Signature Not Verified
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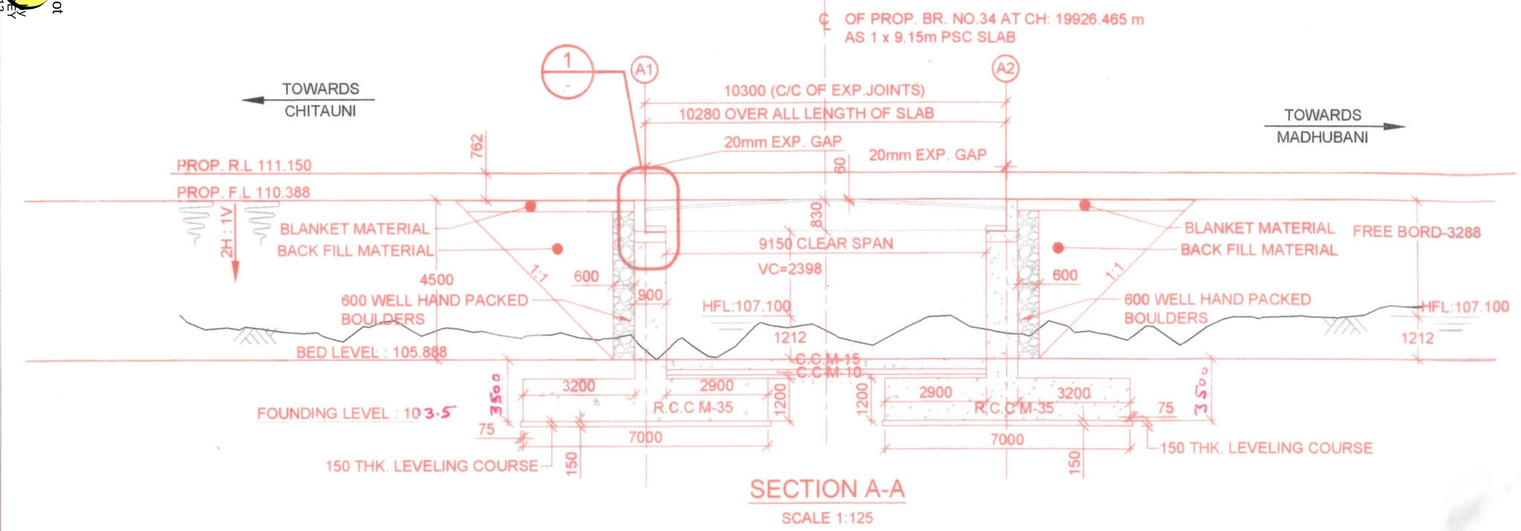
