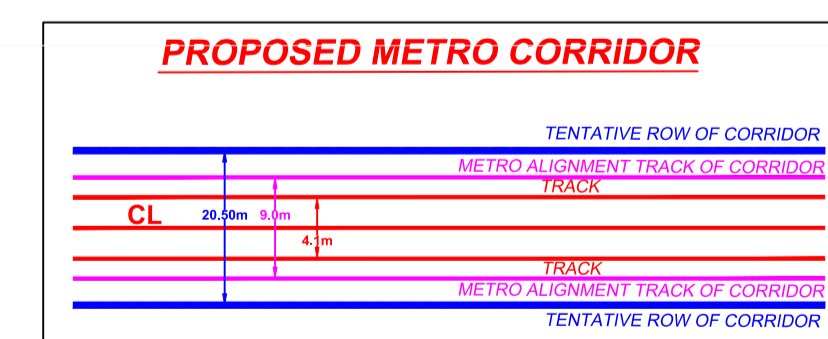
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 BEARING + PEDESTAL = 0.4m.  
 DEPTH OF BOX GIRDER = 2.0m.
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- (XY) X = PIER TYPE  
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VERTICAL_ALIGN	HORIZONTAL_ALIGN	DIFF. IN ELE.	RAIL LEVELS	GROUND LEVELS	CHAINAGES
		18.496	579.650	581.154	13100
		18.670	579.650	560.980	13125
		18.710	579.650	560.940	13150
		18.700	579.650	560.950	13175
		21.884	579.650	557.766	13200
		19.237	579.650	560.413	13225
		19.790	579.650	559.860	13250
		21.070	579.650	558.580	13275
		21.801	579.650	557.849	13300
		22.303	579.650	557.347	13325
		22.638	579.650	557.012	13350
		22.533	579.650	557.117	13375
		22.051	579.650	557.599	13400
		21.844	579.650	557.806	13425
		20.777	579.650	558.873	13450
		20.595	579.650	559.055	13475
		19.949	579.650	559.701	13500
		19.320	579.650	560.330	13525
		18.633	579.650	561.017	13550
		17.995	579.650	561.655	13575
		17.449	579.650	562.201	13600
		16.625	579.650	563.025	13625
		16.409	579.650	563.241	13650
		15.798	579.650	563.852	13675
		14.753	579.650	564.897	13700
		15.197	579.650	564.453	13725

**LONGITUDINAL PROFILE**



**REVISION CONTROL**

REV.	DATE	DESCRIPTION
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R1	15.09.2017	COMMENTS AS PER SITE VISIT NOTE DT.14.08.17 HAVE BEEN INCORPORATED.

**ISSUED BY**

<p><b>NO OBJECTION FOR CONSTRUCTION</b></p> <p>PUNE METRO RAIL PROJECT                  Main metro pune office, 1st floor, Orion Building, opp. Dasm Bhoosa Youth center, Koregaon park,Pune, India - 411001                  Phone No. 20209051074</p>		<p><b>GENERAL ENGINEERING CONSULTANT</b>                  CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES</p> <p>THE DESIGN AND DRAWINGS ARE CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER. CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANS AND ARE RECOMMENDED FOR APPROVAL</p>		
E-W CORRIDOR CPM	Addl. GM Planning	Chief Survey Expert	Alignment Expert	Chief structural Expert for viaduct
DGM (Design) for E-W Corridor viaduct	JGM (Design) for station.	Chief structural Expert for station	Chief Architect	PD/Dy.PD

