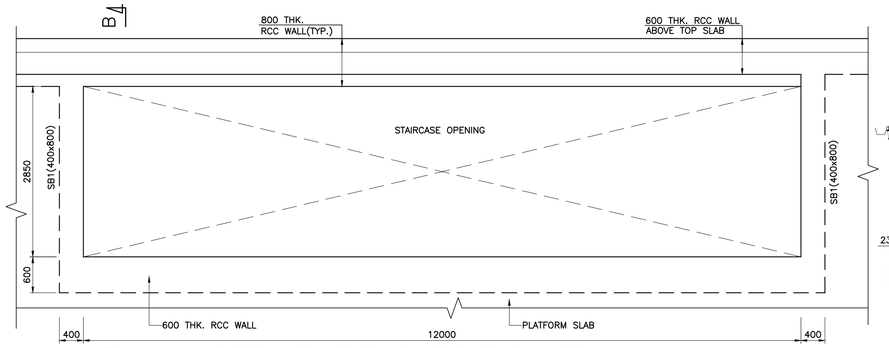
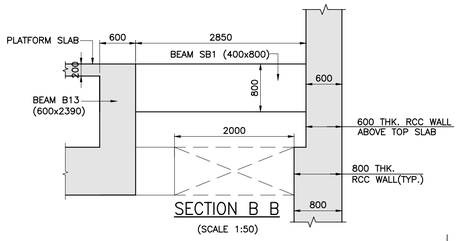
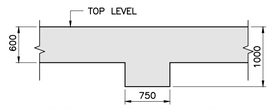


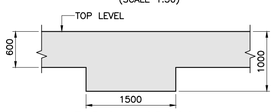
TYPICAL STAIRCASE CUTOUT AT PLATFORM LEVEL
(SCALE 1:50)



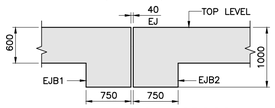
SECTION B B
(SCALE 1:50)



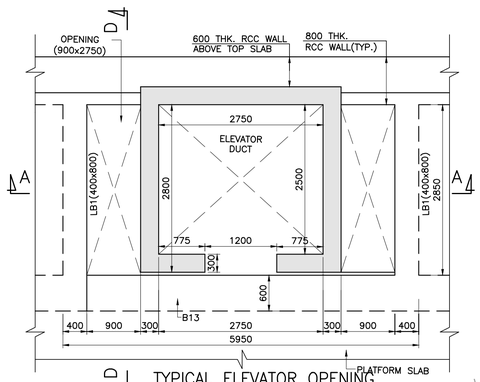
TYPICAL CROSS SECTION (B1 TO B12)
(SCALE 1:50)



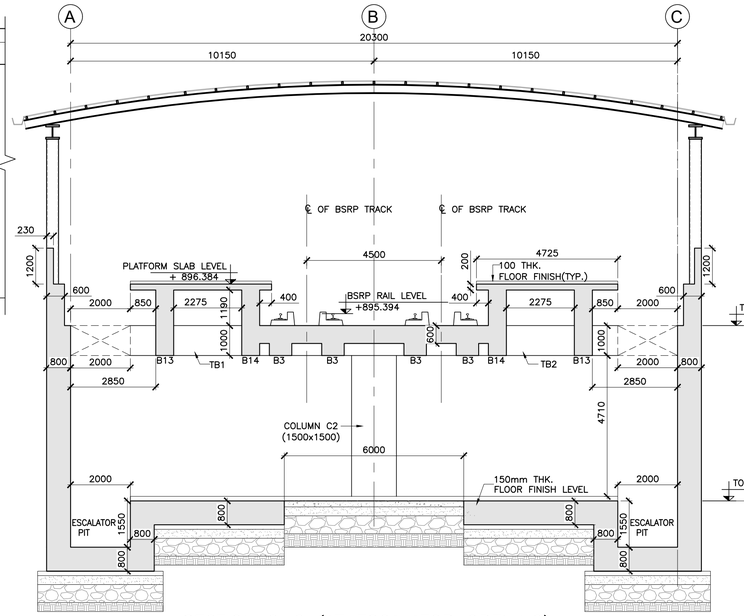
TYPICAL CROSS SECTION (TB1 & TB2)
(SCALE 1:50)



