Addendum No. 05, Item No. 4, Attachment No. 01

Part 2, Section VI-4, Drawings

Modification rules for the Drawings are as follows:

Black colour text without effect shows the drawings which has already issued in the Bidding Documents (not included in Attachment),

Red colour text shows the new drawings,

Blue colour text shows the modified drawings,

~~**Strikethrough text**~~ shows the removal of drawings which has already issued in the Bidding Documents

Common Notes (Applicable to all Drawings)

The following notes shall be read in conjunction with all the Drawings:

Note 1: Rebar weight tables given in the Structural Design drawings are for reference only. Similarly, Bar Bending Schedule (BBS) drawings, wherever provided, are for reference only and the Contractor shall prepare detailed BBS prior to the execution of each and every component of Works to obtain the Engineer's approval. No claim and/or variation in the Accepted Contract Amount shall be admissible on account of rebar weights in the tables and/or BBS provided in the Employer's Requirements. The Contractor shall follow the bar arrangement shown in the reinforcement drawings.

Note 2: The dimensions of breakthrough in TBM temporary wall are indicative and the exact dimensions shall be ascertained from C-2 contractor by necessary interface.

Note 3: Wherever there is a mismatch between Basic Design Drawings and Structural Design Drawings included in the Employer's Requirements, the Contractor shall develop detailed Architectural and MEP Design Drawings based on the Structural Design Drawings (except for the cut-outs, which shall be modified as per Sub-Clause 1.3.3 of GS 05010.), maintaining the basic intent of the Architectural Design Drawings. No claim whatsoever shall be payable to the Contractor on account of such mismatches, which include, but are not limited to the following:

a) Dimensions and/or locations of various items such as:

   i) Floor-to-floor heights;

   ii) Structural elements like beams, columns, slabs etc.; and

   iii) Skylight.

b) The size of the skylight between grids X17 to X21 shall be read as 50m x 20.4m instead of 50m x 41.04m in all the Drawings.

c) West Entry/Exit structure has been designed as RCC framed structure as shown in the Structural Drawings. The detailed design of the architectural works in the West Entry/Exit structure shall be designed maintaining the basic intent of the Architectural Design Drawings as of East Entry/Exit structure (which is to be designed as steel structure frame by the Contractor).

Mumbai-Ahmedabad High Speed Rail Project

Shaft-1

CIVIL STRUCTURE

Owner

NHSRCL

NATIONAL HIGH SPEED RAIL CORPORATION LIMITED

Financed

JICA

JAPAN INTERNATIONAL COOPERATION AGENCY

JICA Study Team

JIC

JAPAN INTERNATIONAL CONSULTANTS FOR TRANSPORTATION

NK

NIPPON KOEI

OC GLOBAL

ORIENTAL CONSULTANTS GLOBAL

RED: New Drawings, BLUE: Revised Drawings

Sr. No	NIT/Revised/New Drawing Number	Title	Status	Size	Scale
	01000 General (00010～)				
1	SD - JIC - C14 - DRW - S01 - CCT - NTU - 00010 000	LOCATION MAP OF MAHSR		A1(A3)	NTS
2	SD - JIC - C14 - DRW - S01 - CCT - NTU - 00020 001	ROUTE MAP OF C-1 CONTRACT PACKAGE		A1(A3)	1/2500 (1/5000)
3	SD - JIC - C14 - DRW - S01 - CCT - NTU - 00030 001	STRUCTURE GAUGE FOR UG STATION, C&C TUNNEL AND SHAFT-1		A1(A3)	1/50 (1/100)
	10010 Mumbai Station (10010～)				
	■General Note etc.				
4	SD - JIC - C14 - DRW - S01 - CCT - NTU - 10020 003	TYPICAL STANDARDS FOR BAR ARRANGEMENT (1/3)		A1(A3)	NTS
5	SD - JIC - C14 - DRW - S01 - CCT - NTU - 10030 003	TYPICAL STANDARDS FOR BAR ARRANGEMENT (2/3)		A1(A3)	NTS
6	SD - JIC - C14 - DRW - S01 - CCT - NTU - 10040 003	TYPICAL STANDARDS FOR BAR ARRANGEMENT (3/3)		A1(A3)	NTS
	■ALIGMENT PLAN				
7	SD - JIC - C14 - DRW - S01 - CCT - NTU - 11010 000	MUMBAI STATION ALIGNMENT PLAN (1/4)		A1(A3)	1/500 (1/1000)
8	SD - JIC - C14 - DRW - S01 - CCT - NTU - 11020 000	MUMBAI STATION ALIGNMENT PLAN (2/4)		A1(A3)	1/500 (1/1000)
9	SD - JIC - C14 - DRW - S01 - CCT - NTU - 11030 000	MUMBAI STATION ALIGNMENT PLAN (3/4)		A1(A3)	1/500 (1/1000)
10	SD - JIC - C14 - DRW - S01 - CCT - NTU - 11040 000	MUMBAI STATION ALIGNMENT CORDINATES (4/4)		A1(A3)	NTS
	■Shaft Detail				
11	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30010 002	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (1/7)		A1(A3)	1/250 (1/500)
12	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30020 001	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (2/7)		A1(A3)	1/250 (1/500)
13	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30030 001	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (3/7)		A1(A3)	1/250 (1/500)
14	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30040 003	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (4/7)		A1(A3)	1/250 (1/500)
15	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30050 002	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (5/7)		A1(A3)	1/250 (1/500)
16	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30060 002	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (6/7)		A1(A3)	1/250 (1/500)
17	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30070 003	SHAFT-1, GENERAL ARRANGMENT DRAWINGS (7/7)		A1(A3)	1/250 (1/500)
18	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30080 002	RC DETAIL AT SECTION-Xsf5 (1/7)		A1(A3)	1/100 (1/200)
19	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30090 002	RC DETAIL AT SECTION-Xsf5 (2/7)		A1(A3)	1/100 (1/200)
20	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30100 001	RC DETAIL AT SECTION-Xsf5 (3/7)		A1(A3)	1/200 (1/400)
21	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30110 001	RC DETAIL AT SECTION-Xsf5 (4/7)		A1(A3)	1/200 (1/400)
22	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30120 002	RC DETAIL OF STRUT (5/7)		A1(A3)	1/100 (1/200)
23	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30130 002	RC DETAIL AT SECTION-Xsf5 (6/7)		A1(A3)	NTS
24	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30140 002	RC DETAIL AT SECTION-Xsf5 (7/7)		A1(A3)	NTS
25	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30150 002	RC DETAIL FOR GIRDERS AND COLUMNS SECTION AT Xsf5 (1/5)		A1(A3)	1/100 (1/200)
26	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30160 002	RC DETAIL FOR GIRDERS AND COLUMNS SECTION AT Ysf3 (2/5)		A1(A3)	1/100 (1/200)
27	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30170 002	RC DETAIL FOR GIRDERS AND COLUMNS SECTION AT Ysf5 & Ysf3 (3/5)		A1(A3)	1/100 (1/200)
28	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30180 001	RC DETAIL FOR GIRDERS AND COLUMNS SECTION AT Ysf5 & Ysf3 (4/5)		A1(A3)	NTS
29	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30190 002	RC DETAIL FOR GIRDERS AND COLUMNS SECTION AT Ysf5 & Ysf3 (5/5)		A1(A3)	NTS
30	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30200 001	TOP SLAB GAD & RC DETAIL (1/3)		A1(A3)	1/200 (1/400)
31	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30210 001	TOP SLAB GAD & RC DETAIL (2/3)		A1(A3)	1/50 (1/100)
32	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30220 001	TOP SLAB GAD & RC DETAIL (3/3)		A1(A3)	1/50 (1/100)
33	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30230 001	B1F SLAB GAD & RC DETAIL (1/4)		A1(A3)	1/200 (1/400)
34	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30240 001	B1F SLAB GAD & RC DETAIL (2/4)		A1(A3)	1/50 (1/100)
35	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30250 001	B1F SLAB GAD & RC DETAIL (3/4)		A1(A3)	1/50 (1/100)
36	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30260 001	B1F SLAB GAD & RC DETAIL (4/4)		A1(A3)	1/50 (1/100)
37	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30270 001	B2F SLAB GAD & RC DETAIL (1/3)		A1(A3)	1/200 (1/400)
38	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30280 001	B2F SLAB GAD & RC DETAIL (2/3)		A1(A3)	1/50 (1/100)
39	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30290 001	B2F SLAB GAD & RC DETAIL (3/3)		A1(A3)	1/50 (1/100)
40	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30300 001	B3F SLAB GAD & RC DETAIL (1/3)		A1(A3)	1/200 (1/400)
41	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30310 001	B3F SLAB GAD & RC DETAIL (2/3)		A1(A3)	1/50 (1/100)
42	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30320 002	B3F SLAB GAD & RC DETAIL (3/3)		A1(A3)	1/50 (1/100)
43	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30330 001	RC DETAIL AT GABLE SECTON (1/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/100 (1/200)
44	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30340 001	RC DETAIL AT GABLE SECTON (2/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/100 (1/200)
45	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30350 001	RC DETAIL AT GABLE SECTON (3/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/100 (1/200)
46	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30360 002	RC DETAIL AT GABLE SECTON (4/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/100 (1/200)
47	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30370 002	RC DETAIL AT GABLE SECTON (5/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/100 (1/200)
48	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30380 002	RC DETAIL AT GABLE SECTON (6/6) AT C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	NTS
49	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30390 001	RC DETAIL AT GABLE SECTON (1/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
50	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30400 001	RC DETAIL AT GABLE SECTON (2/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
51	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30410 001	RC DETAIL AT GABLE SECTON (3/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
52	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30420 001	RC DETAIL AT GABLE SECTON (4/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
53	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30430 001	RC DETAIL AT GABLE SECTON (5/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
54	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30440 002	RC DETAIL AT GABLE SECTON (6/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
55	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30450 002	RC DETAIL AT GABLE SECTON (7/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
56	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30460 002	RC DETAIL AT GABLE SECTON (8/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	1/100 (1/200)
57	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30470 001	RC DETAIL AT GABLE SECTON (9/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	NTS
58	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30480 002	RC DETAIL AT GABLE SECTON (10/10) AT SHAFT-1 & BORE TUNNEL JUNCTION		A1(A3)	NTS

RED: New Drawings, BLUE: Revised Drawings

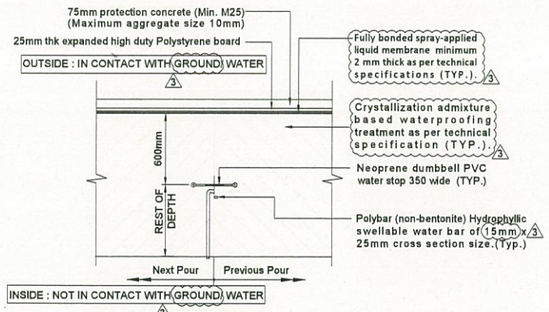
Sr. No	NIT/Revised/New Drawing Number	Title	Status	Size	Scale
59	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30490 002	RC DETAIL AT MIDDLE SECTON (1/6)		A1(A3)	1/100 (1/200)
60	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30500 002	RC DETAIL AT MIDDLE SECTON (2/6)		A1(A3)	1/100 (1/200)
61	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30510 001	RC DETAIL AT MIDDLE SECTON (3/6)		A1(A3)	1/200 (1/400)
62	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30520 001	RC DETAIL AT MIDDLE SECTON (4/6)		A1(A3)	1/200 (1/400)
63	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30530 002	RC DETAIL AT MIDDLE SECTON (5/6)		A1(A3)	NTS
64	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30531 001	RC DETAIL AT MIDDLE SECTON (6/6)		A1(A3)	1/100 (1/200)
65	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30540 003	RC DETAIL AT SECTION SHED-A (1/3)		A1(A3)	1/50 (1/100)
66	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30550 001	RC DETAIL AT SECTION SHED-A (2/3)		A1(A3)	1/100 (1/200)
67	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30560 002	RC DETAIL AT SECTION SHED-A (3/3)		A1(A3)	NTS
68	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30570 002	RC DETAIL AT LONGITUDINAL SECTION SHED-A (1/5)		A1(A3)	1/50 (1/100)
69	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30580 002	RC DETAIL AT LONGITUDINAL SECTION SHED-A (2/5)		A1(A3)	1/50 (1/100)
70	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30590 002	RC DETAIL AT LONGITUDINAL SECTION SHED-A (3/5)		A1(A3)	1/50 (1/100)
71	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30600 001	RC DETAIL AT LONGITUDINAL SECTION SHED-A (4/5)		A1(A3)	NTS
72	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30610 002	RC DETAIL AT LONGITUDINAL SECTION SHED-A (5/5)		A1(A3)	NTS
73	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30620 002	RC DETAIL AT GABLE SECTION FOR SHED-A (1/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
74	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30630 001	RC DETAIL AT GABLE SECTION FOR SHED-A (2/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
75	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30640 002	RC DETAIL AT GABLE SECTION FOR SHED-A (3/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	NTS
76	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30641 001	RC DETAIL AT STAIR SECTION FOR SHED-A		A1(A3)	1/50 (1/100)
77	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30650 002	RC DETAIL FOR SHED-B (1/2)		A1(A3)	1/50 (1/100)
78	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30660 002	RC DETAIL FOR SHED-B (2/2)		A1(A3)	NTS
79	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30670 003	RC DETAIL AT GABLE SECTION FOR SHED-B (1/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
80	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30680 002	RC DETAIL AT GABLE SECTION FOR SHED-B (2/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
81	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30690 002	RC DETAIL AT GABLE SECTION FOR SHED-B (3/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	NTS
82	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30700 002	RC DETAIL FOR SHED-C (1/2)		A1(A3)	1/50 (1/100)
83	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30710 002	RC DETAIL FOR SHED-C (2/2)		A1(A3)	NTS
84	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30720 002	RC DETAIL AT GABLE SECTION FOR SHED-C (1/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
85	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30730 002	RC DETAIL AT GABLE SECTION FOR SHED-C (2/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	1/50 (1/100)
86	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30740 002	RC DETAIL AT GABLE SECTION FOR SHED-C (3/3) AT TOP OF C&C TUNNEL & SHAFT-1 JUNCTION		A1(A3)	NTS
87	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30750 003	RC DETAIL FOR TBM TEMPORARY WALL (1/3)		A1(A3)	1/100 (1/200)
88	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30760 003	RC DETAIL FOR TBM TEMPORARY WALL (2/3)		A1(A3)	1/100 (1/200)
89	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30770 002	RC DETAIL FOR TBM TEMPORARY WALL (3/3)		A1(A3)	NTS
90	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30780 002	SHEAR KEY SECTION FOR UPLIFT COUNTER MEASURE (1/2)		A1(A3)	1/50 (1/100)
91	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30790 002	SHEAR KEY SECTION FOR UPLIFT COUNTER MEASURE (2/2)		A1(A3)	NTS
92	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30900 001	RC DETAIL FOR B4F MIDDLE WALL OPENING SECTION (STANDARD)		A1(A3)	1/50 (1/100)
93	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30910 002	RC DETAIL FOR GABLE COLUMN AT Ysf5 (1/3)		A1(A3)	1/100 (1/200)
94	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30920 002	RC DETAIL FOR LONGITUDINAL SECTION AT Ysf5 (2/3)		A1(A3)	1/100 (1/200)
95	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30930 002	RC DETAIL FOR GABLE COLUMN AT Ysf5 (3/3)		A1(A3)	1/100 (1/200)
96	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30940 002	RC DETAIL FOR LONGITUDINAL SECTION AT Ysf3 (1/2)		A1(A3)	1/100 (1/200)
97	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30950 002	RC DETAIL FOR GABLE COLUMN AT Ysf3 (2/2)		A1(A3)	1/100 (1/200)
98	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30960 002	RC DETAIL FOR GIRDER (1/7)		A1(A3)	1/100 (1/200)
99	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30970 002	RC DETAIL FOR GIRDER AND COLUMN (2/7)		A1(A3)	1/100 (1/200)
100	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30980 002	RC DETAIL FOR COLUMN (3/7)		A1(A3)	1/100 (1/200)
101	SD - JIC - C14 - DRW - S01 - CCT - NTU - 30990 001	BBS PROCESSING DIMENSIONS TABLE FOR GIRDER AND COLUMN (4/7)		A1(A3)	NTS
102	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31000 001	BBS PROCESSING DIMENSIONS TABLE FOR GIRDER AND COLUMN (5/7)		A1(A3)	NTS
103	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31010 001	BBS PROCESSING DIMENSIONS TABLE FOR GIRDER AND COLUMN (6/7)		A1(A3)	NTS
104	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31020 002	BBS PROCESSING DIMENSIONS TABLE FOR GIRDER AND COLUMN (7/7)		A1(A3)	NTS
105	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31030 001	GABLE SECTION FOR ORIGIN DETAIL (1/2)		A1(A3)	1/20 (1/40)
106	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31040 001	GABLE SECTION FOR ORIGIN DETAIL (2/2)		A1(A3)	1/20 (1/40)
107	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31050 001	GABLE SECTION FOR TERMINUS DETAIL (1/3)		A1(A3)	1/20 (1/40)
108	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31060 001	GABLE SECTION FOR TERMINUS DETAIL (2/3)		A1(A3)	1/20 (1/40)
109	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31070 002	GABLE SECTION FOR TERMINUS DETAIL (3/3)		A1(A3)	1/20 (1/40)
110	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31080 001	DETAIL OF TOP AND B1F GIRDER		A1(A3)	1/20 (1/40)
111	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31090 001	DETAIL OF B2F GIRDER		A1(A3)	1/20 (1/40)
112	SD - JIC - C14 - DRW - S01 - CCT - NTU - 31100 002	REINFORCEMENT BAR ARRANGEMENT OF STAIRCASE (STAIR- 1&2)		A1(A3)	1/20 (1/40)
	10013 Incidental Structure（40010～）				
	■TRACK WORK				
113	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40010 003	GENERAL ARRANGEMENT DRAWING, (T60S-1in14 WITH RIGID CROSSING) (1/2)		A1(A3)	1/60 (1/120)
114	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40020 003	GENERAL ARRANGEMENT DRAWING, (T60S-1in14 WITH RIGID CROSSING) (2/2)		A1(A3)	1/60 (1/120)
115	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40030 003	GENERAL ARRANGEMENT DRAWING, (SC60-1in16 WITH RIGID CROSSING) (1/3)		A1(A3)	1/100 (1/200)
116	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40040 003	GENERAL ARRANGEMENT DRAWING, (SC60-1in16 WITH RIGID CROSSING) (2/3)		A1(A3)	1/100 (1/200)
117	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40050 003	GENERAL ARRANGEMENT DRAWING, (SC60-1in16 WITH RIGID CROSSING) (3/3)		A1(A3)	1/20 (1/40)
118	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40060 003	TYPICAL TRACK BAD SHEAR CONNECTER DETAILS FOR UG STATION		A3	AS SHOWN
119	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40070 002	SHEAR DOWEL DETAIL, (T60S-1IN14 WITH RIGID CROSSING) (1/3)		A1(A3)	1/50 (1/100)
120	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40080 003	SHEAR DOWEL DETAIL, (T60S-1IN14 WITH RIGID CROSSING) (2/3)		A1(A3)	AS SHOWN
121	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40090 003	SHEAR DOWEL DETAIL, (T60S-1IN14 WITH RIGID CROSSING) (3/3)		A1(A3)	1/10 (1/20)

RED: New Drawings, BLUE: Revised Drawings

Sr. No	NIT/Revised/New Drawing Number	Title	Status	Size	Scale
122	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40100 004	SHEAR DOWEL DETAIL (1/2)		A1(A3)	AS SHOWN
123	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40110 004	SHEAR DOWEL DETAIL (2/2)		A1(A3)	AS SHOWN
124	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40120 002	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (1/6)		A1(A3)	1/50 (1/100)
125	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40130 002	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (2/6)		A1(A3)	1/50 (1/100)
126	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40140 002	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (3/6)		A1(A3)	1/50 (1/100)
127	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40150 002	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (4/6)		A1(A3)	1/50 (1/100)
128	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40160 003	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (5/6)		A1(A3)	AS SHOWN
129	SD - JIC - C14 - DRW - S01 - CCT - NTU - 40170 003	SHEAR DOWEL DETAIL, (SC60-1IN16 WITH RIGID CROSSING) (6/6)		A1(A3)	1/10 (1/20)
	■SHAFT STAIR				
130	SD - JIC - C14 - DRW - S01 - CCT - NTU - 43010 002	STRUCTURAL PLAN AND SECTION OF STAIR-1 (1/2)		A1(A3)	1/100 (1/200)
131	SD - JIC - C14 - DRW - S01 - CCT - NTU - 43020 002	STRUCTURAL PLAN AND SECTION OF STAIR-2 (2/2)		A1(A3)	1/100 (1/200)
	■WATER PROOFING AND JOINT				
132	SD - JIC - C14 - DRW - S01 - CCT - NTU - 44010 003	STANDARD DETAIL OF WATERPROOFING		A1(A3)	AS SHOWN
133	SD - JIC - C14 - DRW - S01 - CCT - NTU - 44030 001	TYPICAL CONSTRUCTION JOINT BETWEEN CUT & COVER TUNNEL AND SHAFT-1		A1(A3)	NTS
134	BD - JIC - C14 - DRW - S01 - CCT - NTU - 44040 003	DETAIL DRAWING OF ANCHOR		A1(A3)	AS SHOWN

RED: New Drawings, BLUE: Revised Drawings

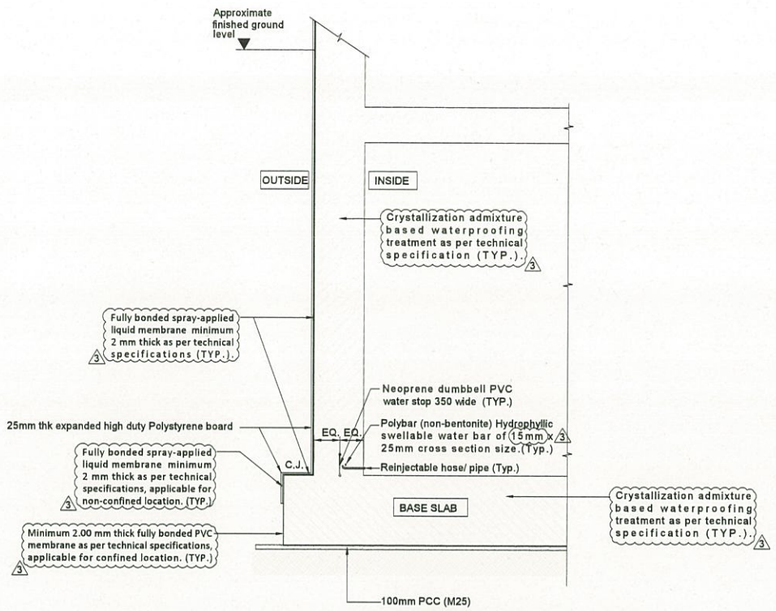
Sr. No	NIT/Revised/New Drawing Number		Title	Status	Size	Scale
	EQUIPMENT					
135	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45010 002	BASIC FOUNDATION PLAN FOR MECHANICAL TRAVERSING DEVICE (MTD)		A1(A3)	1/30 (1/60)
136	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45020 002	CABLE TROUGH FOUNDATION STANDARD DRAWING		A1(A3)	1/10 (1/20)
137	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45030 001	GENERAL ARRANGEMENT DRAWING OF CABLE TROUGH (1/3) (FOR SIGNAL AND TELECOMMUNICATION) (W=450)		A1(A3)	AS SHOWN
138	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45040 001	GENERAL ARRANGEMENT DRAWING OF CABLE TROUGH (2/3) (FOR ELECTRIC POWER) (W=550)		A1(A3)	AS SHOWN
139	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45050 001	GENERAL ARRANGEMENT DRAWING OF CABLE TROUGH (3/3) (FOR LCX) (W=220)		A1(A3)	AS SHOWN
140	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45060 002	GENERAL REINFORCEMENT ARRANGEMENT OF CABLE TROUGH (1/4) (FOR SIGNAL AND TELECOMMUNICATION) (W=450)		A1(A3)	1/10 (1/20)
141	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45070 001	GENERAL REINFORCEMENT ARRANGEMENT DRAWING OF CABLE TROUGH (2/4) (FOR SIGNAL AND TELECOMMUNICATION) (W=450)		A1(A3)	NTS
142	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45080 002	GENERAL REINFORCEMENT ARRANGEMENT DRAWING OF CABLE TROUGH (3/4) (FOR ELECTRIC POWER) (W=550)		A1(A3)	1/10 (1/20)
143	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45090 001	GENERAL REINFORCEMENT ARRANGEMENT OF CABLE TROUGH (4/4) (FOR ELECTRIC POWER) (W=550)		A1(A3)	NTS
144	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45100 002	DETAIL DRAWING OF CABLE PIPE ARRANGEMENT FOR EQUIPMENT ROOM		A1(A3)	1/80 (1/160)
145	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45110 002	GENERAL DRAWING OF EQUIPMENT INSTALLATION PART WIDENING AND CABLE PIPE ARRANGEMENT (1/5) (STANDARD PART FOR S&T)		A1(A3)	1/50 (1/100)
146	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45120 002	GENERAL DRAWING OF EQUIPMENT INSTALLATION PART WIDENING AND CABLE PIPE ARRANGEMENT (2/5) (STATION DEPARTURE ROUTE FOR S&T)		A1(A3)	1/80 (1/160)
147	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45121 000	GENERAL DRAWING OF EQUIPMENT INSTALLATION PART WIDENING AND CABLE PIPE ARRANGEMENT (3/5) (STATION DEPARTURE ROUTE FOR S&T)		A1(A3)	1/80 (1/160)
148	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45130 002	GENERAL DRAWING OF EQUIPMENT INSTALLATION PART WIDENING AND CABLE PIPE ARRANGEMENT (4/5) (STATION DEPARTURE ROUTE FOR S&T)		A1(A3)	1/50 (1/100)
149	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45131 000	GENERAL DRAWING OF EQUIPMENT INSTALLATION PART WENDING AND CABLE PIPE ARRANGEMENT (5/5) FOR (LCX REPEATER)		A1(A3)	NTS
150	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45132 000	EQUIPMENT INSTALLATION WIDENING TRANSVERSE CONDUIT PIPE (INSULATED JOINT FOR MAIN LINE)		A1(A3)	NTS
151	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45133 000	WIDENING AND TRANSVERSE CONDUIT FOR EQUIPMENT INSTALLATION (CABLE ROUTE FROM SER TO MAIN S/T DUCT)		A1(A3)	NTS
152	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45140 002	GENERAL DRAWING OF CABLE PIPE ARRANGEMENT (1/3) (FOR LCX)		A1(A3)	1/80 (1/160)
153	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45150 002	GENERAL DRAWING OF CABLE PIPE ARRANGEMENT (2/3) (FOR PLATFORM TRAIN PROTECTION SWITCH FOR S&T)		A1(A3)	1/50 (1/100)
154	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45160 002	GENERAL DRAWING OF CABLE PIPE ARRANGEMENT (3/3) (AUXILIARY EQUIPMENT ROOM UNDER THE PLATFORM FOR S&T)		A1(A3)	1/80 (1/160)
155	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45170 002	GENERAL DRAWING OF INSERT FOR TRAIN PROTECTION SWITCH AND CABLE PIPE ARRANGEMENT (FOR S&T)		A1(A3)	1/50 (1/100)
156	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45180 002	OPENING OF OPERATION ROOM OUTER WALL (FOR TRAIN PROTECTION SWITCH FOR S&T)		A1(A3)	1/20 (1/40)
157	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45190 003	GENERAL ARRANGEMENT OF FIXING BOLT (1/6) (FOR DROP ARM)		A1(A3)	AS SHOWN
158	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45200 003	GENERAL ARRANGEMENT OF FIXING BOLT (2/6) (FOR OHE RETENTION)		A1(A3)	AS SHOWN
159	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45201 000	GENERAL ARRANGEMENT OF FIXING BOLT (3/6) (FOR OHE RETENTION)		A1(A3)	AS SHOWN
160	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45210 003	GENERAL ARRANGEMENT OF FIXING BOLT (4/6) (FOR FEEDER RETENTION)		A1(A3)	1/50 (1/100)
161	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45220 003	GENERAL ARRANGEMENT OF FIXING BOLT (5/6) (DETAIL OF FIXING BOLT FOR FEEDER WIRE)		A1(A3)	AS SHOWN
162	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45230 003	GENERAL ARRANGEMENT OF FIXING BOLT (6/6) (SIDE WALL ANCHOR FOR MOVABLE BRACKET)		A1(A3)	AS SHOWN
163	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45240 002	SPECIFICATION OF EARTH ROD		A1(A3)	NTS
164	SD - JIC - C14 - DRW - S01 - CCT - NTU -	45250 002	GENERAL ARRANGEMENT AND DETAIL EARTH ROD SYSTEM		A1(A3)	1/100 (1/200)



DETAIL-1

WATER STOP & WATERPROOFING DETAILS AT ROOF SLAB & ITS CONSTRUCTION JOINTS

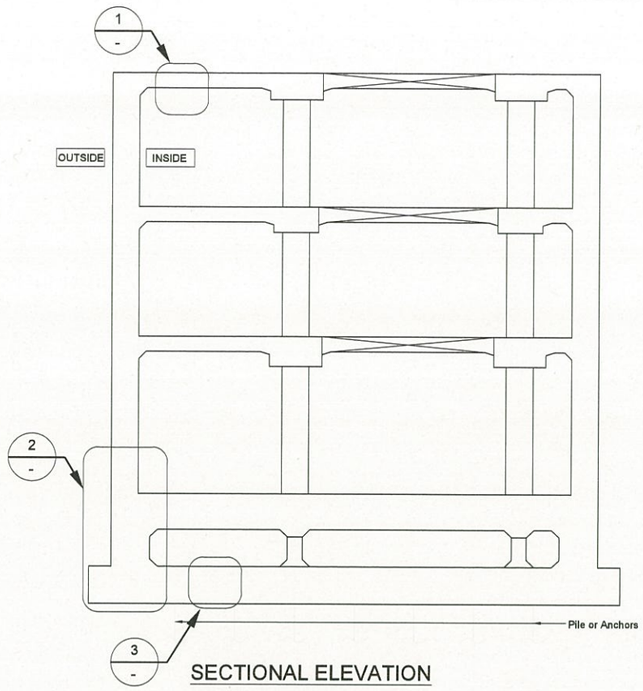
Scale 1 :25



DETAIL-2

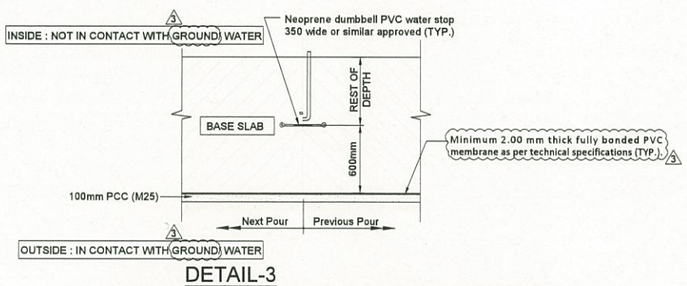
WATER STOP & WATERPROOFING DETAILS AT WALL & ITS CONSTRUCTION JOINTS

Scale 1 :50



SECTIONAL ELEVATION

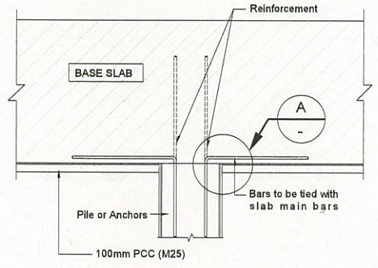
Scale 1 :200



DETAIL-3

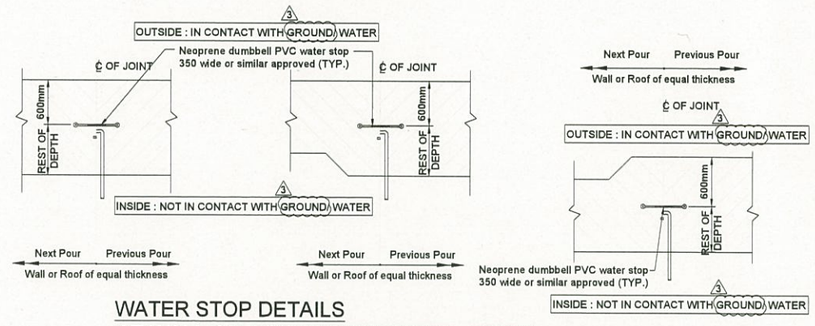
WATER STOP & WATERPROOFING DETAILS AT BASE SLAB & ITS CONSTRUCTION JOINTS

Scale 1 :25



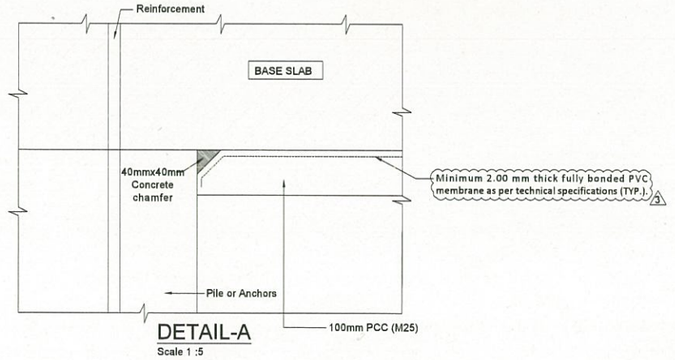
WATER PROOFING DETAILS FOR PILE OR ANCHORS

Scale 1 :25



WATER STOP DETAILS AT WALL OR ROOF TRANSVERSE JOINTS

Scale 1 :25



DETAIL-A

Scale 1 :5

Notes:-

1. All edges which are to be water proofed shall be round off to avoid any sharp edged corner to membrane layer.
2. All PCC concrete, screed concrete and protection screed grade shall be minimum M-25.
3. All haunches / chamfers are 40mmx40mm unless noted otherwise.
4. All concrete surface, to receive water proofing membrane on it, shall be rendered smoothly, if required by the roughness of the concrete surface.
5. All waterproofing details to be approved by the Engineer.