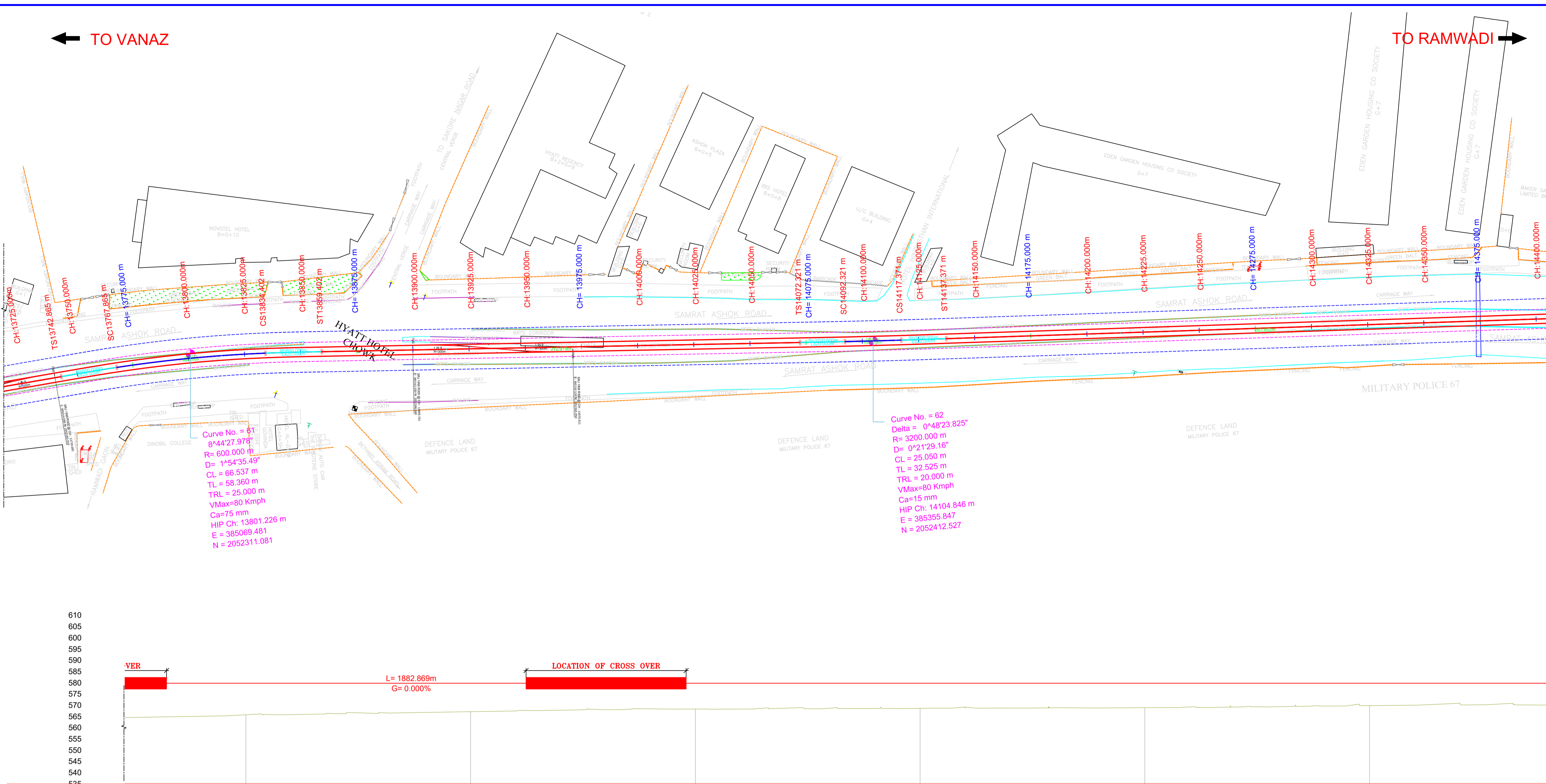
<p>OFFICE OF ORIGIN</p> <p><b>PUNE</b></p>			<p>CLIENT :</p> <p><b>PUNE METRO RAIL CORP . LTD.</b></p>		
Survey Expert	Alignment Expert	Authorised signatory of the contractor	Structural Designer		
PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY		

<p>CONTRACT ID: ---</p> <p>DRAWING NAME/TITLE :</p> <p><b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b></p>		<p>DRAWING NO. :</p> <p><b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b></p>		<p>REV. <b>R3</b></p>	
DATE :	14/07/2018	SCALE :	1:1	SHEET NO. :	

<p>PROJECT NAME:</p> <p>DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO</p>		<p><b>ISSUE RECORD</b></p> <p>AS-BUILT</p> <p>GOOD FOR CONST</p> <p>TENDER DRAWINGS</p> <p>DESIGN DEVELOPMENT</p> <p>PRELIMINARY DESIGN</p>		<p><b>APPROVED</b></p> <p>✓</p>	
---	--	---	--	---------------------------------	--