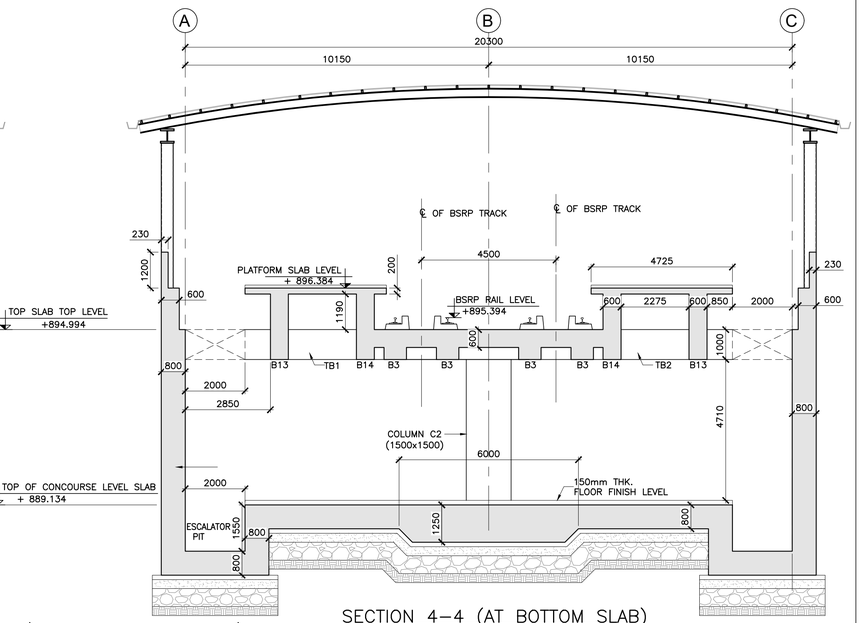
TYPICAL CROSS SECTION (EXPANSION JOINT)
(SCALE 1:50)



TYPICAL ELEVATOR OPENING
(SCALE 1:50)



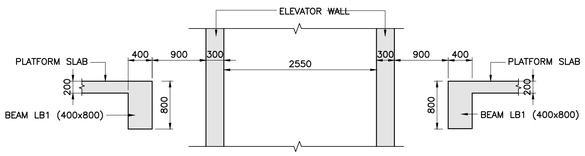
SECTION 2–2 (AT ESCALATOR OPENING)
SCALE 1:100



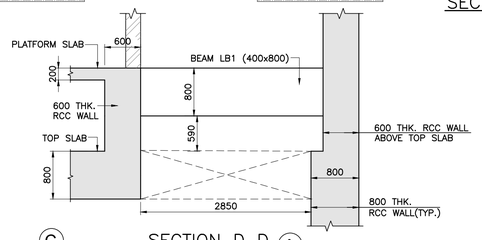
SECTION 4–4 (AT BOTTOM SLAB)
SCALE 1:100