REFERENCE DRAWING:

1. SD-JIC-C14-DRW-S01-CCT-NTU-10010001
2. SD-JIC-C14-DRW-S01-CCT-NTU-10020001
3. SD-JIC-C14-DRW-S01-CCT-NTU-10030000
4. SD-JIC-C14-DRW-S01-CCT-NTU-10040000

Project: Mumbai-Ahmedabad High Speed Rail Project (Package No.MAHSR-C-1)	Owner: NHSRCL NATIONAL HIGH SPEED RAIL CORPORATION LTD.	Consultant: Japan International Consultants for Transportation; NIPPON KOEI; ORIENTAL CONSULTANTS GLOBAL	Revised	Date
			Prepared	12th July 2020
			Checked	12th July 2020
			Approved	12th July 2020

Adopted by: NHSRCL

Title: STANDARD DETAIL OF WATERPROOFING

Scale: AS SHOWN

Drawing No.: SD-JIC-C14-DRW-S01-CCT-NTU-44010003

Mumbai-Ahmedabad High Speed Rail

Station + Tunnel

Civil Structure

LEGEND
NEW ADDITION
MODIFIED
NO CHANGE

STRUCTURAL DRAWINGS - BKC STATION AND CUT & COVER DRAWING LIST					
SL. No.	Drawing No.			Sheet	Title
1	SD-MTC-D01-TDS-S01-CCT-NTU-	20001	004	A1	General Notes drawing
2	SD-MTC-D01-TDS-S01-CCT-NTU-	20002	002	A1	Battery limit (Sheet 1 of 4)
3	SD-MTC-D01-TDS-S01-CCT-NTU-	20003	002	A1	Battery limit (Sheet 2 of 4)
4	SD-MTC-D01-TDS-S01-CCT-NTU-	20004	002	A1	Battery limit (Sheet 3 of 4)
5	SD-MTC-D01-TDS-S01-CCT-NTU-	20005	002	A1	Battery limit (Sheet 4 of 4)
6	BD-MTC-D01-TDS-S01-CCT-NTU-	20007	001	A1	Future IFSC Building scheme and details
7	BD-MTC-D01-TDS-S01-CCT-NTU-	20012	001	A1	Typical Excavation Section
8	SD-MTC-D01-TDS-S01-CCT-NTU-	20013	002	A1	General arrangement - B3 (Raft) Level (Sheet 1 of 7)
9	SD-MTC-D01-TDS-S01-CCT-NTU-	20014	002	A1	General arrangement - B3 (Raft) Level (Sheet 2 of 7)
10	SD-MTC-D01-TDS-S01-CCT-NTU-	20015	002	A1	General arrangement - B3 (Raft) Level (Sheet 3 of 7)
11	SD-MTC-D01-TDS-S01-CCT-NTU-	20016	002	A1	General arrangement - B3 (Raft) Level (Sheet 4 of 7)
12	SD-MTC-D01-TDS-S01-CCT-NTU-	20017	002	A1	General arrangement - B3 (Raft) Level (Sheet 5 of 7)
13	SD-MTC-D01-TDS-S01-CCT-NTU-	20018	002	A1	General arrangement - B3 (Raft) Level (Sheet 6 of 7)
14	SD-MTC-D01-TDS-S01-CCT-NTU-	20019	002	A1	General arrangement - B3 (Raft) Level (Sheet 7 of 7)
15	SD-MTC-D01-TDS-S01-CCT-NTU-	20020	002	A1	General arrangement: Platform Level (Sheet 1 of 5)
16	SD-MTC-D01-TDS-S01-CCT-NTU-	20021	002	A1	General arrangement: Platform Level (Sheet 2 of 5)
17	SD-MTC-D01-TDS-S01-CCT-NTU-	20022	002	A1	General arrangement: Platform Level (Sheet 3 of 5)
18	SD-MTC-D01-TDS-S01-CCT-NTU-	20023	002	A1	General arrangement: Platform Level (Sheet 4 of 5)
19	SD-MTC-D01-TDS-S01-CCT-NTU-	20024	004	A1	General arrangement - B2 Level (Sheet 1 of 7)
20	SD-MTC-D01-TDS-S01-CCT-NTU-	20025	004	A1	General arrangement - B2 Level (Sheet 2 of 7)
21	SD-MTC-D01-TDS-S01-CCT-NTU-	20026	004	A1	General arrangement - B2 Level (Sheet 3 of 7)
22	SD-MTC-D01-TDS-S01-CCT-NTU-	20027	004	A1	General arrangement - B2 Level (Sheet 4 of 7)
23	SD-MTC-D01-TDS-S01-CCT-NTU-	20028	004	A1	General arrangement - B2 Level (Sheet 5 of 7)
24	SD-MTC-D01-TDS-S01-CCT-NTU-	20029	003	A1	General arrangement - B2 Level (Sheet 6 of 7)
25	SD-MTC-D01-TDS-S01-CCT-NTU-	20030	003	A1	General arrangement - B2 Level (Sheet 7 of 7)
26	SD-MTC-D01-TDS-S01-CCT-NTU-	20031	005	A1	General arrangement - B1 Level (Sheet 1 of 7)
27	SD-MTC-D01-TDS-S01-CCT-NTU-	20032	004	A1	General arrangement - B1 Level (Sheet 2 of 7)
28	SD-MTC-D01-TDS-S01-CCT-NTU-	20033	004	A1	General arrangement - B1 Level (Sheet 3 of 7)
29	SD-MTC-D01-TDS-S01-CCT-NTU-	20034	004	A1	General arrangement - B1 Level (Sheet 4 of 7)
30	SD-MTC-D01-TDS-S01-CCT-NTU-	20035	004	A1	General arrangement - B1 Level (Sheet 5 of 7)
31	SD-MTC-D01-TDS-S01-CCT-NTU-	20036	004	A1	General arrangement - B1 Level (Sheet 6 of 7)
32	SD-MTC-D01-TDS-S01-CCT-NTU-	20037	003	A1	General arrangement - B1 Level (Sheet 7 of 7)
33	SD-MTC-D01-TDS-S01-CCT-NTU-	20038	002	A1	General arrangement - URSL Level (Sheet 1 of 7)
34	SD-MTC-D01-TDS-S01-CCT-NTU-	20039	002	A1	General arrangement - URSL Level (Sheet 2 of 7)
35	SD-MTC-D01-TDS-S01-CCT-NTU-	20040	002	A1	General arrangement - URSL Level (Sheet 3 of 7)
36	SD-MTC-D01-TDS-S01-CCT-NTU-	20041	003	A1	General arrangement - URSL Level (Sheet 4 of 7)
37	SD-MTC-D01-TDS-S01-CCT-NTU-	20042	003	A1	General arrangement - URSL Level (Sheet 5 of 7)
38	SD-MTC-D01-TDS-S01-CCT-NTU-	20043	002	A1	General arrangement - URSL Level (Sheet 6 of 7)
39	SD-MTC-D01-TDS-S01-CCT-NTU-	20044	002	A1	General arrangement - URSL Level (Sheet 7 of 7)
40	SD-MTC-D01-TDS-S01-CCT-NTU-	20045	002	A1	General arrangement - Platform Level (Sheet 5 of 5)
41	SD-MTC-D01-TDS-S01-CCT-NTU-	20046	002	A1	General arrangement: GF level (Sheet 1 of 2)
42	SD-MTC-D01-TDS-S01-CCT-NTU-	20047	002	A1	General arrangement: GF level (Sheet 2 of 2)
43	SD-MTC-D01-TDS-S01-CCT-NTU-	20048	002	A1	General arrangement: GF level - Sections (Sheet 1 of 2)
44	BD-MTC-D01-TDS-S01-CCT-NTU-	20049	002	A1	General arrangement: GF level - Sections (Sheet 1 of 2)
45	BD-MTC-D01-TDS-S01-CCT-NTU-	20050	003	A1	General arrangement: Mezzanine plan & sections
46	SD-MTC-D01-TDS-S01-CCT-NTU-	20051	002	A1	General arrangement - West Entry/exit Terrace Level
47	SD-MTC-D01-TDS-S01-CCT-NTU-	20052	001	A1	General arrangement - Stair-1 (Sheet 1 of 2)
48	SD-MTC-D01-TDS-S01-CCT-NTU-	20053	001	A1	General arrangement - Stair-1 (Sheet 2 of 2)
49	SD-MTC-D01-TDS-S01-CCT-NTU-	20054	002	A1	General arrangement - Stair-2 & Stair-M1 (Sheet 1 of 2)
50	SD-MTC-D01-TDS-S01-CCT-NTU-	20055	002	A1	General arrangement - Stair-2 & Stair-M1 (Sheet 2 of 2)
51	SD-MTC-D01-TDS-S01-CCT-NTU-	20056	001	A1	General arrangement - Stair-3 (Sheet 1 of 2)
52	SD-MTC-D01-TDS-S01-CCT-NTU-	20057	001	A1	General arrangement - Stair-3 (Sheet 2 of 2)
53	SD-MTC-D01-TDS-S01-CCT-NTU-	20058	002	A1	General arrangement - Stair-4 & Stair-M2 (Sheet 1 of 2)
54	SD-MTC-D01-TDS-S01-CCT-NTU-	20059	002	A1	General arrangement - Stair-4 & Stair-M2 (Sheet 2 of 2)
55	SD-MTC-D01-TDS-S01-CCT-NTU-	20060	001	A1	General arrangement - Stair-5 & 6
56	SD-MTC-D01-TDS-S01-CCT-NTU-	20061	001	A1	General arrangement - Stair-7 & 8
57	SD-MTC-D01-TDS-S01-CCT-NTU-	20062	002	A1	General arrangement - Stair-9,10,11 & 12 (Sheet 1 of 2)

STRUCTURAL DRAWINGS - BKC STATION AND CUT & COVER DRAWING LIST					
SL. No.	Drawing No.			Sheet	Title
58	SD-MTC-D01-TDS-S01-CCT-NTU-	20063	001	A1	General arrangement - Stair-9,10,11 & 12 (Sheet 2 of 2)
59	SD-MTC-D01-TDS-S01-CCT-NTU-	20064	001	A1	General arrangement - Stair-13 & 14
60	SD-MTC-D01-TDS-S01-CCT-NTU-	20065	001	A1	General arrangement - Stair-15 & 16
61	SD-MTC-D01-TDS-S01-CCT-NTU-	20066	002	A1	General arrangement - Stair-17 & 19 (Sheet 1 of 2)
62	SD-MTC-D01-TDS-S01-CCT-NTU-	20067	002	A1	General arrangement - Stair-17 & 19 (Sheet 2 of 2)
63	SD-MTC-D01-TDS-S01-CCT-NTU-	20068	002	A1	General arrangement - Stair-18 (Sheet 1 of 2)
64	SD-MTC-D01-TDS-S01-CCT-NTU-	20069	002	A1	General arrangement - Stair-18 (Sheet 1 of 2)
65	SD-MTC-D01-TDS-S01-CCT-NTU-	20070	002	A1	General arrangement - Stair-20 (Sheet 1 of 2)
66	SD-MTC-D01-TDS-S01-CCT-NTU-	20071	002	A1	General arrangement - Stair-20 (Sheet 1 of 2)
67	SD-MTC-D01-TDS-S01-CCT-NTU-	20072	002	A1	General arrangement - Stair-21 (Sheet 1 of 2)
68	SD-MTC-D01-TDS-S01-CCT-NTU-	20073	002	A1	General arrangement - Stair-21 (Sheet 1 of 2)
69	SD-MTC-D01-TDS-S01-CCT-NTU-	20074	002	A1	General arrangement - Stair-22 (Sheet 1 of 2)
70	SD-MTC-D01-TDS-S01-CCT-NTU-	20075	002	A1	General arrangement - Stair-22 (Sheet 1 of 2)
71	SD-MTC-D01-TDS-S01-CCT-NTU-	20076	002	A1	General arrangement - Stair-23&24
72	SD-MTC-D01-TDS-S01-CCT-NTU-	20077	002	A1	General arrangement - Stair-25
73	SD-MTC-D01-TDS-S01-CCT-NTU-	20078	002	A1	General arrangement -Stair-26
74	SD-MTC-D01-TDS-S01-CCT-NTU-	20079	002	A1	General arrangement - Stair-27&28
75	SD-MTC-D01-TDS-S01-CCT-NTU-	20080	002	A1	Cross Sectional detail (Sheet 1 of 4)
76	SD-MTC-D01-TDS-S01-CCT-NTU-	20081	003	A1	Cross Sectional detail (Sheet 2 of 4)
77	SD-MTC-D01-TDS-S01-CCT-NTU-	20082	002	A1	Cross Sectional detail (Sheet 3 of 4)
78	SD-MTC-D01-TDS-S01-CCT-NTU-	20083	001	A1	Cross Sectional detail (Sheet 4 of 4)
79	SD-MTC-D01-TDS-S01-CCT-NTU-	20084	001	A1	Longitudinal Section -1 (Sheet 1 of 7)
80	SD-MTC-D01-TDS-S01-CCT-NTU-	20085	002	A1	Longitudinal Section -1 (Sheet 2 of 7)
81	SD-MTC-D01-TDS-S01-CCT-NTU-	20086	002	A1	Longitudinal Section -1 (Sheet 3 of 7)
82	SD-MTC-D01-TDS-S01-CCT-NTU-	20087	001	A1	Longitudinal Section -1 (Sheet 4 of 7)
83	SD-MTC-D01-TDS-S01-CCT-NTU-	20088	001	A1	Longitudinal Section -1 (Sheet 5 of 7)
84	BD-MTC-D01-TDS-S01-CCT-NTU-	20089	002	A1	Longitudinal Section -2 (Sheet 1 of 7)
85	SD-MTC-D01-TDS-S01-CCT-NTU-	20090	003	A1	Longitudinal Section -2 (Sheet 2 of 7)
86	SD-MTC-D01-TDS-S01-CCT-NTU-	20091	003	A1	Longitudinal Section -2 (Sheet 3 of 7)
87	SD-MTC-D01-TDS-S01-CCT-NTU-	20092	002	A1	Longitudinal Section -2 (Sheet 4 of 7)
88	SD-MTC-D01-TDS-S01-CCT-NTU-	20093	002	A1	Longitudinal Section -2 (Sheet 5 of 7)
89	SD-MTC-D01-TDS-S01-CCT-NTU-	20094	001	A1	General arrangement - Tanks at B1 level
90	SD-MTC-D01-TDS-S01-CCT-NTU-	20095	001	A1	General arrangement - Sections - Tanks at B1 level
91	SD-MTC-D01-TDS-S01-CCT-NTU-	20096	001	A1	General arrangement - Tanks at B3 level
92	SD-MTC-D01-TDS-S01-CCT-NTU-	20097	001	A1	General arrangement - Future knockout panel details
93	SD-MTC-D01-TDS-S01-CCT-NTU-	20098	001	A1	Longitudinal Section -1 (Sheet 6 of 7)
94	SD-MTC-D01-TDS-S01-CCT-NTU-	20099	001	A1	Longitudinal Section -1 (Sheet 7 of 7)
95	SD-MTC-D01-TDS-S01-CCT-NTU-	20100	001	A1	Longitudinal Section -2 (Sheet 6 of 7)
96	SD-MTC-D01-TDS-S01-CCT-NTU-	20101	001	A1	Longitudinal Section -2 (Sheet 7 of 7)
97	SD-MTC-D01-TDS-S01-CCT-NTU-	20151	000	A1	Standard beam reinforcement details
98	SD-MTC-D01-TDS-S01-CCT-NTU-	20152	003	A1	Typical Reinforcement details drawing
99	SD-MTC-D01-TDS-S01-CCT-NTU-	20153	000	A1	Typical RC details: Lintels/transoms/mullion
100	SD-MTC-D01-TDS-S01-CCT-NTU-	20154	004	A1	RC details: B3 (Raft) Lvl. (Sheet 1 of 8)
101	SD-MTC-D01-TDS-S01-CCT-NTU-	20155	004	A1	RC details: B3 (Raft) Lvl. (Sheet 2 of 8)
102	SD-MTC-D01-TDS-S01-CCT-NTU-	20156	004	A1	RC details: B3 (Raft) Lvl. (Sheet 3 of 8)
103	SD-MTC-D01-TDS-S01-CCT-NTU-	20157	004	A1	RC details: B3 (Raft) Lvl. (Sheet 4 of 8)
104	SD-MTC-D01-TDS-S01-CCT-NTU-	20158	004	A1	RC details: B3 (Raft) Lvl. (Sheet 5 of 8)
105	SD-MTC-D01-TDS-S01-CCT-NTU-	20159	004	A1	RC details: B3 (Raft) Lvl. (Sheet 6 of 8)
106	SD-MTC-D01-TDS-S01-CCT-NTU-	20160	004	A1	RC details: B3 (Raft) Lvl. (Sheet 7 of 8)
107	SD-MTC-D01-TDS-S01-CCT-NTU-	20161	004	A1	RC details: B3 (Raft) Lvl. (Sheet 8 of 8)
108	SD-MTC-D01-TDS-S01-CCT-NTU-	20162	003	A1	RC details: Cross sections (Sheet 1 of 5)
109	SD-MTC-D01-TDS-S01-CCT-NTU-	20163	003	A1	RC details: Cross sections (Sheet 2 of 5)
110	SD-MTC-D01-TDS-S01-CCT-NTU-	20164	003	A1	RC details: Cross sections (Sheet 3 of 5)
111	SD-MTC-D01-TDS-S01-CCT-NTU-	20165	003	A1	RC details: Cross sections (Sheet 4 of 5)
112	SD-MTC-D01-TDS-S01-CCT-NTU-	20166	003	A1	RC details: Column/wall (Sheet 1 of 10)
113	SD-MTC-D01-TDS-S01-CCT-NTU-	20167	003	A1	RC details: Column/wall (Sheet 2 of 10)
114	SD-MTC-D01-TDS-S01-CCT-NTU-	20168	003	A1	RC details: Column/wall (Sheet 3 of 10)
115	SD-MTC-D01-TDS-S01-CCT-NTU-	20169	003	A1	RC details: Column/wall (Sheet 4 of 10)
116	SD-MTC-D01-TDS-S01-CCT-NTU-	20170	002	A1	RC details: Column/wall (Sheet 5 of 8)
117	SD-MTC-D01-TDS-S01-CCT-NTU-	20171	003	A1	RC details: Column/wall (Sheet 6 of 10)
118	SD-MTC-D01-TDS-S01-CCT-NTU-	20172	003	A1	RC details: Column/wall (Sheet 7 of 8)

STRUCTURAL DRAWINGS - BKC STATION AND CUT & COVER DRAWING LIST					
SL. No.	Drawing No.			Sheet	Title
119	SD-MTC-D01-TDS-S01-CCT-NTU-	20173	003	A1	RC details: Column/wall (Sheet 8 of 10)
120	SD-MTC-D01-TDS-S01-CCT-NTU-	20174	001	A1	RC details: Stair -1
121	SD-MTC-D01-TDS-S01-CCT-NTU-	20175	001	A1	RC details: Stair -2
122	SD-MTC-D01-TDS-S01-CCT-NTU-	20176	001	A1	RC details: Stair -3
123	SD-MTC-D01-TDS-S01-CCT-NTU-	20177	001	A1	RC details: Stair - 4
124	SD-MTC-D01-TDS-S01-CCT-NTU-	20178	002	A1	RC details: Stair - 5 & 6
125	SD-MTC-D01-TDS-S01-CCT-NTU-	20179	001	A1	RC details: Stair - 7 & 8
126	SD-MTC-D01-TDS-S01-CCT-NTU-	20180	000	A1	RC details: Stair - 9,10,11 & 12 (Sheet 1 of 2)
127	SD-MTC-D01-TDS-S01-CCT-NTU-	20181	001	A1	RC details: Stair - 9,10,11 & 12 (Sheet 2 of 2)
128	SD-MTC-D01-TDS-S01-CCT-NTU-	20182	001	A1	RC details: Stair - 13 & 14
129	SD-MTC-D01-TDS-S01-CCT-NTU-	20183	002	A1	RC details: Stair - 15 & 16
130	SD-MTC-D01-TDS-S01-CCT-NTU-	20184	003	A1	RC details: Stair - 17 & 19 (Sheet 1 of 2)
131	SD-MTC-D01-TDS-S01-CCT-NTU-	20185	001	A1	RC details: Stair - 17 & 19 (Sheet 2 of 2)
132	SD-MTC-D01-TDS-S01-CCT-NTU-	20186	003	A1	RC details: Stair -18 (Sheet 1 of 2)
133	SD-MTC-D01-TDS-S01-CCT-NTU-	20187	002	A1	RC details: Stair -18 (Sheet 2 of 2)
134	SD-MTC-D01-TDS-S01-CCT-NTU-	20188	002	A1	RC details: Stair -20 (Sheet 1 of 2)
135	SD-MTC-D01-TDS-S01-CCT-NTU-	20189	002	A1	RC details: Stair -20 (Sheet 2 of 2)
136	SD-MTC-D01-TDS-S01-CCT-NTU-	20190	002	A1	RC details: Stair -21 (Sheet 1 of 2)
137	SD-MTC-D01-TDS-S01-CCT-NTU-	20191	002	A1	RC details: Stair -21 (Sheet 2 of 2)
138	SD-MTC-D01-TDS-S01-CCT-NTU-	20192	002	A1	RC details: Stair -22 (Sheet 1 of 2)
139	SD-MTC-D01-TDS-S01-CCT-NTU-	20193	002	A1	RC details: Stair -22 (Sheet 2 of 2)
140	SD-MTC-D01-TDS-S01-CCT-NTU-	20194	002	A1	RC details: Stair -23, 24
141	SD-MTC-D01-TDS-S01-CCT-NTU-	20195	003	A1	RC details: Stair -25
142	SD-MTC-D01-TDS-S01-CCT-NTU-	20196	002	A1	RC details: Stair -27, 28
143	SD-MTC-D01-TDS-S01-CCT-NTU-	20197	003	A1	RC details: Stair -26
144	SD-MTC-D01-TDS-S01-CCT-NTU-	20198	001	A1	Details: Stair - M1 & M2
145	SD-MTC-D01-TDS-S01-CCT-NTU-	20199	001	A1	RC details: Platform level
146	SD-MTC-D01-TDS-S01-CCT-NTU-	20200	003	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 1 of 8)
147	SD-MTC-D01-TDS-S01-CCT-NTU-	20201	003	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 2 of 8)
148	SD-MTC-D01-TDS-S01-CCT-NTU-	20202	003	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 3 of 8)
149	SD-MTC-D01-TDS-S01-CCT-NTU-	20203	003	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 4 of 8)
150	SD-MTC-D01-TDS-S01-CCT-NTU-	20204	004	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 5 of 8)
151	SD-MTC-D01-TDS-S01-CCT-NTU-	20205	004	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 6 of 8)
152	SD-MTC-D01-TDS-S01-CCT-NTU-	20206	004	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 7 of 8)
153	SD-MTC-D01-TDS-S01-CCT-NTU-	20207	004	A1	RC DETAILS: B2 (SLAB) LVL. (Sheet 8 of 8)
154	SD-MTC-D01-TDS-S01-CCT-NTU-	20208	001	A1	RC details: B2 Lvl. Beams (Sheet 1 of 6)
155	SD-MTC-D01-TDS-S01-CCT-NTU-	20209	001	A1	RC details: B2 Lvl. Beams (Sheet 2 of 6)
156	SD-MTC-D01-TDS-S01-CCT-NTU-	20210	001	A1	RC details: B2 Lvl. Beams (Sheet 3 of 6)
157	SD-MTC-D01-TDS-S01-CCT-NTU-	20211	002	A1	RC details: B2 Lvl. Beams (Sheet 4 of 6)
158	SD-MTC-D01-TDS-S01-CCT-NTU-	20212	002	A1	RC details: B2 Lvl. Beams (Sheet 5 of 6)
159	SD-MTC-D01-TDS-S01-CCT-NTU-	20213	003	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 1 of 8)
160	SD-MTC-D01-TDS-S01-CCT-NTU-	20214	003	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 2 of 8)
161	SD-MTC-D01-TDS-S01-CCT-NTU-	20215	003	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 3 of 8)
162	SD-MTC-D01-TDS-S01-CCT-NTU-	20216	004	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 4 of 8)
163	SD-MTC-D01-TDS-S01-CCT-NTU-	20217	004	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 5 of 8)
164	SD-MTC-D01-TDS-S01-CCT-NTU-	20218	004	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 6 of 8)
165	SD-MTC-D01-TDS-S01-CCT-NTU-	20219	003	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 7 of 8)
166	SD-MTC-D01-TDS-S01-CCT-NTU-	20220	003	A1	RC DETAILS: B1 (SLAB) LVL. (Sheet 8 of 8)
167	SD-MTC-D01-TDS-S01-CCT-NTU-	20221	001	A1	RC details: B1 Lvl. Beams (Sheet 1 of 5)
168	SD-MTC-D01-TDS-S01-CCT-NTU-	20222	001	A1	RC details: B1 Lvl. Beams (Sheet 2 of 5)
169	SD-MTC-D01-TDS-S01-CCT-NTU-	20223	002	A1	RC details: B1 Lvl. Beams (Sheet 3 of 5)
170	SD-MTC-D01-TDS-S01-CCT-NTU-	20224	002	A1	RC details: B1 Lvl. Beams (Sheet 4 of 5)
171	SD-MTC-D01-TDS-S01-CCT-NTU-	20225	001	A1	RC details: B1 Lvl. Beams (Sheet 5 of 5)
172	SD-MTC-D01-TDS-S01-CCT-NTU-	20226	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 1 of 8)
173	SD-MTC-D01-TDS-S01-CCT-NTU-	20227	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 2 of 8)
174	SD-MTC-D01-TDS-S01-CCT-NTU-	20228	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 3 of 8)
175	SD-MTC-D01-TDS-S01-CCT-NTU-	20229	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 4 of 8)
176	SD-MTC-D01-TDS-S01-CCT-NTU-	20230	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 5 of 8)
177	SD-MTC-D01-TDS-S01-CCT-NTU-	20231	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 6 of 8)
178	SD-MTC-D01-TDS-S01-CCT-NTU-	20232	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 7 of 8)
179	SD-MTC-D01-TDS-S01-CCT-NTU-	20233	003	A1	RC DETAILS: URSL (SLAB) LVL. (Sheet 8 of 8)

STRUCTURAL DRAWINGS - BKC STATION AND CUT & COVER DRAWING LIST					
SL. No.	Drawing No.			Sheet	Title
180	SD-MTC-D01-TDS-S01-CCT-NTU-	20235	002	A1	RC details: GF & Mezzanine level - West Entry/exit structures
181	SD-MTC-D01-TDS-S01-CCT-NTU-	20236	003	A1	RC details: Terrace level - West Entry/exit structure
182	SD-MTC-D01-TDS-S01-CCT-NTU-	20237	002	A1	RC details: Tanks at B1 Lvl. (Sheet 1 of 2)
183	SD-MTC-D01-TDS-S01-CCT-NTU-	20238	003	A1	RC details: Tanks at B1 Lvl. (Sheet 2 of 2)
184	SD-MTC-D01-TDS-S01-CCT-NTU-	20239	001	A1	RC details: Tanks at B3 Lvl.
185	SD-MTC-D01-TDS-S01-CCT-NTU-	20240	002	A1	RC details: Future knock out and cut out panels
186	SD-MTC-D01-TDS-S01-CCT-NTU-	20241	003	A1	RC details: Cross sections (Sheet 5 of 5)
187	SD-MTC-D01-TDS-S01-CCT-NTU-	20243	001	A1	RC details : Column/wall (Sheet 9 of 10)
188	SD-MTC-D01-TDS-S01-CCT-NTU-	20244	001	A1	RC details : Column/wall (Sheet 10 of 10)
189	SD-MTC-D01-TDS-S01-CCT-NTU-	20102	000	A1	General Arrangment - Ventilation Shaft - 2
190	SD-MTC-D01-TDS-S01-CCT-NTU-	20234	000	A1	RC Details - Retaining wall above URSL
191	SD-MTC-D01-TDS-S01-CCT-NTU-	20242	000	A1	RC details: B2 Lvl. Beams (Sheet 6 of 6)
192	SD-MTC-D01-TDS-S01-CCT-NTU-	20245	000	A1	RC Details - Ventilation Shaft - 2
193	SD-MTC-D01-TDS-S01-CCT-NTU-	20246	001	A1	RC details: Raft cross sections (Sheet 1 of 2)
194	SD-MTC-D01-TDS-S01-CCT-NTU-	20247	001	A1	RC details: Raft cross sections (Sheet 2 of 2)
195	SD-MTC-D01-TDS-S01-CCT-NTU-	20248	000	A1	RC details: Typical extra reinforcement around cutout in wall

GENERAL:

1. ALL LEVELS ARE CONSIDERED WITH RESPECT TO MEAN SEA LEVEL.
2. DRAWINGS SHALL NOT BE SCALED. FOLLOW WRITTEN DIMENSION ONLY.
3. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS AND ELEVATIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. ALL LEVELS & DIMENSION INDICATED IN DRAWINGS ARE FROM CONCRETE SURFACE WITHOUT ANY FINISHES.
5. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK. ANY DISCREPANCY FOUND IN DIMENSION SHALL BE BROUGHT TO THE NOTICE OF ENGINEER BEFORE EXECUTION.
6. DETAILS OF CONSTRUCTION NOT SPECIFICALLY SHOWN SHALL BE CONSTRUCTED IN ACCORDANCE TO TECHNICAL SPECIFICATIONS AND AS PER DETAILS SHOWN FOR SIMILAR CONDITIONS AND MATERIALS, AND SHALL BE APPROVED BY THE ENGINEER.
7. ALL EMBEDDED SERVICES, DUCTS FOR ELECTRICAL/PLUMBING/MECHANICAL SHALL BE PLACED APPROPRIATELY BEFORE CASTING OF CONCRETE AS PER APPROVED MEP SYSTEM DETAILS.
8. ALL SLEEVES SHALL BE SUITABLY CLOSED TO PREVENT ENTRY OF CONCRETE WHILE CASTING & APPROPRIATE MEASURES SHOULD BE TAKEN TO PREVENT DAMAGE OF SLEEVES AND TO ENSURE APPROPRIATE SHAPE IS MAINTAINED.
9. ALL FOUNDATION SHALL REST ON FIRM STRATA & UNDULATIONS SHALL BE MADE GOOD WITH PLUM CONCRETE.
10. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CORRESPONDING ARCHITECTURAL, SERVICES DRAWINGS, COMBINED UTILITY DRAWINGS, CONTRACT TERMS & CONDITIONS AND SPECIFICATIONS.
11. CONTRACTOR SHALL PLAN UNDERGROUND EXCAVATION WORKS TAKING IN TO CONSIDERATION APPROPRIATE EARTH SUPPORTING SYSTEM TO ACHIEVE STABLE SLOPE. THE SAME SHALL BE APPROVED BY ENGINEER BEFORE EXECUTION STARTS.
12. TO MINIMIZE DEWATERING CONTRACTOR SHALL PLAN THE EXCAVATION WORKS CONSIDERING EXPECTED RAINS, GROUND WATER LEVELS. CONTRACTOR SHALL ADOPT APPROPRIATE METHODS TO LOWER THE WATER TABLE (WITHOUT CREATING DRAWDOWN APPROPRIATELY MONITORED AND CONTROLLED) TO ENSURE NO FLOATATION DURING CONSTRUCTION.
13. UNLESS OTHERWISE NOTED, FOR REINFORCED CONCRETE WORKS, ALL PROVISIONS OF IS:456 AND SPECIFICATION PERTAINING TO DESIGN, DETAILING AND CONSTRUCTION SHALL APPLY.
14. FOR CONCRETE GRADE AND COVER TO MAIN REINFORCEMENT REFER TABLE–2
15. SETTING OUT LAYOUT FOR STRUCTURE SHALL BE AS PER ARCHITECTURAL DRAWINGS.

BLASTING -

1. BLASTING WORK SHALL BE CARRIED OUT AS PER THE TECHNICAL SPECIFICATIONS.

UNDER CUT – KEYING–IN

1. KEYING OF THE RAFT IN ROCK SHALL BE DONE FOR MINIMUM 1.0M TO GENERATE SHEAR RESISTANCE AGAINST UPLIFT.
2. THE MINIMUM SHEAR RESISTANCE CONSIDERED IS 0.35MPa.
   THE SAME NEED TO BE VERIFIED AT SITE AND APPROVED FROM ENGINEER.

EARTH WORK & FOUNDATION

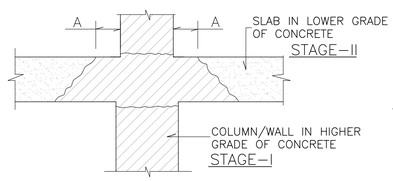
1. ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO PLACING OF CONCRETE. EXCAVATION AND BACK FILLING TO BE DONE AS PER STANDARD SPECIFICATIONS FOR EARTHWORKS.
2. BACKFILLING AROUND THE EXTERNAL WALLS SHALL BE DONE AS PER THE BACKFILLING DRAWING AND TECHNICAL SPECIFICATIONS AFTER COMPLETION OF WATERPROOFING.

CONCRETE:

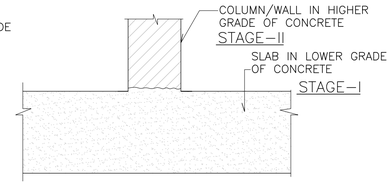
1. DESIGN OF CONCRETE MIX, TYPE AND QUANTITY OF CEMENTITIOUS MATERIALS AND AGGREGATES AND TESTING PROCEDURES SHALL CONFIRM TO BIS CODE AND TECHNICAL SPECIFICATIONS & DESIGN SHALL BE APPROVED BY ENGINEER.
2. EMBEDDED MATERIALS:
   A. BEFORE PLACING CONCRETE, CARE SHALL BE TAKEN THAT ALL REINFORCING STEEL DOWELS, EMBEDDED ITEMS AND EQUIPMENT ANCHORS ARE IN POSITION AND SECURELY FASTENED IN PLACE AS PER RELAVENT DRAWINGS.
   B. ALL EMBEDDED ITEMS REFER TO APPLICABLE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND VENDORS EQUIPMENT DRAWINGS. FOR ADDITIONAL DETAILS ON LOCATION, SETTING AND ARRANGEMENT OF EMBEDDED ITEMS USED AS FOLLOWS, BUT NOT LIMITED TO:
      (1) ANCHOR BOLTS AND ANCHORS.
      (2) ELECTRICAL CONDUITS, APPARATUS AND GROUNDING CONDUCTORS.
      (3) EMBEDDED STRUCTURAL STEEL FOR EQUIPMENT AND MISCELLANEOUS STEEL.
      (4) PIPING, PIPE SLEEVES, METAL INSERTS, FLOOR DRAINS, TRENCH DETAILS, WEDGE INSERTS, WELDED HEADED STUDS.
   C. ELECTRIC CONDUITS AND PIPING TO BE EMBEDDED IN STRUCTURAL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS OF RELEVANT SPECIFICATIONS.
   D. WATER STOPS SHALL BE MADE CONTINUOUS BY CAREFULLY MADE FIELD CONNECTIONS. ALL PROJECTING WATER STOPS SHALL BE SUPPORTED AND PROTECTED FROM DAMAGE AND EXPOSURE DURING CONSTRUCTION.
3. NOTICE OF NO OBJECTION/APPROVAL OF ALL THE CUTOUTS REQUIRED FOR MEP/SERVICES SHALL BE OBTAINED BY CONTRACTOR FROM THE ENGINEER. ANY CHANGE OR DISCREPANCY TO BE BROUGHT IN NOTICE OF ENGINEER BEFORE EXECUTION.
4. JOINT AND RECESSES:
   THE JOINT AND RECESSES SHALL CONFORM TO BIS CODE AND TECHNICAL SPECIFICATION. THE LOCATION AND ARRANGEMENT OF CONSTRUCTION JOINT SHALL BE AS APPROVED BY THE ENGINEER.
5. PLACEMENT TEMPERATURE FOR CONCRETE SHALL NOT EXCEED TEMPERATURE AS MENTIONED BELOW.
   TO MAINTAIN THE DESIRED PLACEMENT TEMPERATURE, ICE COOLED AGGREGATES, CHILLED WATER OR ANY METHOD ADOPTED SHALL BE USED AS DIRECTED BY ENGINEER,
   > FOR THICKNESS EQUAL TO OR GREATER THAN 1000MM----25°C
6. IT SHALL BE ENSURED THAT MAXIMUM TEMPERATURE IN CONCRETE AFTER POURING DOES NOT RISE ABOVE 65°C.
7. WATERPROOFING SHALL BE DONE AS PER SPECIFICATIONS BY APPROVED WATERPROOFING SYSTEM SUPPLIER IN HIS PRESENCE.
8. DURABILITY PROPERTIES OF CONCRETE SHALL BE ACHIEVED AS SPECIFIED IN TABLE–1.
9. DOWELS/INSERTPLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CEMENT –

1. CEMENT USED IN CONCRETE SHALL CONFORM TO BIS CODE AND TECHNICAL SPECIFICATIONS.



POUR SEQUENCE FOR TWO GRADES OF CONCRETE AT THE COLUMN BEAM JUNCTION



POUR SEQUENCE FOR TWO GRADES OF CONCRETE AT THE RAFT/COLUMN JUNCTION

i) HIGHER GRADE OF CONCRETE SHALL BE PLACED FIRST IN THE COLUMN/WALL.
ii) LOWER GRADE CONCRETE IN BEAMS SHALL BE PLACED WHEN HIGHER GRADE CONCRETE IS PLASTIC.
iii) DISTANCE "A" SHOULD BE MIN. 800 mm OR DEPTH OF DEEPEST BEAM MEETING AT JUNCTION, WHICHEVER IS GREATER.
iv) CONCRETE JUNCTIONS SHALL BE ADEQUATELY VIBRATED TO ENSURE PROPER INTEGRATION OF MIXES.
v) CONTRACTOR TO PLAN DELIVERIES OF TWO GRADES OF MIXES ACCORDINGLY.