← TO VANAZ

TO RAMWADI →



**KEY PLAN**

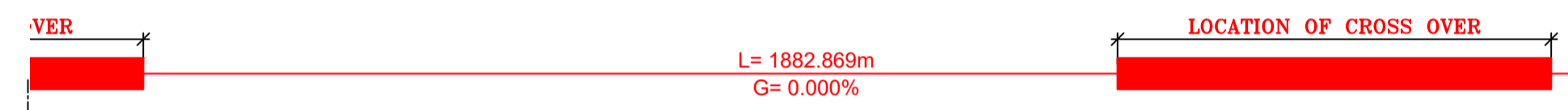
**NOTES:**

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  - THE L-SECTION HAS BEEN PREPARED WITH RAIL LEVEL AT MINIMUM 9.75M AND 13.75M HEIGHT ABOVE THE EXISTING ROAD LEVEL AT VIADUCT AND STATIONS RESPECTIVELY. THESE RAIL LEVELS MAY CHANGE AT PORTALS, CANTILEVER PIERS, OBLIGATORY SPAN LOCATIONS ETC. DEPENDING ON THE THICKNESS OF GIRDER TO BE DECIDED BY EXECUTING AGENCY/DDC ENSURING 5.5M VERTICAL CLEARANCE OVER THE EXISTING ROAD LEVEL.
  - THE GAD IS BASED ON THE EXISTING SURVEY DATA AVAILABLE WITH NMRC. DTM HAS BEEN PREPARED ACCORDINGLY. CONTRACTOR TO ENSURE THE GROUND/ROAD LEVELS ETC. DURING DETAILED DESIGN AND EXECUTION.
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BEARING + PEDESTAL = 0.4m.  
DEPTH OF BOX GIRDER = 2.0m.
  - TURNOUTS AND CROSS OVER AS FOLLOW DRG. NO. NMRC/PUNE/TRACK PLAN/GC/2017/01 DATED 24.08.2017
- P = STANDARD PIER  
 CP = CANTILEVER PIER  
 PP = PORTAL PIER  
 CS = CURVE TO SPIRAL  
 ST = SPIRAL TO TANGENT  
 TS = TANGENT TO SPIRAL  
 SC = SPIRAL TO CURVE  
 SS = SPIRAL TO SPIRAL  
 SL = STRAIGHT LENGTH  
 ELE = ELEVATION  
 E = EASTING  
 N = NORTHING  
 HIP = HORIZONTAL INTERSECTION POINT  
 D = DEFLECTION ANGLE  
 L = GRADE LENGTH  
 TRL = TRANSITION LENGTH  
 TL = TANGENT LENGTH  
 R = RADIUS  
 CA = APPLIED CANT  
 CD = CANT DEFICIENCY  
 PVI = POINT OF VERTICAL CURVE  
 SRJ = STOCK RAIL JOINT  
 CH = CHAINAGE  
 DELTA = DEFLECTION ANGLE
- TRACK CENTER LINE  
 --- VIADUCT OUTER LINE  
 --- ROW LINE
- (XY) X = PIER TYPE  
 Y = PIER No.

Curve No. = 61  
 Δ = 44°27.97'  
 R = 600.000 m  
 D = 1°54'35.49"  
 CL = 66.537 m  
 TL = 58.360 m  
 TRL = 25.000 m  
 VMax = 80 Kmph  
 Ca = 75 mm  
 HIP Ch: 13801.226 m  
 E = 385069.481  
 N = 2052311.081

Curve No. = 62  
 Delta = 0°48'23.825"  
 R = 3200.000 m  
 D = 0°21'29.16"  
 CL = 25.050 m  
 TL = 32.525 m  
 TRL = 20.000 m  
 VMax = 80 Kmph  
 Ca = 15 mm  
 HIP Ch: 14104.846 m  
 E = 385355.847  
 N = 2052412.527

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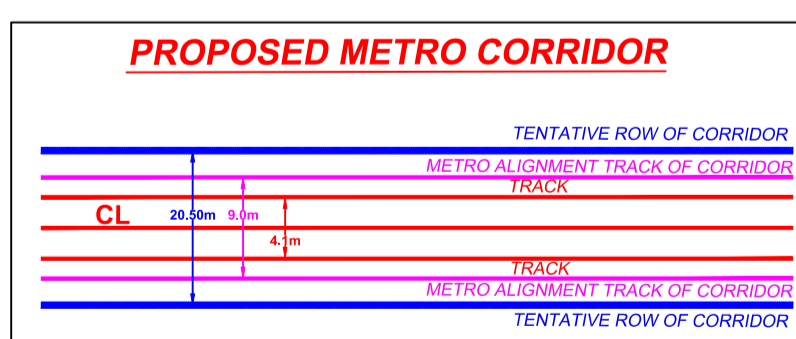