TOP SLAB TOP LEVEL +894.994

TOP OF CONCOURSE LEVEL SLAB + 889.134

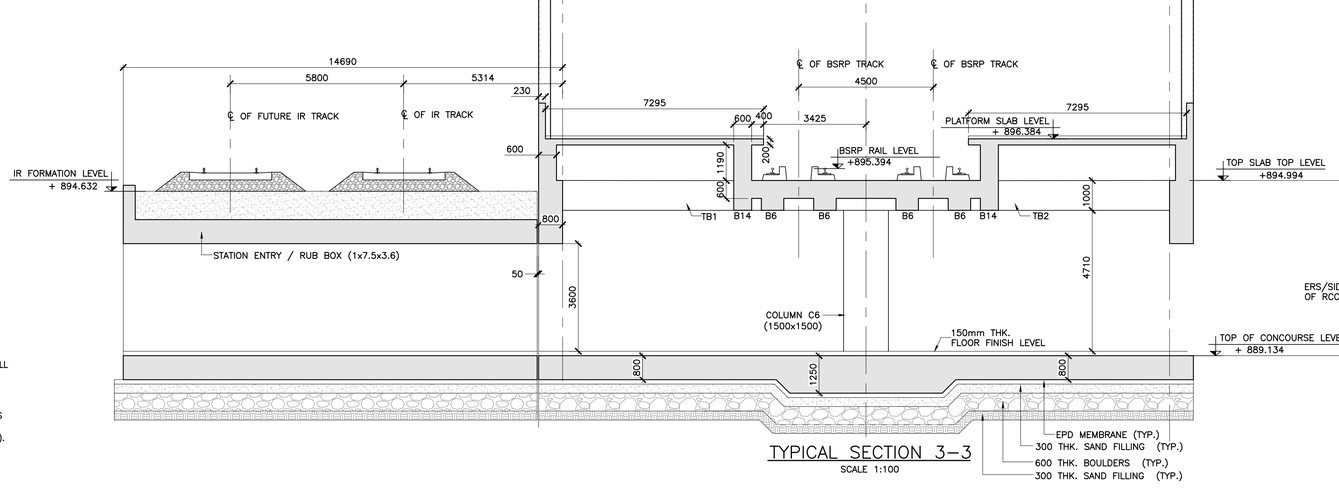


SECTION A A
(SCALE 1:50)



SECTION D D
(SCALE 1:50)

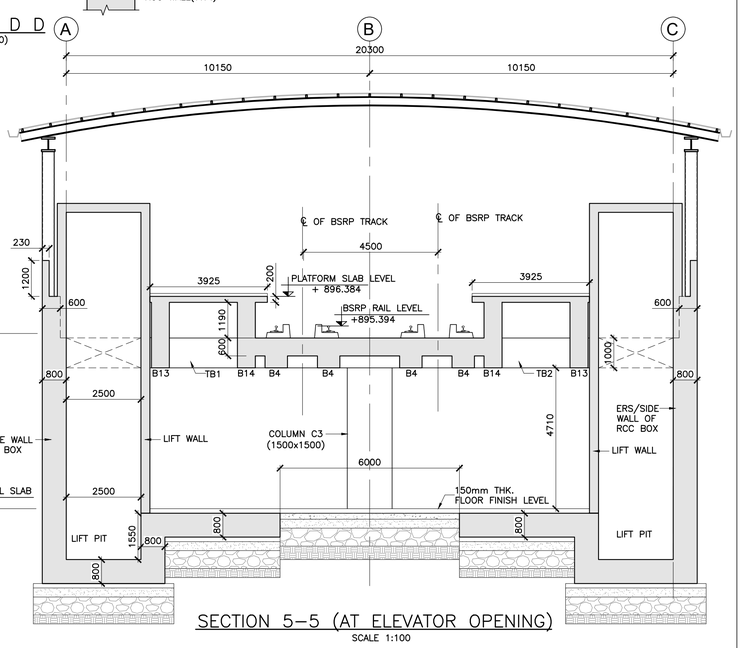
CROSS BEAM DIMENTION	
BEAM	SIZE
SB1	400 x 800
EB1	400 x 800
LB1	400 x 800



