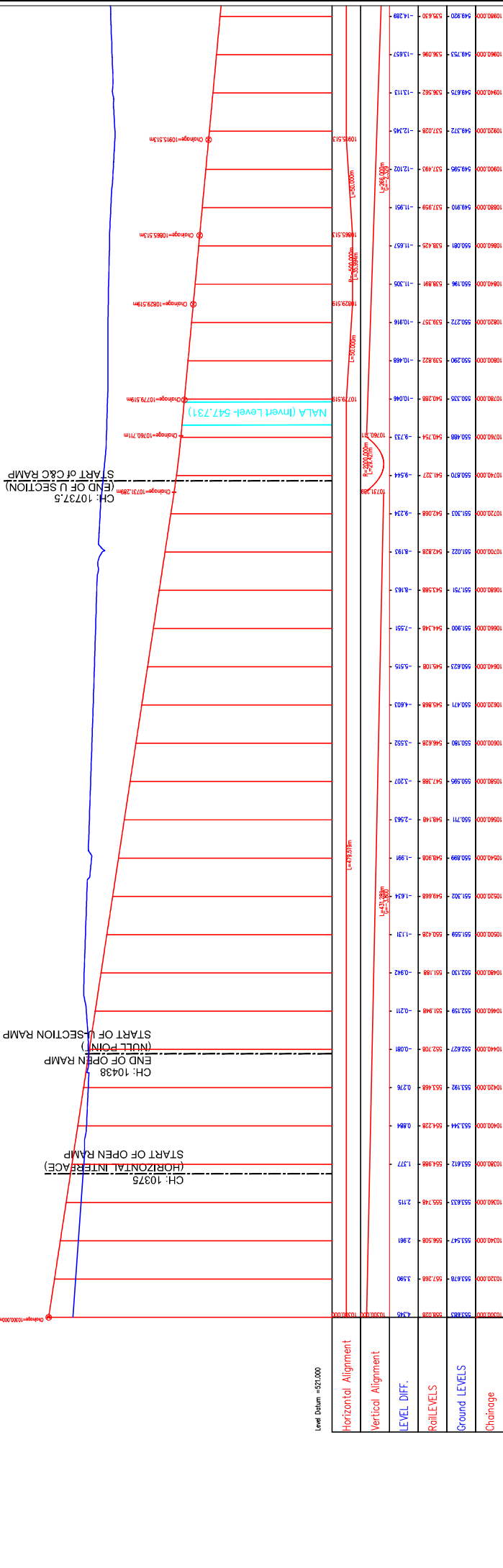
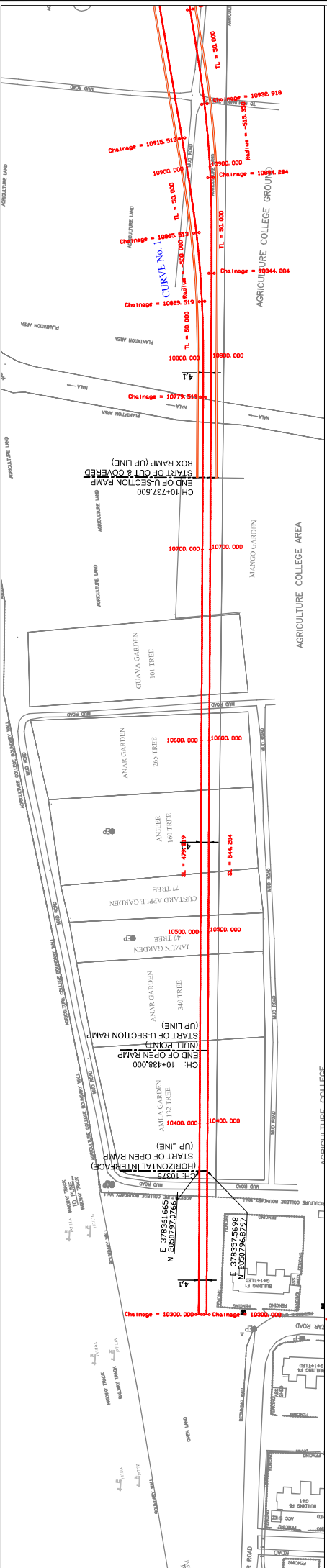


TO SWARGATE

TO PCMC



CURVE NO.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING 37884.357	37874.37	38045.273	37958.713	37958.009	37907.54	37961.013
	NORTHING 206824.984	206824.194	206859.909	207724.758	207030.082	204845.462	204631.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	216° 08' 44"	59° 20' 22"	9° 40' 54"	18° 24' 57"	11° 28' 31"
RADIUS	300	300	300	300	31335	31335	31335
CHORD LENGTH	315.984	268.524	655.081	235.319	35.022	42.276	57.112
CANT	95	105	105	105	105	100	80
CANT DEFLECT ENCY	76	88	73	88	76	84	76
OPERATING SPEED	85	70	70	70	85	70	85

SYSTRA, AECOM, EGIS, RITES.

INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

MAHARASHTRA METRO RAIL CORP. LTD. PUNE METRO

PROJECT: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

STATION: TENDER DRAWING

DATE: 10/05/2018

SCALE: (A1) 1:500

DRAWING TITLE: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION

DRAWING NO: PML1-IC-AL-UCC-0121

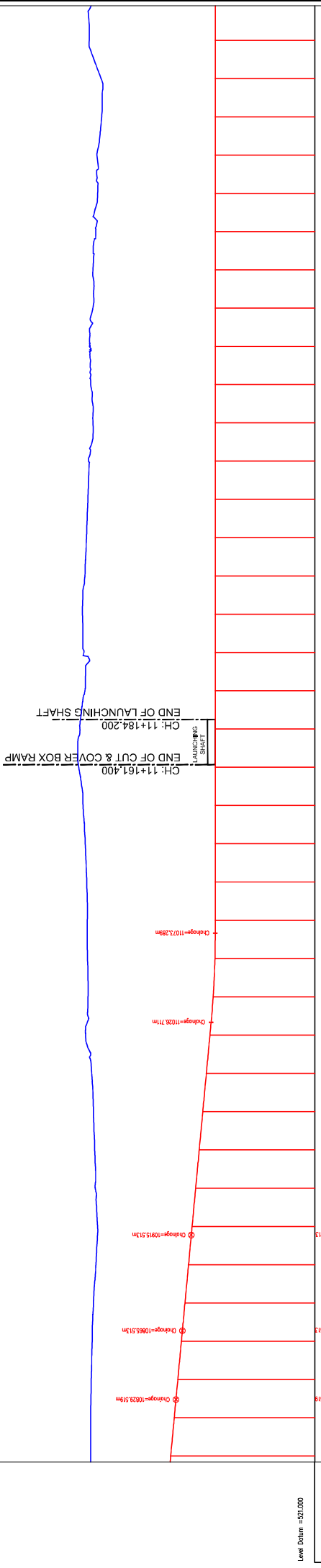
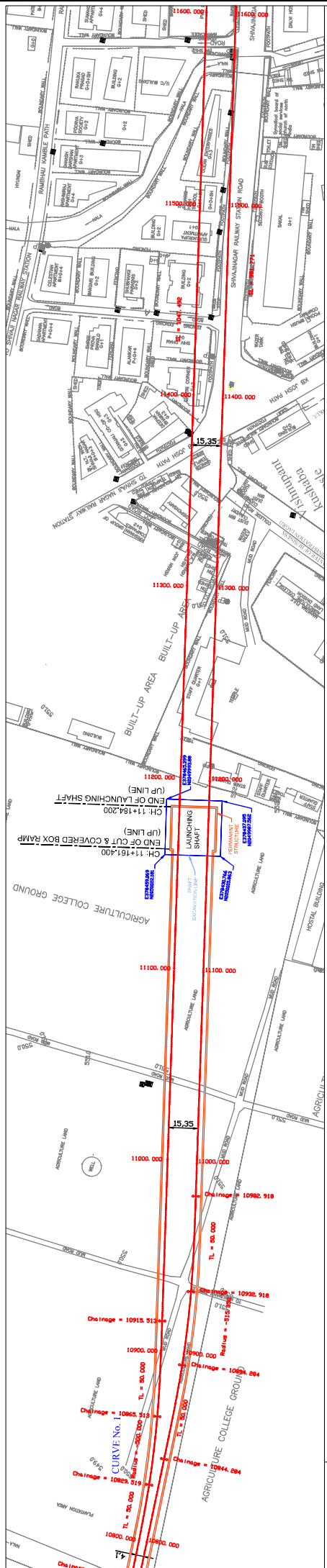
REV.	DATE	DESCRIPTION	APPROVED BY	CHECKED BY	DESIGN BY	DRAWN BY	NAME	SIGN

NOTES:

- THE ALIGNMENT DRAWING IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED.
- ALL THE CHANGES OF STATIONS CENTRE LINE, TUNNELS ETC MEASURED ALONG THE UP LINE OF THE TRACK OF SOUTH BOUND LINE/TUNNEL.
- THE LONGITUDINAL SECTION (PROFILE) SHOWN IN THE DRAWING IS ALONG THE SOUTH BOUND LINE/TUNNEL.
- THE LOCATION OF CROSS-PASSES (WITH AND WITHOUT SUMPS) AND BUNDLES SHOWN IN THE DRAWING INDICATE ONLY AND THE CONTRACTOR PROFESSIONALS SHALL COMPLY WITH THE CONTRACT SPECIFICATIONS IN THIS REGARD. THE LOCATION OF SUMPS & PUMPS SHALL BE PROPOSED/ DETERMINED BY THE CONTRACTOR AFTER FINALIZING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SECOND LINE (NORTH BOUND LINE/TUNNEL).