FORMWORKS:

1. FORMWORK SHALL CONFORM TO BIS CODE AND TECHNICAL SPECIFICATIONS.
2. FORMWORK TO BE DESHUTTERED AFTER APPROPRIATE STRENGTH IN CONCRETE IS ACHIEVED.

REINFORCEMENT

1. REINFORCING STEEL
   A. ALL REINFORCING STEEL SHALL BE HIGH STRENGTH DEFORMED BARS (HYSD) OF GRADE Fe–550D CONFORMING TO IS–1786 WITH YEILD STRENGTH OF 550Mpa AND MINIMUM ELONGATION OF16%
2. DETAILING
   A. ALL DETAILING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE BIS CODE FOR REINFORCED CONCRETE, UNLESS OTHERWISE NOTED.
   B. FOR DETAILING STANDARDS OF BENT BARS, HOOKS AND OTHER POSITIONING AND FASTENING DETAILS, REFER TO THE RELEVANT BIS CODE PROVISIONS IN ADDITION TO TYPICAL RC DETAILS PROVIDED.
   C. DIMENSIONS AND SPACING OF BARS ARE TO THE CENTER LINES OF THE BARS UNLESS OTHERWISE NOTED.
   D. REINFORCEMENT DETAILING SHALL CONFORM TO IS:13920.
3. PLACING OF REINFORCING BARS:
   A. REINFORCEMENT MAY BE ADJUSTED WITH THE APPROVAL OF ENGINEER AS NECESSARY TO CLEAR OPENINGS POCKETS, PIPES, SEAL RECESSES, EMBEDDED ITEMS AND CONDUITS. IN NO CASE, BARS SHALL BE BENT WITH A RADIUS LESS THAN SPECIFIED FOR STANDARD HOOKS.
   B. TO MAINTAIN CORRECT POSITION OF REINFORCING BARS AND TO PREVENT DISPLACEMENT OF BARS DURING PLACING AND COMPACTION OF CONCRETE, SPACERS & CHAIRS CONFORMING TO IS:2502. CONCRETE COVER BLOCKS SHALL ONLY BE USED. COVER BLOCKS SHALL BE READY MADE CONCRETE BLOCKS OF THE SAME GRADE OR ONE GRADE HIGHER THAN THAT OF CONCRETE USED.
   C. REINFORCEMENT BARS UP TO 20MM DIAMETER, WHEREVER SHOWN IN SINGLE LENGTHS, SHALL BE LAP SPLICED AT SITE BASED ON LENGTHS OF BARS AVAILABLE. SUCH SPLICES SHALL BE STAGGERED SO THAT NOT MORE THAN 50% BARS ARE SPLICED AT THE SAME LOCATION. CLEAR DISTANCE BETWEEN SUCH STAGGERED SPLICES SHALL BE NOT LESS THAN 1.3 TIMES THE DEVELOPMENT LENGTH.
   D. ALL BARS SHALL BE STRAIGHTENED AND PLACED IN APPROPRIATE POSITION WITHOUT INDUCING STRESS IN THE BARS.
   E. LAP LENGTH INCLUDING ANCHORAGE VALUE OF HOOKS SHALL NOT BE LESS THAN THE DEVELOPMENT LENGTH OF LARGEST LONGITUDINAL BAR IN TENSION. THE DEVELOPMENT LENGTH FOR BARS OF DIFFERENT GRADES OF CONCRETE IS GIVEN BELOW.
   ø – DIAMETER OF THE BAR

GRADE OF CONCRETE	DEVELOPMENT LENGTH (MM)
M20	63 X ø
M25	54 X ø
M30	50 X ø
M35	44 X ø
M40 & ABOVE	40 X ø

   F. KINK IN REINFORCEMENT, IF REQUIRED SHALL NOT HAVE SLOPE MORE THAN 1:6.
   G. WELDING OF REINFORCEMENT BARS SHALL BE AVOIDED. IF FOR SOME UNAVOIDABLE REASONS IT IS REQUIRED THAN IT SHALL BE AS PER THE DETAILS PROVIDED BY ENGINEER.
   H. COUPLERS IF USED SHALL BE APPROVED BY THE ENGINEER AND ALL THE TESTS SUGGESTED ON THE COUPLERS SHALL BE CARRIED OUT FOR APPROVAL BEFORE THEY ARE USED FOR EXECUTION.
   I. BARS SHALL NOT BE LAPPED IN THE CONFINEMENT ZONE FOR COLUMN & FOR BEAM MAIN BARS SHALL NOT BE LAPPED WITHIN DISTANCE 2D FROM FACE OF COLUMN WHERE 'D' IS OVERALL DEPTH OF BEAM.
   J. TOLERANCES ON PLACING OF REINFORCEMENT SHALL CONFORM TO IS:456.
   K. 90° BEND ALLOWANCE SHALL BE AS MENTIONED BELOW AND ROUNDED OFF TO NEAREST 5MM,
   FOR BARS OF DIAMETER LESS THAN OR EQUAL TO Y25 – 6ø (MINIMUM OF 75MM)
   FOR BARS OF DIAMETER MORE THAN Y25 – 7ø
   ø–DIAMETER OF BAR CONSIDERED

TABLE–1:
TEST REGIME: RCPT, PERMEABILITY AND PERMEABILITY COEFFICIENT.

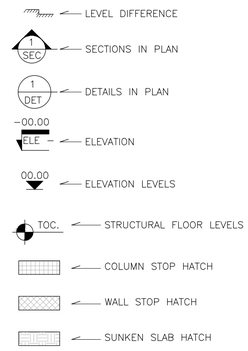
SL. NO.	TESTS	REFERENCE	AGE OF CONCRETE	FREQUENCY	ACCEPTABLE LIMITS
1.	RCPT	ASTM–C 1202	28 DAYS	1 TEST FOR EVERY 500 CUM OF CONCRETING FOR FIRST 3 TIMES; IF RESULT LIES WITHIN ACCEPTABLE LIMIT THEN, 1 TEST IN EACH 1000CUM; OTHERWISE REPEAT THE INITIAL TEST (3 TEST)– 1 NO FOR EVERY DAY 500 M³	≤1000 COULOMBS
2.	PERMEABILITY COEFF. (K) (ALL CONCRETE ELEMENTS IN CONTACT WITH SOIL & WATER)	IS–3085/ DIN–1048–5 OR EQUIVALENT CODE	28 DAYS	1 TEST FOR EVERY 500 CUM OF CONCRETING FOR FIRST 3 TIMES; IF RESULT LIES WITHIN ACCEPTABLE LIMIT THEN, 1 TEST IN EACH 1000CUM; OTHERWISE REPEAT THE INITIAL TEST (3 TEST)– 1 NO FOR EVERY DAY 500 M³	≤5X10⁻¹³ M/S
3.	PERMEABILITY (PENETRABILITY)	DIN–1048–5 OR EQUIVALENT CODE	28 DAYS	1 TEST FOR EVERY 500 CUM OF CONCRETING FOR FIRST 3 TIMES; IF RESULT LIES WITHIN ACCEPTABLE LIMIT THEN, 1 TEST IN EACH 1000CUM; OTHERWISE REPEAT THE INITIAL TEST (3 TEST)– 1 NO FOR EVERY DAY 500 M³	≤ 10MM

TABLE–2:
CONCRETE GRADE AND COVER MAIN REINFORCEMENT

STRUCTURAL ELEMENT		COVER TO MAIN REINFORCEMENT	CONCRETE
LINTEL,TRANSOM & MULLION		30MM	M25
RAFT	SIDE IN CONTACT WITH SOIL	75MM	M60
	SIDE NOT IN CONTACT WITH SOIL	50MM	
INTERNAL COLUMN		40MM	M80
INTERNAL SHEAR WALL		40MM	M80
BEAM	SIDE IN CONTACT WITH SOIL	75MM	M60
	SIDE NOT IN CONTACT WITH SOIL	50MM	
SLAB	SIDE IN CONTACT WITH SOIL	75MM	M60
	SIDE NOT IN CONTACT WITH SOIL	50MM	
OUTER WALL	SIDE IN CONTACT WITH SOIL	75MM	M60
	SIDE NOT IN CONTACT WITH SOIL	50MM	
STAIRCASE	PHERIPHERAL RC WALL	40MM	M60
	COLUMN	40MM	
	BEAM	50MM	
	WAIST SLAB	45MM	
PLATFORM WALL / SLAB		40MM	M60
WATERTANK	WALL	50MM	M30
	BEAM	50MM	
	SLAB	50MM	
TOP 1M OF FUTURE IFSC COLUMN/WALL		40MM	M30

ABBREVIATION & SYMBOLS

THK --- THICK
TYP --- TYPICAL
TOC --- TOP OF CONCRETE
GF --- GROUND FLOOR
CT --- COLUMN DESIGNED FOR FUTURE IFSC TOWERS
CG --- COLUMN DESIGNED FOR HSR STRUCTURE STOPS AT URSL LEVEL(NOT DESIGNED FOR FUTURE IFSC TOWER)
C --- COLUMN DESIGNED FOR HSR STRUCTURE (NOT DESIGN FOR FUTURE IFSC COLUMN)
W --- WALL DESIGNED FOR HSR STRUCTURE (NOT DESIGN FOR FUTURE IFSC COLUMN)
WT --- WALL DESIGNED FOR FUTURE IFSC TOWERS
WG --- WALL DESIGNED FOR HSR STRUCTURE STOPS AT URSL LEVEL(NOT DESIGNED FOR FUTURE IFSC TOWER)
CMECH-- CUTOUT FOR MECHANICAL SERVICES
CCAB -- CUTOUT FOR CABLES
CELE -- CUTOUT FOR ELECTRICAL SERVICES
CTEL -- CUTOUT FOR TELECOM SERVICES
EPS -- ELECTRICAL PIPE SHAFT
EVS -- SERVICE ELEVATOR SHAFT
EVP -- PASSENGER ELEVATOR SHAFT
PRS -- PRESSURIZATION SHAFT
RC -- REINFORCEMENT CONCRETE
PS -- PIPE SHAFT
FA -- CUTOUT FOR FRESH AIR
EA -- CUTOUT FOR EXHAUST AIR
CPS -- CUTOUT FOR PLUMBING SERVICES
S -- SLAB
MM -- MILLIMETER
M -- METER
LD -- DEVELOPMENT LENGTH
DIA -- DIAMETER
IS -- INDIAN STANDARD
C/L -- CENTER LINE
EGL -- EXISTING GROUND LEVEL
NGL -- NATURAL GROUND LEVEL
FFL -- FINISHED FLOOR LEVEL
FGL -- FINISHED GROUND LEVEL
LVL -- LEVEL
URSL -- UNDERGROUND ROOF SLAB LEVEL
PCC -- PLAIN CEMENT CONCRETE
RCC -- REINFORCEMENT CEMENT CONCRETE
SFR -- SIDE FACE REINFORCEMENT
TOS -- TOP OF STEEL
T/B -- TOP BOTTOM
E/F -- EACH FACE
B/F -- BOTH FACE
ø -- DIAMETER OF BAR
UON -- UNLESS OTHERWISE NOTED



REFERENCES

ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE LATEST VERSION OF FOLLOWING DRAWINGS.

1) SD–JIC–C14–DRW–S01–CCT–NTU–10020
2) SD–JIC–C14–DRW–S01–CCT–NTU–10030
3) SD–JIC–C14–DRW–S01–CCT–NTU–10040

SBC ASSUMPTION

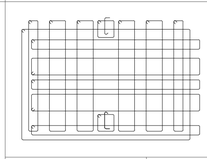
SBC IS ASSUMED AS NOTED BELOW. CONTRACTOR SHALL CONFIRM THE SBC VALUES NOTED BELOW BEFORE START OF ANY WORK. ANY DEVIATION OF SBC FROM THE ASSUMED VALUES SHALL BE IMMEDIATELY REFERED BACK TO ENGINEER AND CONCERNED AUTHORITY.

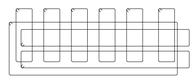
1. GRID X0 TO X33 = 213 T/Sqm
2. GRID X33 TO X62 = 280 T/Sqm
3. GRID X62 TO X77 = 143 T/Sqm

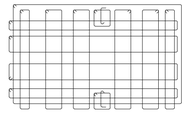
ADOPTED BY: **NHSRCL**

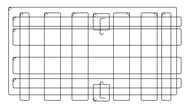
PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI

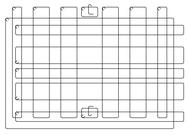
REVISED :	DATE : 14.07.2020	TITLE: GENERAL NOTES
PREPARED :	NNP / FAS	
CHECKED :	GB / MS	SCALE: -
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20001-004

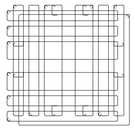


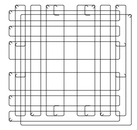


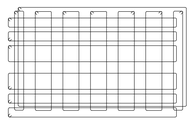


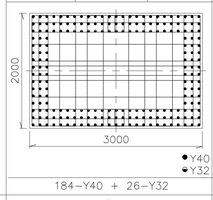


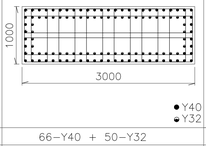


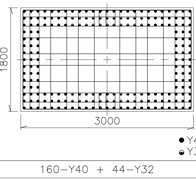


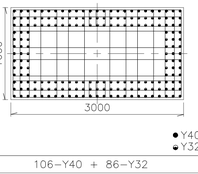


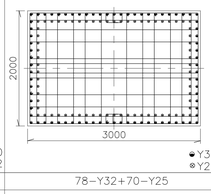


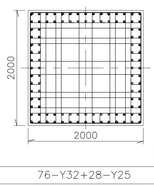


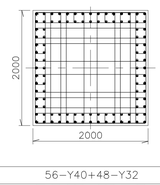


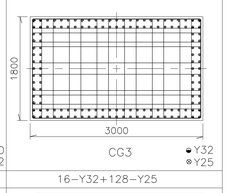


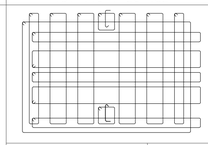


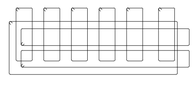


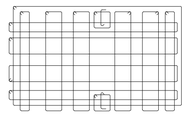


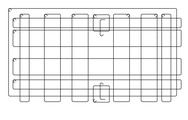


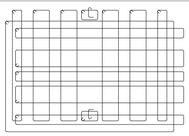


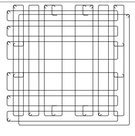


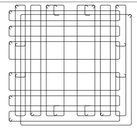


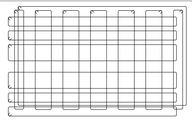


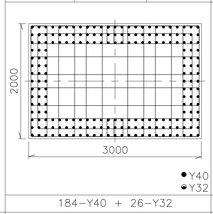


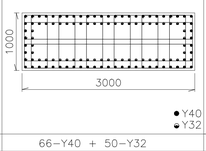


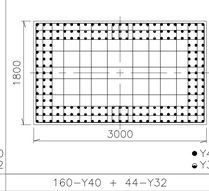


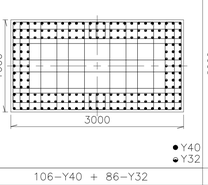


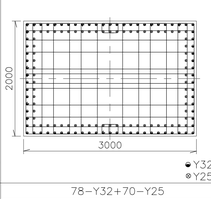


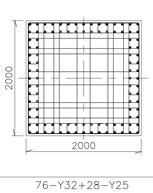


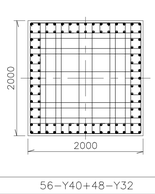


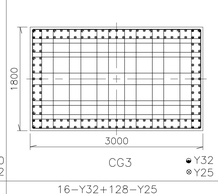


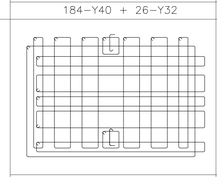


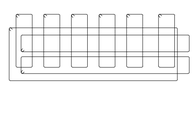


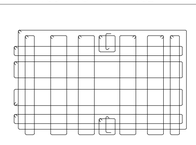


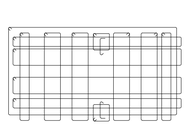


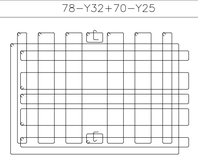


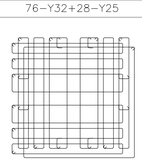


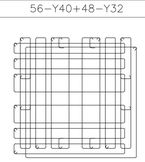


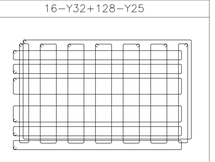












	CT1	CT2	CT3	CT4	CG1	CG2	CG6	CG3
GF TO TERRACE (TOC.+18.40)	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE COLUMN ONLY	SAME REINF. TO BE FOLLOWED	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE COLUMN ONLY	–	–	–	–	–
URSL TO GF	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE COLUMN ONLY	SAME REINF. TO BE FOLLOWED	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE COLUMN ONLY	–	SAME REINF. TO BE FOLLOWED	–	–	–
B1 TO URSL	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 184−Y40 + 26−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 66−Y40 + 50−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 160−Y40 + 44−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 106−Y40 + 86−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 78−Y32+70−Y25	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 76−Y32+28−Y25	Z1 HEIGHT = 2000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 56−Y40+48−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 16−Y32+128−Y25
B2 TO B1	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 184−Y40 + 26−Y32	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 66−Y40 + 50−Y32	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 160−Y40 + 44−Y32	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 106−Y40 + 86−Y32	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 78−Y32+70−Y25	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 76−Y32+28−Y25	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 56−Y40+48−Y32	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 16−Y32+128−Y25
B3 TO B2	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 184−Y40 + 26−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 66−Y40 + 50−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 160−Y40 + 44−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 106−Y40 + 86−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 78−Y32+70−Y25	Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS – 76−Y32+28−Y25	Z1 HEIGHT = 2000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 56−Y40+48−Y32	Z1 HEIGHT = 3000 Z1 MAIN LINK Y16 @ 100 Z1 OTHERS Y10 @ 100 Z2 LINKS Y10 @ 200 16−Y32+128−Y25
COLUMN MARKED	CT1	CT2	CT3	CT4	CG1	CG2	CG6	CG3

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD−MTC−D01−TDS−S01−CCT−NTU−20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION−7 −−−−−−−− BD−JIC−C14−DRW−S01−STA−NTU−02110

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES −−−−−−−−−−−−− SD−MTC−D01−TDS−S01−CCT−NTU−20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS −− SD−MTC−D01−TDS−S01−CCT−NTU−20152
9. RC DETAILS: COLUMN / WALL −−−−−−SD−MTC−D01−TDS−S01−CCT−NTU−20167 TO 20173, 20243, 20244

ADOPTED BY: **NHSRCL**

PROJECT :
Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

OWNER :
NHSRCL
NATIONAL HIGH SPEED RAIL
CORPORATION LTD.

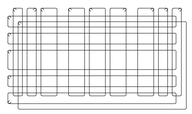
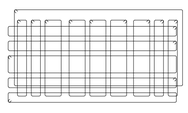
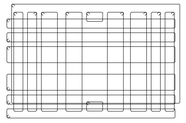
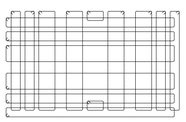
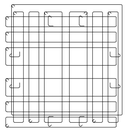
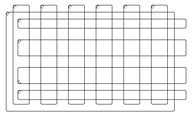
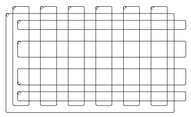
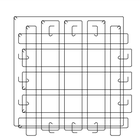
STRUCTURAL CONSULTANT :
TATA
TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : **10.07.2020**	
PREPARED :	**SVD / FAS / NNP**	
CHECKED :	**AZ / OK / GB / MS**	
APPROVED :	**NJT / HD / SND**	

TITLE:
RC DETAILS: COLUMN / WALL
SHEET (1 OF 10)

SCALE: **NTS**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20166-003**

B1 TO URSL																								
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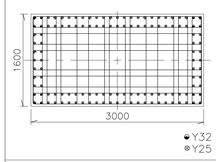
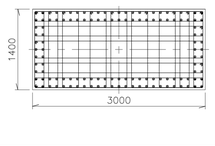
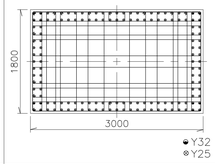
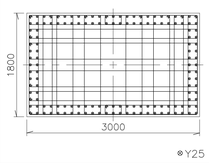
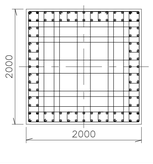
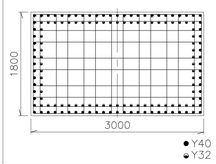
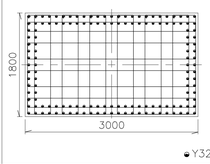
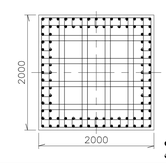
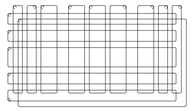
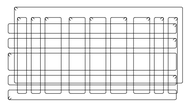
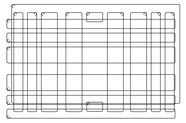
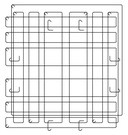
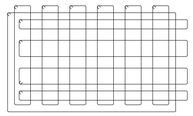
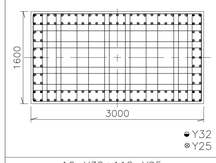
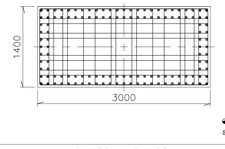
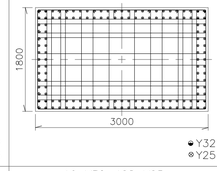
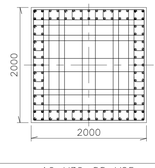
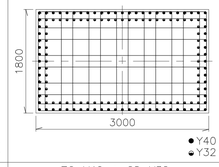
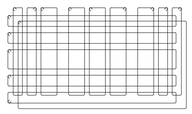
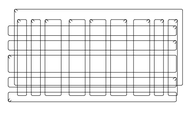
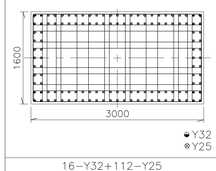
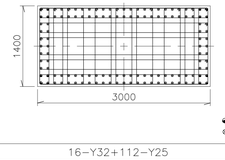
	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS
	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10 @ 100	Y12 @ 200	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y12 @ 100	Y12 @ 200	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10 @ 100	–
																								
	16–Y32+112–Y25			16–Y32+112–Y25			16–Y32+128–Y25			144–Y25			16–Y32+88–Y25			76–Y40 + 68–Y32			144–Y32			76–Y40 + 28–Y32		
B2 TO B1										----									----			----		
	Z1 HEIGHT = FULL HEIGHT			Z1 HEIGHT = FULL HEIGHT			Z1 HEIGHT = FULL HEIGHT						Z1 HEIGHT = FULL HEIGHT			Z1 HEIGHT = FULL HEIGHT								
	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS				Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS						
	Y16 @ 100	Y10 @ 100	–	Y16 @ 100	Y10 @ 100	–	Y16 @ 100	Y10 @ 100	–				Y16 @ 100	Y12 @ 100	Y12 @ 200	Y16 @ 100	Y10 @ 100	–						
										----									----			----		
	16–Y32+112–Y25			16–Y32+112–Y25			16–Y32+128–Y25						16–Y32+88–Y25			76–Y40 + 68–Y32								
B3 TO B2							----			----			----			----			----			----		
	Z1 HEIGHT = 3000			Z1 HEIGHT = 3000																				
	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS																		
	Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10 @ 100	Y12 @ 200																		
							----			----			----			----			----			----		
	16–Y32+112–Y25			16–Y32+112–Y25																				
WALL MARKED	CG4			CG5			CWG3			CWG3A			CWG2			CWT3			CWT3A			CWG2A		

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD-MTC-D01-TDS-S01-CCT-NTU-20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION-7 -------- BD-JIC-C14-DRW-S01-STA-NTU-02110

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
9. RC DETAILS: COLUMN / WALL
   ----SD-MTC-D01-TDS-S01-CCT-NTU-20167 TO 20173, 20243, 20244

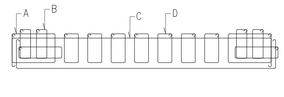
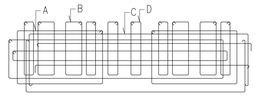
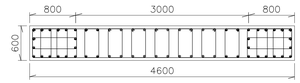
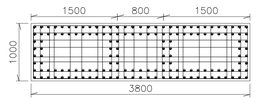
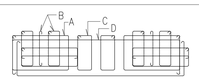
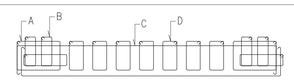
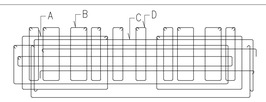
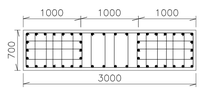
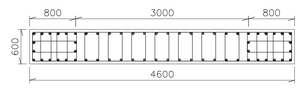
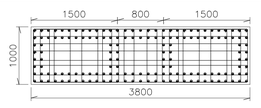
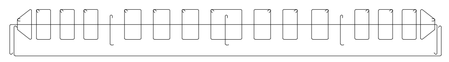
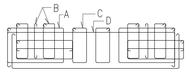
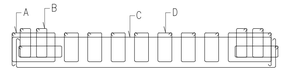
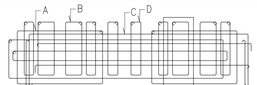
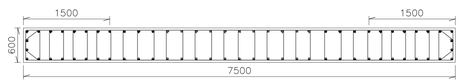
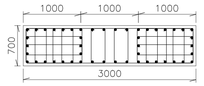
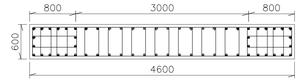
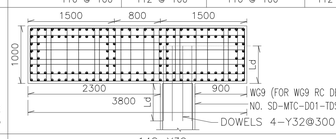
ADOPTED BY: **NHSRCL**

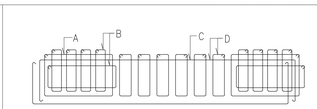
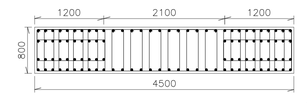
PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020 PREPARED : SVD / FAS / NNP CHECKED : AZ / OK / GB / MS APPROVED : NJT / HD / SND

TITLE: **RC DETAILS: COLUMN / WALL SHEET (2 OF 10)**

SCALE: **NTS**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20167-003**

B1 TO URSL	---	---		
			BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)
			Y12 @ 100 | Y10 @ 100 | Y12 @ 100 | Y10 @ 200	Y16 @ 100 | Y12 @ 100 | Y16 @ 100 | Y12 @ 200
	---	---	 ●Y32 ⊗Y25	 ●Y32
			40–Y32 + 20–Y25	148–Y32
B2 TO B1	---			
		BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)
		Y16 @ 100 | Y10 @ 100 | Y16 @ 100 | Y10 @ 200	Y12 @ 100 | Y10 @ 100 | Y12 @ 100 | Y10 @ 200	Y16 @ 100 | Y12 @ 100 | Y16 @ 100 | Y12 @ 200
	---	 ●Y40	 ●Y32 ⊗Y25	 ●Y32
		48–Y40	40–Y32 + 20–Y25	148–Y32
B3 TO B2	 Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS Y12 @ 100 | Y10 @ 100 | –	 BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D) Y16 @ 100 | Y10 @ 100 | Y16 @ 100 | Y10 @ 200	 BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D) Y12 @ 100 | Y10 @ 100 | Y12 @ 100 | Y10 @ 200	 BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D) Y16 @ 100 | Y12 @ 100 | Y16 @ 100 | Y12 @ 200
	 ●Y32 ⊗Y25	 ●Y40	 ●Y32 ⊗Y25	 WG9 (FOR WG9 RC DETAILS REFER DWG. NO. SD-MTC-D01-TDS-S01-CCT-NTU-243) DOWELS 4–Y32@300 ●Y32
	48–Y32 + 22–Y25	48–Y40	40–Y32 + 20–Y25	148–Y32
WALL MARKED	WG1	WG2	WG3	WG5

ABOVE URSL				
	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)			
	Y16 @ 100 | Y10 @ 100 | Y16 @ 100 | Y10 @ 200			
	 ●Y40			
	104–Y40			
WALL MARKED	PDW4			

NOTES

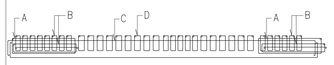
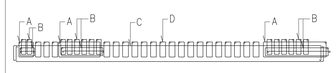
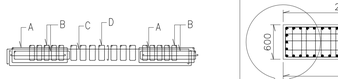
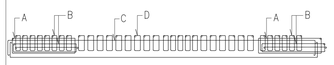
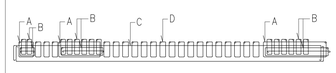
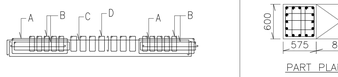
1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD-MTC-D01-TDS-S01-CCT-NTU-20002 TO 20005

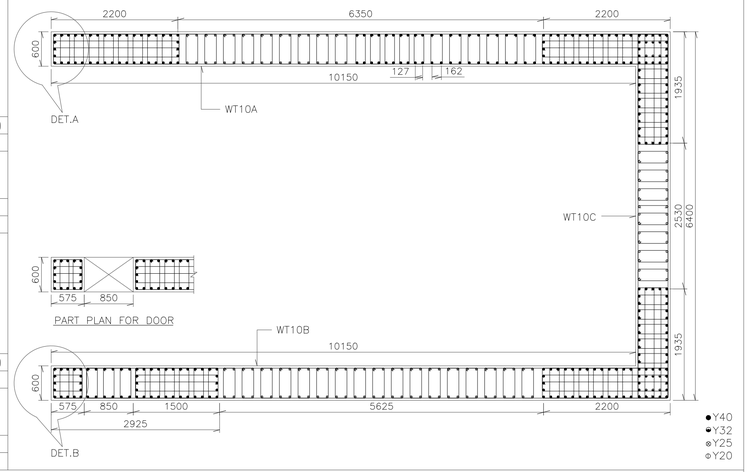
ENGINEERING REFERENCE DRAWINGS

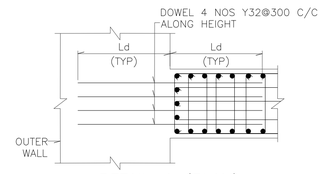
MUMBAI STATION
SECTION-7 -------- BD-JIC-C14-DRW-S01-STA-NTU-02110

CONSTRUCTION REFERENCE DRAWINGS

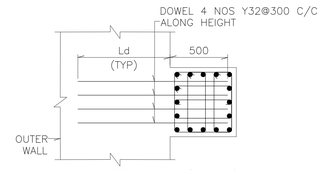
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS --SD-MTC-D01-TDS-S01-CCT-NTU-20152
9. RC DETAILS: COLUMN / WALL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20167 TO 20173, 20243, 20244
10. RC DETAILS : TYPICAL EXTRA REINFORCEMENT AROUND CUTOUT IN WALL
    -----SD-MTC-D01-TDS-S01-CCT-NTU-20248

B1 TO URSL			
	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)
	Y16 @ 75 | Y10 @ 150 | Y20 @ 75 | Y10 @ 150	Y16 @ 75 | Y10 @ 150 | Y20 @ 75 | Y10 @ 150	Y16 @ 75 | Y10 @ 150 | Y16 @ 75 | Y10 @ 150
	115–Y40 + 36–Y25	87–Y40+68–Y25	82–Y40+12–Y32+30–Y20
	WT10A (600X10150)	WT10B (600X10150)	WT10C (600X6400)
B3 TO B1			
	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)	BE MAIN (A) | BE OTHERS (B) | MID MAIN LINKS (C) | MID OTHER (D)
	Y16 @ 100 | Y10 @ 100 | Y16 @ 100 | Y10 @ 200	Y16 @ 100 | Y10 @ 100 | Y16 @ 100 | Y10 @ 200	Y16 @ 100 | Y10 @ 100 | Y12 @ 100 | Y10 @ 200
	71–Y40+80–Y25	87–Y40+68–Y25	82–Y40+12–Y32+30–Y20
	WT10A (600X10150)	WT10B (600X10150)	WT10C (600X6400)
COMBINED WALL	WT10		





DETAIL–A (PLAN)
1:50



DETAIL–B (PLAN)
1:50

ADOPTED BY:	NHSRCL

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED :	DATE : 10.07.2020
			PREPARED :	SVD / FAS / NNP
			CHECKED :	OK / GB / MS
			APPROVED :	NJT / HD