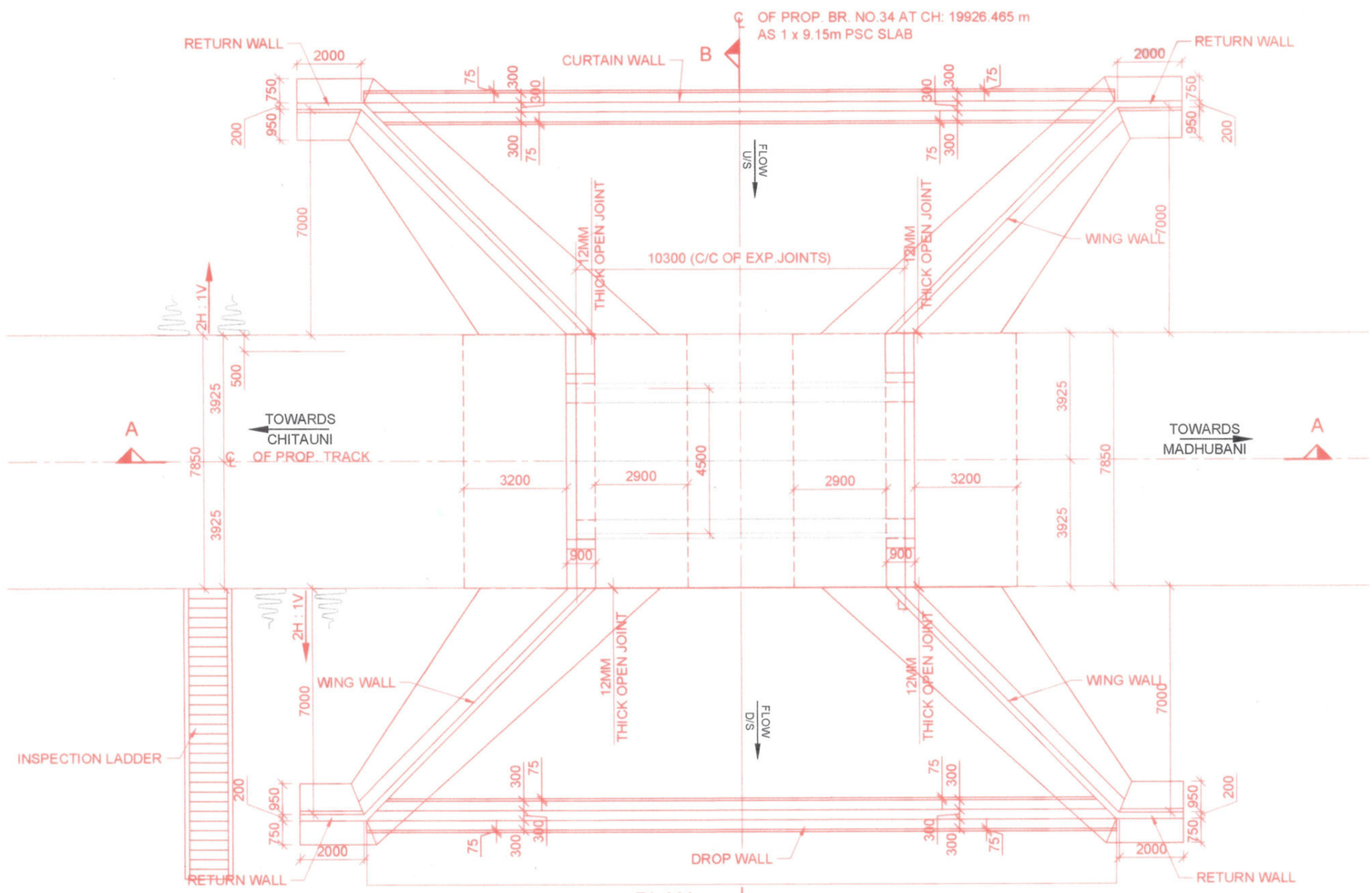
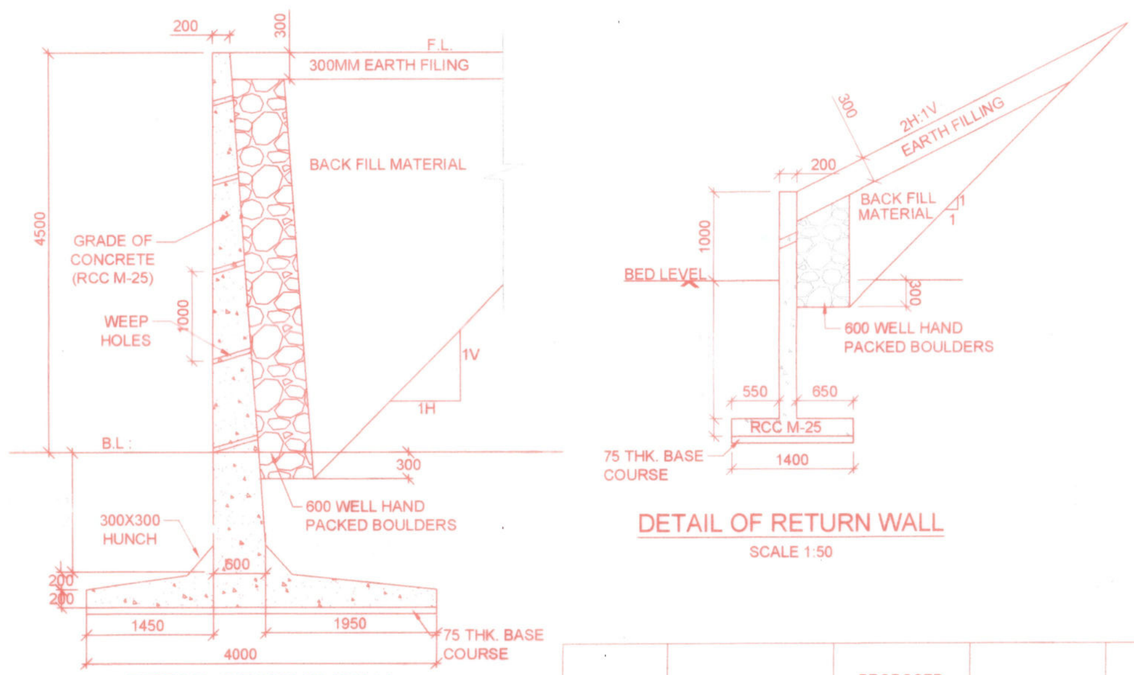
AUTHORITY OF WORK
PINK BOOK- 2024-25
PAGE NO.-4:2:1
ITEM NO. - 34