TO SWARGATE

TO PCMC



Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING = 37854.357	37854.273	38045.273	379582.713	379584.009	379057.54	379461.013
	NORTHING = 20659.909	20659.909	207724.758	207724.758	206920.082	204845.462	204639.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	216° 08' 44"	59° 20' 22"	9° 44' 54"	18° 24' 57"	11° 28' 31"
RADIUS	500	500	500	500	500	513.55	513.55
CHORD LENGTH	35.984	268.524	655.081	243.319	35.022	42.276	57.112
CANT DIFFERENTIAL	0.05	0.05	0.05	0.05	0.05	0.05	0.05
OPERATING SPEED	85	70	70	70	85	70	85

CH	11+161.400	11+184.200	11+200.000	11+220.000	11+240.000	11+260.000	11+280.000	11+300.000	11+320.000	11+340.000	11+360.000	11+380.000	11+400.000	11+420.000	11+440.000	11+460.000	11+480.000	11+500.000	11+520.000	11+540.000	11+560.000		
LEVEL	520.290	520.272	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	
ROLL LEVELS	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	519.822	
GROUND LEVELS	520.290	520.272	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	520.537	
CHANGE																							

NOTES:

- THE ALIGNMENT DRAWING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED OUT.
- ALL THE CHANGES OF STATIONS CENTRE LINE, TUNNELS ETC MEASURED ALONG THE UP LINE OF THE TRACK OF SOUTH BOUND LINE/TUNNEL.
- THE LONGITUDINAL SECTION (PROFILES) SHOWN IN THE DRAWING IS ALONG THE SOUTH BOUND LINE/TUNNEL.
- THE PROFILE OF CROSS-PASSAGE (WITH AND WITHOUT SLOPES AND RUMPS) SHOWN IN THE DRAWING ARE INDICATIVE ONLY AND THE CONTRACTOR'S PROFILES/DESIGN SHALL COMPLY WITH THE CONTRACT SPECIFICATIONS IN THIS REGARD. THE LOCATION OF PUMPS & RUMPS SHALL BE DETERMINED BY THE CONTRACTOR AFTER FINALISING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SOUTH BOUND LINE/TUNNEL.

SYSTRA, AECOM, EGIS, RITES.

INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINHWAD TO SWARGATE

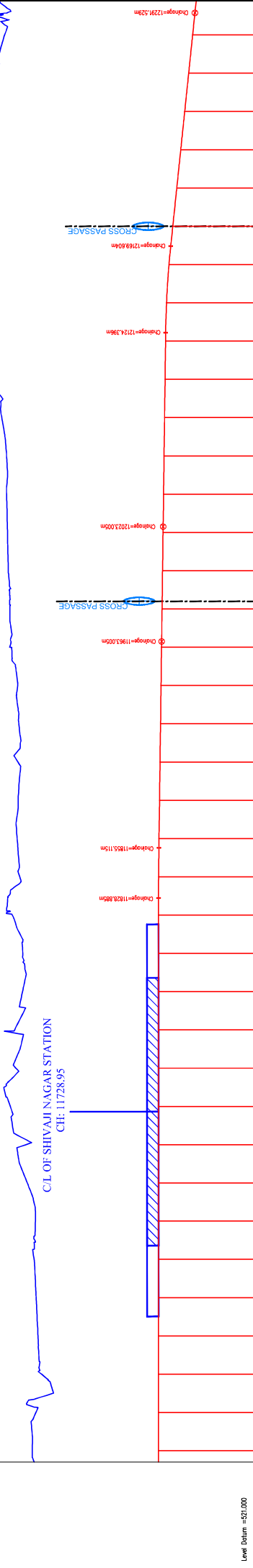
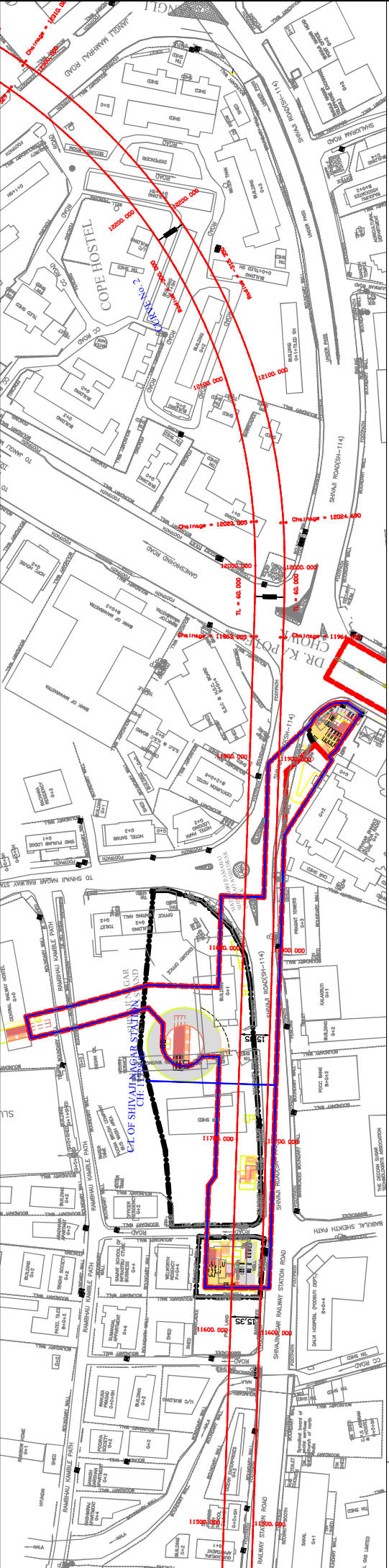
MAHARASHTRA METRO RAIL CORP. LTD. PUNE METRO

STATION: PUNE METRO LINE 1 PIMPRI-CHINHWAD TO SWARGATE
 TENDER DRAWING
 DRAWING TITLE: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION
 DATE: 10/05/2018
 SCALE (A1): 1:500
 DRAWING NO: PML1-IC-AL-UCC-0122

REV.	DATE	PREP.	APPROVED	DESCRIPTION

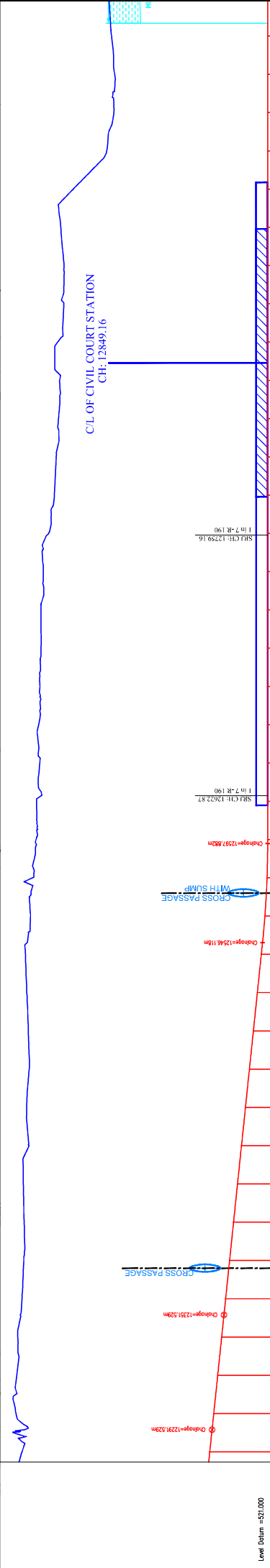
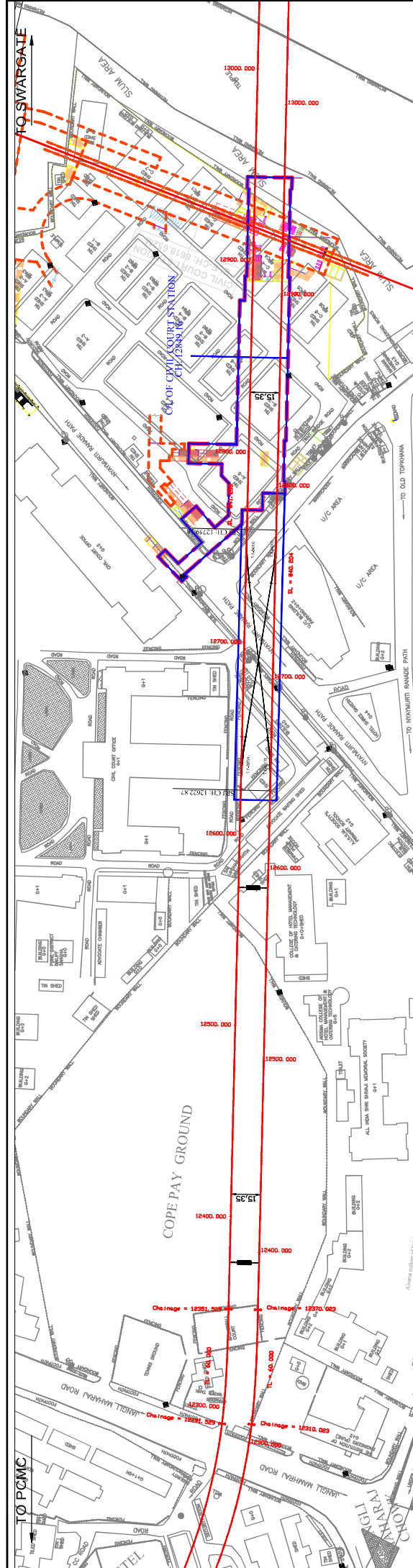
TO SWARGATE