VERTICAL_ALIGN	L = 1882.869 m G = 0.000%	
HORIZONTAL_ALIGN	13742.865 TRL = 25.000m R = 600.000m CL = 66.537m	13859.402 TRL = 25.000m SL212.919m*
DIFF. IN ELE.	15.197	11.173
RAIL LEVELS	579.650	579.650
GROUND LEVELS	564.453	568.477
CHAINAGES	13725	14350

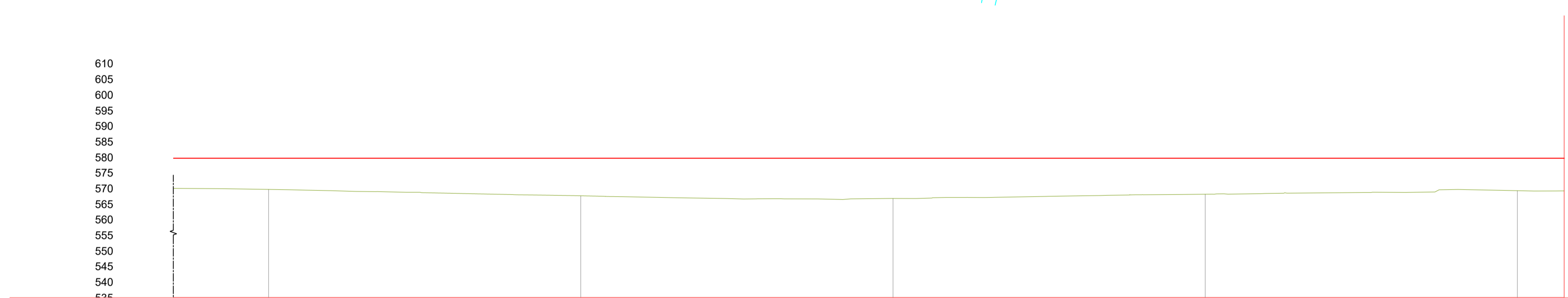
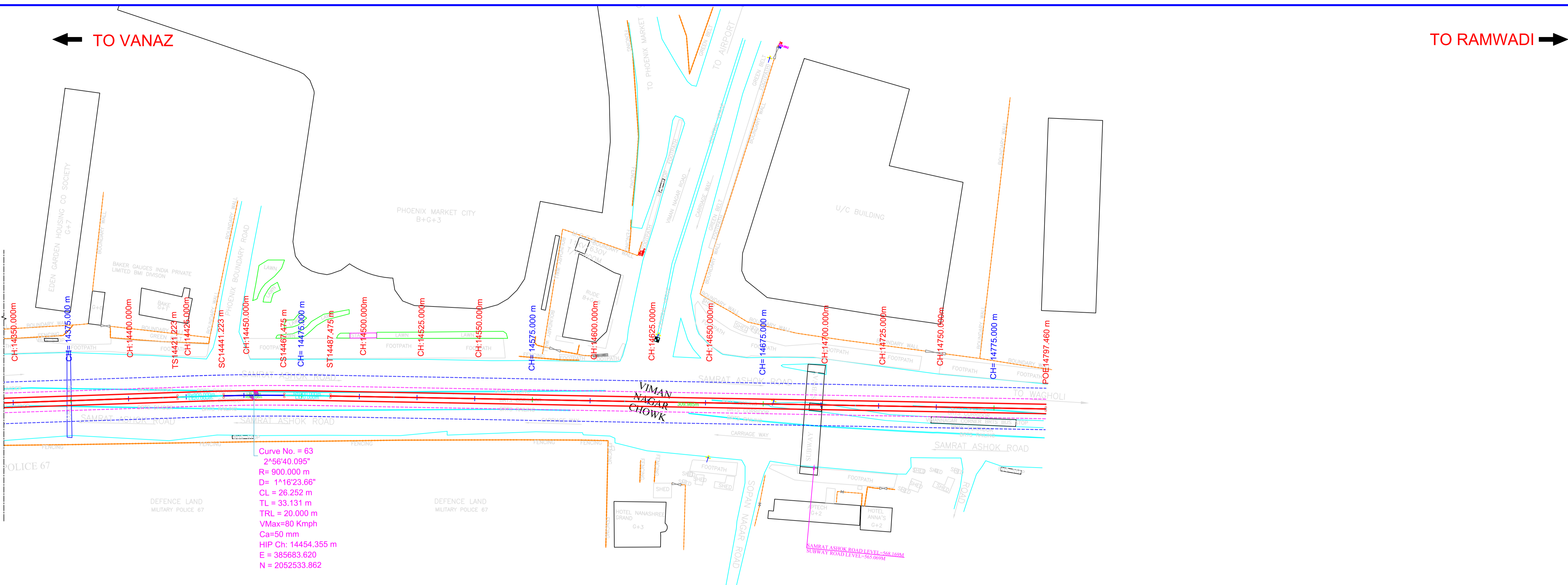
**REVISION CONTROL**