TITLE: **RC DETAILS: COLUMN / WALL SHEET (3 OF 10)**

SCALE: **NTS**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20168-003**

B1 TO URSL	Z1 MAIN LINKS / Z1 OTHER LINKS Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK: Y12 @ 100 / Z1 OTHERS: Y10 @ 100 / Z2 LINKS: –	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): – MID OTHER (D): –	BE MAIN (A): Y12 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y12 @ 100 MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): – MID OTHER (D): –	1000, 3350, 3350, 11000, 600 DOWELS FOR VC2 ABOVE URSL ● Y40 ◒ Y32
	12–Y40+118–Y32	156–Y40	68–Y32+54–Y25	30–Y32	1000, 5700 ● Y40 WG7A
					1625, 3250, 1625, 6500, 600 ● Y32 ⊗ Y25
					600, 2000 BARS TO BE EMBEDDED IN BELOW WALL WG12 FOR LD ● Y32
				WALL MARKED: WG12A	
B2 TO B1	Z1 MAIN LINKS / Z1 OTHER LINKS Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK: Y12 @ 100 / Z1 OTHERS: Y10 @ 100 / Z2 LINKS: –	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): – MID OTHER (D): –	BE MAIN (A): Y12 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y12 @ 100 MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y16 @ 100 MID OTHER (D): Y10 @ 100	1000, 3350, 3350, 11000, 600 ● Y40 ◒ Y32
	12–Y40+118–Y32	156–Y40	68–Y32+54–Y25	50–Y32	1000, 5700 ● Y40 WG7A
					1625, 3250, 1625, 6500, 600 ● Y32 ⊗ Y25
					1000, 1250, 1000, 3250, 600 ● Y32
B3 TO B2	Z1 MAIN LINKS / Z1 OTHER LINKS Z1 HEIGHT = FULL HEIGHT Z1 MAIN LINK: Y12 @ 100 / Z1 OTHERS: Y10 @ 100 / Z2 LINKS: –	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): – MID OTHER (D): –	BE MAIN (A): Y12 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y12 @ 100 MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y16 @ 100 MID OTHER (D): Y10 @ 100	1000, 3350, 3350, 11000, 600 ● Y40 ◒ Y32
	12–Y40+118–Y32	156–Y40	68–Y32+54–Y25	50–Y32	1000, 5600 ● Y40
					1625, 3250, 1625, 6500, 600 ● Y32 ⊗ Y25
					1000, 1250, 1000, 3250, 600 ● Y32
WALL MARKED	WG6	WG7	WG11	WG12	

ABOVE URSL	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y16 @ 100 MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y10 @ 100 MID MAIN LINKS (C): Y16 @ 100 MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 BE OTHERS (B): Y12 @ 100 MID MAIN LINKS (C): Y16 @ 100 MID OTHER (D): Y12 @ 100	Z1 MAIN LINK: Y16 @ 100 Z1 OTHER: Y10 @ 100 Z2 LINKS: Y10 @ 200
	1250, 2500, 1250, 5000, 1200 ●Y40	1200, 2100, 1200, 4500, 1000 ●Y40	1250, 2300, 1250, 4800, 1200 ●Y40	2500, 1500 ●Y40
	184–Y40	146–Y40	180–Y40	116–Y40
WALL MARKED	PDW1	PDW2	PDW3	PDC1

NOTES

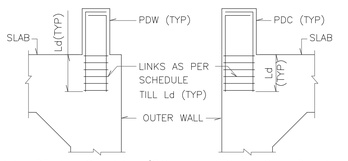
1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD–MTC–D01–TDS–S01–CCT–NTU–20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

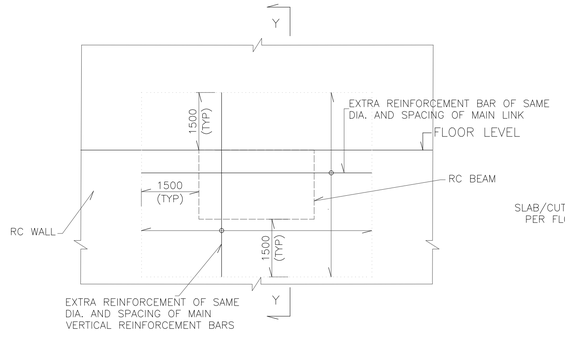
MUMBAI STATION
SECTION–7 -------- BD–JIC–C14–DRW–S01–STA–NTU–02110

CONSTRUCTION REFERENCE DRAWINGS

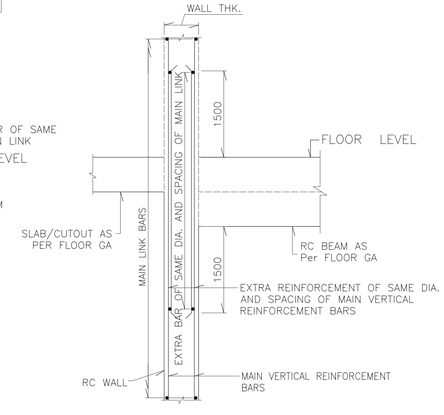
1. GENERAL NOTES ---------- SD–MTC–D01–TDS–S01–CCT–NTU–20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS –– SD–MTC–D01–TDS–S01–CCT–NTU–20152
9. RC DETAILS: COLUMN / WALL ----SD–MTC–D01–TDS–S01–CCT–NTU–20167 TO 20173, 20243, 20244



TYPICAL DETAIL OF WALL/COLUMN ABOVE OUTER WALL
(SLAB & OUTER WALL REINF. NOT SHOWN FOR CLARITY.)
SCALE 1:100



TYP. ELEVATION SHOWING DETAILS OF EXTRA REINFORCEMENT IN RC WALL AT BEAM LOCATION WHERE BEAM IS NOT CONTINUOUS OVER RC WALL
SCALE 1:50

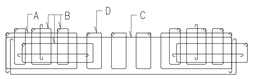
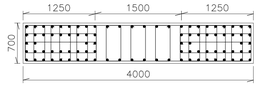
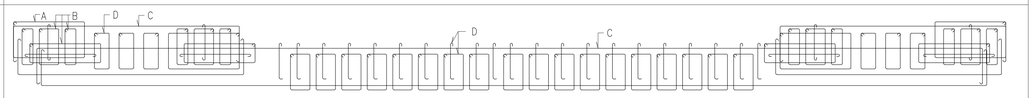
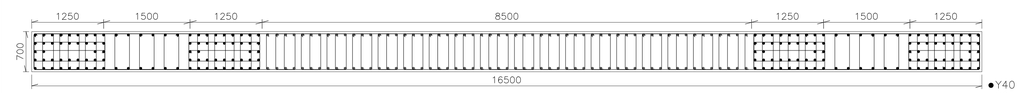


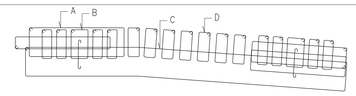
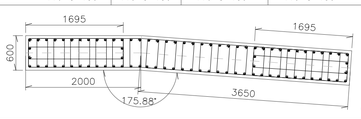
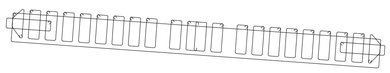
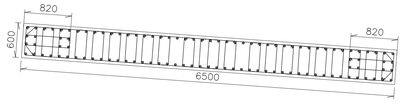
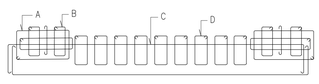
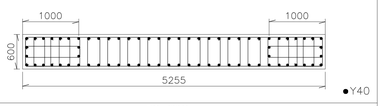
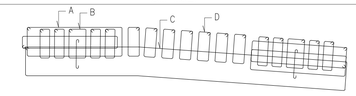
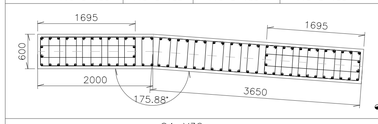
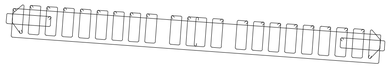
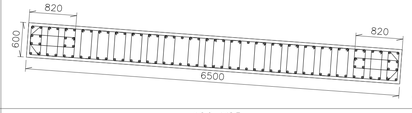
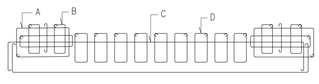
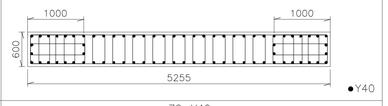
SECTION Y–Y
SCALE 1:50

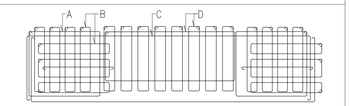
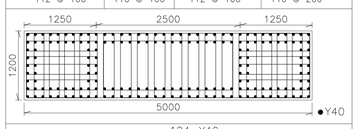
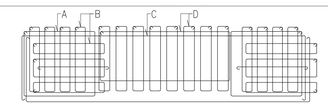
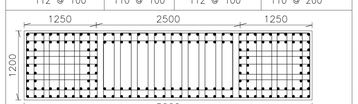
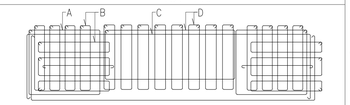
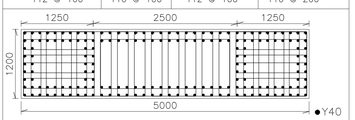
ADOPTED BY: NHSRCL

PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: COLUMN / WALL SHEET (4 OF 10)
PREPARED :	SVD / FAS / NNP	
CHECKED :	AZ / OK / GB / MS	SCALE: NTS
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20169-003

B1 TO URSL	-------	-------
B2 TO B1	 BE MAIN (A): Y16 @ 100; BE OTHERS (B): Y10@ 100; MID MAIN LINKS (C): Y12 @ 100; MID OTHER (D): Y10@ 100  92–Y40	-------
B3 TO B2	-------	 BE MAIN (A): – ; BE OTHERS (B): Y10 @ 100; MID MAIN LINKS (C): Y12 @ 100; MID OTHER (D): Y10 @ 200  184–Y40 + 114–Y25
WALL MARKED	WT4A	WT4

B1 TO URSL	 BE MAIN (A): Y16 @ 150; BE OTHERS (B): Y10 @ 150; MID MAIN LINKS (C): Y16 @ 150; MID OTHER (D): Y10 @ 150  84–Y32	Z1 HEIGHT = FULL HEIGHT  Z1 MAIN LINK: Y16 @ 150; Z1 OTHERS: Y10 @ 150; Z2 LINKS: –  106–Y25	 BE MAIN (A): Y16 @ 150; BE OTHERS (B): Y10 @ 150; MID MAIN LINKS (C): Y16 @ 150; MID OTHER (D): Y10 @ 150  72–Y40
B2 TO B1	 BE MAIN (A): Y16 @ 150; BE OTHERS (B): Y10 @ 150; MID MAIN LINKS (C): Y16 @ 150; MID OTHER (D): Y10 @ 150  84–Y32	Z1 HEIGHT = FULL HEIGHT  Z1 MAIN LINK: Y16 @ 150; Z1 OTHERS: Y10 @ 150; Z2 LINKS: –  106–Y25	 BE MAIN (A): Y16 @ 150; BE OTHERS (B): Y10 @ 150; MID MAIN LINKS (C): Y16 @ 150; MID OTHER (D): Y10 @ 150  72–Y40
WALL MARKED	WG9A	WG9B	WT9C

GF TO TERRACE (TOC.+18.40)	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE WALL ONLY
URSL TO GF	SAME REINF. TO BE FOLLOWED FOR ENTRY EXIT STRUCTURE WALL ONLY
B1 TO URSL	 BE MAIN (A): Y12 @ 100; BE OTHERS (B): Y10 @ 100; MID MAIN LINKS (C): Y12 @ 100; MID OTHER (D): Y10 @ 200  184–Y40
B2 TO B1	 BE MAIN (A): Y12 @ 100; BE OTHERS (B): Y10 @ 100; MID MAIN LINKS (C): Y12 @ 100; MID OTHER (D): Y10 @ 200  184–Y40
B3 TO B2	 BE MAIN (A): Y12 @ 100; BE OTHERS (B): Y10 @ 100; MID MAIN LINKS (C): Y12 @ 100; MID OTHER (D): Y10 @ 200  184–Y40
WALL MARKED	WT1

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456:2000.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD–MTC–D01–TDS–S01–CCT–NTU–20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION–7 ------- BD–JIC–C14–DRW–S01–STA–NTU–02110

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD–MTC–D01–TDS–S01–CCT–NTU–20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS -- SD–MTC–D01–TDS–S01–CCT–NTU–20152
9. RC DETAILS: COLUMN / WALL ----SD–MTC–D01–TDS–S01–CCT–NTU–20167 TO 20173, 20243, 20244

ADOPTED BY: **NHSRCL**

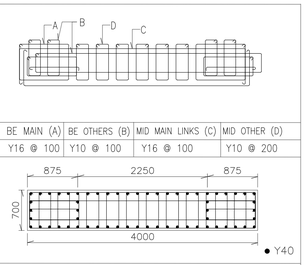
PROJECT :
Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

OWNER :
NATIONAL HIGH SPEED RAIL CORPORATION LTD.

STRUCTURAL CONSULTANT :
TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: COLUMN / WALL SHEET (5 OF 10)
PREPARED :	SVD / FAS / NNP	
CHECKED :	AZ / OK / GB / MS	SCALE: NTS
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20170-002

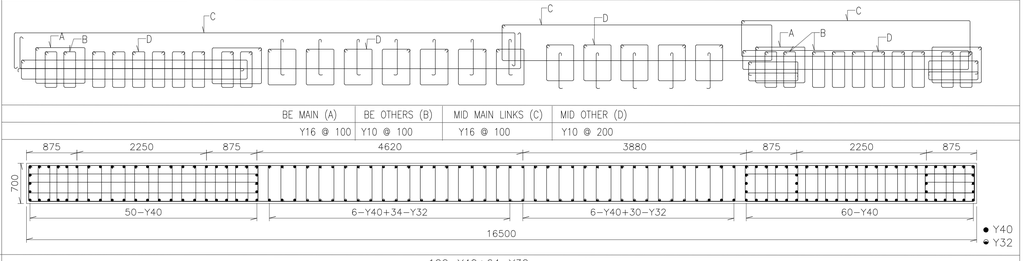
B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



60–Y40

WG8A

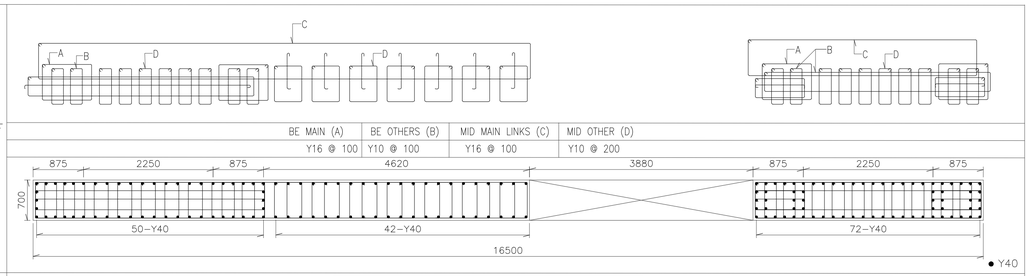
B3 TO B2	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



122–Y40+64–Y32

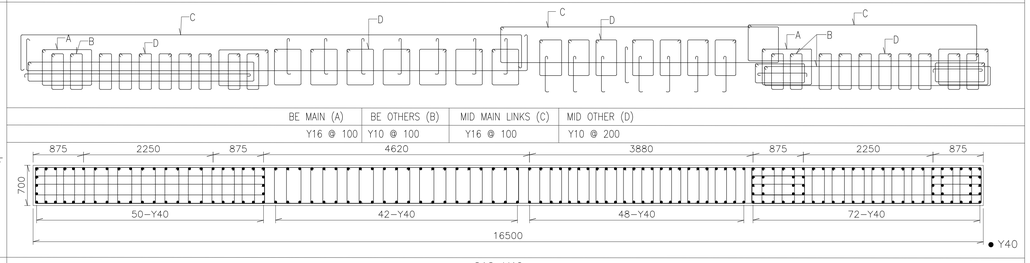
WG8 & WG8A

BOT. LVL. OF LIFT TO B2	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



164–Y40

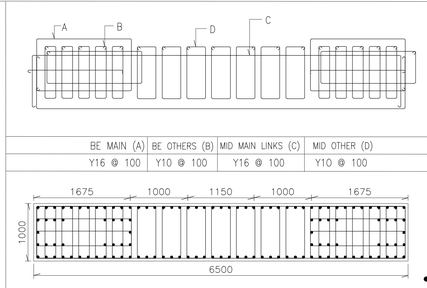
B3 TO BOT. LVL. OF LIFT	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



212–Y40

WG10

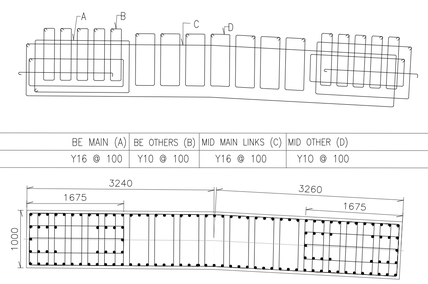
B1 TO URSL	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 100



126–Y40

WT6A1

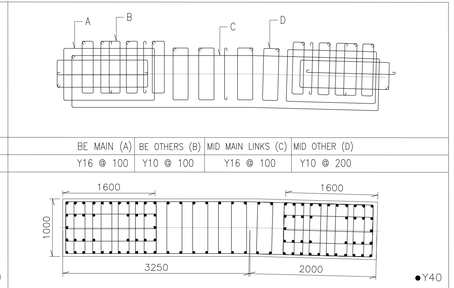
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 100



126 –Y40

WT6B1

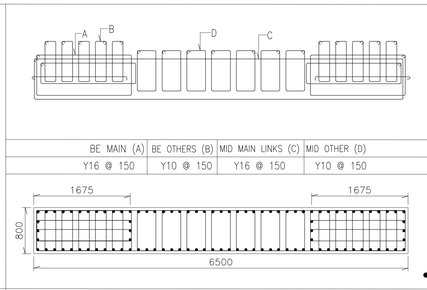
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



98–Y40

WT6C1

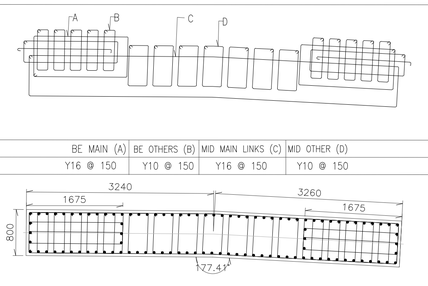
B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y16 @ 150	Y10 @ 150



102–Y40

WT6A

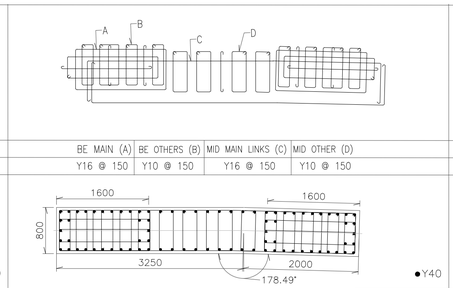
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y16 @ 150	Y10 @ 150



102 –Y40

WT6B

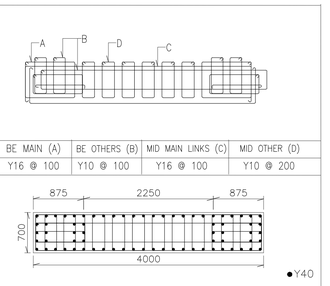
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y16 @ 150	Y10 @ 150



82–Y40

WT6C

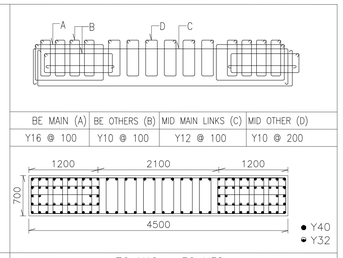
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y16 @ 100	Y10 @ 200



72–Y40

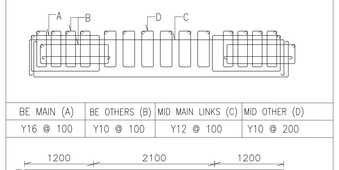
WG10A

B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y12 @ 100	Y10 @ 200



76–Y40 + 36–Y32

B3 TO B2	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	Y12 @ 100	Y10 @ 200



76–Y40 + 36–Y32

WT2

NOTE:

1. FOR NOTES, ENGINEERING DWGS. & CONSTRUCTION DWGS. REFER DWG. NO. SD–MTC–D01–TDS–S01–CCT–NTU–20166

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : SVD / FAS / NNP
			CHECKED : AZ / OK / GB / MS
			APPROVED : NJT / HD

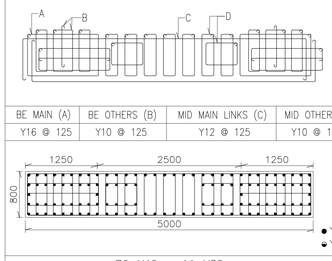
ADOPTED BY: NHSRCL

TITLE: RC DETAILS: COLUMN / WALL SHEET (6 OF 10)

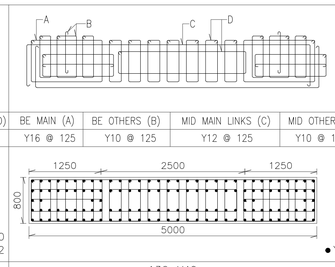
SCALE: NTS

DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20171-003

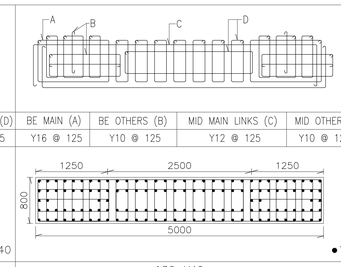
B1 TO URSL	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 125	Y10 @ 125	Y12 @ 125	Y10 @ 125
	76–Y40 + 44–Y32			
WALL MARKED	WT5C1			



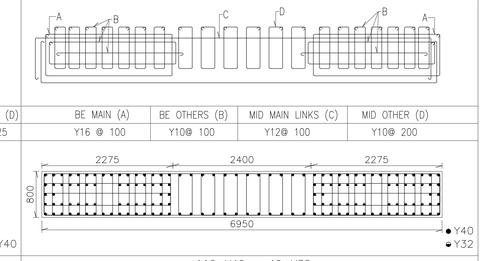
B1 TO URSL	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 125	Y10 @ 125	Y12 @ 125	Y10 @ 125
	136–Y40			
WALL MARKED	WT5A2			

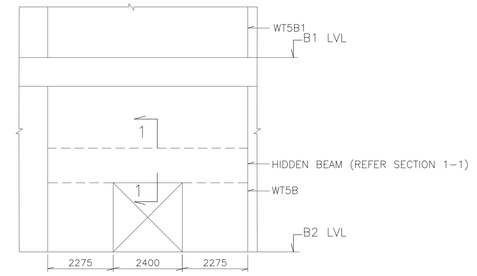


B1 TO URSL	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 125	Y10 @ 125	Y12 @ 125	Y10 @ 125
	136–Y40			
WALL MARKED	WT5A1			



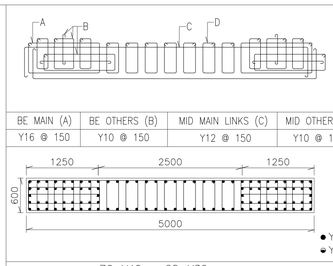
B1 TO URSL	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10@ 100	Y12@ 100	Y10@ 200
	112–Y40 + 40–Y32			
WALL MARKED	WT5B1/WT5B ABOVE DOOR OPENING TILL B1			



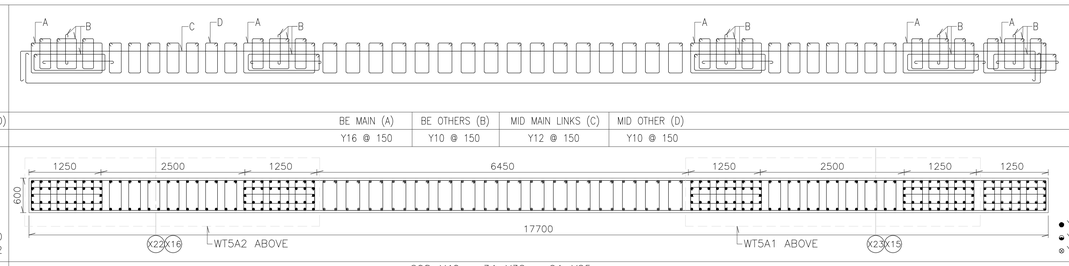


PART ELEVATION FOR WALL WT5B
1:100

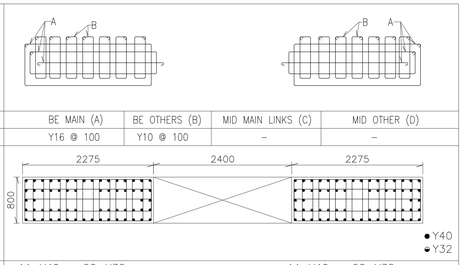
B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y12 @ 150	Y10 @ 150
	76–Y40 + 28–Y32			
WALL MARKED	WT5C			

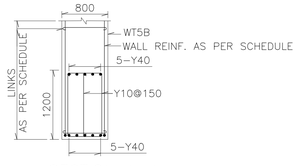


B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y12 @ 150	Y10 @ 150
	208–Y40 + 34–Y32 + 64–Y25			
WALL MARKED	WT5A			



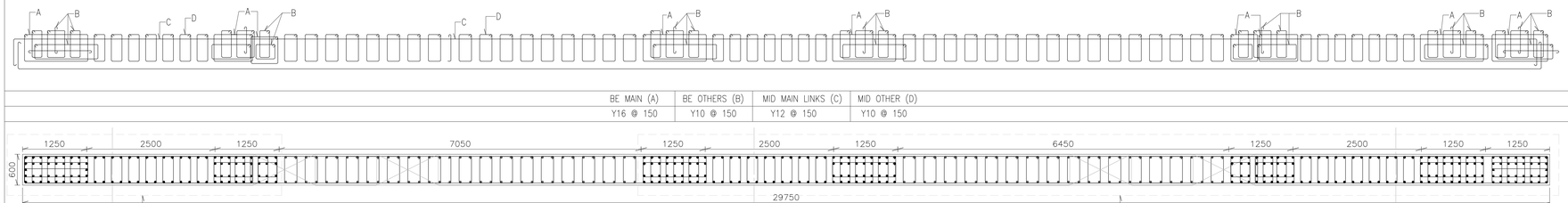
B2 TO B1	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 100	Y10 @ 100	–	–
	44–Y40 + 20–Y32		44–Y40 + 20–Y32	
WALL MARKED	WT5B			



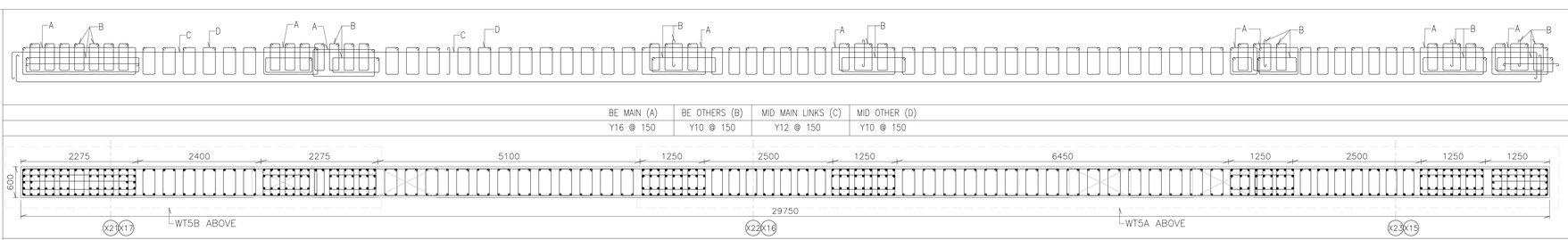


SECTION 1–1
1:50

B3 TO B2	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y12 @ 150	Y10 @ 150
	274–Y40 + 62–Y32 + 134–Y25			
WALL MARKED	WT5 (FOR GRID Y4 ONLY)			



B3 TO B2	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
	Y16 @ 150	Y10 @ 150	Y12 @ 150	Y10 @ 150
	284–Y40 + 98–Y32 + 114–Y25			
WALL MARKED	WT5 (FOR GRID Y2 & Y6 ONLY)			



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD–MTC–D01–TDS–S01–CCT–NTU–20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION–7 -------- BD–JIC–C14–DRW–S01–STA–NTU–02110

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD–MTC–D01–TDS–S01–CCT–NTU–20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL ----SD–MTC–D01–TDS–S01–CCT–NTU–20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS –– SD–MTC–D01–TDS–S01–CCT–NTU–20152
9. RC DETAILS: COLUMN / WALL ----SD–MTC–D01–TDS–S01–CCT–NTU–20167 TO 20173, 20243, 20244
10. RC DETAILS : TYPICAL EXTRA REINFORCEMENT AROUND CUTOUT IN WALL -----SD–MTC–D01–TDS–S01–CCT–NTU–20248

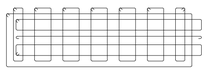
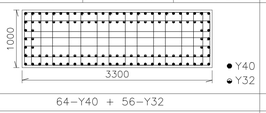
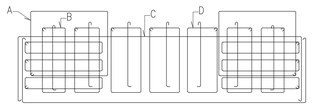
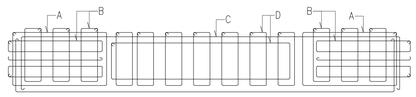
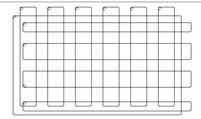
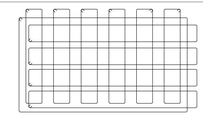
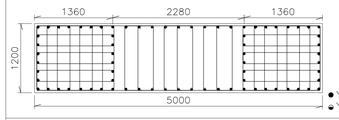
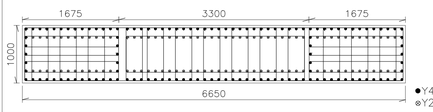
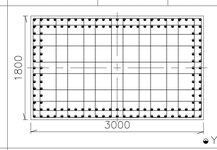
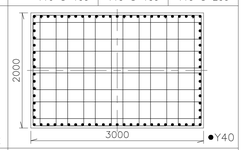
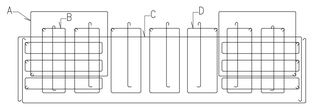
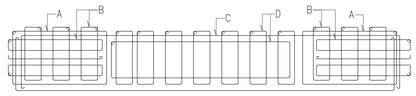
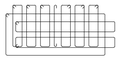
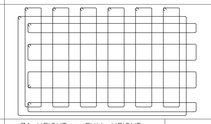
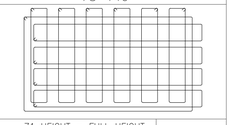
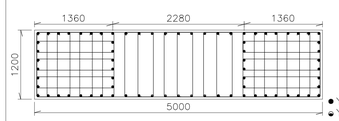
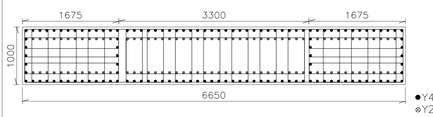
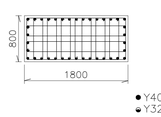
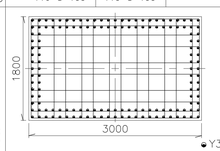
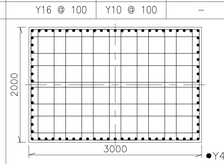
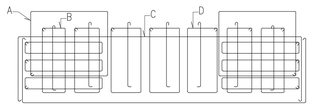
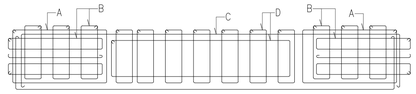
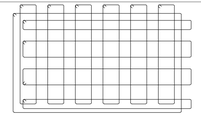
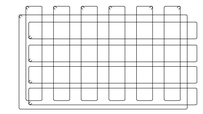
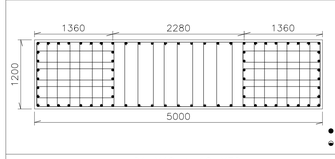
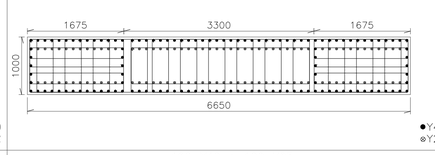
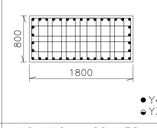
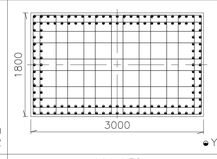
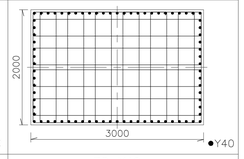
ADOPTED BY: **NHSRCL**

PROJECT :
Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

OWNER :
NATIONAL HIGH SPEED RAIL CORPORATION LTD.