TO PCMC



Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING 378944.357	378945.273	389345.273	379582.713	379584.009	379557.54	379461.013
NORTHING	206924.994	206924.194	206924.194	207724.758	207720.682	206845.462	206839.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	216° 08' 44"	59° 20' 22"	9° 40' 54"	18° 24' 57"	11° 28' 31"
RADIUS	300	300	300	300	300	313.35	513.35
CHORD LENGTH	315.994	268.524	655.981	243.319	33.022	42.276	57.112
CANT	0.05	0.05	1.05	0.05	0.05	0.00	0.00
CANT DEFLECT ENCY	76	88	73	88	76	84	76
OPERATING SPEED	85	70	70	70	85	70	85

Stationing	Ground Level	Proposed Level	Level Diff.
11540.000	550.468	534.000	-16.468
11545.000	550.022	534.000	-16.022
11550.000	549.853	534.000	-15.853
11555.000	549.729	534.000	-15.729
11560.000	549.656	534.000	-15.656
11565.000	549.528	534.000	-15.528
11570.000	549.400	534.000	-15.400
11575.000	549.274	534.000	-15.274
11580.000	549.142	534.000	-15.142
11585.000	549.009	534.000	-15.009
11590.000	548.876	534.000	-14.876
11595.000	548.742	534.000	-14.742
11600.000	548.605	534.000	-14.605
11605.000	548.468	534.000	-14.468
11610.000	548.329	534.000	-14.329
11615.000	548.187	534.000	-14.187
11620.000	548.042	534.000	-14.042
11625.000	547.894	534.000	-13.894
11630.000	547.742	534.000	-13.742
11635.000	547.586	534.000	-13.586
11640.000	547.426	534.000	-13.426
11645.000	547.262	534.000	-13.262
11650.000	547.094	534.000	-13.094
11655.000	546.922	534.000	-12.922
11660.000	546.746	534.000	-12.746
11665.000	546.566	534.000	-12.566
11670.000	546.382	534.000	-12.382
11675.000	546.194	534.000	-12.194
11680.000	546.002	534.000	-12.002
11685.000	545.806	534.000	-11.806
11690.000	545.606	534.000	-11.606
11695.000	545.402	534.000	-11.402
11700.000	545.194	534.000	-11.194
11705.000	544.982	534.000	-10.982
11710.000	544.766	534.000	-10.766
11715.000	544.546	534.000	-10.546
11720.000	544.322	534.000	-10.322
11725.000	544.094	534.000	-10.094
11730.000	543.862	534.000	-9.862
11735.000	543.626	534.000	-9.626
11740.000	543.386	534.000	-9.386
11745.000	543.142	534.000	-9.142
11750.000	542.894	534.000	-8.894
11755.000	542.642	534.000	-8.642
11760.000	542.386	534.000	-8.386
11765.000	542.126	534.000	-8.126
11770.000	541.862	534.000	-7.862
11775.000	541.594	534.000	-7.594
11780.000	541.322	534.000	-7.322
11785.000	541.046	534.000	-7.046
11790.000	540.766	534.000	-6.766
11795.000	540.482	534.000	-6.482
11800.000	540.194	534.000	-6.194
11805.000	539.902	534.000	-5.902
11810.000	539.606	534.000	-5.606
11815.000	539.306	534.000	-5.306
11820.000	539.002	534.000	-5.002
11825.000	538.694	534.000	-4.694
11830.000	538.382	534.000	-4.382
11835.000	538.066	534.000	-4.066
11840.000	537.746	534.000	-3.746
11845.000	537.422	534.000	-3.422
11850.000	537.094	534.000	-3.094
11855.000	536.762	534.000	-2.762
11860.000	536.426	534.000	-2.426
11865.000	536.086	534.000	-2.086
11870.000	535.742	534.000	-1.742
11875.000	535.394	534.000	-1.394
11880.000	535.042	534.000	-1.042
11885.000	534.686	534.000	-0.686
11890.000	534.326	534.000	-0.326
11895.000	533.962	534.000	0.038
11900.000	533.594	534.000	0.406
11905.000	533.222	534.000	0.778
11910.000	532.846	534.000	1.154
11915.000	532.466	534.000	1.534
11920.000	532.082	534.000	1.918
11925.000	531.694	534.000	2.306
11930.000	531.302	534.000	2.698
11935.000	530.906	534.000	3.094
11940.000	530.506	534.000	3.494
11945.000	530.102	534.000	3.898
11950.000	529.694	534.000	4.306
11955.000	529.282	534.000	4.718
11960.000	528.866	534.000	5.134
11965.000	528.446	534.000	5.554
11970.000	528.022	534.000	5.978
11975.000	527.594	534.000	6.406
11980.000	527.162	534.000	6.838
11985.000	526.726	534.000	7.274
11990.000	526.286	534.000	7.714
11995.000	525.842	534.000	8.158
12000.000	525.394	534.000	8.606
12005.000	524.942	534.000	9.058
12010.000	524.486	534.000	9.514
12015.000	524.026	534.000	9.974
12020.000	523.562	534.000	10.438
12025.000	523.094	534.000	10.906
12030.000	522.622	534.000	11.378
12035.000	522.146	534.000	11.854
12040.000	521.666	534.000	12.334
12045.000	521.182	534.000	12.818
12050.000	520.694	534.000	13.306
12055.000	520.202	534.000	13.798
12060.000	519.706	534.000	14.294
12065.000	519.206	534.000	14.794
12070.000	518.702	534.000	15.298
12075.000	518.194	534.000	15.806
12080.000	517.682	534.000	16.318
12085.000	517.166	534.000	16.834
12090.000	516.646	534.000	17.354
12095.000	516.122	534.000	17.878
12100.000	515.594	534.000	18.406
12105.000	515.062	534.000	18.938
12110.000	514.526	534.000	19.474
12115.000	513.986	534.000	20.014
12120.000	513.442	534.000	20.558
12125.000	512.894	534.000	21.106
12130.000	512.342	534.000	21.658
12135.000	511.786	534.000	22.214
12140.000	511.226	534.000	22.774
12145.000	510.662	534.000	23.338
12150.000	510.094	534.000	23.906
12155.000	509.522	534.000	24.478
12160.000	508.946	534.000	25.054
12165.000	508.366	534.000	25.634
12170.000	507.782	534.000	26.218
12175.000	507.194	534.000	26.806
12180.000	506.602	534.000	27.398
12185.000	506.006	534.000	27.994
12190.000	505.406	534.000	28.594
12195.000	504.802	534.000	29.198
12200.000	504.194	534.000	29.806
12205.000	503.582	534.000	30.418
12210.000	502.966	534.000	31.034
12215.000	502.346	534.000	31.654
12220.000	501.722	534.000	32.278
12225.000	501.094	534.000	32.906
12230.000	500.462	534.000	33.538
12235.000	499.826	534.000	34.174
12240.000	499.186	534.000	34.814
12245.000	498.542	534.000	35.458
12250.000	497.894	534.000	36.106
12255.000	497.242	534.000	36.758
12260.000	496.586	534.000	37.414
12265.000	495.926	534.000	38.074
12270.000	495.262	534.000	38.738
12275.000	494.594	534.000	39.406
12280.000	493.922	534.000	40.078
12285.000	493.246	534.000	40.754
12290.000	492.566	534.000	41.434
12295.000	491.882	534.000	42.118
12300.000	491.194	534.000	42.806
12305.000	490.502	534.000	43.5
12310.000	489.806	534.000	44.198
12315.000	489.106	534.000	44.898
12320.000	488.402	534.000	45.6
12325.000	487.694	534.000	46.306
12330.000	486.982	534.000	47.014
12335.000	486.266	534.000	47.724
12340.000	485.546	534.000	48.438
12345.000	484.822	534.000	49.154
12350.000	484.094	534.000	49.874
12355.000	483.362	534.000	50.598
12360.000	482.626	534.000	51.326
12365.000	481.886	534.000	52.058
12370.000	481.142	534.000	52.794
12375.000	480.394	534.000	53.534
12380.000	479.642	534.000	54.278
12385.000	478.886	534.000	55.026
12390.000	478.126	534.000	55.778
12395.000	477.362	534.000	56.534
12400.000	476.594	534.000	57.294
12405.000	475.822	534.000	58.058
12410.000	475.046	534.000	58.826
12415.000	474.266	534.000	59.598
12420.000	473.482	534.000	60.374
12425.000	472.694	534.000	61.154
12430.000	471.902	534.000	61.938
12435.000	471.106	534.000	62.726
12440.000	470.306	534.000	63.518
12445.000	469.502	534.000	64.314
12450.000	468.694	534.000	65.114
12455.000	467.882	534.000	65.918
12460.000	467.066	534.000	66.726
12465.000	466.246	534.000	67.538
12470.000	465.422	534.000	68.354
12475.000	464.594	534.000	69.174
12480.000	463.762	534.000	69.998
12485.000	462.926	534.000	70.826
12490.000	462.086	534.000	71.658
12495.000	461.242	534.000	72.494
12500.000	460.394	534.000	73.334
12505.000	459.542	534.000	74.178
12510.000	458.686	534.000	75.026
12515.000	457.826	534.000	75.878
12520.000	456.962	534.000	76.734
12525.000	456.094	534.000	77.594
12530.000	455.222	534.000	78.458
12535.000	454.346	534.000	79.326
12540.000	453.466	534.000	80.198
12545.000	452.582	534.000	81.074
12550.000	451.694	534.000	81.954
12555.000	450.802	534.000	82.838
12560.000	449.906	534.000	83.726
12565.000	449.006	534.000	84.618
12570.000	448.102	534.00	