TYPICAL SECTION 3–3
SCALE 1:100

TOP SLAB TOP LEVEL +894.994

TOP OF CONCOURSE LEVEL SLAB + 889.134



SECTION 5–5 (AT ELEVATOR OPENING)
SCALE 1:100

SPECIAL NOTES :–

1. SEISMIC ZONE: II
2. IF ANY AMBIGUITY IS FOUND IN DRAWINGS OR AT SITE, THE SAME SHALL BE BROUGHT TO DESIGNER'S / ENGINEER'S NOTICE BEFORE EXECUTION.
3. REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE Fe 500 CONFORMING TO IS:1786–2008
4. GRADE OF CONCRETE SHALL BE AS FOLLOWS:
   LEVELING COURSE : PCC M20
   RCC BOX : RCC M50
   BEAM : RCC M50
   PIER : RCC M50
5. CLEAR COVER TO ALL REINFORCEMENT SHALL BE:
   RCC BOX : 50 mm
   BEAM : 50 mm
   PIER : 50 mm
6. THE NOMINAL MAXIMUM SIZE OF AGGREGATE TO BE USED SHALL BE 20mm
7. ESCALATORS AND ELEVATOR PITS DETAILS TO BE VERIFIED AS PER VENDOR'S SPECIFICATIONS AND NOT IN OUR SCOPE.
8. ESCALATOR WITH ITS HOSTING DETAILS & HOSTING HOLES SHALL BE AS PER VENDOR REQUIREMENTS AND NOT IN OUR SCOPE.
9. BACKFILL: GEO–COMPOSITE DRAIN AS PER RAILWAY BOARD LETTER NO 2017/CE–IC/RUB/88, DATED 18.02.2018. BEHIND THE GEO COMPOSITE DRAIN. BACKFILL MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW, GROUPS AS PER IS:1498–1970 (ABUTMENTS, RETAINING WALLS ...) (OR) THE BOULDER FILLING SHALL CONSIST OF WELL HAND–PACKED BOULDERS AND COBBLERS TO THICKNESS NOT LESS THAN 600MM WITH SMALLER SIZE TOWARDS THE BACK. BEHIND THE BOULDER FILLING. BACKFILL MATERIAL SHALL CONSIST OF GRANULAR MATERIALS OF GW,GP,SW GROUPS AS PER IS 1498–1970(RCC BOX)
10. HIGH STRENGTH DEFORMED BARS (TOR) SHALL CONFORM TO IS: 1786–2008 (FE–500).
11. BAR BENDING SHALL BE CONFORMING TO IS:2502
12. CONCRETE SHALL BE MECHANICALLY MIXED, VIBRATED & THOROUGHLY CURED.
13. GROUND IMPROVED SOIL SHALL BE OF SOIL QUALITY CLASS SQ2 AND SQ3 AS PER RDSO GUIDELINES.
14. WHEREVER SBC IS LESSER, IMPROVE THE SBC OF SOIL TWO LAYERS OF SAND & BOULDER FILLING OF 300MM THICKNESS EACH TO BE LAID & COMPACTED BEFORE LEVELLING COURSE FOR RCC BOX, RETURN WALL FOUNDATION & APRON FLOORING.
15. PARAMETERS CONSIDERED FOR DESIGN:–
    a) ANGLE OF INTERNAL BACKFILL —— ϕ = 30°
    b) COHESION OF BACKFILL —— C = 0
    c) WALL FRICTION ANGLE —— δ = 10°
    d) SATURATED DENSITY OF BACKFILL —— γ = 20kN/m³
    e) FRICTION COEFFICIENT BETWEEN SOIL AND CONCRETE —— μ = TAN ϕ
16. MAXIMUM CALCULATED PRESSURE AT BOTTOM OF FOUNDATION FOR DIFFERENT ELEMENTS OF THIS RUB IS AS FOLLOWS:

STRUCTURE	P max
RCC BOX (kN/M²)	239

17. ENGINEER INCHARGE SHALL ENSURE MAXIMUM CALCULATED FOUNDATION PRESSURE AT FOUNDATION LEVEL SHALL NOT EXCEED SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.(UNO)
18. THIS DRAWING IS NOT APPLICABLE FOR SECTION –2. PLEASE REFER SEPARATE DRAWING.

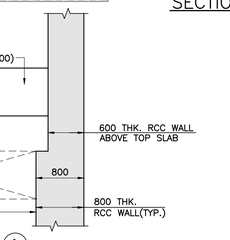
NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. FOLLOW FIGURED DIMENSIONS ONLY.
3. ESCALATORS AND ELEVATOR PITS DETAILS TO BE DESIGNED/VERIFIED AS PER VENDOR'S SPECIFICATIONS AND NOT IN OUR SCOPE.
4. ESCALATOR WITH ITS HOSTING DETAILS & HOSTING HOLES SHALL BE AS PER VENDOR REQUIREMENTS AND NOT IN OUR SCOPE.
5. MEP, PEB & STATION ROOF WORKS ARE NOT IN OUR SCOPE.
6. ARCHITECTURE DETAILS ARE NOT IN SCOPE.
7. FOR OPENING SIZE & SCHEDULE REFER ARCHITECTURAL DRAWING.
8. FOR OTHER NOTES REFER DRG.NO. :– O2077–BSRP–CR2–C–UB–0–10–1302 (SH–3 TO 3)

LEGEND :