STRUCTURAL CONSULTANT :
TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: COLUMN / WALL SHEET (7 OF 10)
PREPARED :	SVD / FAS / NNP	
CHECKED :	AZ / GB / MS	SCALE: NTS
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20172-003

URSL	--	--		--	--	--
			Z1 HEIGHT= 3300			
TO			Z1 MAIN LINK: Y16 @ 100 | Z1 OTHER: Y10 @ 100 | Z2 LINKS: Y10 @ 200			
TERRACE (TOC +18.40)	--	--		--	--	--
			64–Y40 + 56–Y32			
B1 TO URSL			--	--		
	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y16 @ 100 | MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y12 @ 100 | MID OTHER (D): Y10 @ 200			Z1 HEIGHT = 3000: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 200	Z1 HEIGHT = 3000: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 200
			--	--		
	64–Y40 + 10–Y32	128–Y40 + 100–Y25			144–Y32	78–Y40
B2 TO B1			--			
	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y16 @ 100 | MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y12 @ 100 | MID OTHER (D): Y10 @ 200		Z1 HEIGHT = 1800: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 100	Z1 HEIGHT = FULL HEIGHT: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: –	Z1 HEIGHT = FULL HEIGHT: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: –
			--			
	64–Y40 + 10–Y32	128–Y40 + 100–Y25		16–Y40 + 22–Y32	144–Y32	78–Y40
B3 TO B2			--			
	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y16 @ 100 | MID OTHER (D): Y10 @ 200	BE MAIN (A): Y16 @ 100 | BE OTHERS (B): Y10 @ 100 | MID MAIN LINKS (C): Y12 @ 100 | MID OTHER (D): Y10 @ 200		Z1 HEIGHT = 1800: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 200	Z1 HEIGHT = 3000: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 200	Z1 HEIGHT = 3000: Z1 MAIN LINK: Y16 @ 100 | Z1 OTHERS: Y10 @ 100 | Z2 LINKS: Y10 @ 200
			--			
	64–Y40 + 10–Y32	128–Y40 + 100–Y25		16–Y40 + 22–Y32	144–Y32	78–Y40
WALL MARKED	WG4	WT3	CWT5	CG7	CG8	CG9

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD-MTC-D01-TDS-S01-CCT-NTU-20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION–7 ------- BD-JIC-C14-DRW-S01-STA-NTU-02110

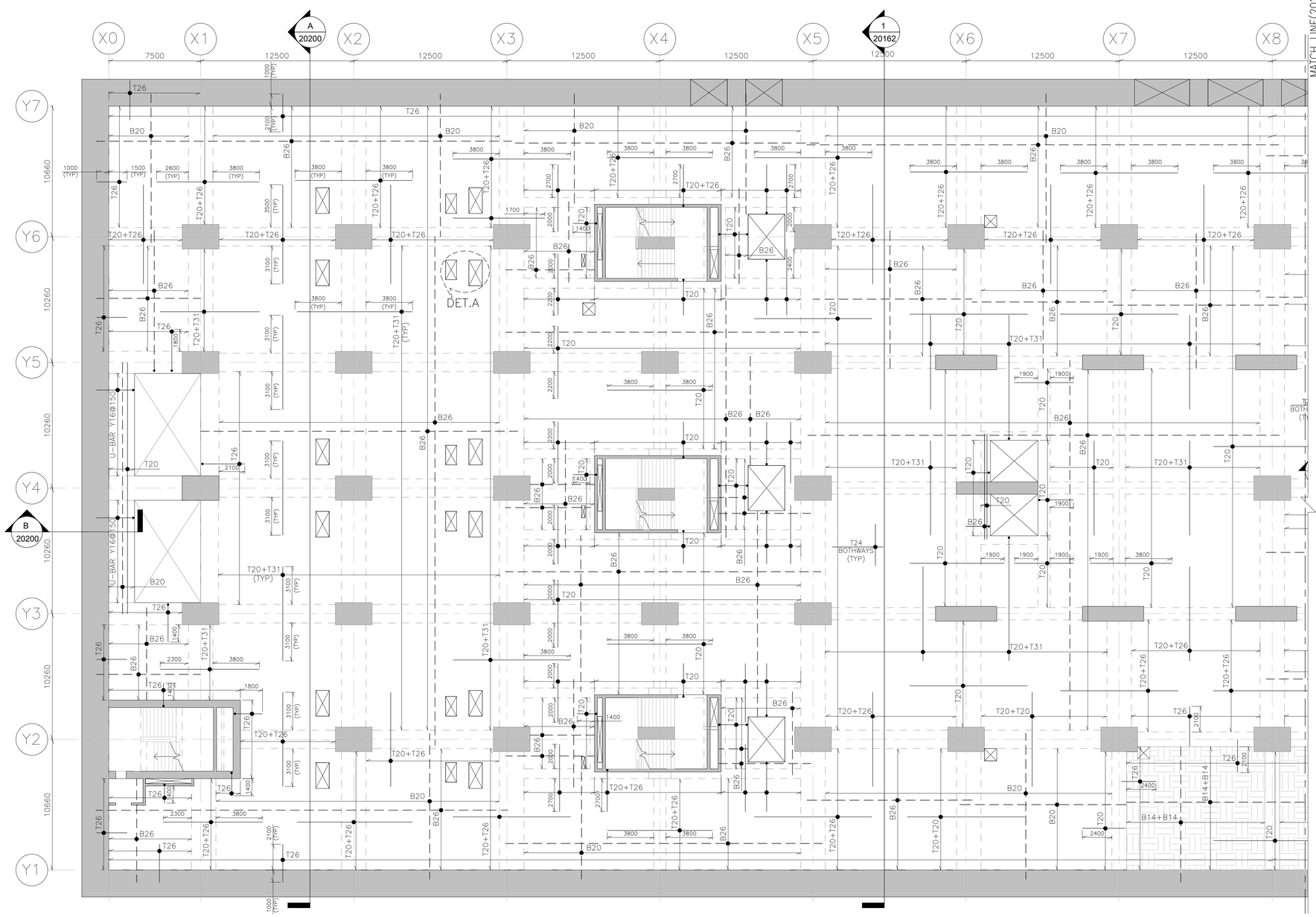
CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20020 TO 20023, 20045 (SH. 1 TO 5)
3. GENERAL ARRANGEMENT: B2 LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL ----SD-MTC-D01-TDS-S01-CCT-NTU-20046 TO 20047 (SH. 1 TO 2)
8. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
9. RC DETAILS: COLUMN / WALL ----SD-MTC-D01-TDS-S01-CCT-NTU-20167 TO 20173, 20243, 20244

ADOPTED BY: **NHSRCL**

PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI

REVISED :	DATE : 10.07.2020	TITLE:	RC DETAILS: COLUMN / WALL SHEET (8 OF 10)
PREPARED :	SVD / FAS / NNP		
CHECKED :	AZ / OK / GB / MS	SCALE:	NTS
APPROVED :	NJT / HD	DRAWING NO:	SD-MTC-D01-TDS-S01-CCT-NTU-20173-003



MATCH LINE(20201)

LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (———)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

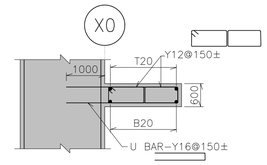
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS ----- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ----- SD-MTC-D01-TDS-S01-CCT-NTU-20201 TO 20207

BAR TAG

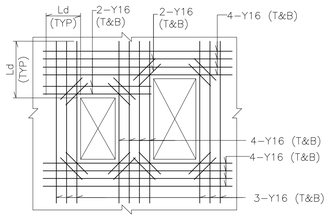
B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



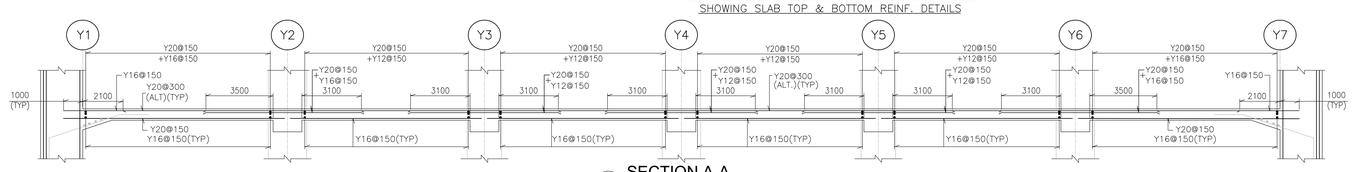
B SECTION B-B
1 : 75
(WALL REINFORCEMENT NOT SHOWN FOR CLARITY)



DETAIL–A
(TYPICAL ADDITIONAL REINF. DETAILS)
1:75

RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS



A SECTION A-A
1 : 150

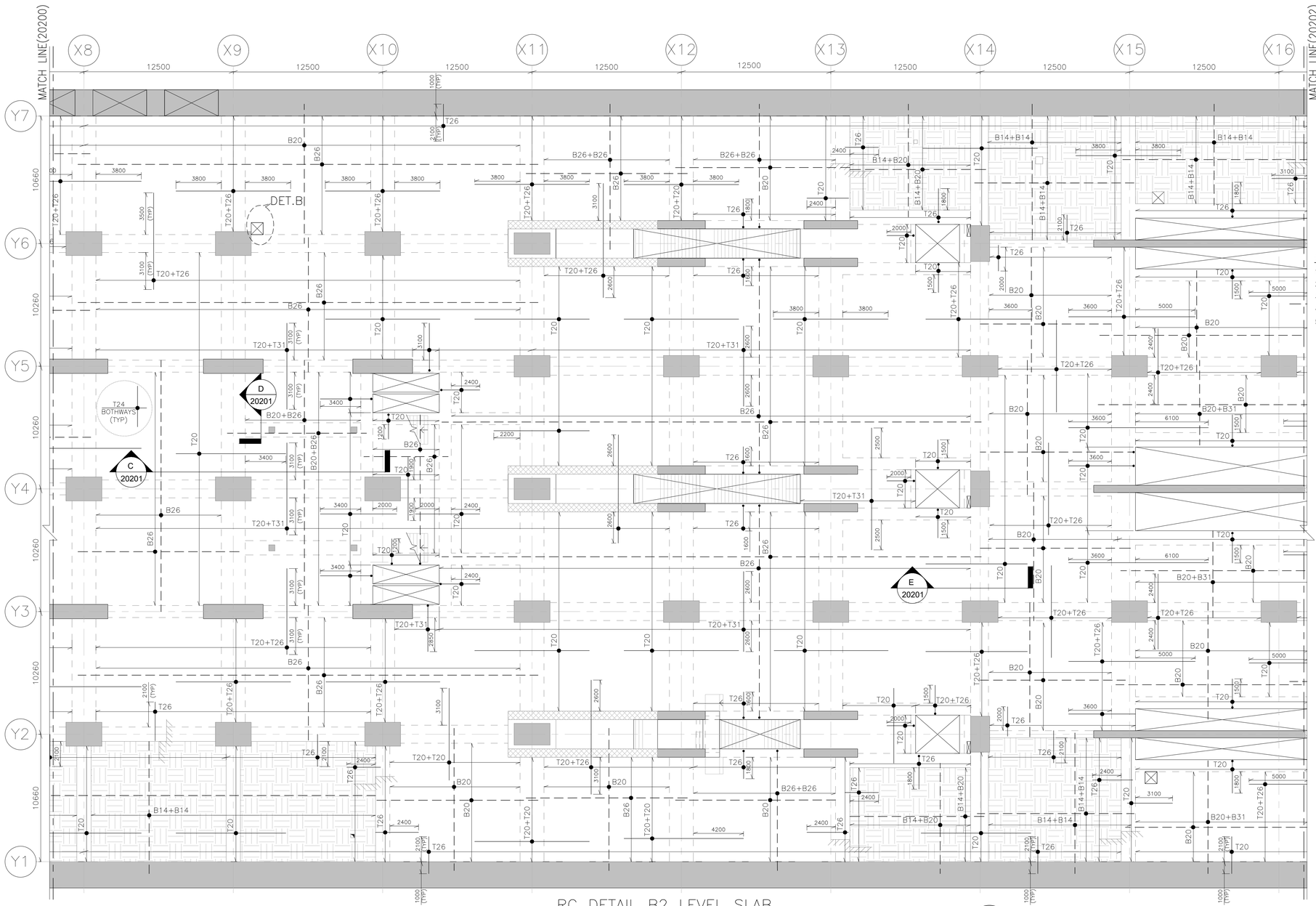
PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : SVD / NNP
			CHECKED : AZ / GB
			APPROVED : NJT / HD / SND

ADOPTED BY: **NHSRCL**

TITLE: **RC DETAILS: B2 (SLAB) LVL. SHEET (1 OF 8)**

SCALE: **1:175**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20200-003**



LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

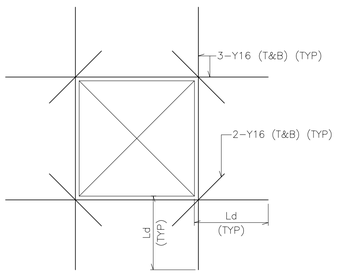
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200
5. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20202 TO 20207

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

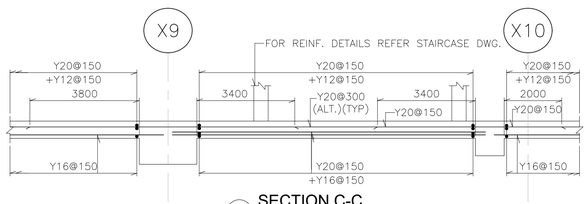
B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



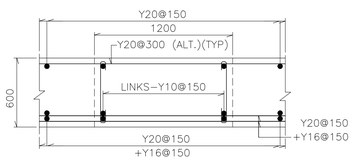
DETAIL–B
(TYPICAL ADDITIONAL REINF. DETAILS)
SCALE 1:25

RC DETAIL B2 LEVEL SLAB

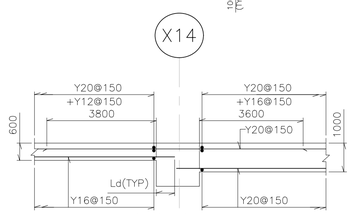
SHOWING SLAB TOP & BOTTOM REINF. DETAILS



C SECTION C-C
1 : 100

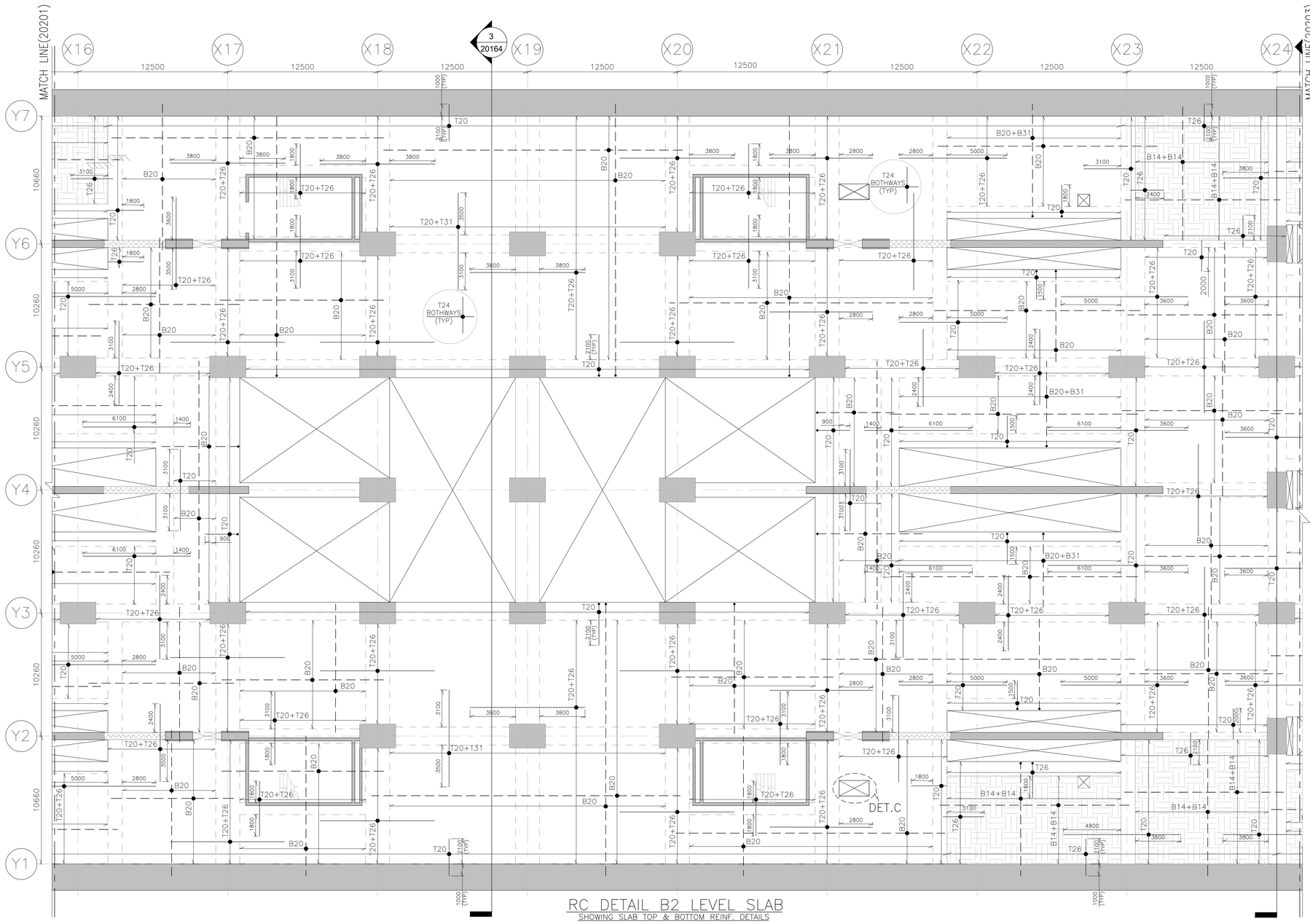


D SECTION D-D
1 : 25



F SECTION E-E
1 : 100

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	ADOPTED BY: NHSRCL
		REVISED :	DATE : 10.07.2020
		PREPARED :	SVD / NNP
		CHECKED :	AZ / GB
		APPROVED :	NJT / HD / SND
			TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (2 OF 8)
			SCALE: 1:175
			DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20201-003



RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

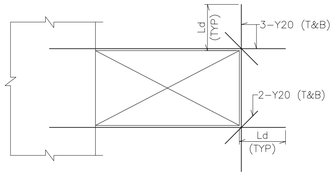
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200 & 20201
5. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20203 TO 20207

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

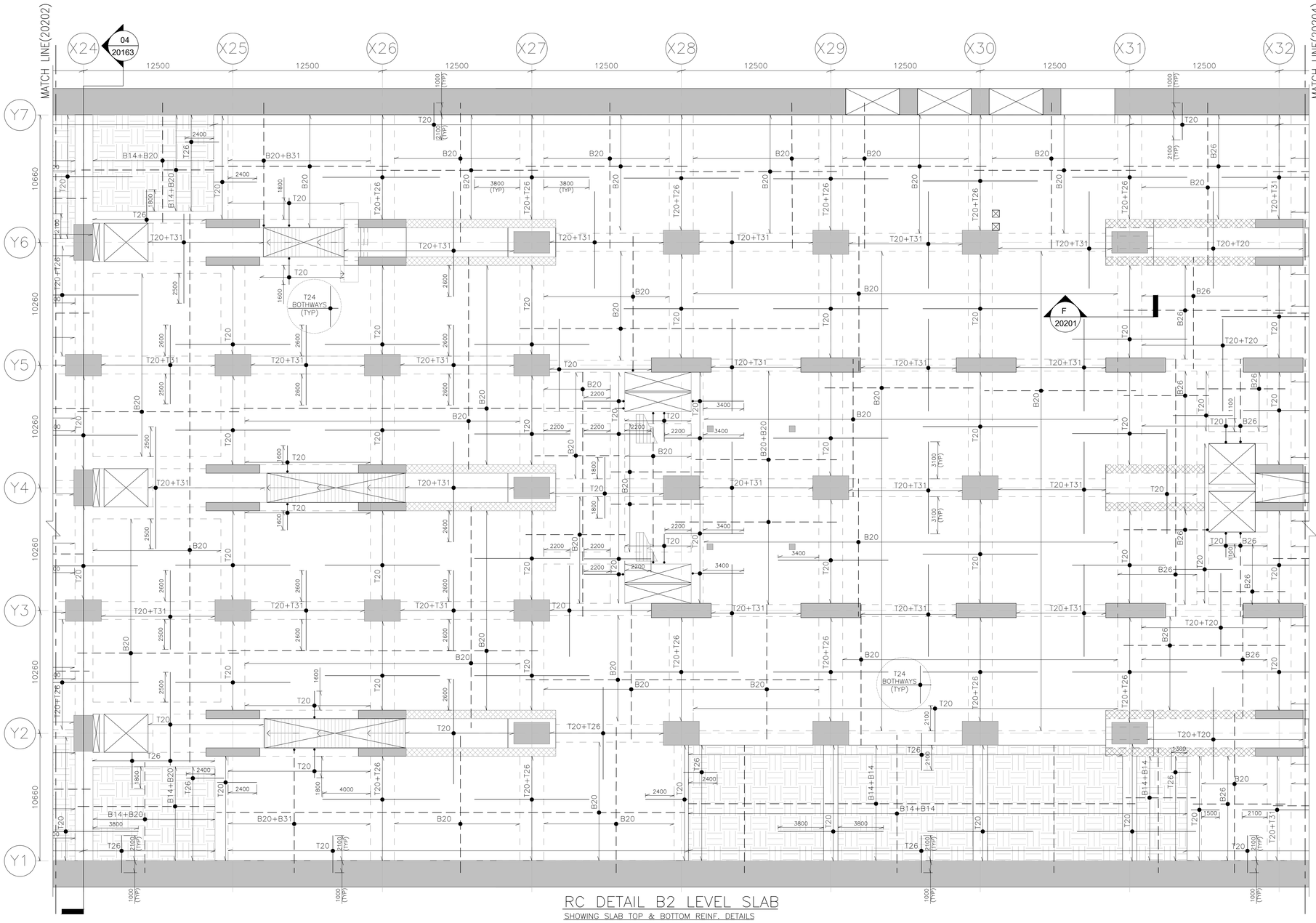


DETAIL–C

(TYPICAL ADDITIONAL REINF. DETAILS)

SCALE 1:50

ADOPTED BY: NHSRCL			
PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NHSRCL NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : SVD / NNP
			CHECKED : AZ / GB
			APPROVED : NJT / HD
TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (3 OF 8)			
SCALE: 1:175			
DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20202-003			



RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

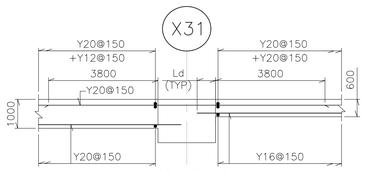
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200 TO 20202
5. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20204 TO 20207

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



F SECTION F-F
1 : 100

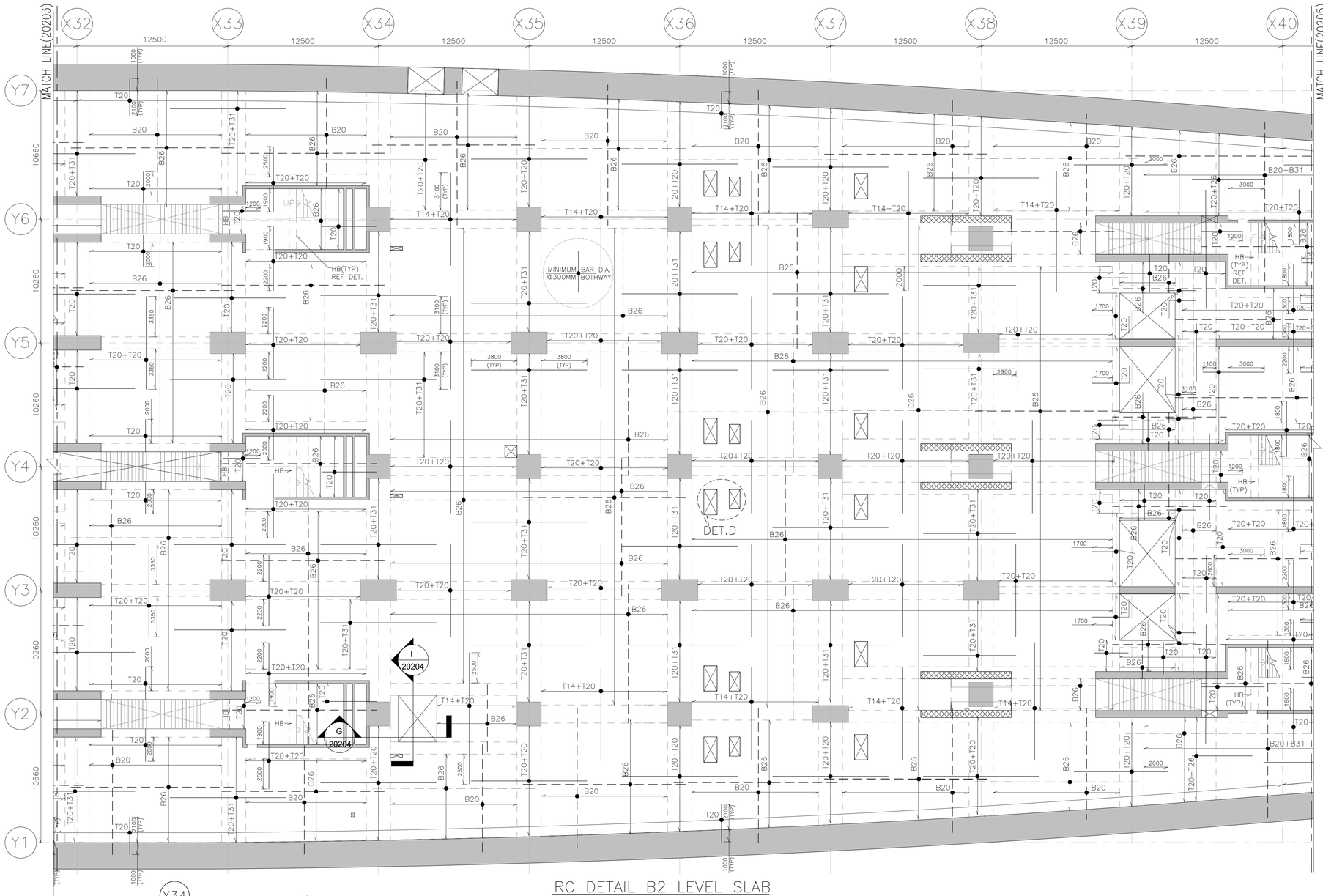
ADOPTED BY: NHSRCL

PROJECT :
Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

OWNER :
NATIONAL HIGH SPEED RAIL CORPORATION LTD.

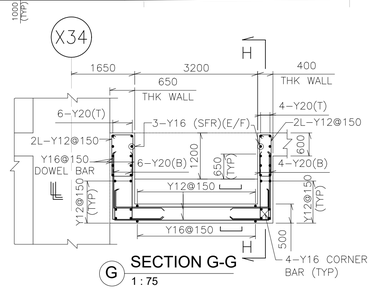
STRUCTURAL CONSULTANT :
TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (4 OF 8)
PREPARED :	SVD / NNP	
CHECKED :	AZ / GB	SCALE: 1:175
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20203-003

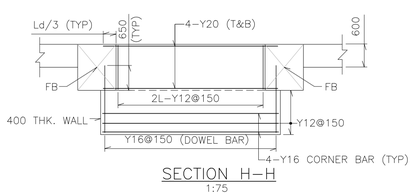


RC DETAIL B2 LEVEL SLAB

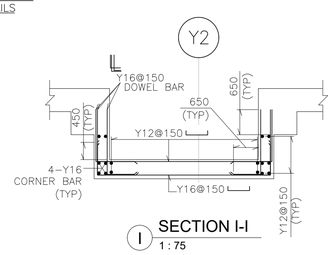
SHOWING SLAB TOP & BOTTOM REINF. DETAILS



G SECTION G-G
1 : 75



SECTION H–H
1:75



I SECTION I-I
1 : 75

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (————)
B ----- BOTTOM REINFORCEMENT (– – – – – –)
HB ----- HIDDEN BEAM
SFR --- SIDE FACE REINFORCEMENT

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

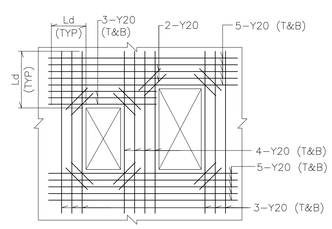
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200 TO 20203
5. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20205 TO 20207

BAR TAG

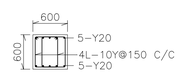
B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @150	T3=Y40 @150
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @150	T9=Y32 @150
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @150	T15=Y25 @150

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @150	T21=Y20 @150
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @150	T27=Y16 @150
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



DETAIL–D
(TYPICAL ADDITIONAL REINF. DETAILS)
1:75



TYPICAL RC DETAIL OF HB (HIDDEN BEAM)
HIDDEN BEAM (HB) (600X600)
1:50

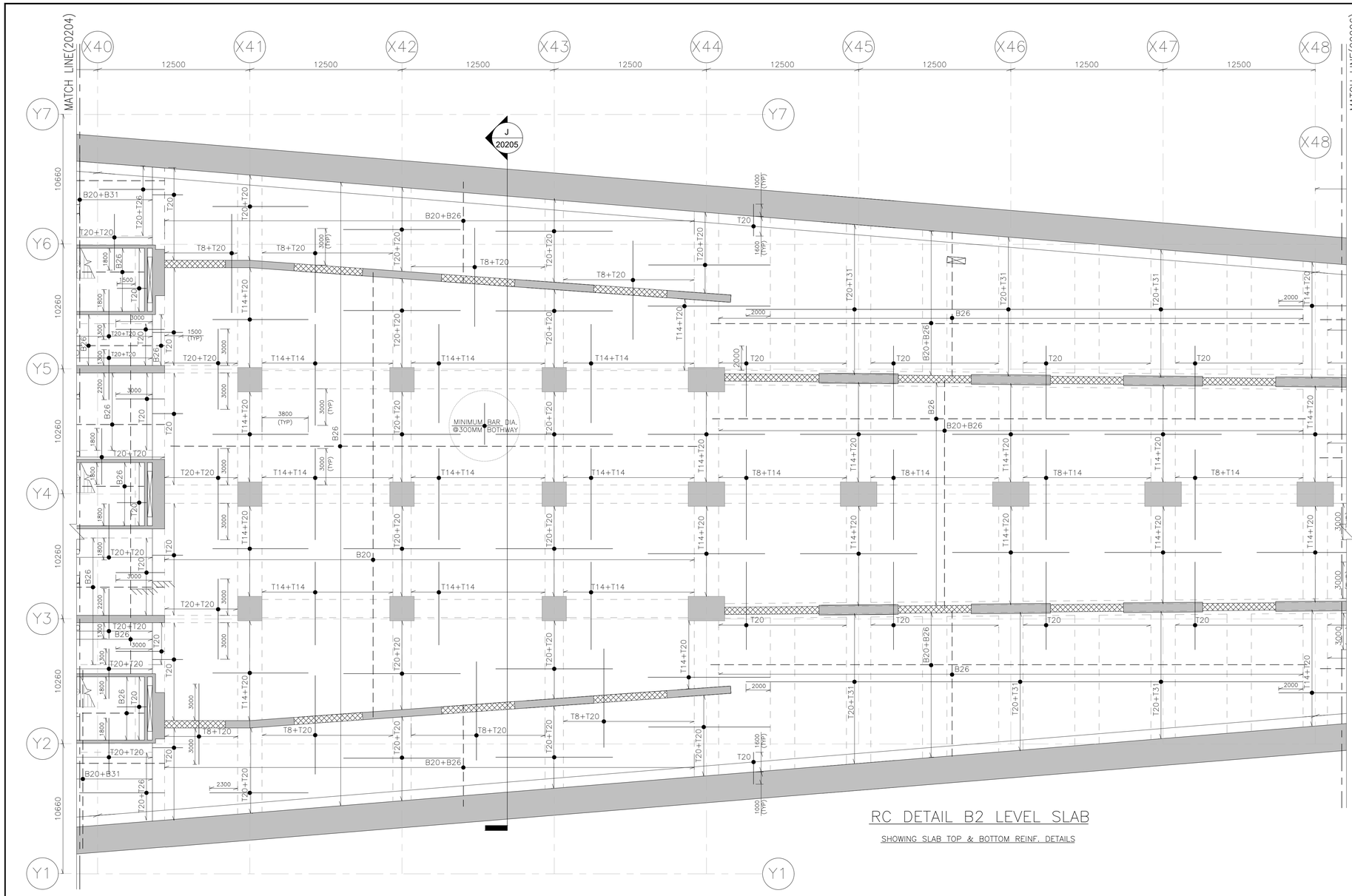
PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : SVD / NNP
			CHECKED : OK / GB
			APPROVED : NJT / HD

ADOPTED BY: NHSRCL

TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (5 OF 8)

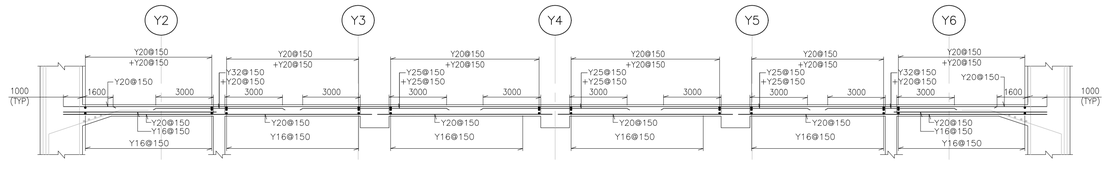
SCALE: 1:175

DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20204-004



RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS



J SECTION J-J

1 : 150

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200 TO 20204
5. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20206 & 20207

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

ADOPTED BY: NHSRCL

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI

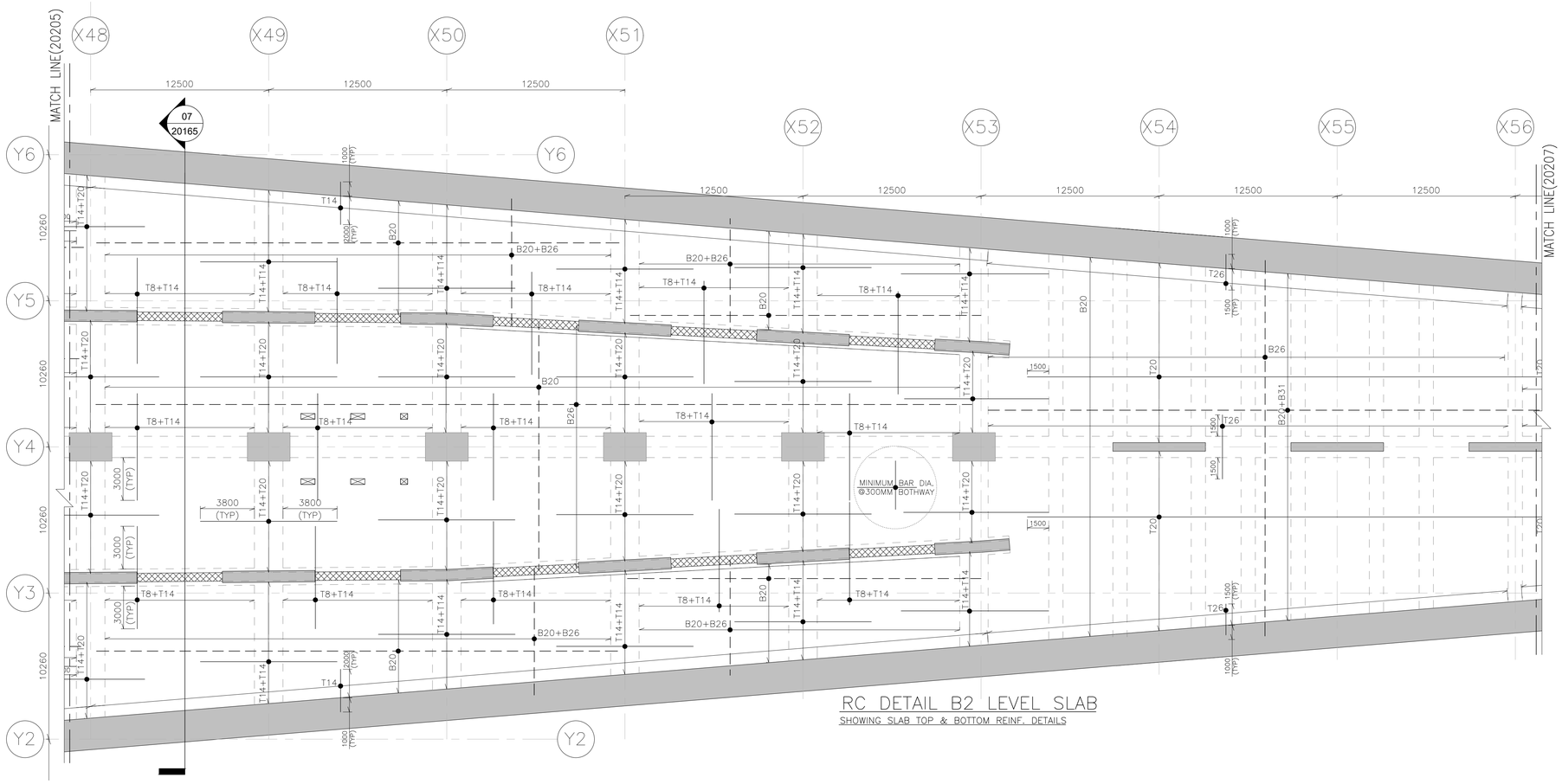
REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (6 OF 8)
PREPARED :	SVD / NNP	
CHECKED :	OK / GB	SCALE: 1:175
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20205-004

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.



RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ———————— SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL —— SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS ——— SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ———— SD-MTC-D01-TDS-S01-CCT-NTU-20200 TO 20205
5. RC DETAILS : B2 (SLAB) LEVEL ———— SD-MTC-D01-TDS-S01-CCT-NTU-20207

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

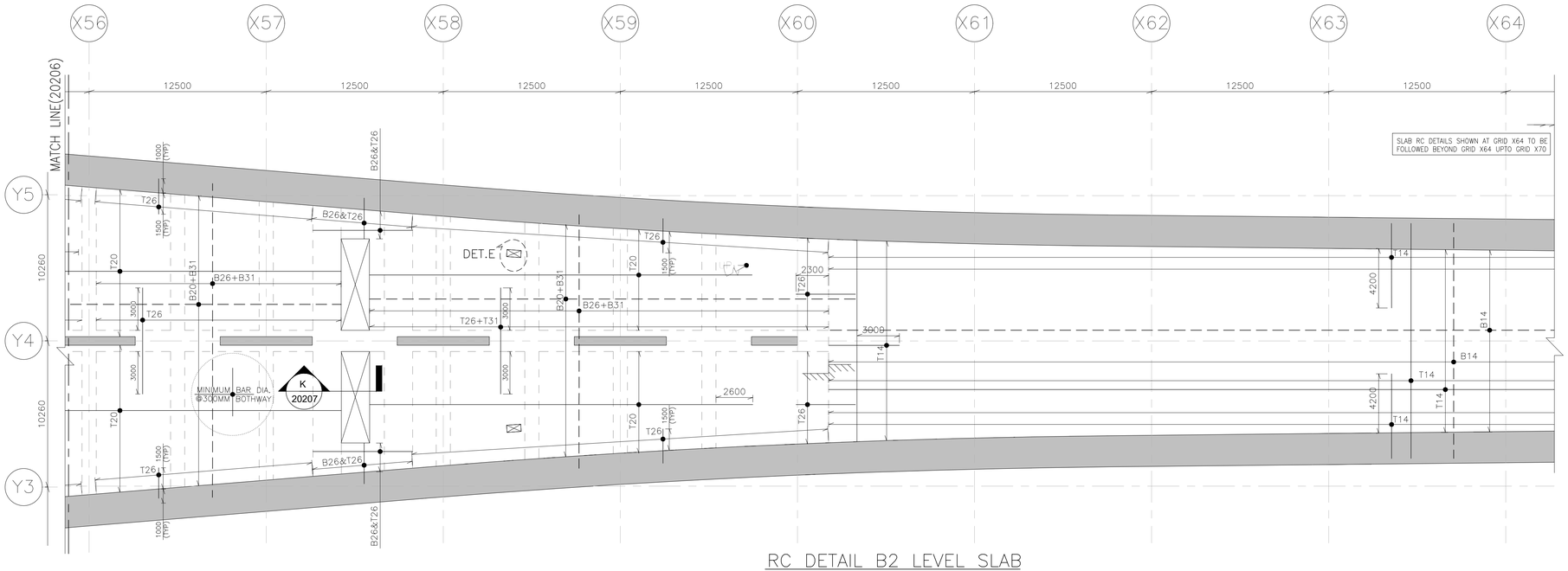
ADOPTED BY: **NHSRCL**

PROJECT :
Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

OWNER :
NATIONAL HIGH SPEED RAIL CORPORATION LTD.

STRUCTURAL CONSULTANT :
TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (7 OF 8)
PREPARED :	SVD / NNP	
CHECKED :	OK / GB	SCALE: 1:175 UN
APPROVED :	NJT / HD	DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20206-004



RC DETAIL B2 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS

LEGEND

THK ---- THICK
TYP ---- TYPICAL
BOT ---- BOTTOM
T ---- TOP REINFORCEMENT (—————)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

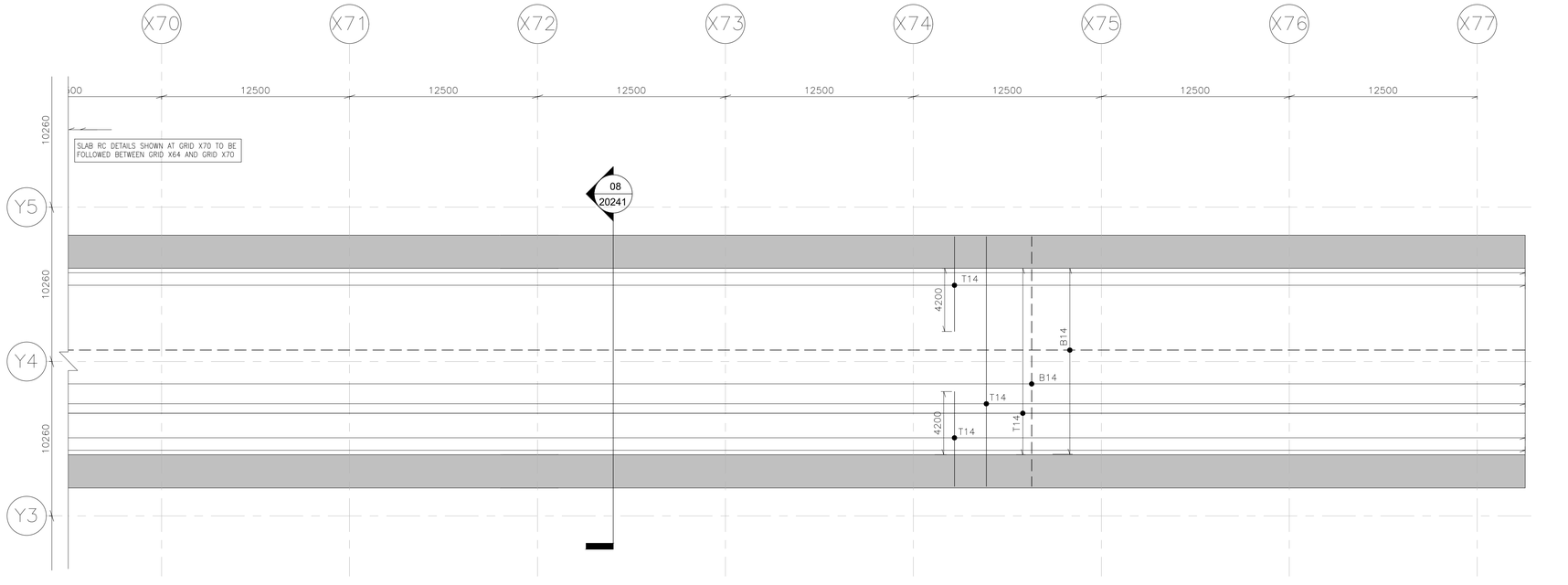
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B2 LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030
3. TYPICAL REINFORCEMENT DETAILS --- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B2 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20200 TO 20206

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

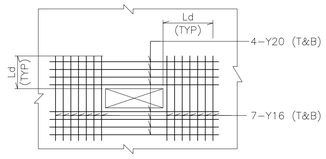
BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



RC DETAIL B2 LEVEL SLAB

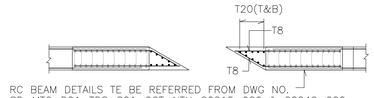
SHOWING SLAB TOP & BOTTOM REINF. DETAILS



DETAIL–E

(OPENING DIMENSIONS NOT SHOWN FOR CLARITY)

1:75



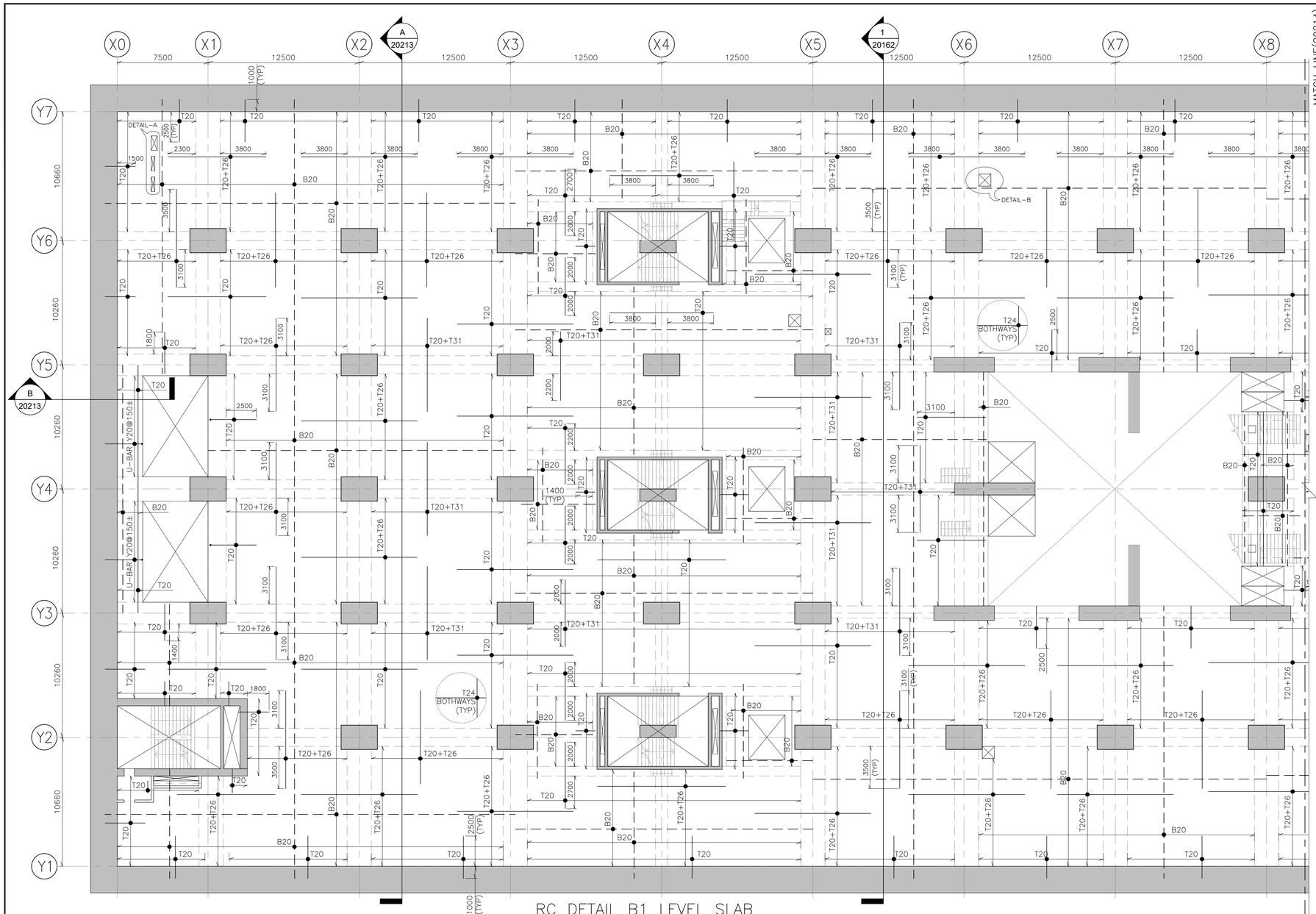
RC BEAM DETAILS TE BE REFERRED FROM DWG NO. SD-MTC-D01-TDS-S01-CCT-NTU-20212-000 & 20242-000

K SECTION K-K

1 : 75

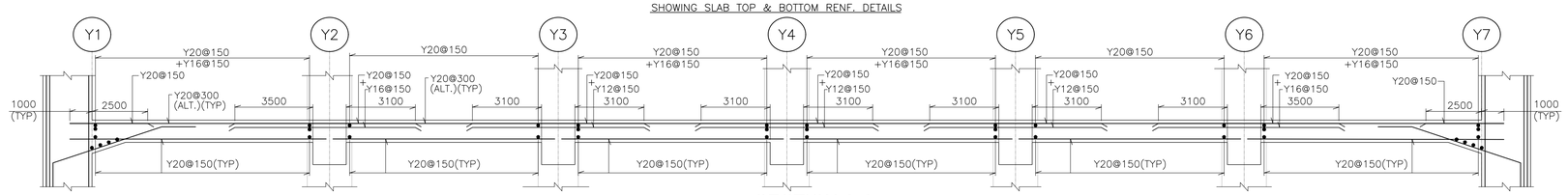
(OPENING DIMENSIONS NOT SHOWN FOR CLARITY)

ADOPTED BY: NHSRCL			
PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : SVD / NNP
			CHECKED : OK / GB
			APPROVED : NJT / HD / SND
			TITLE: RC DETAILS: B2 (SLAB) LVL. SHEET (8 OF 8)
			SCALE: 1:175
			DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20207-004



RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS



A SECTION A-A
1 : 150

LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (———)
B ----- BOTTOM REINFORCEMENT (- - - - - -)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

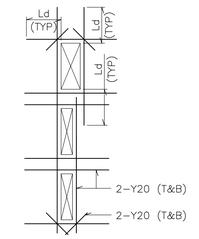
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS ----- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL ----- SD-MTC-D01-TDS-S01-CCT-NTU-20214 TO 20220

BAR TAG

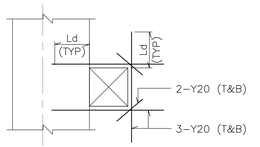
B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

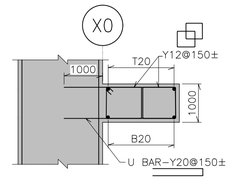
B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150



DETAIL-A
(TYPICAL ADDITIONAL REINF. DETAILS)
1:75



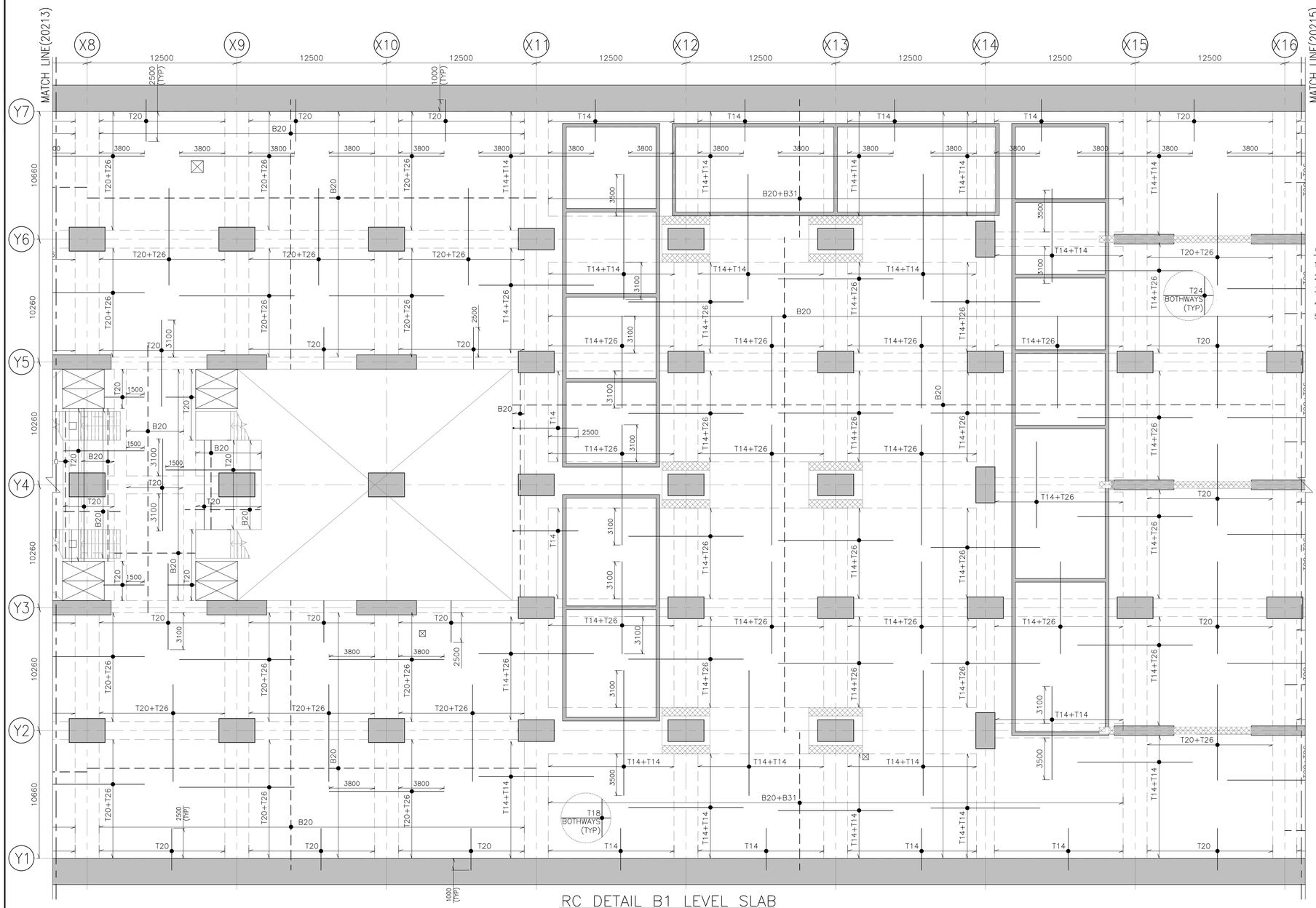
DETAIL-B
(TYPICAL ADDITIONAL REINF. DETAILS)
1:75



B SECTION B-B
1 : 75
(WALL REINFORCEMENT NOT SHOWN FOR CLARITY)

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED :	DATE : 10.07.2020
			PREPARED :	FAS / SVD / NNP
			CHECKED :	AZ / GB / MS
			APPROVED :	NJT / HD / SND

ADOPTED BY:	NHSRCL
TITLE:	RC DETAILS: B1 (SLAB) LVL. SHEET (1 OF 8)
SCALE:	1:175
DRAWING NO:	SD-MTC-D01-TDS-S01-CCT-NTU-20213-003



RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM RENF. DETAILS

LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (————)
B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS ---- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20213
5. RC DETAILS : B1 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20215 TO 20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

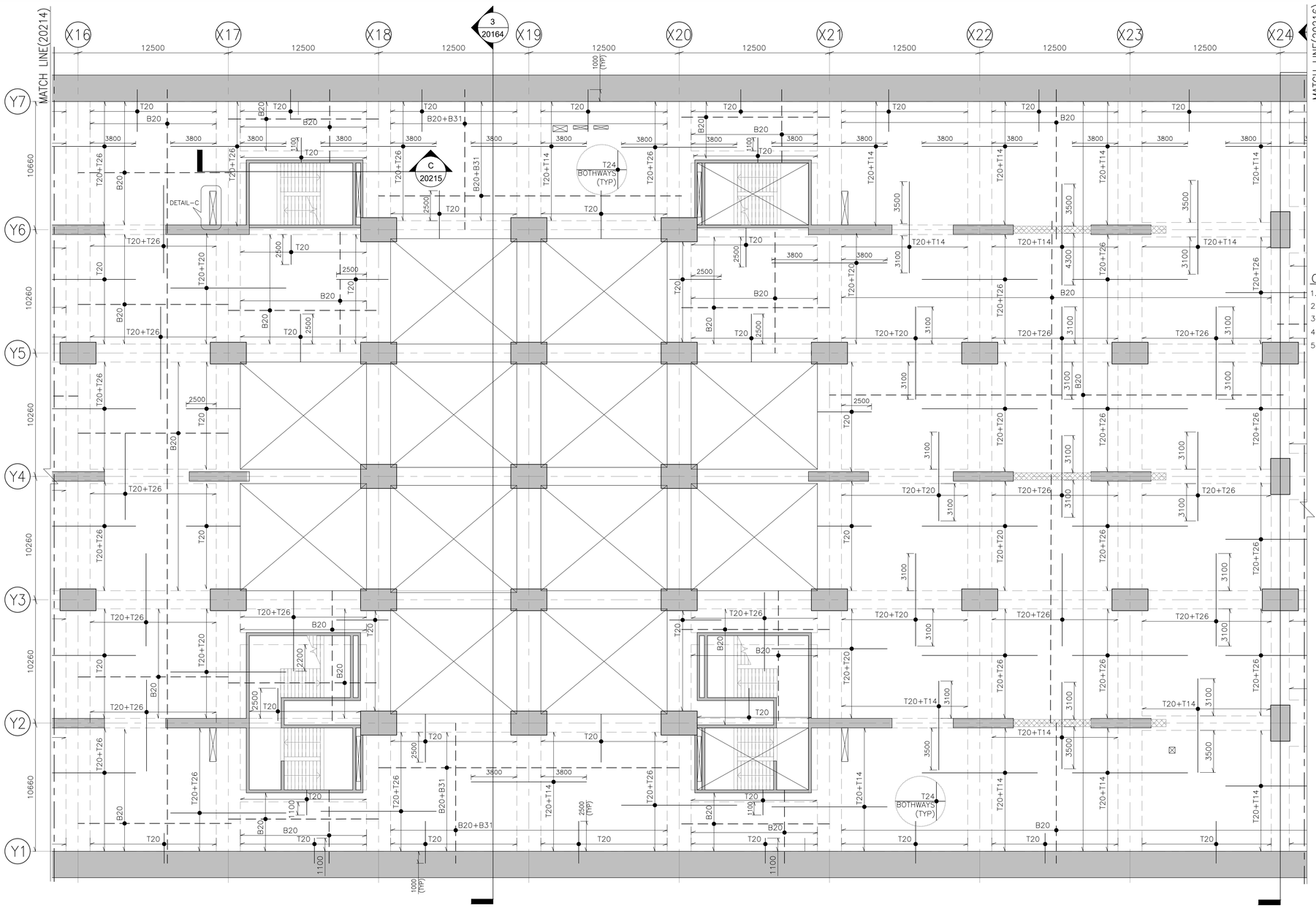
ADOPTED BY: **NHSRCL**

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED :
			DATE : 10.07.2020
			PREPARED : FAS / SVD / NNP
			CHECKED : AZ / GB / MS
			APPROVED : NJT / HD / SND

TITLE: **RC DETAILS: B1 (SLAB) LVL. SHEET (2 OF 8)**

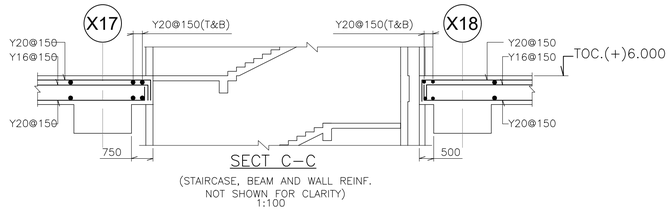
SCALE: **1:175**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20214-003**



RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINF. DETAILS



SECT C-C

(STAIRCASE, BEAM AND WALL REINF. NOT SHOWN FOR CLARITY)

1:100

LEGEND

THK ---- THICK

TYP ---- TYPICAL

T ---- TOP REINFORCEMENT (————)

B ----- BOTTOM REINFORCEMENT (– – – – –)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

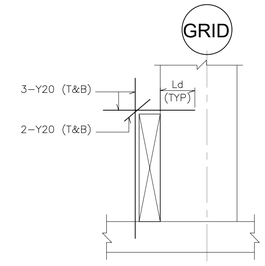
1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS ---- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20213 & 20214
5. RC DETAILS : B1 (SLAB) LEVEL ---- SD-MTC-D01-TDS-S01-CCT-NTU-20216 TO 20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B30=Y12 @150	T31=Y12 @150



DETAIL-C

(TYPICAL ADDITIONAL REINF. DETAILS)

1:75

ADOPTED BY: **NHSRCL**

PROJECT :

Mumbai - Ahmedabad High Speed Railway Project
(Package No. MAHSR-C-1)

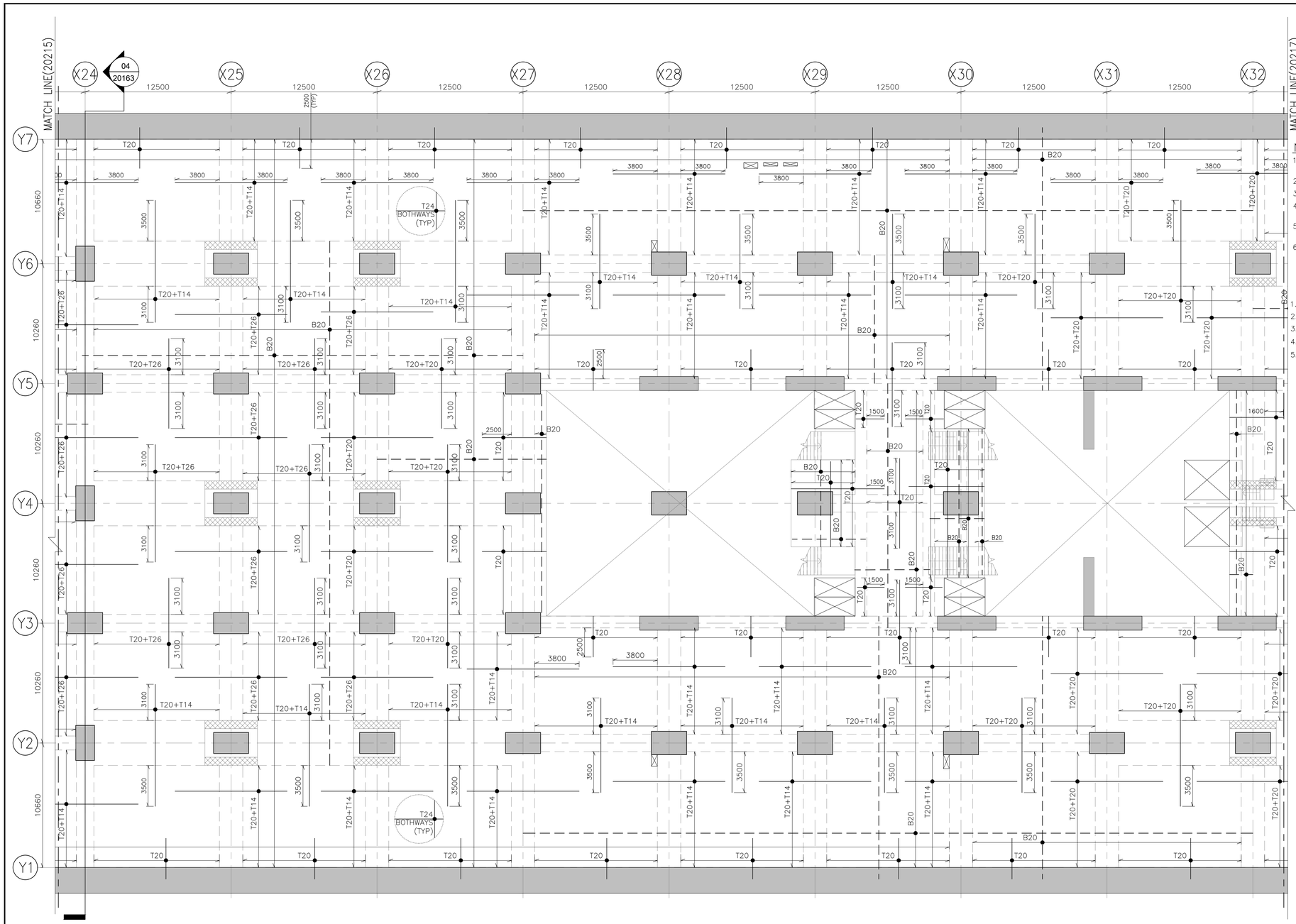
OWNER :

NATIONAL HIGH SPEED RAIL CORPORATION LTD.

STRUCTURAL CONSULTANT :

TATA CONSULTING ENGINEERS LIMITED
MUMBAI

REVISED :	DATE : 10.07.2020	TITLE: **RC DETAILS: B1 (SLAB) LVL. SHEET (3 OF 8)**
PREPARED :	FAS / SVD / NNP	
CHECKED :	AZ / GB / MS	SCALE: **1:175**
APPROVED :	NJT / HD	DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20215-003**



LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (———)
B ----- BOTTOM REINFORCEMENT (------)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL – SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20213 TO 20215
5. RC DETAILS : B1 (SLAB) LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20217 TO 20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM RENF. DETAILS

ADOPTED BY: **NHSRCL**

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : / FAS / SVD / NNP
			CHECKED : / AZ / GB / MS
			APPROVED : / NJT / HD

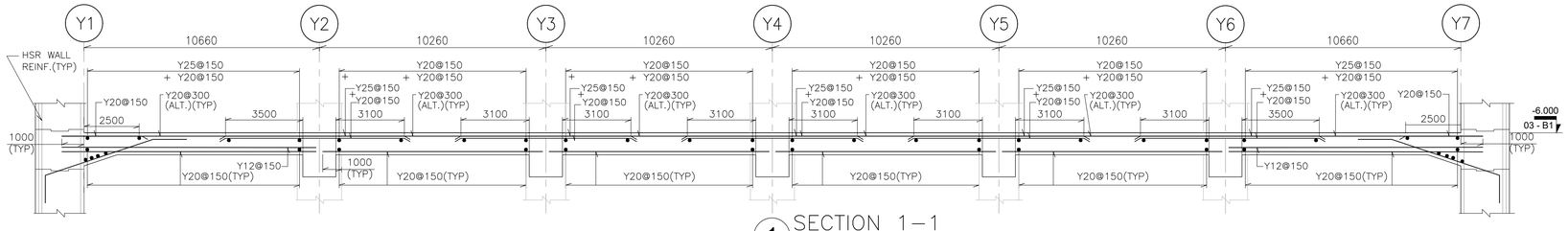
TITLE: **RC DETAILS: B1 (SLAB) LVL. SHEET (4 OF 8)**

SCALE: **1:175**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20216-004**

RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM RENF. DETAILS



1 SECTION 1-1

1 : 125

LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (———)
B ----- BOTTOM REINFORCEMENT (- - - - -)
Ld ---- DEVELOPMENT LENGTH

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL – SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20213 TO 20216
5. RC DETAILS : B1 (SLAB) LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20218 TO 20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

DETAIL-A

(OPENING DIMENSIONS NOT SHOWN FOR CLARITY)

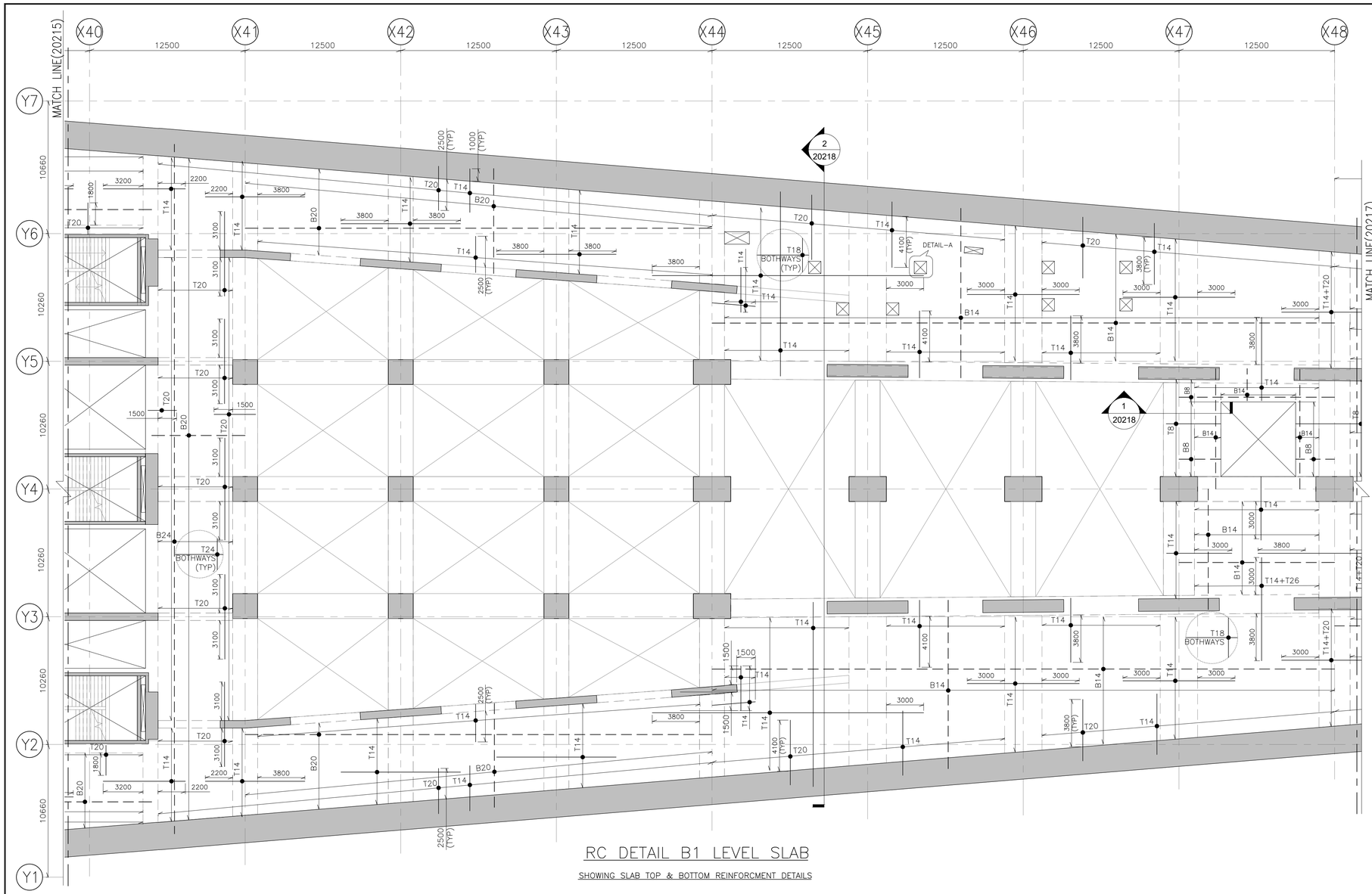
1:75

DETAIL-B

(OPENING DIMENSIONS NOT SHOWN FOR CLARITY)

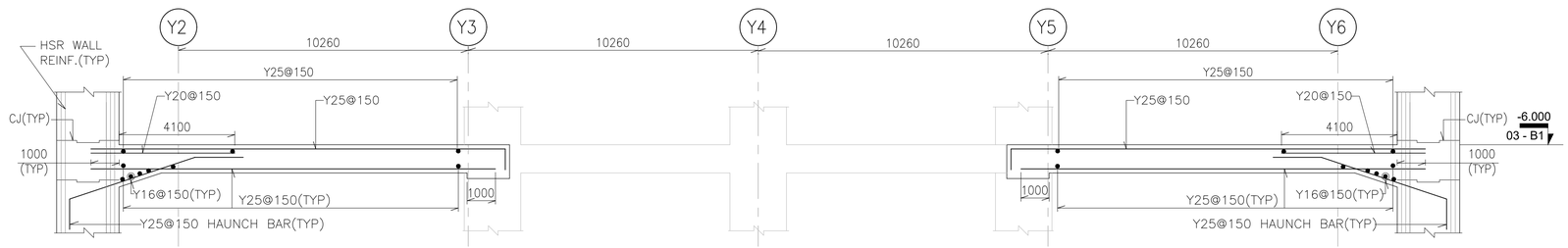
1:75

ADOPTED BY: NHSRCL			
PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED :
			DATE : 10.07.2020
			PREPARED : FAS / SVD / NNP
			CHECKED : OK / GB / MS
			APPROVED : NJT / HD
			TITLE: RC DETAILS: B1 (SLAB) LVL. SHEET (5 OF 8)
			SCALE: 1:175
			DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20217-004



RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM REINFORCMENT DETAILS



1 SECTION 2–2

1 : 100

LEGEND

THK ---- THICK
TYP ---- TYPICAL
T ---- TOP REINFORCEMENT (———)
B ----- BOTTOM REINFORCEMENT (- - - - - -)
Ld ---- DEVELOPMENT LENGTH
SFR ---- SIDE FACE REINFORCEMENT
CANT. --- CANTILEVER
EF ---- EACH FACE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL – SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20213 TO 20217
5. RC DETAILS : B1 (SLAB) LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20219 & 20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

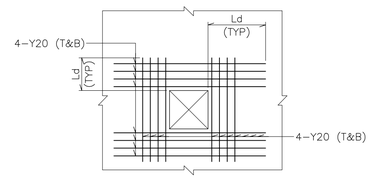
BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

BEAM DETAILS AS PER DWG NOS SD-MTC-D01-TDS-S01-CCT-NTU-20224 & 20225

SECTION 1–1

1:75



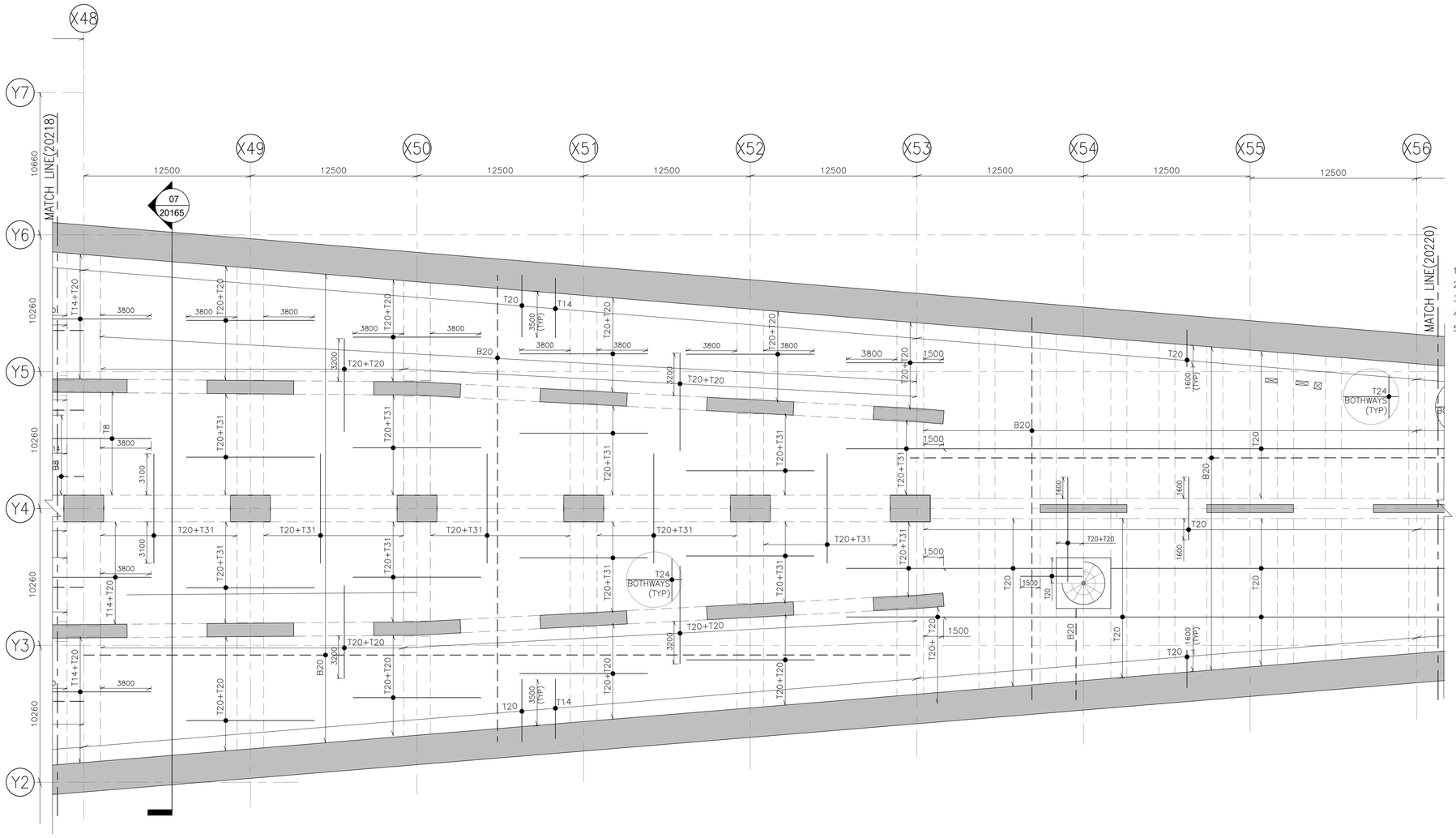
DETAIL–A

(OPENING DIMENSIONS NOT SHOWN FOR CLARITY)

1:75

ADOPTED BY: NHSRCL		
PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI

REVISED :	DATE : 10.07.2020	TITLE:	RC DETAILS: B1 (SLAB) LVL. SHEET (6 OF 8)
PREPARED :	FAS / SVD / NNP		
CHECKED :	OK / GB / MS	SCALE:	1:175
APPROVED :	NJT / HD	DRAWING NO:	SD-MTC-D01-TDS-S01-CCT-NTU-20218-004



LEGEND

TYP ---- TYPICAL

T ---- TOP REINFORCEMENT (————)

B ----- BOTTOM REINFORCEMENT (- - - - - -)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL – SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20213 TO 20218
5. RC DETAILS : B1 (SLAB) LEVEL --- SD-MTC-D01-TDS-S01-CCT-NTU-20220

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM RENF. DETAILS

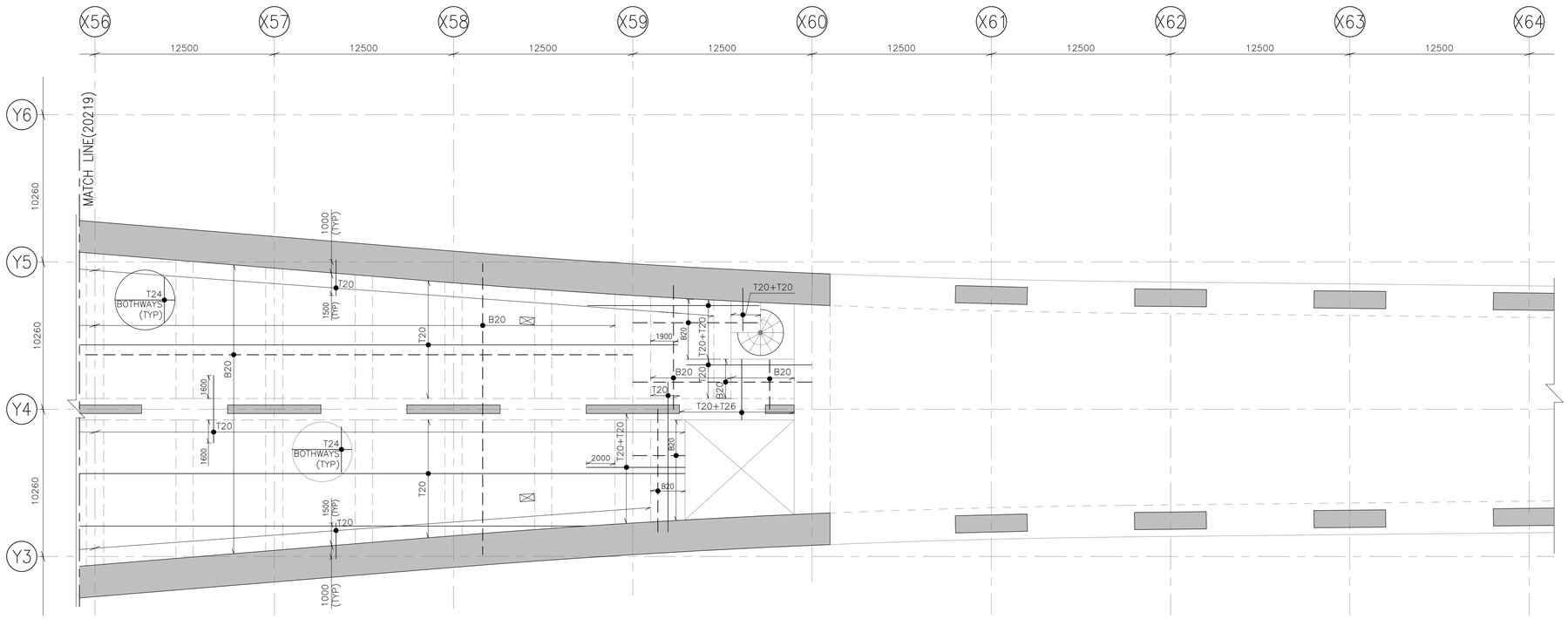
ADOPTED BY: **NHSRCL**

PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : / FAS / SVD / NNP
			CHECKED : / OK / GB / MS
			APPROVED : / NJT / HD / SND

TITLE: **RC DETAILS: B1 (SLAB) LVL. SHEET (7 OF 8)**

SCALE: **1:175**

DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20219-003**



RC DETAIL B1 LEVEL SLAB

SHOWING SLAB TOP & BOTTOM RENF. DETAILS

LEGEND

TYP ---- TYPICAL

T ---- TOP REINFORCEMENT (————)

B ----- BOTTOM REINFORCEMENT (- - - - - -)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456.
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED.
5. WHEREVER THE REINFORCEMENT IS PROVIDED IN TWO LAYERS, THE BAR WITH LARGER DIAMETER SHALL BE PLACED IN FIRST LAYER.
6. DOWELS/INSERT PLATES FOR EQUIPMENTS, STAIRS, MACHINES & SERVICES SUPPORTS SHALL BE LEFT IN CONCRETE BEFORE CASTING OF CONCRETE.

CONSTRUCTION REFERENCE DRAWINGS

1. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
2. GENERAL ARRANGEMENT B1 LEVEL – SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037
3. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
4. RC DETAILS : B1 (SLAB) LEVEL -- SD-MTC-D01-TDS-S01-CCT-NTU-20213 TO 20219

BAR TAG

B1=Y40 @125	T1=Y40 @125
B2=Y40 @150	T2=Y40 @150
B3=Y40 @175	T3=Y40 @175
B4=Y40 @200	T4=Y40 @200
B5=Y40 @250	T5=Y40 @250
B6=Y40 @300	T6=Y40 @300
B7=Y32 @125	T7=Y32 @125
B8=Y32 @150	T8=Y32 @150
B9=Y32 @175	T9=Y32 @175
B10=Y32 @200	T10=Y32 @200
B11=Y32 @250	T11=Y32 @250
B12=Y32 @300	T12=Y32 @300
B13=Y25 @125	T13=Y25 @125
B14=Y25 @150	T14=Y25 @150
B15=Y25 @175	T15=Y25 @175

BAR TAG

B16=Y25 @200	T16=Y25 @200
B17=Y25 @250	T17=Y25 @250
B18=Y25 @300	T18=Y25 @300
B19=Y20 @125	T19=Y20 @125
B20=Y20 @150	T20=Y20 @150
B21=Y20 @175	T21=Y20 @175
B22=Y20 @200	T22=Y20 @200
B23=Y20 @250	T23=Y20 @250
B24=Y20 @300	T24=Y20 @300
B25=Y16 @125	T25=Y16 @125
B26=Y16 @150	T26=Y16 @150
B27=Y16 @175	T27=Y16 @175
B28=Y16 @200	T28=Y16 @200
B29=Y16 @250	T29=Y16 @250
B30=Y16 @300	T30=Y16 @300
B31=Y12 @150	T31=Y12 @150

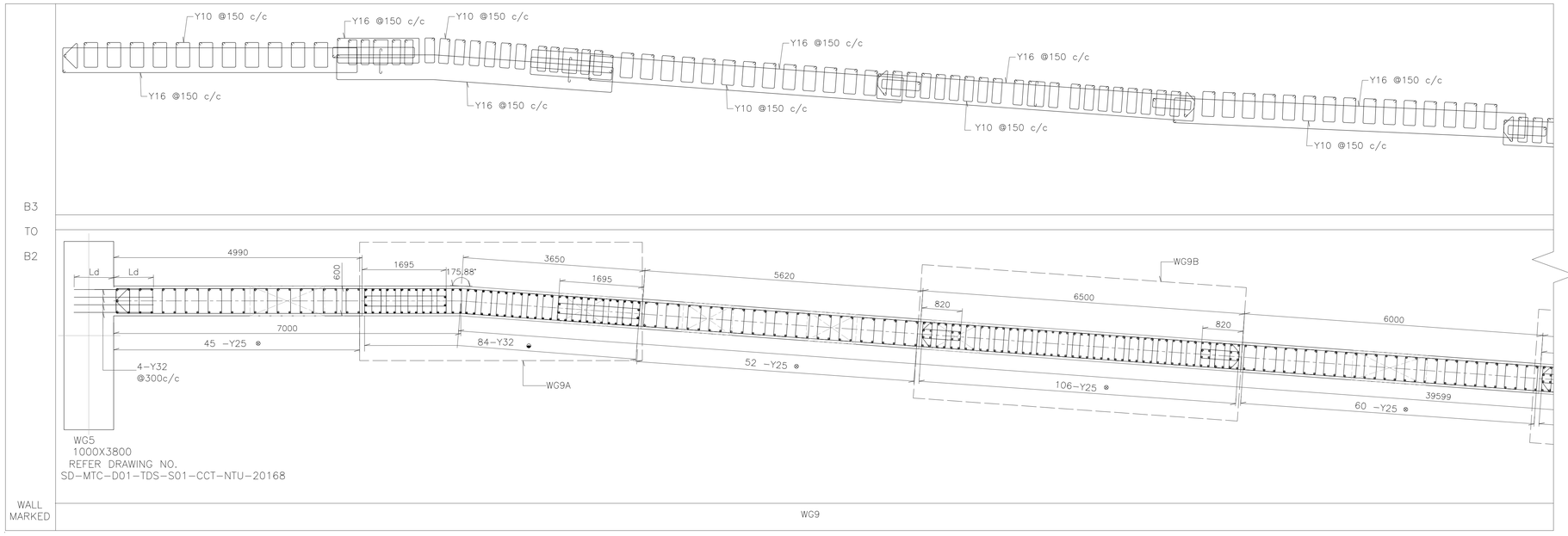
ADOPTED BY: **NHSRCL**

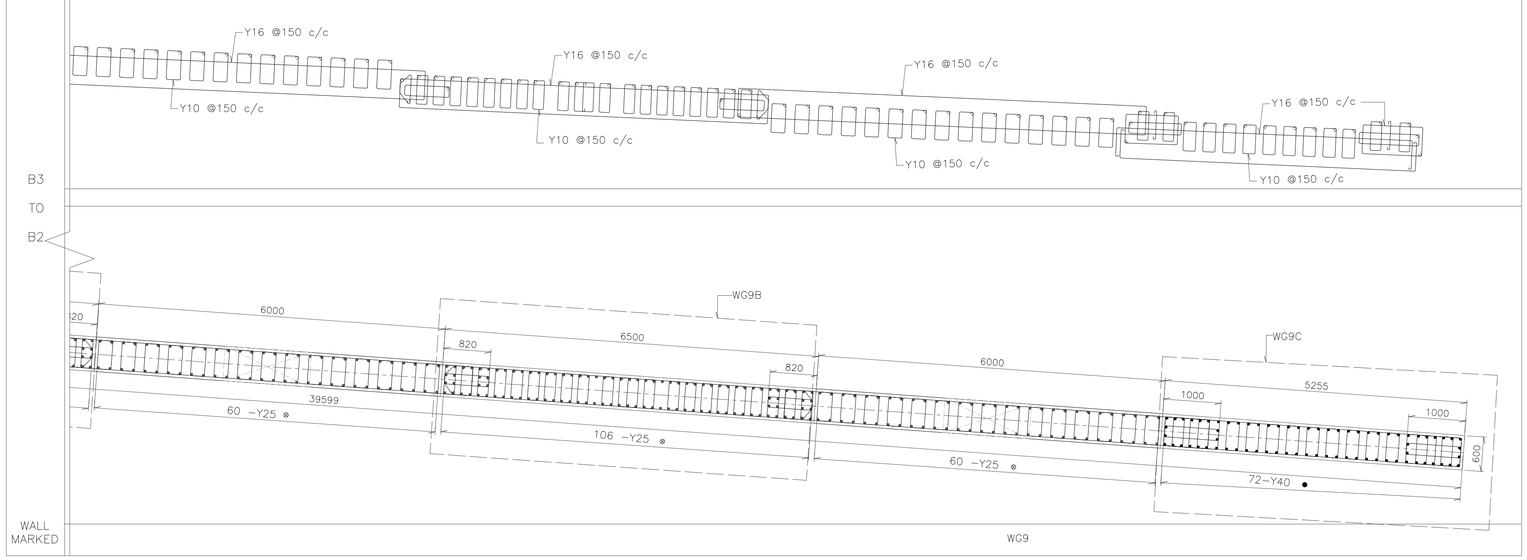
PROJECT : Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER : NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT : TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED :	DATE : 10.07.2020
			PREPARED :	FAS / SVD / NNP
			CHECKED :	OK / GB / MS
			APPROVED :	NJT / HD

TITLE: **RC DETAILS: B1 (SLAB) LVL. SHEET (8 OF 8)**

SCALE: **1:175**

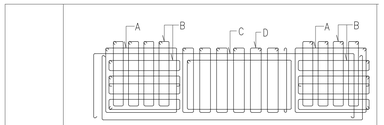
DRAWING NO: **SD-MTC-D01-TDS-S01-CCT-NTU-20220-003**



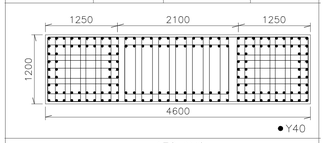


CONSTRUCTION REFERENCE DRAWINGS

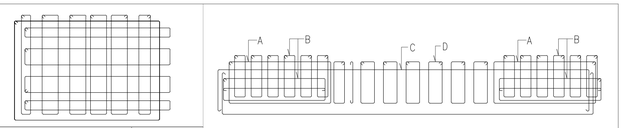
1. GENERAL ARRANGEMENT: B3 (RAFT)LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20013 TO 20019 (SH. 1 TO 7)
2. GENERAL ARRANGEMENT: PLATFORM LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20020 TO 20023 (SH. 1 TO 4)
3. GENERAL ARRANGEMENT: B2 LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20024 TO 20030 (SH. 1 TO 7)
4. GENERAL ARRANGEMENT: B1 LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20031 TO 20037 (SH. 1 TO 7)
5. GENERAL ARRANGEMENT: URSL LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20038 TO 20044 (SH. 1 TO 7)
6. GENERAL ARRANGEMENT: GROUND LEVEL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20046 TO 20047 (SH. 1 TO 2)
7. RC DETAILS: COLUMN / WALL
   -----SD-MTC-D01-TDS-S01-CCT-NTU-20167 TO 20173,20243,20244
8. TYPICAL REINFORCEMENT DETAILS -- SD-MTC-D01-TDS-S01-CCT-NTU-20152
9. GENERAL NOTES ---------- SD-MTC-D01-TDS-S01-CCT-NTU-20001
10. RC DETAILS: TYPICAL EXTRA REINFORCEMENT AROUND CUTOUT IN WALL
    -----SD-MTC-D01-TDS-S01-CCT-NTU-20248



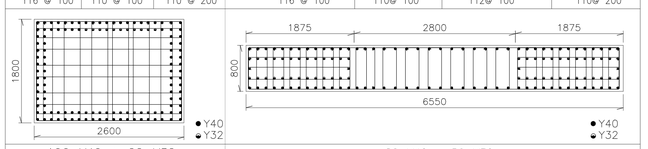
	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
ABOVE URSL	Y12 @ 100	Y10 @ 100	Y12 @ 100	Y10 @ 200



	172–Y40
COLUMN/ WALL MARKED	WT1A



Z1 HEIGHT = FULL HEIGHT						
Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	BE MAIN (A)	BE OTHERS (B)	MID MAIN LINKS (C)	MID OTHER (D)
Y16 @ 100	Y10 @ 100	Y10 @ 200	Y16 @ 100	Y10@ 100	Y12@ 100	Y10@ 200



ABOVE URSL	106–Y40 + 22–Y32	82–Y40 + 56–Y32
COLUMN/ WALL MARKED	CT3A	WT5B1A

NOTES

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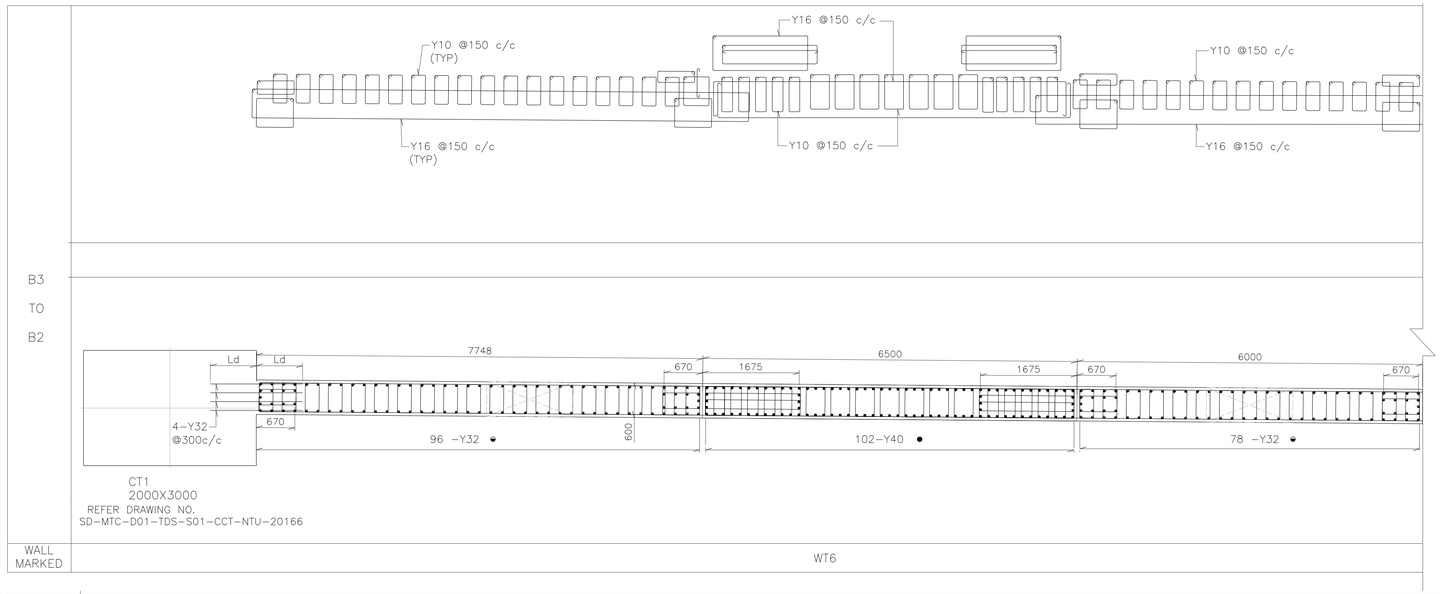
2. DO NOT SCALE THE DRAWINGS.
3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING
   SD–MTC–D01–TDS–S01–CCT–NTU–20002 TO 20005

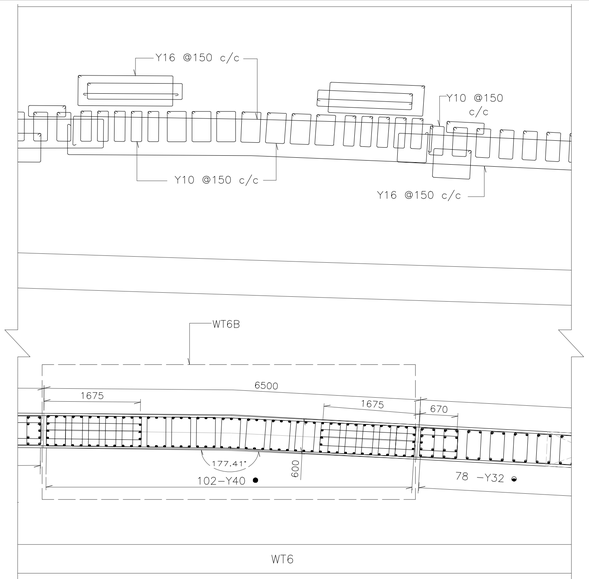
ENGINEERING REFERENCE DRAWINGS

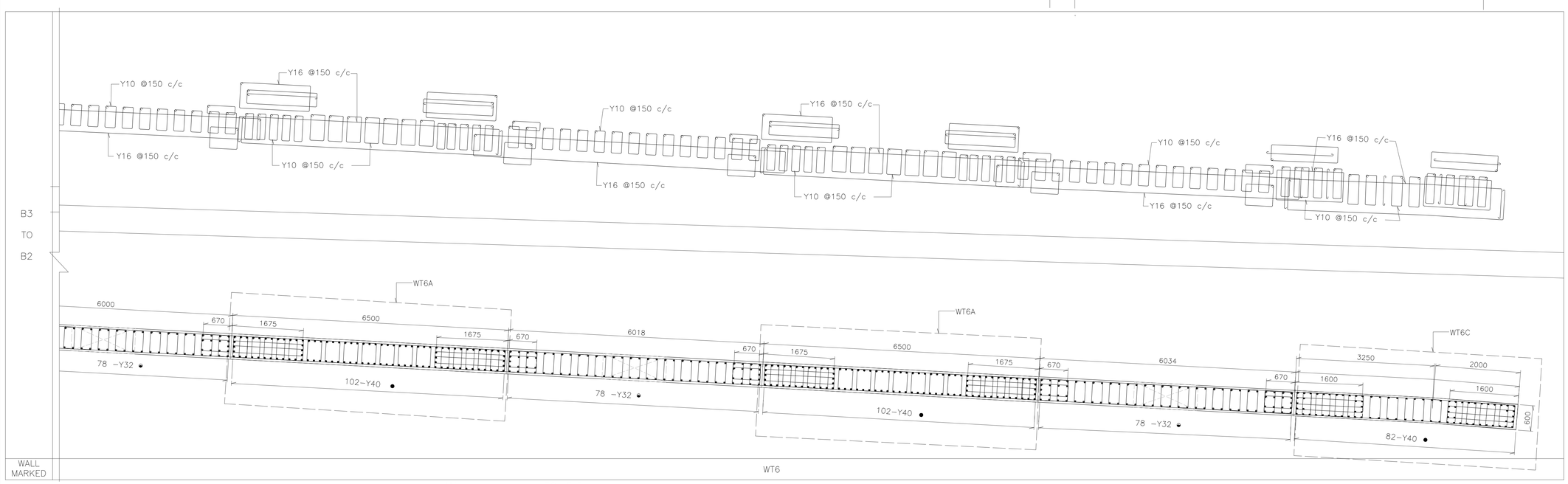
MUMBAI STATION
SECTION–7 ------- BD–JIC–C14–DRW–S01–STA–NTU–02110

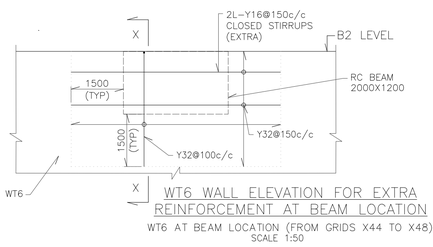
ADOPTED BY: **NHSRCL**

PROJECT :	Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)
OWNER :	NATIONAL HIGH SPEED RAIL CORPORATION LTD.
STRUCTURAL CONSULTANT :	TATA CONSULTING ENGINEERS LIMITED MUMBAI
REVISED :	
DATE :	10.07.2020
PREPARED :	FAS
CHECKED :	OK / GB / MS
APPROVED :	NJT / HD
TITLE:	RC DETAILS: COLUMN / WALL SHEET (9 OF 10)
SCALE:	NTS
DRAWING NO:	SD-MTC-D01-TDS-S01-CCT-NTU-20243-001





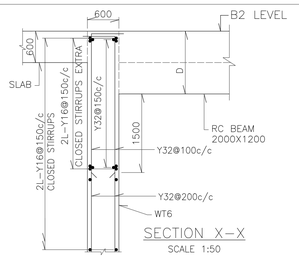




WT6 WALL ELEVATION FOR EXTRA REINFORCEMENT AT BEAM LOCATION

WT6 AT BEAM LOCATION (FROM GRIDS X44 TO X48)

SCALE 1:50



SECTION X–X

SCALE 1:50

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS, UNLESS OTHERWISE NOTED
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3. RCC WORK SHALL BE STRICTLY IN ACCORDANCE WITH IS 456
4. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNLESS OTHERWISE NOTED
5. FOR COLUMN / WALL TERMINATION LEVEL REFER BATTERY LIMIT DRAWING SD–MTC–D01–TDS–S01–CCT–NTU–20002 TO 20005

ENGINEERING REFERENCE DRAWINGS

MUMBAI STATION
SECTION–7 -------- BD–JIC–C14–DRW–S01–STA–NTU–02110

CONSTRUCTION REFERENCE DRAWINGS

FOR CONSTRUCTION REFERENCE DRAWING REFER DRAWING NO –– SD–MTC–D01–TDS–S01–CCT–NTU–20243

ADOPTED BY: NHSRCL			
PROJECT: Mumbai - Ahmedabad High Speed Railway Project (Package No. MAHSR-C-1)	OWNER: NATIONAL HIGH SPEED RAIL CORPORATION LTD.	STRUCTURAL CONSULTANT: TATA CONSULTING ENGINEERS LIMITED MUMBAI	REVISED : / DATE : 10.07.2020
			PREPARED : / SVD
			CHECKED : / OK / GB / MS
			APPROVED : / NJT / HD
			TITLE: RC DETAILS: COLUMN / WALL SHEET (9 OF 9)
			SCALE: NTS
			DRAWING NO: SD-MTC-D01-TDS-S01-CCT-NTU-20244-001

Mumbai-Ahmedabad High Speed Rail Project

Mumbai Station

ARCHITECTURE

Owner

NATIONAL HIGH SPEED RAIL CORPORATION LIMITED

Financed

JAPAN INTERNATIONAL COOPERATION AGENCY

JICA Study Team

JAPAN INTERNATIONAL CONSULTANTS FOR TRANSPORTATION

NIPPON KOEI

ORIENTAL CONSULTANTS GLOBAL

RED: New Drawings, BLUE: Revised Drawings

MUMBAI STATION DRAWING LIST (ARCHITECTURE)

1	BD - JIC - C14 - DRW - S01 - STA - NTU - 00001 000	GENERAL NOTE AND ABBREVIATIONS	A1(A3)	NTS
2	BD - JIC - C14 - DRW - S01 - STA - NTU - 00002 000	LOCATION MAP	A1(A3)	1/4000
3	BD - JIC - C14 - DRW - S01 - STA - NTU - 01001 000	PERSPECTIVE SKETCH-1	A1(A3)	NTS
4	BD - JIC - C14 - DRW - S01 - STA - NTU - 01002 000	PERSPECTIVE SKETCH-2	A1(A3)	NTS
5	BD - JIC - C14 - DRW - S01 - STA - NTU - 01101 000	BUILDING MENSURATION -1	A1(A3)	1/1500
6	BD - JIC - C14 - DRW - S01 - STA - NTU - 01102 000	BUILDING MENSURATION -2	A1(A3)	1/1500
7	BD - JIC - C14 - DRW - S01 - STA - NTU - 01201 000	FINISH SCHEDULE EXTERIOR	A1(A3)	NTS
8	BD - JIC - C14 - DRW - S01 - STA - NTU - 01202 000	FINISH SCHEDULE INTERIOR -1	A1(A3)	NTS
9	BD - JIC - C14 - DRW - S01 - STA - NTU - 01203 000	FINISH SCHEDULE INTERIOR -2	A1(A3)	NTS
10	BD - JIC - C14 - DRW - S01 - STA - NTU - 01204 000	FINISH SCHEDULE INTERIOR -3	A1(A3)	NTS
11	BD - JIC - C14 - DRW - S01 - STA - NTU - 01205 000	FINISH SCHEDULE INTERIOR -4	A1(A3)	NTS
12	BD - JIC - C14 - DRW - S01 - STA - NTU - 01206 000	FINISH SCHEDULE INTERIOR -5	A1(A3)	NTS
13	BD - JIC - C14 - DRW - S01 - STA - NTU - 02001 000	SITE LAYOUT PLAN	A1(A3)	1/2000
14	BD - JIC - C14 - DRW - S01 - STA - NTU - 02002 000	GROUND FLOOR PLAN	A1(A3)	1/1000
15	BD - JIC - C14 - DRW - S01 - STA - NTU - 02003 000	ROOF,MF,URF PLANS	A1(A3)	1/1000
16	BD - JIC - C14 - DRW - S01 - STA - NTU 02004 000	B1 FLOOR PLAN	A1(A3)	1/1000
17	BD - JIC - C14 - DRW - S01 - STA - NTU 02005 000	B2 FLOOR PLAN	A1(A3)	1/1000
18	BD - JIC - C14 - DRW - S01 - STA - NTU - 02006 000	PLATFORM FLOOR PLAN	A1(A3)	1/1000
19	BD - JIC - C14 - DRW - S01 - STA - NTU - 02007 000	B3 FLOOR (RAIL SLAB),B4 FLOOR PLANS	A1(A3)	1/1000
20	BD - JIC - C14 - DRW - S01 - STA - NTU - 02101 000	ELEVATION -1	A1(A3)	1/150
21	BD - JIC - C14 - DRW - S01 - STA - NTU - 02102 000	ELEVATION -2	A1(A3)	1/150
22	BD - JIC - C14 - DRW - S01 - STA - NTU - 02103 000	ELEVATION -3	A1(A3)	1/150
23	BD - JIC - C14 - DRW - S01 - STA - NTU - 02104 000	SECTION	A1(A3)	1/1000
24	BD - JIC - C14 - DRW - S01 - STA - NTU - 02108 000	GROUND FLOOR ENLARGED PLAN -1	A1(A3)	1/500
25	BD - JIC - C14 - DRW - S01 - STA - NTU - 02109 000	GROUND FLOOR ENLARGED PLAN -2	A1(A3)	1/500
26	BD - JIC - C14 - DRW - S01 - STA - NTU - 02110 000	ROOF,MF,URF ENLARGED PLANS	A1(A3)	1/500
27	BD - JIC - C14 - DRW - S01 - STA - NTU - 02111 000	B1 FLOOR ENLARGED PLAN -1	A1(A3)	1/500
28	BD - JIC - C14 - DRW - S01 - STA - NTU - 02112 000	B1 FLOOR ENLARGED PLAN -2	A1(A3)	1/500
29	BD - JIC - C14 - DRW - S01 - STA - NTU - 02113 000	B2 FLOOR ENLARGED PLAN -1	A1(A3)	1/500
30	BD - JIC - C14 - DRW - S01 - STA - NTU - 02114 000	B2 FLOOR ENLARGED PLAN -2	A1(A3)	1/500
31	BD - JIC - C14 - DRW - S01 - STA - NTU - 02115 000	PLATFORM FLOOR ENLARGED PLAN	A1(A3)	1/500
32	BD - JIC - C14 - DRW - S01 - STA - NTU - 02116 000	B3 B4 FLOOR ENLARGED PLANS -1(RAIL SLAB FLOOR,PIT ENLARGED PLANS)	A1(A3)	1/500
33	BD - JIC - C14 - DRW - S01 - STA - NTU - 02117 000	B3 B4 FLOOR ENLARGED PLANS -2(RAIL SLAB FLOOR,PIT ENLARGED PLANS)	A1(A3)	1/500
34	BD - JIC - C14 - DRW - S01 - STA - NTU - 02201 000	GROUND FLOOR DETAIL PLAN -1	A1(A3)	1/150
35	BD - JIC - C14 - DRW - S01 - STA - NTU - 02202 000	GROUND FLOOR DETAIL PLAN -2	A1(A3)	1/150
36	BD - JIC - C14 - DRW - S01 - STA - NTU - 02203 000	GROUND FLOOR DETAIL PLAN -3	A1(A3)	1/150
37	BD - JIC - C14 - DRW - S01 - STA - NTU - 02204 000	GROUND FLOOR DETAIL PLAN -4	A1(A3)	1/150
38	BD - JIC - C14 - DRW - S01 - STA - NTU - 02205 000	GROUND FLOOR DETAIL PLAN -5	A1(A3)	1/150
39	BD - JIC - C14 - DRW - S01 - STA - NTU - 02206 002	ROOF DETAIL PLAN -1	A1(A3)	1/150
40	BD - JIC - C14 - DRW - S01 - STA - NTU - 02207 000	ROOF DETAIL PLAN -2	A1(A3)	1/150
41	BD - JIC - C14 - DRW - S01 - STA - NTU - 02208 000	MF DETAIL PLAN -1	A1(A3)	1/150