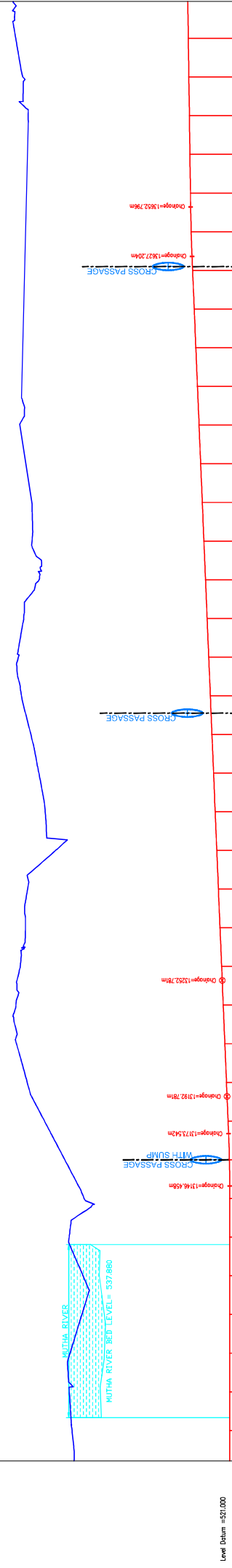
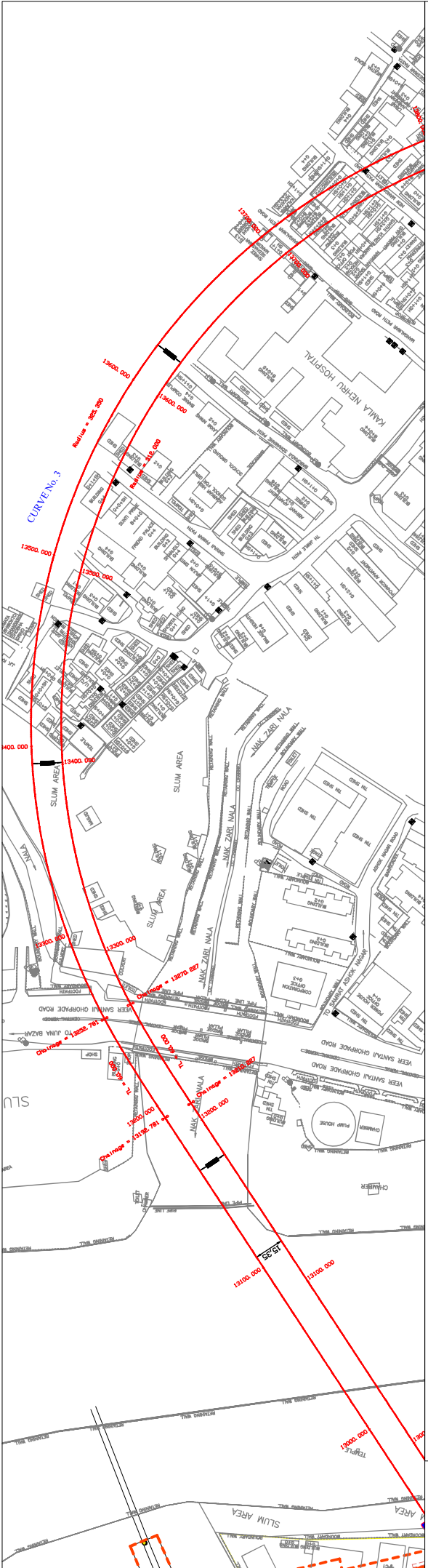


Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX EASTING	37884.557	37874.37	38945.273	37952.713	37954.009	37857.54	379461.013
COORDINATE OF APPEX NORTHING	205924.994	204923.194	204859.909	204724.758	204700.692	204645.462	204632.417
DEFLECTION ANGLE	9° 51' 15"	62° 14' 36"	126° 09' 44"	59° 50' 22"	9° 42' 34"	18° 34' 57"	11° 58' 31"
RADIUS	500	300	243.55	500	500	313.55	513.55
DEFLECTION ANGLE	31.594	268.524	645.691	253.219	35.022	42.276	57.112
CURVE LENGTH	95	105	105	105	85	85	90
CANT DEFLECTION	76	88	70	70	85	70	85
OPERATING SPEED	85	70	70	70	85	70	85