REFERENCE DRAWINGS :
1. O2077–BSRP–CR2–C–UB–0–10–1301 (SH–1 TO 2) : GENERAL ARRANGEMENT DRAWING OF NAGAWARA STATION
2. O2077–BSRP–CR2–C–UB–0–10–1302 (SH–1 TO 3) : DIMENSION DETAIL DRAWING OF NAGAWARA STATION (AT GRADE)
2. O2077–BSRP–CR2–C–UB–0–10–1303 (SH–1 TO 3) : REINFORCEMENT DETAIL OF NAGAWARA STATION (AT GRADE)

REFERENCE DOCUMENTS :
1. DOC–BSRP–CR2–AG–DGN–BR–10–1585 : DESIGN OF STATION BOX & ENTRANCE RUB AT CH:7+133 OF NAGAWARA STATION

KEY PLAN



STATION BOX KEY PLAN

REV	DATE	BRIEF DESCRIPTION
B	06/12/2024	RECEIVED AS PER LATEST PC & GC COMMENT
A	28/06/2024	FOR APPROVAL

REVISIONS

CONTRACTOR : TRANSPORTATION INFRASTRUCTURE IC EDRC-SPECIAL BRIDGES

DETAILED DESIGN CONSULTANT (DDC) : STUP Consultants Pvt. Ltd. JP & Devi Jambulashwar Arcade 1st & 2nd Floor, Millers Road, Bangalore-560052. Tel.: 080-2286 9560 www.stupconsultants.com www.stupdesignsystem.com

PROOF CONSULTANT (PC) : Indian Institute of Technology Madras IIT P.O., Chennai 600 036 INDIA

L&T CONSTRUCTION EDRC-SPECIAL BRIDGES - TIIC

QUALITY ASSURANCE
The responsibility of control, check and verification of accuracy, correctness, completeness, integration and full compliance of Contract provisions in respect of design analysis and drawing rests with Design & Build Contractor.

	DDC			PC	Contractor
SIGN	Mrina l Roy (Digitally signed by Mrinal Roy Date: 2024.06.12 17:08:08 +05'30')	Venk atesh a S.S (Digitally signed by Venkatesha S.S Date: 2024.06.12 17:09:07 +05'30')	Partha Chakr aborty (Digitally signed by Partha Chakraborty Date: 2024.06.12 17:09:35 +05'30')	MEHER PRASAD SUBRAHMANYAM LU / ANJAN KUMAR (Digitally signed by MEHER PRASAD SUBRAHMANYAM LU Date: 2024.06.12 17:10:00 +05'30')	
DATE	06.12.2024	06.12.2024	06.12.2024		06.12.2024
NAME	MLR	SSV	PC		JSG
	PREPARED BY	CHECKED BY	APPROVED BY	APPROVED BY	ISSUED BY

GENERAL CONSULTANTS

	CHECKED & APPROVED		COUNTER SIGN	
	NAME	SIGN	PROJECT DIRECTOR	
CIVIL:GAD			SIGN	
CIVIL:ALIGNMENT			NAME	
CIVIL:STRUCTURAL			DATE	
CIVIL:GEOTECH				

K RIDE	DESIGNATION	SIGN	DATE
CIVIL:GAD			
CIVIL:ALIGNMENT			
CIVIL:STRUCTURAL			
CIVIL:GEOTECH	GM/CIVIL/DESIGN		

EMPLOYER : RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

GENERAL CONSULTANTS : AECOM egis wsp AECOM-EGIS-WSP

PROJECT : BENGALURU SUBURBAN RAILWAY PROJECT (BSRP)
K-RIDE CORRIDOR - 2

DRAWING TITLE : DIMENSION DETAIL DRAWING OF NAGAWARA STATION (AT GRADE)

DRAWING NO. : O2077-BSRP-CR2-C-UB-0-10-1302 (SHEET 3 OF 3)

REVISION : B
DWG STATUS : D

SCALE : AS SHOWN
DATE : 28.06.2024

PRELIMINARY DWG (P), DEFINITIVE DWG (D), CONSTRUCTION DWG (C), AS BUILT DWG (B), SHOP DWG (S), MANUFACTURED DWG (M)
SHEET SIZE - A1

15-11-2024 17:29:35
D:\Manual_NO\042_K-RIDE\RD_Nagawara Station\O2077-BSRP-CR2-C-UB-0-10-1302_B_3H - 1 to 3.dwg