SECTION A-A
SCALE 1:125

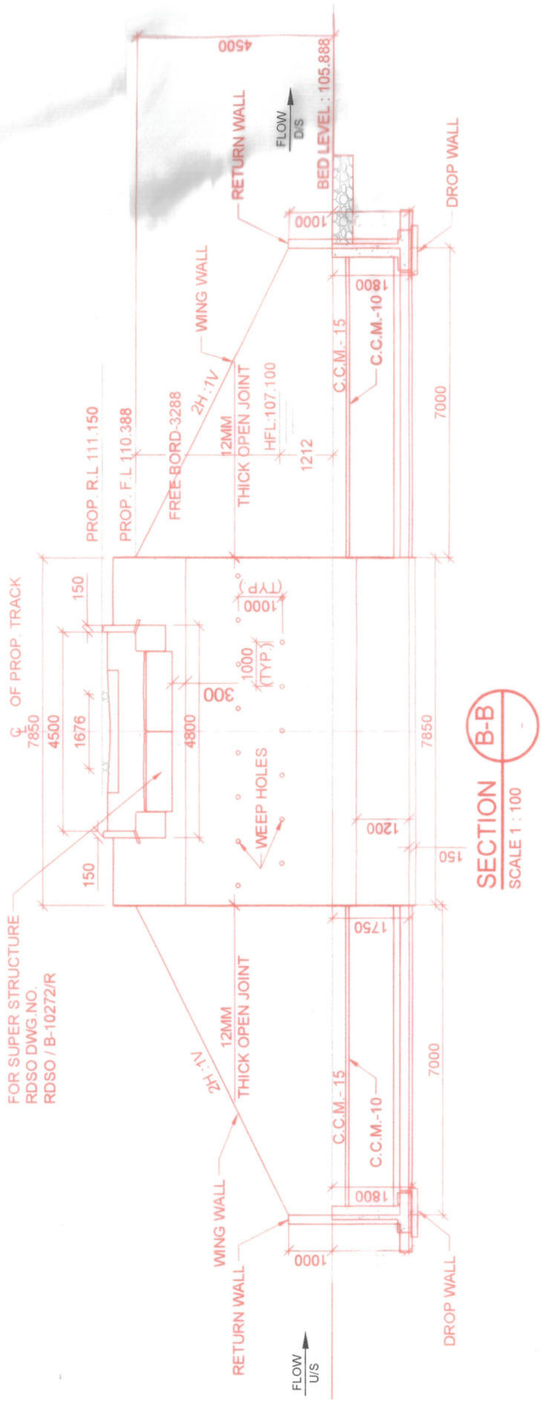


PLAN
SCALE 1:125

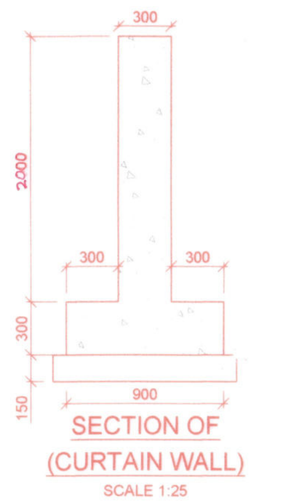


DETAIL OF WING WALL AT MAXIMUM HEIGHT
SCALE 1:50

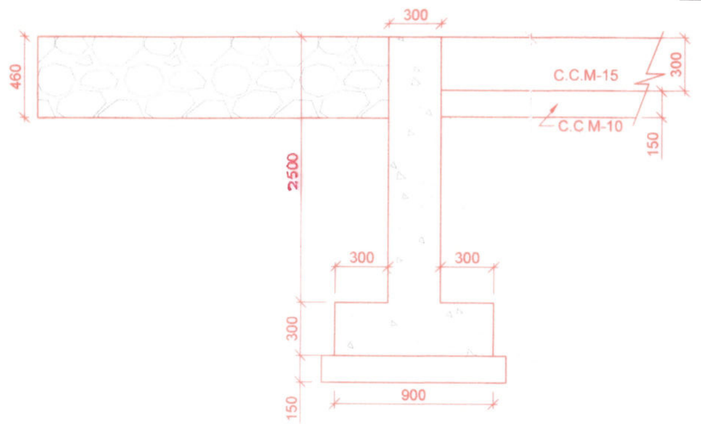
DETAIL OF RETURN WALL
SCALE 1:50



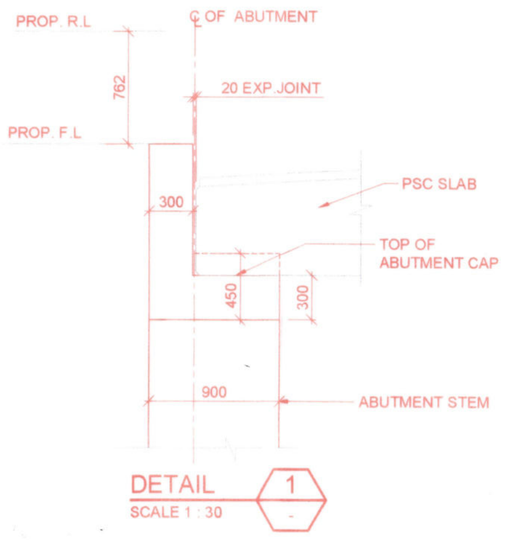
SECTION B-B
SCALE 1 : 100



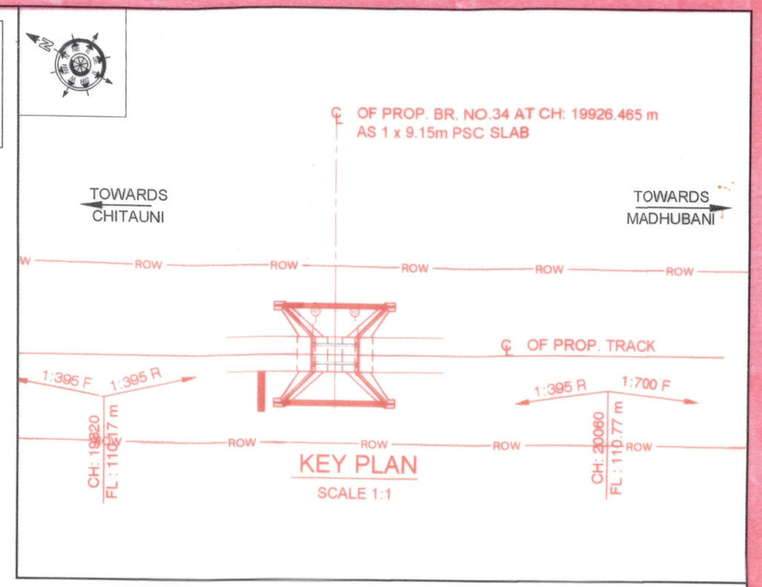
SECTION OF (CURTAIN WALL)
SCALE 1:25



SECTION OF (DROP WALL)
SCALE 1:25



DETAIL 1
SCALE 1 : 30



KEY PLAN
SCALE 1:1

BOREHOLE PROFILE
SECTION: CHITAUNI TO MADHUBANI
Bore Hole Terminated at : 10.45M.

DEPTH (M)		SPT N-VALUE	DESCRIPTION OF SOIL	IS CLASSIFICATION
0.00	0.50	--	ML	LOOSE TO MEDIUM DENSE LITE BROWN SILT (SP)
0.50	0.95	7		
1.50	1.95	9		
3.00	3.45	14		
4.50	4.95	16		
6.00	6.45	17		
7.50	7.95	18	SM	MEDIUM DENSE LITE GRAY,SILTY SAND (SP)