Station	12280.000	12300.000	12320.000	12340.000	12360.000	12380.000	12400.000	12420.000	12440.000	12460.000	12480.000	12500.000	12520.000	12540.000	12560.000	12580.000	12600.000	12620.000	12640.000	12660.000	12680.000	12700.000	12720.000	12740.000	12760.000	12780.000	12800.000	12820.000	12840.000	12860.000	12880.000	12900.000	12920.000	12940.000	12960.000	12980.000	13000.000	13020.000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
LEVEL DIFF.	-4.518	-5.829	-6.241	-6.806	-7.252	-7.966	-8.548	-9.054	-9.589	-10.107	-10.611	-11.107	-11.594	-12.071	-12.538	-13.008	-13.475	-13.939	-14.400	-14.858	-15.314	-15.767	-16.217	-16.664	-17.108	-17.549	-17.987	-18.422	-18.853	-19.281	-19.705	-20.125	-20.542	-20.956	-21.367	-21.775	-22.180	-22.582	-22.981	-23.377	-23.770	-24.160	-24.547	-24.931	-25.312	-25.690	-26.065	-26.437	-26.806	-27.172	-27.535	-27.895	-28.252	-28.606	-28.957	-29.305	-29.650	-29.992	-30.341	-30.687	-31.030	-31.370	-31.707	-32.041	-32.372	-32.700	-33.025	-33.347	-33.666	-33.982	-34.295	-34.605	-34.912	-35.216	-35.517	-35.815	-36.110	-36.402	-36.691	-36.978	-37.262	-37.543	-37.821	-38.096	-38.368	-38.637	-38.903	-39.166	-39.426	-39.683	-39.937	-40.188	-40.436	-40.681	-40.923	-41.162	-41.399	-41.633	-41.864	-42.092	-42.317	-42.540	-42.761	-42.979	-43.194	-43.406	-43.615	-43.821	-44.025	-44.226	-44.424	-44.619	-44.812	-45.002	-45.189	-45.373	-45.554	-45.732	-45.907	-46.080	-46.250	-46.418	-46.583	-46.745	-46.904	-47.061	-47.215	-47.366	-47.514	-47.659	-47.802	-47.942	-48.080	-48.215	-48.347	-48.476	-48.602	-48.725	-48.845	-48.962	-49.076	-49.187	-49.295	-49.400	-49.502	-49.601	-49.697	-49.790	-49.880	-49.967	-50.051	-50.132	-50.210	-50.285	-50.357	-50.426	-50.492	-50.555	-50.615	-50.672	-50.726	-50.777	-50.825	-50.870	-50.912	-50.951	-50.987	-51.020	-51.050	-51.077	-51.101	-51.121	-51.138	-51.152	-51.163	-51.171	-51.176	-51.178	-51.177	-51.173	-51.166	-51.155	-51.140	-51.122	-51.101	-51.077	-51.050	-51.020	-50.987	-50.951	-50.912	-50.870	-50.825	-50.777	-50.726	-50.672	-50.615	-50.555	-50.492	-50.426	-50.357	-50.285	-50.210	-50.132	-50.051	-49.967	-49.880	-49.790	-49.697	-49.601	-49.502	-49.400	-49.295	-49.187	-49.076	-48.962	-48.845	-48.725	-48.602	-48.476	-48.347	-48.215	-48.080	-47.942	-47.802	-47.659	-47.514	-47.366	-47.215	-47.061	-46.907	-46.750	-46.590	-46.427	-46.261	-46.092	-45.920	-45.745	-45.567	-45.386	-45.202	-45.015	-44.825	-44.632	-44.436	-44.237	-44.035	-43.830	-43.622	-43.411	-43.197	-42.980	-42.760	-42.537	-42.311	-42.082	-41.850	-41.615	-41.377	-41.136	-40.892	-40.645	-40.395	-40.142	-39.886	-39.627	-39.365	-39.100	-38.832	-38.561	-38.287	-38.011	-37.732	-37.450	-37.165	-36.877	-36.586	-36.292	-36.000	-35.705	-35.407	-35.106	-34.802	-34.495	-34.185	-33.872	-33.556	-33.237	-32.915	-32.590	-32.262	-31.931	-31.597	-31.260	-30.920	-30.577	-30.231	-29.882	-29.530	-29.175	-28.817	-28.456	-28.092	-27.725	-27.355	-26.982	-26.606	-26.227	-25.845	-25.460	-25.072	-24.681	-24.287	-23.890	-23.490	-23.087	-22.681	-22.272	-21.860	-21.445	-21.027	-20.606	-20.182	-19.755	-19.325	-18.892	-18.456	-18.017	-17.575	-17.130	-16.682	-16.231	-15.777	-15.320	-14.860	-14.397	-13.931	-13.462	-12.990	-12.515	-12.037	-11.556	-11.072	-10.585	-10.095	-9.602	-9.106	-8.607	-8.105	-7.600	-7.092	-6.581	-6.067	-5.550	-5.030	-4.507	-3.981	-3.452	-2.920	-2.385	-1.847	-1.306	-0.762	-0.215	0.326	0.863	1.396	1.925	2.450	2.971	3.488	4.001	4.510	5.015	5.516	6.013	6.506	6.995	7.480	7.961	8.438	8.911	9.380	9.845	10.306	10.763	11.216	11.665	12.110	12.551	12.988	13.421	13.850	14.275	14.696	15.113	15.526	15.935	16.340	16.741	17.138	17.531	17.920	18.305	18.686	19.063	19.436	19.805	20.170	20.531	20.888	21.241	21.590	21.935	22.276	22.613	22.946	23.275	23.600	23.921	24.238	24.551	24.860	25.165	25.466	25.763	26.056	26.345	26.630	26.911	27.188	27.461	27.730	28.000	28.265	28.525	28.781	29.034	29.283	29.528	29.770	30.009	30.245	30.478	30.707	30.932	31.154	31.372	31.586	31.797	32.004	32.207	32.406	32.601	32.792	32.979	33.162	33.341	33.516	33.687	33.854	34.017	34.176	34.331	34.482	34.629	34.772	34.911	35.046	35.177	35.304	35.427	35.546	35.661	35.772	35.879	35.982	36.081	36.176	36.267	36.354	36.437	36.516	36.591	36.662	36.729	36.792	36.851	36.906	36.957	37.004	37.047	37.086	37.121	37.152	37.179	37.202	37.221	37.236	37.247	37.254	37.257	37.256	37.251	37.242	37.229	37.212	37.191	37.166	37.138	37.106	37.070	37.030	36.987	36.941	36.892	36.840	36.785	36.727	36.666	36.602	36.535	36.465	36.392	36.316	36.237	36.155	36.070	35.982	35.891	35.797	35.700	35.600	35.497	35.391	35.282	35.170	35.055	34.937	34.816	34.692	34.565	34.435	34.302	34.166	34.027	33.885	33.740	33.592	33.441	33.287	33.130	32.970	32.807	32.641	32.472	32.300	32.125	31.947	31.766	31.582	31.395	31.205	31.012	30.816	30.617	30.415	30.210	30.002	29.791	29.577	29.360	29.140	28.917	28.691	28.462	28.230	28.000	27.765	27.526	27.283	27.037	26.788	26.536	26.281	26.023	25.762	25.498	25.231	24.961	24.688	24.412	24.133	23.851	23.566	23.278	22.987	22.693	22.396	22.096	21.793	21.487	21.178	20.866	20.551	20.233	19.912	19.588	19.261	18.931	18.598	18.262	17.923	17.581	17.236	16.888	16.537	16.183	15.826	15.466	15.103	14.737	14.368	13.996	13.621	13.243	12.862	12.478	12.091	11.701	11.308	10.912	10.513	10.111	9.706	9.298	8.887	8.473	8.056	7.636	7.213	6.787	6.358	5.926	5.491	5.053	4.612	4.168	3.721	3.271	2.818	2.362	1.903	1.441	0.976	0.508	0.037	-0.438	-0.909	-1.376	-1.839	-2.298	-2.753	-3.204	-3.651	-4.094	-4.533	-4.968	-5.400	-5.829	-6.255	-6.678	-7.097	-7.512	-7.923	-8.330	-8.733	-9.132	-9.527	-9.918	-10.305	-10.688	-11.067	-11.442	-11.813	-12.180	-12.543	-12.902	-13.257	-13.608	-13.955	-14.298	-14.637	-14.972	-15.303	-15.630	-15.953	-16.272	-16.587	-16.898	-17.205	-17.508	-17.807	-18.102	-18.393	-18.680	-18.963	-19.242	-19.517	-19.788	-20.055	-20.318	-20.577	-20.832	-21.083	-21.330	-21.573	-21.812	-22.047	-22.278	-22.505	-22.728	-22.947	-23.162	-23.373	-23.580	-23.783	-23.982	-24.177	-24.368	-24.555	-24.738	-24.917	-25.092	-25.263	-25.430	-25.593	-25.752	-25.907	-26.058	-26.205	-26.348	-26.487	-26.622	-26.753	-26.880	-26.993	-27.102	-27.207	-27.308	-27.405	-27.498	-27.587	-27.672	-27.753	-27.830	-27.903	-27.972	-28.037	-28.098	-28.155	-28.208	-28.257	-28.302	-28.343	-28.380	-28.413	-28.442	-28.467	-28.488	-28.505	-28.518	-28.527	-28.532	-28.533	-28.530	-28.523	-28.512	-28.497	-28.479	-28.457	-28.431	-28.401	-28.368	-28.332	-28.293	-28.251	-28.206	-28.158	-28.107	-28.053	-27.996	-27.936	-27.873	-27.807	-27.738	-27.666	-27.591	-27.513	-27.432	-27.348	-27.261	-27.171	-27.078	-26.982	-26.883	-26.781	-26.676	-26.568	-26.457	-26.343	-26.226	-26.106	-25.983	-25.857	-25.728	-25.596	-25.461	-25.323	-25.182	-25.038	-24.891	-24.741	-24.588	-24.432	-24.273	-24.111	-23.946	-23.778	-23.607	-23.433	-23.256	-23.076	-22.893	-22.707	-22.518	-22.326	-22.131	-21.933	-21.732	-21.528	-21.321	-21.111	-20.898	-20.682	-20.463	-20.241	-20.016	-19.788	-19.557	-19.323	-19.086	-18.846	-18.603	-18.357	-18.108	-17.856	-17.601	-17.343	-17.082	-16.818	-16.551	-16.281	-16.008	-15.732	-15.453	-15.171	-14.886	-14.598	-14.307	-14.013	-13.716	-13.416	-13.113	-12.807	-12.500	-12.190	-11.877	-11.561	-11.242	-10.920	-10.595	-10.267	-9.936	-9.602	-9.265	-8.925	-8.582	-8.236

TO SWARGATE

TO PCMC



Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING 378944.357	378945.273	380945.273	379582.713	379584.009	379057.54	379461.013
COORDINATE OF APPEX	NORTHING 200624.904	200624.194	200774.758	200774.758	200774.758	200684.462	200683.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	12° 08' 44"	59° 20' 22"	9° 40' 54"	18° 24' 57"	11° 04' 31"
RADIUS	500	500	500	500	500	500	500
CURVE LENGTH	31.994	268.524	655.081	2.83.319	35.022	42.276	57.112
CANT DEFLECTION	0.05	0.05	0.05	0.05	0.05	0.05	0.05
OPERATING SPEED	85	70	70	70	85	70	85

Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING 378944.357	378945.273	380945.273	379582.713	379584.009	379057.54	379461.013
COORDINATE OF APPEX	NORTHING 200624.904	200624.194	200774.758	200774.758	200774.758	200684.462	200683.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	12° 08' 44"	59° 20' 22"	9° 40' 54"	18° 24' 57"	11° 04' 31"
RADIUS	500	500	500	500	500	500	500
CURVE LENGTH	31.994	268.524	655.081	2.83.319	35.022	42.276	57.112
CANT DEFLECTION	0.05	0.05	0.05	0.05	0.05	0.05	0.05
OPERATING SPEED	85	70	70	70	85	70	85

SYSTRA, AECOM, EGIS, RITES.

INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

MAHARASHTRA METRO RAIL CORP. LTD. PUNE METRO

PROJECT: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

STATION: TENDER DRAWING

DATE: 10/05/2018

DRAWING TITLE: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION

SCALE (A1): 1:500

DRAWING NO: PML1-ICAL-UCC-0125

REV. DATE [PREP. APPROVED]

DESCRIPTION

APPROVED BY

CHECKED BY

DESIGN BY

DRAWN BY

NAME SIGN

PROJECT

GENERAL ARRANGEMENT DRAWING

ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION

THE ALIGNMENT DRAWING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS, SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED OUT.

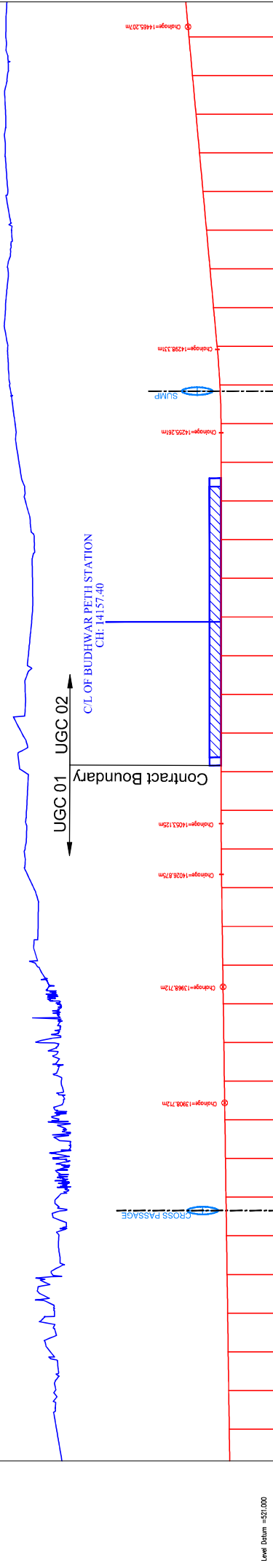
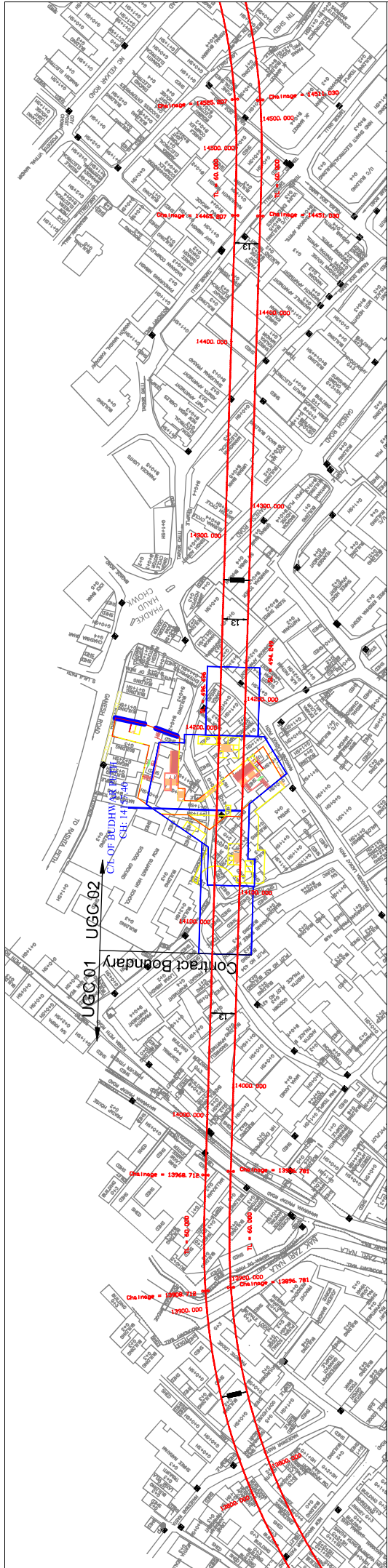
ALL THE DIMENSIONS OF STATIONS, CENTRE LINE, TUNNELS, ETC. SHALL BE MEASURED ALONG THE UP LINE OF THE TRACK OF SOUTH-BOUND LINE/TUNNEL.

THE LONGITUDINAL SECTION (PROFILE) SHOWN IN THE DRAWING IS ALONG THE SOUTH-BOUND LINE/TUNNEL.

DRAWINGS INDICATIVE ONLY AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF SWAMPS & PUMPS SHALL BE PROPOSED/ DETERMINED BY THE CONTRACTOR AFTER FINALIZING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SECOND FLOOR/ RAMP/ RAIL/ TUNNEL.

TO SWARGATE

TO PCMC



Curve No.	1	2	3	4	5	6	7
COORDINATE OF APPEX	EASTING 378945.273	379584.009	379584.009	379584.009	379584.009	379584.009	379584.009
NORTHING	206859.909	207724.758	207724.758	207724.758	207724.758	206859.909	206859.909
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	216° 08' 44"	59° 20' 22"	9° 40' 54"	18° 24' 57"	11° 28' 31"
RADIUS	500	500	500	500	500	500	500
CHORD LENGTH	315.994	268.524	655.081	243.319	35.022	42.276	57.112
CANT DEFLECTION	0.05	0.05	0.05	0.05	0.05	0.05	0.05
OPERATING SPEED	85	70	70	70	70	70	85

Station	1	2	3	4	5	6	7
Horizontal Alignment	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000
Vertical Alignment	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000
LEVEL DIFF.	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Roll LEVELS	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000
Ground LEVELS	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000	1440.000
Changeage	0.000	0.000	0.000	0.000	0.000	0.000	0.000

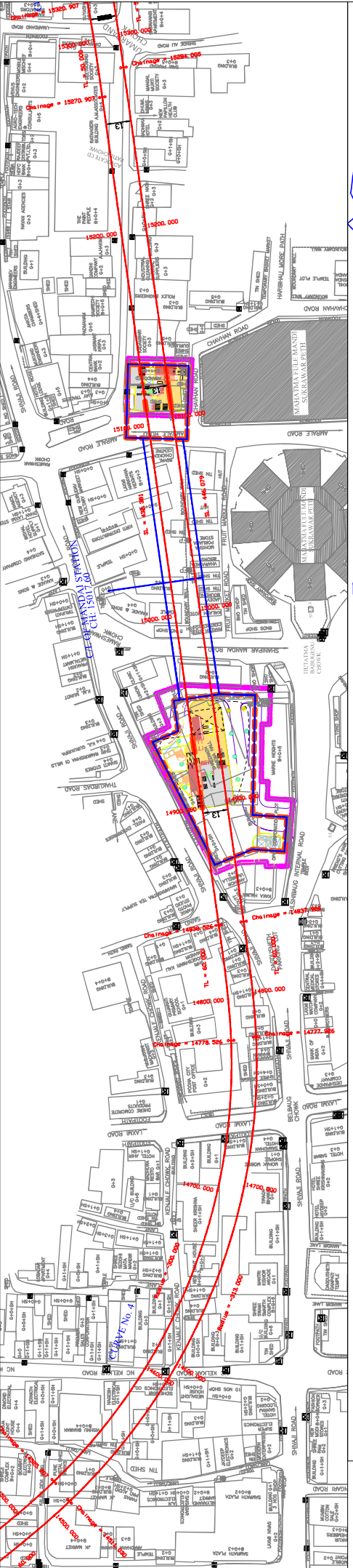
- NOTES:
- THE ALIGNMENT DRAWING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS, SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED.
 - ALL THE CHANGES OF STATIONS CENTRE LINE, TUNNELS ETC. MEASURED ALONG THE UP LINE.
 - THE TRACK OF SOUTH-BOUND LINE/TUNNEL.
 - THE LONGITUDINAL SECTION (PROFILE) SHOWN IN THE DRAWING IS ALONG THE SOUTH-BOUND LINE/TUNNEL.
 - CROSS-PASSAGES (OVER AND UNDER CROSSING) AND PUMPS LOCATION IN THE DRAWING ARE INDICATIVE ONLY AND THE CONTRACTOR PROPOSALS/DESIGN SHALL COMPLY WITH THE CONTRACT SPECIFICATIONS IN THIS REGARD. THE LOCATION OF Sumps & PUMPS SHALL BE PROPOSED/ DETERMINED BY THE CONTRACTOR AFTER FINALIZING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SECOND (UP/ADDITIONAL) BOUND LINE/TUNNEL.