RED: New Drawings, BLUE: Revised Drawings

MUMBAI STATION DRAWING LIST (ARCHITECTURE)

42	BD - JIC - C14 - DRW - S01 - STA - NTU - 02209 000	MF DETAIL PLAN -2	A1(A3)	1/150
43	BD - JIC - C14 - DRW - S01 - STA - NTU - 02210 000	URF DETAIL PLAN -1	A1(A3)	1/150
44	BD - JIC - C14 - DRW - S01 - STA - NTU - 02211 000	URF DETAIL PLAN -2	A1(A3)	1/150
45	BD - JIC - C14 - DRW - S01 - STA - NTU - 02212 000	B1 FLOOR DETAIL PLAN -1	A1(A3)	1/150
46	BD - JIC - C14 - DRW - S01 - STA - NTU - 02213 000	B1 FLOOR DETAIL PLAN -2	A1(A3)	1/150
47	BD - JIC - C14 - DRW - S01 - STA - NTU - 02214 000	B1 FLOOR DETAIL PLAN -3	A1(A3)	1/150
48	BD - JIC - C14 - DRW - S01 - STA - NTU - 02215 000	B1 FLOOR DETAIL PLAN -4	A1(A3)	1/150
49	BD - JIC - C14 - DRW - S01 - STA - NTU - 02216 000	B1 FLOOR DETAIL PLAN -5	A1(A3)	1/150
50	BD - JIC - C14 - DRW - S01 - STA - NTU - 02217 000	B1 FLOOR DETAIL PLAN -6	A1(A3)	1/150
51	BD - JIC - C14 - DRW - S01 - STA - NTU - 02218 000	B1 FLOOR DETAIL PLAN -7	A1(A3)	1/150
52	BD - JIC - C14 - DRW - S01 - STA - NTU - 02219 000	B1 FLOOR DETAIL PLAN -8	A1(A3)	1/150
53	BD - JIC - C14 - DRW - S01 - STA - NTU - 02220 000	B2 FLOOR DETAIL PLAN -1	A1(A3)	1/150
54	BD - JIC - C14 - DRW - S01 - STA - NTU - 02221 000	B2 FLOOR DETAIL PLAN -2	A1(A3)	1/150
55	BD - JIC - C14 - DRW - S01 - STA - NTU - 02222 000	B2 FLOOR DETAIL PLAN -3	A1(A3)	1/150
56	BD - JIC - C14 - DRW - S01 - STA - NTU - 02223 000	B2 FLOOR DETAIL PLAN -4	A1(A3)	1/150
57	BD - JIC - C14 - DRW - S01 - STA - NTU - 02224 000	B2 FLOOR DETAIL PLAN -5	A1(A3)	1/150
58	BD - JIC - C14 - DRW - S01 - STA - NTU - 02225 000	B2 FLOOR DETAIL PLAN -6	A1(A3)	1/150
59	BD - JIC - C14 - DRW - S01 - STA - NTU - 02226 000	B2 FLOOR DETAIL PLAN -7	A1(A3)	1/1000
60	BD - JIC - C14 - DRW - S01 - STA - NTU - 02227 000	B2 FLOOR DETAIL PLAN -8	A1(A3)	1/150
61	BD - JIC - C14 - DRW - S01 - STA - NTU - 02228 000	PLATFORM FLOOR DETAIL PLAN -1	A1(A3)	1/150
62	BD - JIC - C14 - DRW - S01 - STA - NTU - 02229 002	PLATFORM FLOOR DETAIL PLAN -2	A1(A3)	1/150
63	BD - JIC - C14 - DRW - S01 - STA - NTU - 02230 002	PLATFORM FLOOR DETAIL PLAN -3	A1(A3)	1/150
64	BD - JIC - C14 - DRW - S01 - STA - NTU - 02231 000	PLATFORM FLOOR DETAIL PLAN -4	A1(A3)	1/150
65	BD - JIC - C14 - DRW - S01 - STA - NTU - 02232 000	PLATFORM FLOOR DETAIL PLAN -5	A1(A3)	1/150
66	BD - JIC - C14 - DRW - S01 - STA - NTU - 02233 002	B3 FLOOR(RAIL SLAB) DETAIL PLAN -1	A1(A3)	1/150
67	BD - JIC - C14 - DRW - S01 - STA - NTU - 02234 002	B3 FLOOR(RAIL SLAB) DETAIL PLAN -2	A1(A3)	1/150
68	BD - JIC - C14 - DRW - S01 - STA - NTU - 02235 002	B3 FLOOR(RAIL SLAB) DETAIL PLAN -3	A1(A3)	1/150
69	BD - JIC - C14 - DRW - S01 - STA - NTU - 02236 002	B3 FLOOR(RAIL SLAB) DETAIL PLAN -4	A1(A3)	1/150
70	BD - JIC - C14 - DRW - S01 - STA - NTU - 02237 000	B3 FLOOR(RAIL SLAB) DETAIL PLAN -5	A1(A3)	1/150
71	BD - JIC - C14 - DRW - S01 - STA - NTU - 02238 000	B3 FLOOR(RAIL SLAB) DETAIL PLAN -6	A1(A3)	1/150
72	BD - JIC - C14 - DRW - S01 - STA - NTU - 02239 000	B3 FLOOR(RAIL SLAB) DETAIL PLAN -7	A1(A3)	1/150
73	BD - JIC - C14 - DRW - S01 - STA - NTU - 02240 000	B3 FLOOR(RAIL SLAB) DETAIL PLAN -8	A1(A3)	1/150
74	BD - JIC - C14 - DRW - S01 - STA - NTU - 02241 000	B4 FLOOR DETAIL PLAN	A1(A3)	1/150
75	BD - JIC - C14 - DRW - S01 - STA - NTU - 02301 000	TOILET AREA DETAIL PLAN -1	A1(A3)	1/50
76	BD - JIC - C14 - DRW - S01 - STA - NTU - 02302 000	TOILET AREA DETAIL PLAN -2	A1(A3)	1/50
77	BD - JIC - C14 - DRW - S01 - STA - NTU - 02303 000	TOILET AREA DETAIL PLAN -3	A1(A3)	1/50
78	BD - JIC - C14 - DRW - S01 - STA - NTU - 02405 000	ENLARGED SECTION -1	A1(A3)	1/150
79	BD - JIC - C14 - DRW - S01 - STA - NTU - 02406 000	ENLARGED SECTION -2	A1(A3)	1/150
80	BD - JIC - C14 - DRW - S01 - STA - NTU - 02407 000	ENLARGED SECTION -3	A1(A3)	1/150
81	BD - JIC - C14 - DRW - S01 - STA - NTU - 02408 000	ENLARGED SECTION -4	A1(A3)	1/1000
82	BD - JIC - C14 - DRW - S01 - STA - NTU - 02409 000	ENLARGED SECTION -5	A1(A3)	1/150

RED: New Drawings, BLUE: Revised Drawings

MUMBAI STATION DRAWING LIST (ARCHITECTURE)

83	BD - JIC - C14 - DRW - S01 - STA - NTU - 02410 002	ENLARGED SECTION -6	A1(A3)	1/150
84	BD - JIC - C14 - DRW - S01 - STA - NTU - 02411 000	ENLARGED SECTION -7	A1(A3)	1/150
85	BD - JIC - C14 - DRW - S01 - STA - NTU - 02412 000	ENLARGED SECTION -8	A1(A3)	1/150
86	BD - JIC - C14 - DRW - S01 - STA - NTU - 02413 000	ENLARGED SECTION -9	A1(A3)	1/150
87	BD - JIC - C14 - DRW - S01 - STA - NTU - 02414 000	ENLARGED SECTION -10	A1(A3)	1/150
88	BD - JIC - C14 - DRW - S01 - STA - NTU - 02501 000	INTERIOR ELEVATION -1	A1(A3)	1/150
89	BD - JIC - C14 - DRW - S01 - STA - NTU - 02502 000	INTERIOR ELEVATION -2	A1(A3)	1/150
90	BD - JIC - C14 - DRW - S01 - STA - NTU - 02503 000	INTERIOR ELEVATION -3	A1(A3)	1/150
91	BD - JIC - C14 - DRW - S01 - STA - NTU - 02504 000	INTERIOR ELEVATION -4	A1(A3)	1/150
92	BD - JIC - C14 - DRW - S01 - STA - NTU - 02505 000	INTERIOR ELEVATION -5	A1(A3)	1/150
93	BD - JIC - C14 - DRW - S01 - STA - NTU - 02506 000	INTERIOR ELEVATION -6	A1(A3)	1/150
94	BD - JIC - C14 - DRW - S01 - STA - NTU - 02507 000	INTERIOR ELEVATION -7	A1(A3)	1/150
95	BD - JIC - C14 - DRW - S01 - STA - NTU - 02601 000	CEILING PLAN OF PUBLIC AREA -1	A1(A3)	1/1000
96	BD - JIC - C14 - DRW - S01 - STA - NTU - 02602 000	CEILING PLAN OF PUBLIC AREA -2	A1(A3)	1/150
97	BD - JIC - C14 - DRW - S01 - STA - NTU - 02603 000	SECONDARY ROOF	A1(A3)	1/1000
98	BD - JIC - C14 - DRW - S01 - STA - NTU - 03001 002	DOOR AND WINDOW SCHEDULE -1	A1(A3)	NTS
99	BD - JIC - C14 - DRW - S01 - STA - NTU - 03002 002	DOOR AND WINDOW SCHEDULE -2	A1(A3)	NTS
100	BD - JIC - C14 - DRW - S01 - STA - NTU - 03003 002	DOOR AND WINDOW SCHEDULE -3	A1(A3)	NTS
101	BD - JIC - C14 - DRW - S01 - STA - NTU - 03004 000	DOOR AND WINDOW KEY PLAN -1	A1(A3)	1/500
102	BD - JIC - C14 - DRW - S01 - STA - NTU - 03005 000	DOOR AND WINDOW KEY PLAN -2	A1(A3)	1/500
103	BD - JIC - C14 - DRW - S01 - STA - NTU - 03006 000	DOOR AND WINDOW KEY PLAN -3	A1(A3)	1/500
104	BD - JIC - C14 - DRW - S01 - STA - NTU - 03007 002	DOOR AND WINDOW KEY PLAN -4	A1(A3)	1/500
105	BD - JIC - C14 - DRW - S01 - STA - NTU - 03008 002	DOOR AND WINDOW KEY PLAN -5	A1(A3)	1/500
106	BD - JIC - C14 - DRW - S01 - STA - NTU - 03009 002	DOOR AND WINDOW KEY PLAN -6	A1(A3)	1/500
107	BD - JIC - C14 - DRW - S01 - STA - NTU - 03010 000	DOOR AND WINDOW KEY PLAN -7	A1(A3)	1/500
108	BD - JIC - C14 - DRW - S01 - STA - NTU - 03011 000	DOOR AND WINDOW KEY PLAN -8	A1(A3)	1/500
109	BD - JIC - C14 - DRW - S01 - STA - NTU - 03012 000	DOOR AND WINDOW KEY PLAN -9	A1(A3)	1/500
110	BD - JIC - C14 - DRW - S01 - STA - NTU - 03013 000	DOOR AND WINDOW KEY PLAN -10	A1(A3)	1/500
111	BD - JIC - C14 - DRW - S01 - STA - NTU - 04001 000	DETAIL SECTION-1	A1(A3)	1/50
112	BD - JIC - C14 - DRW - S01 - STA - NTU - 04002 000	DETAIL SECTION-2	A1(A3)	1/50
113	BD - JIC - C14 - DRW - S01 - STA - NTU - 04003 000	DETAIL SECTION-3	A1(A3)	1/50
114	BD - JIC - C14 - DRW - S01 - STA - NTU - 04004 000	DETAIL SECTION-4	A1(A3)	1/50
115	BD - JIC - C14 - DRW - S01 - STA - NTU - 04005 000	HANDRAIL DETAILS	A1(A3)	1/50,1/100
116	BD - JIC - C14 - DRW - S01 - STA - NTU - 04011 000	LANDSCAPE	A1(A3)	1/150
117	BD - JIC - C14 - DRW - S01 - STA - NTU - 04012 000	METAL WORK DETAIL -1	A1(A3)	1/10,1/20
118	BD - JIC - C14 - DRW - S01 - STA - NTU - 04013 000	METAL WORK DETAIL -2	A1(A3)	1/10,1/20
119	BD - JIC - C14 - DRW - S01 - STA - NTU - 04014 000	MISCELLANEOUS DETAILS -1	A1(A3)	1/2.5,1/5
120	BD - JIC - C14 - DRW - S01 - STA - NTU - 04015 000	MISCELLANEOUS DETAILS -2	A1(A3)	1/20,1/40
121	BD - JIC - C14 - DRW - S01 - STA - NTU - 04016 000	MISCELLANEOUS DETAILS -3	A1(A3)	1/20
122	BD - JIC - C14 - DRW - S01 - STA - NTU - 04017 000	MISCELLANEOUS DETAILS -4	A1(A3)	1/4
123	BD - JIC - C14 - DRW - S01 - STA - NTU - 04018 000	ESCALTOR HANDRAIL DETAIL	A1(A3)	1/10,1/20
124	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05101 000	SIGNAGE SCHEDULE	A1(A3)	NTS
125	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05102 000	SIGNAGE KEY PLAN -1	A1(A3)	1/250
126	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05103 000	SIGNAGE KEY PLAN -2	A1(A3)	1/250
127	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05104 000	SIGNAGE KEY PLAN -3	A1(A3)	1/250
128	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05105 000	SIGNAGE KEY PLAN -4	A1(A3)	1/250
129	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05106 000	SIGNAGE KEY PLAN -5	A1(A3)	1/250

RED: New Drawings, BLUE: Revised Drawings

MUMBAI STATION DRAWING LIST (ARCHITECTURE)

130	BD - JIC - C14 - DRW - S01 - SGN - NTU - 05107 000	SIGNAGE KEY PLAN -6	A1(A3)	1/250
131	BD - JIC - C14 - DRW - S01 - STA - NTU - 06001 000	PUBLIC AREA MATERIAL PLAN - WALL -1	A1(A3)	NTS
132	BD - JIC - C14 - DRW - S01 - STA - NTU - 06002 000	PUBLIC AREA MATERIAL PLAN - WALL -2	A1(A3)	NTS
133	BD - JIC - C14 - DRW - S01 - STA - NTU - 06003 000	PUBLIC AREA MATERIAL PLAN - WALL -3	A1(A3)	NTS
134	BD - JIC - C14 - DRW - S01 - STA - NTU - 06004 002	PUBLIC AREA MATERIAL PLAN - WALL -4	A1(A3)	NTS
135	BD - JIC - C14 - DRW - S01 - STA - NTU - 06005 000	PUBLIC AREA MATERIAL PLAN - WALL -5	A1(A3)	NTS
136	BD - JIC - C14 - DRW - S01 - STA - NTU - 06006 002	PUBLIC AREA MATERIAL PLAN - WALL -6	A1(A3)	NTS
137	BD - JIC - C14 - DRW - S01 - STA - NTU - 06007 000	PUBLIC AREA MATERIAL PLAN - WALL -7	A1(A3)	NTS
138	BD - JIC - C14 - DRW - S01 - STA - NTU - 06101 000	OUTLINE SPECIFICATION -1	A1(A3)	NTS
139	BD - JIC - C14 - DRW - S01 - STA - NTU - 06102 000	OUTLINE SPECIFICATION -2	A1(A3)	NTS
140	BD - JIC - C14 - DRW - S01 - STA - NTU - 06103 000	OUTLINE SPECIFICATION -3	A1(A3)	NTS
141	BD - JIC - C14 - DRW - S01 - STA - NTU - 06104 000	OUTLINE SPECIFICATION -4	A1(A3)	NTS
142	BD - JIC - C14 - DRW - S01 - STA - NTU - 06105 000	OUTLINE SPECIFICATION -5	A1(A3)	NTS
143	BD - JIC - C14 - DRW - S01 - STA - NTU - 06106 000	OUTLINE SPECIFICATION -6	A1(A3)	NTS
144	BD - JIC - C14 - DRW - S01 - STA - NTU - 06107 000	OUTLINE SPECIFICATION -7	A1(A3)	NTS
145	BD - JIC - C14 - DRW - S01 - STA - NTU - 06108 000	OUTLINE SPECIFICATION -8	A1(A3)	NTS
146	BD - JIC - C14 - DRW - S01 - STA - NTU - 06109 000	OUTLINE SPECIFICATION -9	A1(A3)	NTS
147	BD - JIC - C14 - DRW - S01 - STA - NTU - 06110 000	OUTLINE SPECIFICATION -10	A1(A3)	NTS
148	BD - JIC - C14 - DRW - S01 - STA - NTU - 06111 000	OUTLINE SPECIFICATION -11	A1(A3)	NTS
149	BD - JIC - C14 - DRW - S01 - STA - NTU - 06112 000	OUTLINE SPECIFICATION -12	A1(A3)	1/250
150	BD - JIC - C14 - DRW - S01 - STA - NTU - 06113 000	OUTLINE SPECIFICATION -13	A1(A3)	1/250
151	BD - JIC - C14 - DRW - S01 - STA - NTU - 06114 000	OUTLINE SPECIFICATION -14	A1(A3)	1/250
152	BD - JIC - C14 - DRW - S01 - STA - NTU - 06115 000	OUTLINE SPECIFICATION -15	A1(A3)	1/250
153	BD - JIC - C14 - DRW - S01 - STA - NTU - 06116 000	OUTLINE SPECIFICATION -16	A1(A3)	1/250
154	BD - JIC - C14 - DRW - S01 - STA - NTU - 06117 000	OUTLINE SPECIFICATION -17	A1(A3)	1/250
155	BD - JIC - C14 - DRW - S01 - STA - NTU - 06118 000	OUTLINE SPECIFICATION -18	A1(A3)	1/250
156	BD - JIC - C14 - DRW - S01 - STA - NTU - 06250 000	URF SLAB STRUCTURAL OPENING PLAN -1	A1(A3)	1/250
157	BD - JIC - C14 - DRW - S01 - STA - NTU - 06251 000	URF SLAB STRUCTURAL OPENING PLAN -2	A1(A3)	1/250
158	BD - JIC - C14 - DRW - S01 - STA - NTU - 06252 000	URF SLAB STRUCTURAL OPENING PLAN -3	A1(A3)	1/250
159	BD - JIC - C14 - DRW - S01 - STA - NTU - 06253 000	URF SLAB STRUCTURAL OPENING PLAN -4	A1(A3)	1/250
160	BD - JIC - C14 - DRW - S01 - STA - NTU - 06254 000	URF SLAB STRUCTURAL OPENING PLAN -5	A1(A3)	1/250
161	BD - JIC - C14 - DRW - S01 - STA - NTU - 06255 000	URF SLAB STRUCTURAL OPENING PLAN -6	A1(A3)	1/250
162	BD - JIC - C14 - DRW - S01 - STA - NTU - 06256 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -1	A1(A3)	1/250
163	BD - JIC - C14 - DRW - S01 - STA - NTU - 06257 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -2	A1(A3)	1/250
164	BD - JIC - C14 - DRW - S01 - STA - NTU - 06258 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -3	A1(A3)	1/250
165	BD - JIC - C14 - DRW - S01 - STA - NTU - 06259 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -4	A1(A3)	1/250
166	BD - JIC - C14 - DRW - S01 - STA - NTU - 06260 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -5	A1(A3)	1/250
167	BD - JIC - C14 - DRW - S01 - STA - NTU - 06261 000	B1 FLOOR SLAB STRUCTURAL OPENING PLAN -6	A1(A3)	1/250
168	BD - JIC - C14 - DRW - S01 - STA - NTU - 06262 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -1	A1(A3)	1/250
169	BD - JIC - C14 - DRW - S01 - STA - NTU - 06263 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -2	A1(A3)	1/250
170	BD - JIC - C14 - DRW - S01 - STA - NTU - 06264 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -3	A1(A3)	NTS
171	BD - JIC - C14 - DRW - S01 - STA - NTU - 06265 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -4	A1(A3)	1/250
172	BD - JIC - C14 - DRW - S01 - STA - NTU - 06266 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -5	A1(A3)	1/250
173	BD - JIC - C14 - DRW - S01 - STA - NTU - 06267 000	B2 FLOOR SLAB STRUCTURAL OPENING PLAN -6	A1(A3)	1/250
174	BD - JIC - C14 - DRW - S01 - STA - NTU - 06268 000	PF SLAB STRUCTURAL OPENING PLAN -1	A1(A3)	1/250
175	BD - JIC - C14 - DRW - S01 - STA - NTU - 06269 000	PF SLAB STRUCTURAL OPENING PLAN -2	A1(A3)	1/250
176	BD - JIC - C14 - DRW - S01 - STA - NTU - 06270 000	PF SLAB STRUCTURAL OPENING PLAN -3	A1(A3)	1/250
177	BD - JIC - C14 - DRW - S01 - STA - NTU - 07003 000	STATION ENTRANCE-2 FRAMING PLAN	A1(A3)	1/300
178	BD - JIC - C14 - DRW - S01 - STA - NTU - 07004 000	STATION ENTRANCE-2 FRAMING ELEVATION	A1(A3)	1/300
179	BD - JIC - C14 - DRW - S01 - STA - NTU - 07005 000	VENTILATION SHAFT-1 FRAMING PLAN	A1(A3)	1/200
180	BD - JIC - C14 - DRW - S01 - STA - NTU - 07006 000	VENTILATION SHAFT-1 FRAMING ELEVATION	A1(A3)	1/200
181	BD - JIC - C14 - DRW - S01 - STA - NTU - 07007 000	VENTILATION SHAFT-2 FRAMING PLAN	A1(A3)	1/200
182	BD - JIC - C14 - DRW - S01 - STA - NTU - 07008 000	VENTILATION SHAFT-2 FRAMING ELEVATION	A1(A3)	1/200

Mumbai-Ahmedabad High Speed Rail Project

Mumbai Station

MECHANICAL

Owner

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JICA Study Team

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ORIENTAL CONSULTANTS GLOBAL

C-1 Mechanical

Drawing Number	Title	Status	Size	Scale
BD - JIC C14 - DRW - S01 - STM - NTU - 00100 001	ECS Mechanical Equipment List	1	A3	1/1000
BD - JIC C14 - DRW - S01 - STM - NTU - 00200 002	ECS Main Duct Plan ROOF / MIDDLE FLOOR	1	A3	1/1000
BD - JIC C14 - DRW - S01 - STM - NTU - 00201 001	ECS Main Duct Plan GROUND FLOOR 1/2	1	A3	1/1000
BD - JIC C14 - DRW - S01 - STM - NTU - 00202 001	ECS Main Duct Plan GROUND FLOOR 2/2	1	A3	1/1000
BD - JIC C14 - DRW - S01 - STM - NTU - 00203 002	ECS Main Duct Plan BASEMENT 1 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00204 001	ECS Main Duct Plan BASEMENT 1 FLOOR 2/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00205 002	ECS Main Duct Plan BASEMENT 2 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00206 001	ECS Main Duct Plan BASEMENT 2 FLOOR 2/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00207 001	ECS Main Duct Plan PLATFORM FLOOR	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00208 001	ECS Main Duct Plan BASEMENT 3 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00209 001	ECS Main Duct Plan BASEMENT 3 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00250 001	ECS Main Pipe Plan ROOF / MIDDLE FLOOR	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00251 001	ECS Main Pipe Plan GROUND FLOOR	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00252 002	ECS Main Pipe Plan BASEMENT 1 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00253 002	ECS Main Pipe Plan BASEMENT 1 FLOOR 2/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00254 001	ECS Main Pipe Plan BASEMENT 2 FLOOR 1/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00255 001	ECS Main Pipe Plan BASEMENT 2 FLOOR 2/2	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00256 001	ECS Main Pipe Plan PLATFORM FLOOR	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00257 001	ECS Main Pipe Plan BASEMENT 3 FLOOR	1	A3	1/1000
BD JIC C14 DRW S01 STM NTU 00300 001	ECS Schematic Diagram Duct 1	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00301 001	ECS Schematic Diagram Duct 2	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00302 001	ECS Schematic Diagram Duct 3	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00400 001	ECS Schematic Diagram Pipe	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00500 002	LIFT & ESC -1	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00501 003	LIFT & ESC -2	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00502 002	LIFT & ESC (For Service)	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00503 001	LIFT & ESC -3	1	A3	NTS
BD JIC C14 DRW S01 STM NTU 00504 001	LIFT & ESC -4	1	A3	NTS

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MUMBAI STATION DRAWING LIST (ELEC)

1	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00001	-	002	ABBREVIATIONS AND LEGENDS	A1(A3)	NTS
2	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00101	-	003	ER-1 SUBSTATION CONCEPTUAL SINGLE LINE DIAGRAM	A1(A3)	NTS
3	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00102	-	003	ER-2 SUBSTATION CONCEPTUAL SINGLE LINE DIAGRAM	A1(A3)	NTS
4	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00103	-	003	ER-3 SUBSTATION CONCEPTUAL SINGLE LINE DIAGRAM	A1(A3)	NTS
5	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00104	-	004	ER-4 & CHILLER-ER SUBSTATION CONCEPTUAL SINGLE LINE DIAGRAM	A1(A3)	NTS
6	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00118	-	003	ELEC ROOMS PLAN	A1(A3)	AS SHOWN
7	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00119	-	003	RISER DIAGRAM (GENERAL SYSTEM)	A1(A3)	NTS
8	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00120	-	002	RISER DIAGRAM (CHILLER & CBS)	A1(A3)	NTS
9	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00200	-	002	POWER MAINS & PANELS PLAN ROOF, MF, GF	A1(A3)	1/500 (1/1000)
10	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00201	-	002	POWER MAINS & PANELS PLAN B1F	A1(A3)	1/500(1/1000)
11	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00202	-	002	POWER MAINS & PANELS PLAN B2F	A1(A3)	1/500(1/1000)
12	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00203	-	002	POWER MAINS & PANELS PLAN PF	A1(A3)	1/500(1/1000)
13	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00204	-	002	POWER MAINS & PANELS PLAN B3F	A1(A3)	1/500(1/1000)
14	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00500	-	002	LIGHTING FIXTURE SKETCH & SPECIFICATION	A1(A3)	NTS
15	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00502	-	002	LIGHTING PLAN ROOF,MF,GF	A1(A3)	1/500(1/1000)
16	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00503	-	002	LIGHTING PLAN B1F	A1(A3)	1/500(1/1000)
17	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00504	-	002	LIGHTING PLAN B2F	A1(A3)	1/500(1/1000)
18	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00505	-	002	LIGHTING PLAN PF	A1(A3)	1/500(1/1000)
19	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	00506	-	002	LIGHTING PLAN B3F	A1(A3)	1/500(1/1000)
20	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01000	-	002	ELV DIAGRAM	A1(A3)	NTS
21	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01001	-	002	ELV PLAN ROOF,MF,GF	A1(A3)	1/500(1/1000)
22	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01002	-	002	ELV PLAN B1F	A1(A3)	1/500(1/1000)
23	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01003	-	002	ELV PLAN B2F	A1(A3)	1/500(1/1000)
24	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01004	-	002	ELV PLAN PF	A1(A3)	1/500(1/1000)
25	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	01005	-	002	ELV PLAN B3F	A1(A3)	1/500(1/1000)
26	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02000	-	002	FIRE ALARM SYSTEM BASIC DIAGRAM	A1(A3)	NTS
27	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02001	-	002	FIRE ALARM SYSTEM PLAN GF	A1(A3)	1/500(1/1000)
28	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02002	-	002	FIRE ALARM SYSTEM PLAN B1F	A1(A3)	1/500(1/1000)
29	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02003	-	002	FIRE ALARM SYSTEM PLAN B2F	A1(A3)	1/500(1/1000)
30	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02004	-	002	FIRE ALARM SYSTEM PLAN PF	A1(A3)	1/500(1/1000)
31	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	02005	-	002	FIRE ALARM SYSTEM PLAN B3F	A1(A3)	1/500(1/1000)
32	BD	-	JIC	-	C14	-	DRW	-	S01	-	STE	-	NTU	-	03000	-	002	BMS CONCEPTUAL DIAGRAM	A1(A3)	NTS

Mumbai-Ahmedabad High Speed Rail Project

Mumbai Station

PLUMBING & FIRE FIGHTING

Owner

NHSRCL

NATIONAL HIGH SPEED RAIL CORPORATION LIMITED

Financed

JICA

JAPAN INTERNATIONAL COOPERATION AGENCY

JICA Study Team

JAPAN INTERNATIONAL CONSULTANTS FOR TRANSPORTATION

NIPPON KOEI

ORIENTAL CONSULTANTS GLOBAL

RED: New Drawings BLUE: Revised Drawings

Page	Drawing Number			Title	Size	Scale
	10010 Mumbai station					
	10017 Plumbing Work					
1	BD - JIC - C14 - DRW - S01 - STM - NTU	00700	000	Plumbing Equipment List	A1(A3)	NTS
2	BD - JIC - C14 - DRW - S01 - STM - NTU	00800	000	Water Supply Pipe Plan Roof / Middle / Ground Floor	A1(A3)	1/500
3	BD - JIC - C14 - DRW - S01 - STM - NTU	00801	000	Water Supply Pipe Plan Ground Floor	A1(A3)	1/500
4	BD - JIC - C14 - DRW - S01 - STM - NTU	00802	000	Water Supply Pipe Plan Basement 1 Floor 1/2	A1(A3)	1/500
5	BD - JIC - C14 - DRW - S01 - STM - NTU	00803	000	Water Supply Pipe Plan Basement 1 Floor 2/2	A1(A3)	1/500
6	BD - JIC - C14 - DRW - S01 - STM - NTU	00804	000	Water Supply Pipe Plan Basement 2 Floor 1/2	A1(A3)	1/500
7	BD - JIC - C14 - DRW - S01 - STM - NTU	00805	000	Water Supply Pipe Plan Basement 2 Floor 2/2	A1(A3)	1/500
8	BD - JIC - C14 - DRW - S01 - STM - NTU	00806	000	Water Supply Pipe Plan Platform Floor	A1(A3)	1/500
9	BD - JIC - C14 - DRW - S01 - STM - NTU	00807	000	Water Supply Pipe Plan Basement 3 Floor	A1(A3)	1/500
10	BD - JIC - C14 - DRW - S01 - STM - NTU	00900	000	Waste Water Pipe Plan Roof/Middle /Ground Floor	A1(A3)	1/500
11	BD - JIC - C14 - DRW - S01 - STM - NTU	00901	000	Waste Water Pipe Plan Ground Floor	A1(A3)	1/500
12	BD - JIC - C14 - DRW - S01 - STM - NTU	00902	000	Waste Water Pipe Plan Basement 1 Floor 1/2	A1(A3)	1/500
13	BD - JIC - C14 - DRW - S01 - STM - NTU	00903	000	Waste Water Pipe Plan Basement 1 Floor 2/2	A1(A3)	1/500
14	BD - JIC - C14 - DRW - S01 - STM - NTU	00904	000	Waste Water Pipe Plan Basement 2 Floor 1/2	A1(A3)	1/500
15	BD - JIC - C14 - DRW - S01 - STM - NTU	00905	000	Waste Water Pipe Plan Basement 2 Floor 2/2	A1(A3)	1/500
16	BD - JIC - C14 - DRW - S01 - STM - NTU	00906	000	Waste Water Pipe Plan Platform Floor	A1(A3)	1/500
17	BD - JIC - C14 - DRW - S01 - STM - NTU	00907	000	Waste Water Pipe Plan Basement 3 Floor	A1(A3)	1/500
18	BD - JIC - C14 - DRW - S01 - STM - NTU	00908	000	Vertical Tunnel Main Pipe Plan	A1(A3)	NTS
19	BD - JIC - C14 - DRW - S01 - STM - NTU	01000	000	Water Supply Schematic Diagram	A1(A3)	NTS
20	BD - JIC - C14 - DRW - S01 - STM - NTU	01100	000	Waste Water Schematic Diagram	A1(A3)	NTS
21	BD - JIC - C14 - DRW - S01 - STM - NTU	01150	000	Underground Water Tanks & Pump Layout	A1(A3)	1/250
22	BD - JIC - C14 - DRW - S01 - STM - NTU	01151	000	Waste Water Treatment Plant Layout	A1(A3)	1/250
23	BD - JIC - C14 - DRW - S01 - STM - NTU	01400	002	Fire Fighting Schematic Diagram	A1(A3)	NTS