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**LONGITUDINAL PROFILE**

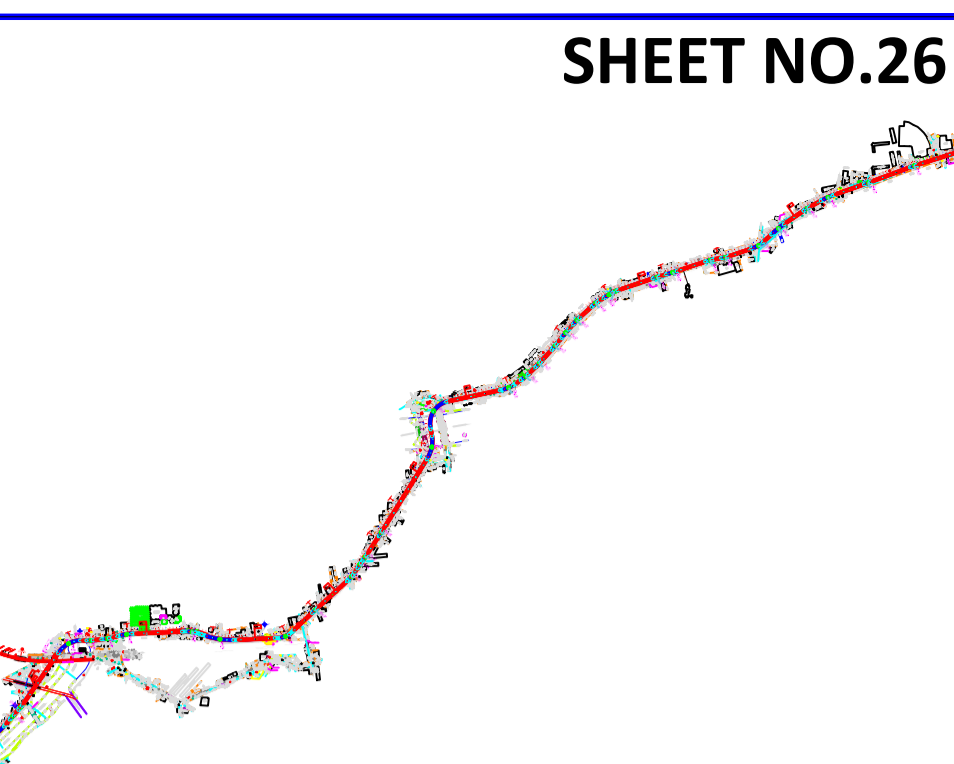
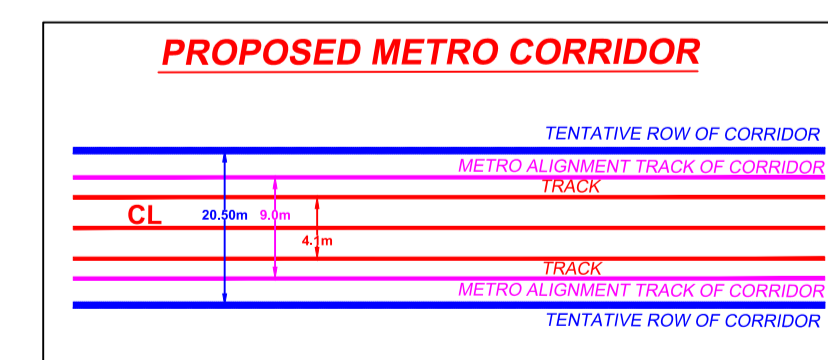