REV.	DATE	PREP.	APPROVED	DESCRIPTION

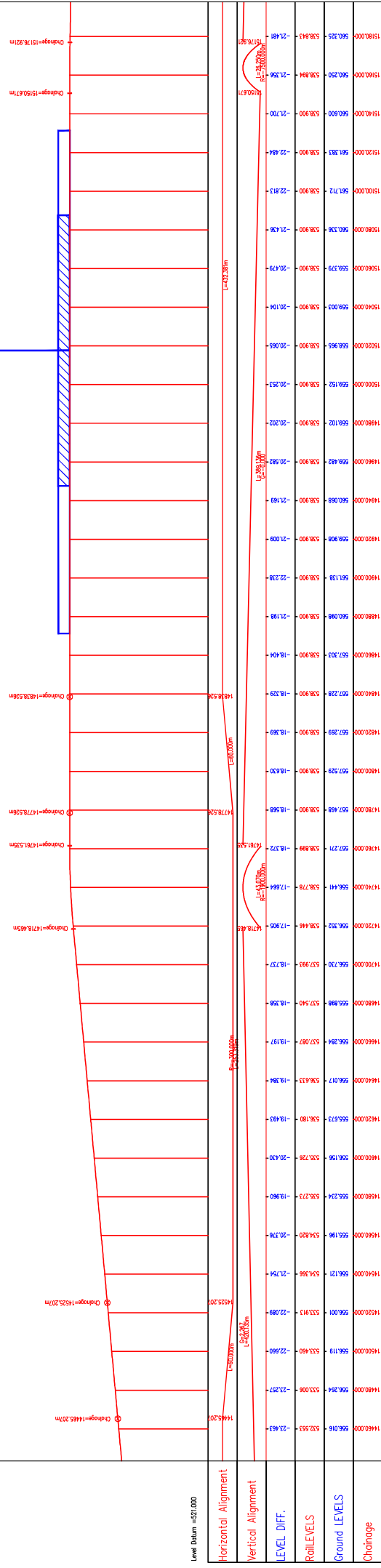
SYSTRA, AECOM, EGIS, RITES.
INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

TO SWARGATE

TO PCMC



C/L OF MANDALI STATION
CH: 15017.60



CURVE NO.	EASTING	NORTHING	DEFLECTION ANGLE	RADIUS	CHORD LENGTH	CURVE LENGTH	CANT	CANT DIFFERENTIAL	OPERATING SPEED
1	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
2	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
3	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
4	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
5	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
6	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			
7	378574.37	206855.273	379382.713	379594.009	379507.54	379461.013			

SYSTRA, AECOM, EGIS, RITES.

INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

MAHARASHTRA METRO RAIL CORP. LTD. PUNE METRO

STATION: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

TENDER DRAWING: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION

DATE: 10/05/2018

SCALE (A1): 1:500

PROJECT: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

TITLE: GENERAL ARRANGEMENT DRAWING

DRAWING NO: PML1-IC-AL-UCC-0222

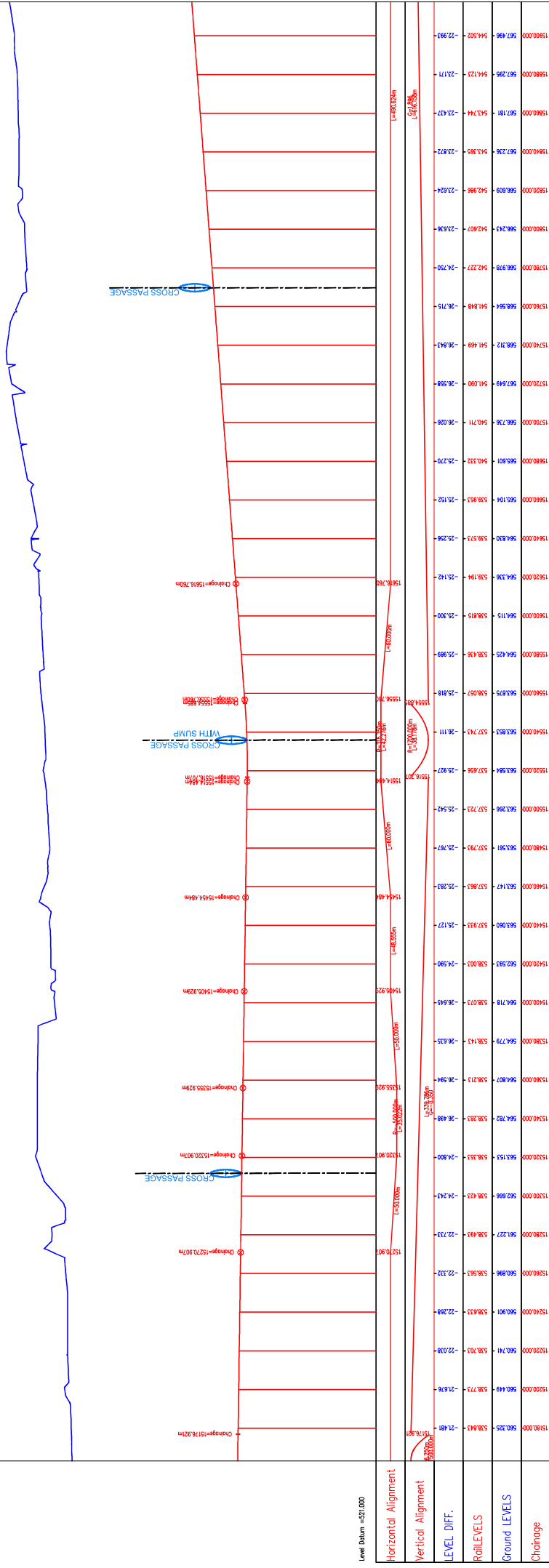
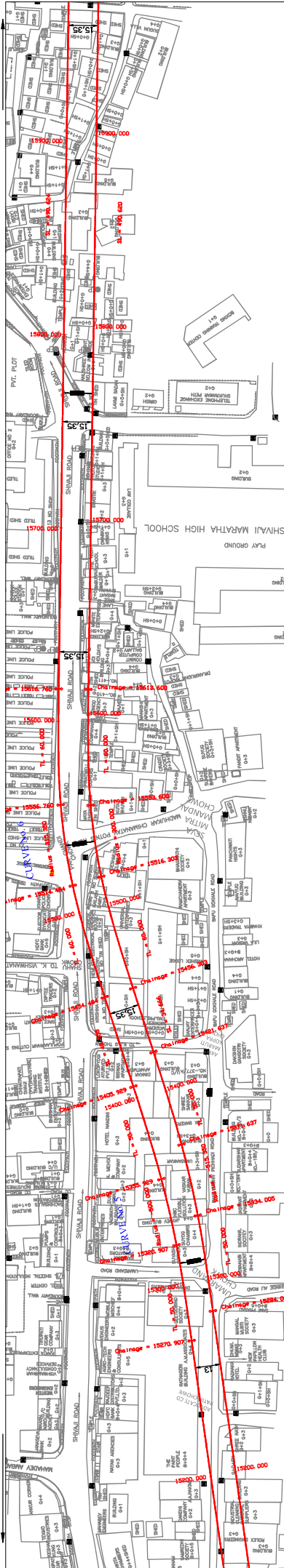
REV.	DATE	PREP.	APPROVED	DESCRIPTION

NOTES:

- THE ALIGNMENT DRAWING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS SURVEY AND PHOTOGRAPHIC INVESTIGATION CARRIED OUT.
- ALL THE CHANGES OF STATIONS CENTRE LINE, TUNNELS ETC MEASURED ALONG THE UP LINE OF THE TRACK OF SOUTH BOUND LINE/TUNNEL.
- THE LONGITUDINAL SECTION (PROFILE) SHOWN IN THE DRAWING IS ALONG THE SOUTH BOUND LINE/TUNNEL.
- LOCATIONS OF CROSS-PASSAGE (WITH AND WITHOUT SUMPS) AND RUMPS SHOWN IN THE DRAWING ARE INDICATIVE ONLY AND THE CONTRACTOR'S PROPOSAL/DESIGN SHALL COMPLY WITH THE CONTRACT SPECIFICATIONS IN THIS REGARD. THE LOCATION OF SUMPS & RUMPS SHALL BE DETERMINED BY THE CONTRACTOR AFTER FINALISING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SOUTH BOUND/NORTH BOUND LINE/TUNNEL.

TO SWARGATE

TO PCMC



CURVE NO.	1	2	3	4	5	6	7
COORDINATE OF APPEX EASTING	37894.357	37894.273	38045.273	37958.713	37958.009	37957.54	37946.103
COORDINATE OF APPEX NORTHING	206824.984	206823.194	206859.909	207274.758	207270.682	206845.462	206639.417
DEFLECTION ANGLE	9° 21' 15"	62° 14' 36"	216° 08' 44"	59° 20' 22"	9° 40' 54"	18° 34' 57"	11° 38' 31"
RADIUS (M)	300	300	300	300	300	313.35	513.35
CHORD LENGTH	35.984	268.524	655.681	253.319	35.022	42.276	57.112
CANT	95	105	105	105	95	100	80
CANT DEFLECT ENCY	76	88	73	88	76	84	76
OPERATING SPEED	85	70	70	70	85	70	85

SYSTRA, AECOM, EGIS, RITES.

INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

MAHARASHTRA METRO RAIL CORP. LTD. PUNE METRO

STATION: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

TENDER DRAWING

DATE: 10/05/2018

SCALE: (A1) 1:500

DRAWING TITLE: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION

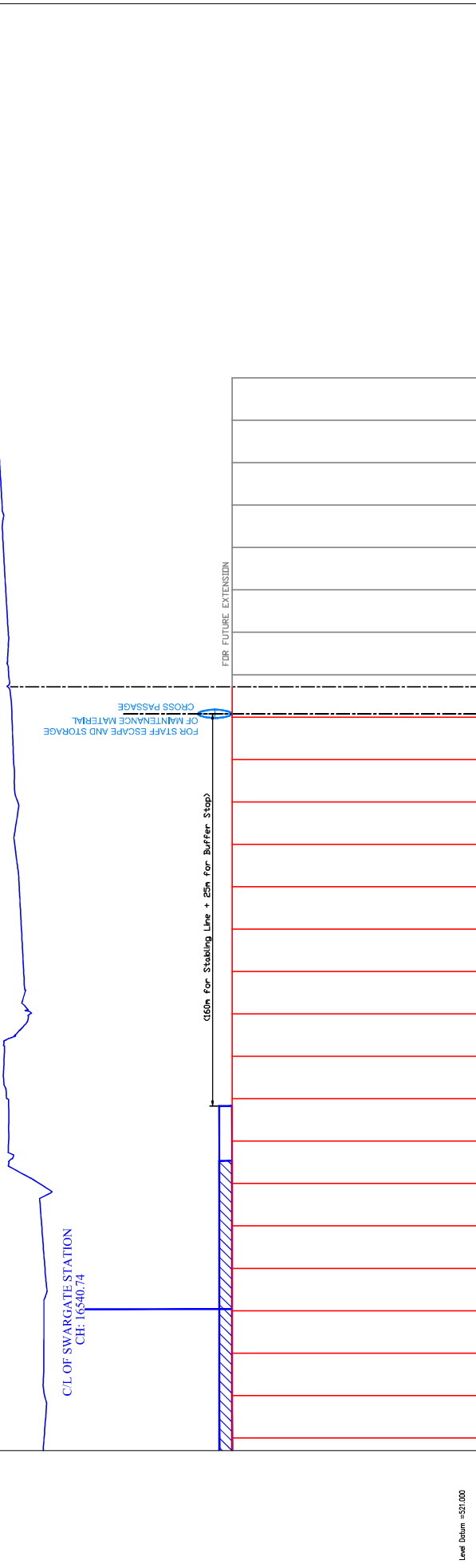
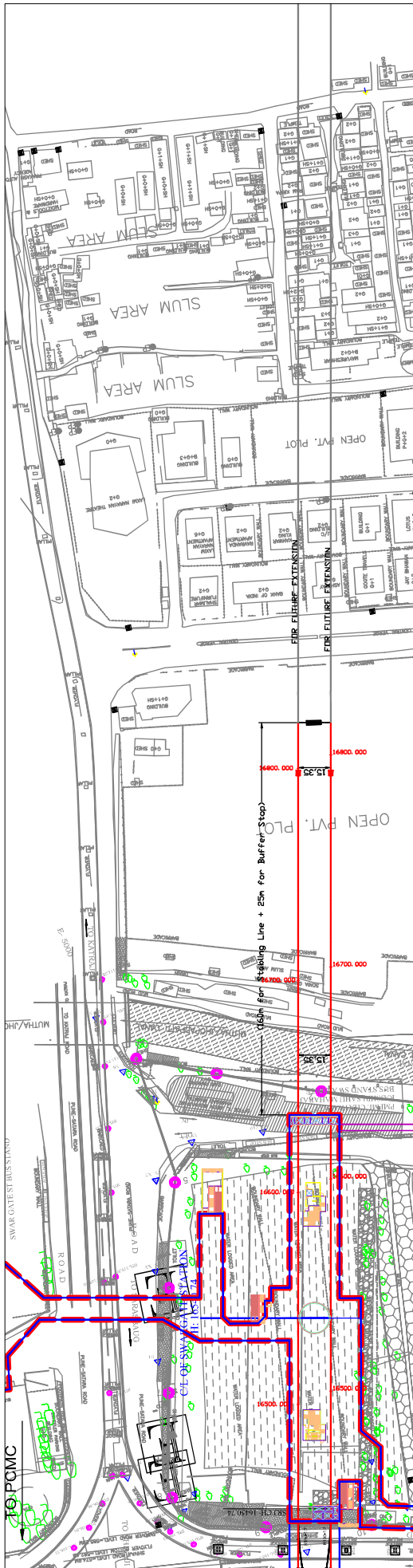
DRAWING NO: PML1-IC-AL-LGCC-0223

REV.	DATE	PREP.	APPROVED	DESCRIPTION

NOTES:

- THE ALIGNMENT DRAWING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR NEED TO DEVELOP DETAILED ALIGNMENT DRAWING BASED ON THE ABOVE AND CONSIDERING THE TOPOGRAPHIC SURVEY, CONDITIONS OF BUILDINGS SURVEY AND GEO-TECHNICAL INVESTIGATION CARRIED OUT.
- ALL THE CHANGES OF STATIONS CENTRE LINE, TUNNELS ETC. MEASURED ALONG THE UP LINE OF THE TRACK OF SOUTH BOUND LINE/ TUNNEL.
- THE LONGITUDINAL SECTION (PROFILE) SHOWN IN THE DRAWING IS ALONG THE SOUTH BOUND LINE/ TUNNEL.
- THE LOCATION OF CROSS-PASSAGES (WITH AND WITHOUT SUMPS AND PUMPS) SHOWN IN THE DRAWING ARE INDICATIVE ONLY AND THE CONTRACTOR'S PROPOSAL/DESIGN SHALL COMPLY WITH THE CONTRACT SPECIFICATIONS IN THIS REGARD. THE LOCATION OF SUMPS & PUMPS SHALL BE PROPOSED/ DETERMINED BY THE CONTRACTOR AFTER FINALISING THE ALIGNMENT INCLUDING THE VERTICAL PROFILE OF THE SECOND UNDERPASS BOUND LINE/ TUNNEL.

TO SWARGATE



Station	Ground Level (m)	Rail Level (m)	Ground Level (m)	Rail Level (m)
16490+00	52.44	52.44	52.44	52.44
16495+00	52.44	52.44	52.44	52.44
16500+00	52.44	52.44	52.44	52.44
16505+00	52.44	52.44	52.44	52.44
16510+00	52.44	52.44	52.44	52.44
16515+00	52.44	52.44	52.44	52.44
16520+00	52.44	52.44	52.44	52.44
16525+00	52.44	52.44	52.44	52.44
16530+00	52.44	52.44	52.44	52.44
16535+00	52.44	52.44	52.44	52.44
16540+00	52.44	52.44	52.44	52.44
16545+00	52.44	52.44	52.44	52.44
16550+00	52.44	52.44	52.44	52.44
16555+00	52.44	52.44	52.44	52.44
16560+00	52.44	52.44	52.44	52.44
16565+00	52.44	52.44	52.44	52.44
16570+00	52.44	52.44	52.44	52.44
16575+00	52.44	52.44	52.44	52.44
16580+00	52.44	52.44	52.44	52.44
16585+00	52.44	52.44	52.44	52.44
16590+00	52.44	52.44	52.44	52.44

NOTES:

- THE DRAWING IS FOR INFORMATION ONLY. THE CONTRACTOR NEED TO DO THE FIELD SURVEY AND VERIFY THE DATA BEFORE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA AND CONSIDER THE NECESSARY SURVEY CONDITIONS OF BUILDINGS SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED OUT BY HIM.
- ALL THE CHANGES OF STATIONS, TUNNELS ETC MEASURED ALONG THE UP LINE SHALL BE INDICATED BY A RED LINE.
- THE LONGITUDINAL SECTION (PROFILES) SHOWN IN THE DRAWING IS ALONG THE SOUTH BOUND LINE/TUNNEL.
- THE LOCATION OF CROSS-PASSAGES (WITH AND WITHOUT SHIMPS AND PUMPS) SHOWN IN THE DRAWING ARE INDICATIVE ONLY AND THE CONTRACTOR'S PHOTOGRAPHER/DESIGN SHALL COMPLY WITH THE REQUIREMENTS OF THE CONTRACT AFTER FINALIZING THE ALIGNMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA AND CONSIDER THE NECESSARY SURVEY CONDITIONS OF BUILDINGS SURVEY AND GEOTECHNICAL INVESTIGATION CARRIED OUT BY HIM.

SYSTRA, AECOM, EGIS, RITES.
INTERIM CONSULTANCY SERVICES FOR PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE

MAHARASHTRA METRO RAIL CORP. LTD.
PUNE METRO

DATE: 10/05/2018
 SCALE: (A1)
 1:500

PROJECT: PUNE METRO LINE 1 PIMPRI-CHINCHWAD TO SWARGATE
 STATION: TENDER DRAWING
 DRAWING TITLE: ARRANGEMENT OF PLAN AND LONGITUDINAL SECTION
 TITLE: GENERAL ARRANGEMENT DRAWING
 DRAWING NO: PML1-IC-AL-UCC-0225

REV.	DATE	PREP.	APPROVED	DESCRIPTION