<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro gauge office, 1st floor, Orion Building, opp. Dasm Biscoo Youth center, Koregaon park, Pune, India - 411001 Phone No. 22026051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWING AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>		PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO						
E-W CORRIDOR CPM Addl. GM Planning		Chief Survey Expert Alignment Expert		Chief structural Expert for viaduct		Survey Expert Alignment Expert Authorised signatory of the contractor		Structural Designer		CONTRACT ID: --- DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>		ISSUE RECORD AS-BUILT GOOD FOR CONST		APPROVED	
DGM (Design) for E-W Corridor viaduct JGM (Design) for station.		Chief structural Expert for station Chief Architect		PD/Dy.PD		PREPARED BY CHECKED BY APPROVED BY		ISSUED BY		DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>		REV. : <b>R3</b>		TENDER DRAWINGS DESIGN DEVELOPMENT PRELIMINARY DESIGN	
DATE : 14/07/2018		SCALE : 1:1		SHEET NO. :		DATE : 14/07/2018		SCALE : 1:1		SHEET NO. :		SHEET SIZE: A1		PLOTTING SCALE 1:1	



VERTICAL_ALIGN																			
HORIZONTAL_ALIGN	SL.309.985m																		
DIFF. IN ELE.	9.697	9.984	10.554	11.043	11.575	12.030	12.549	12.996	13.031	12.894	12.575	12.208	11.783	11.536	11.215	10.980	10.107	10.401	10.469
RAIL LEVELS	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650	579.650
GROUND LEVELS	589.347	589.634	590.204	590.707	591.225	592.000	592.804	593.600	593.619	593.256	592.075	590.442	588.867	587.114	585.435	583.670	581.543	580.249	579.181
CHAINAGES	14350	14375	14400	14425	14450	14475	14500	14525	14550	14575	14600	14625	14650	14675	14700	14725	14750	14775	14790

LONGITUDINAL PROFILE



KEY PLAN

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ISSUED BY

<b>NO OBJECTION FOR CONSTRUCTION</b> PUNE METRO RAIL PROJECT Main metro pylon office, 1st floor, Orion Building, opp. Dhanu Bazaar Youth center, Koregaon park,Pune, India - 411001 Phone No. 20226051074		<b>GENERAL ENGINEERING CONSULTANT</b> CONSORTIUM OF SYSTRA-AECOM-EGIS-RITES THE DESIGN AND DRAWINGS AS CERTIFIED AND SUBMITTED BY THE DETAILED DESIGNER CONSULTANT HAVE BEEN REVIEWED AND PROOF CHECKED BY GENERAL ENGINEER CONSULTANTS AND ARE RECOMMENDED FOR APPROVAL			OFFICE OF ORIGIN <b>PUNE</b>		CLIENT : <b>PUNE METRO RAIL CORP . LTD.</b>			PROJECT NAME: DETAILED DESIGN CONSULTANCY SERVICES FOR VIADUCT CORRIDOR-EAST WEST (VANAZ TO CIVIL COURT STATION) ALL ELEVATED VIADUCT PORTIONS FOR PUNE METRO			
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DGM (Design) for E-W Corridor viaduct JGM (Design) for station.		Chief structural Expert for station	Chief Architect	PD/Dy.PD	PREPARED BY	CHECKED BY	APPROVED BY	ISSUED BY	DRAWING NAME/TITLE : <b>GAD (ALIGNMENT PLAN &amp; VERTICAL PROFILE) FOR CIVIL COURT TO RAMWADI (EAST/WEST) CORRIDOR</b>	DRAWING NO. : <b>PUNE/CIVIL COURT TO RAMWADI/GAD/ALG/01</b>	REV. : <b>R3</b>	AS-BUILT	APPROVED
									DATE : 14/07/2018	SCALE : 1:1	SHEET NO. :	TENDER DRAWINGS	
												DESIGN DEVELOPMENT	
												PRELIMINARY DESIGN	✓