9.00	9.45	19		
10.00	10.45	19		

RL=105.888
FL=104.138
SBC=29.40t/m² > 20.0t/m² (safe)

W.L-2.00

BRIDGE NO.: 34
BOREHOLE NO.: 01

HFL IN (M)	FLOOR LEVEL IN (M)	PROPOSED FORMATION LEVEL (M)	PROPOSED RAIL LEVEL (M)	DISCHARGE IN CUMECS	VERTICAL CLEARANCE IN MM		FREE BOARD IN MM	
					PROVIDED	REQUIRED	PROVIDED	REQUIRED
107.100	105.888	110.388	111.150	15.626	2398	NIL	3288	1000

CONSTRUCTION DEPTH

	PROP. LINE
1) RAIL	172 mm
2) RUBBER PAD	10 mm
3) PSC SLEEPER	210 mm
4) BALLAST	350 mm
TOTAL	742 mm

LEGEND

R.L	RAIL LEVEL
F.L	FORMATION LEVEL
VC	VERTICAL CLEARANCE
FB	FREE BOARD
HFL	HIGH FLOOD LEVEL
B.L	BED LEVEL
TOPC	TOP OF PILE CAP
BOPC	BOTTOM OF PILE CAP
PROP.	PROPOSED
THK.	THICKNESS
EXP. JT.	EXPANSION JOINT
C.C	CEMENT CONCRETE
TYP.	TYPICAL

NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
2. NO DIMENSIONS ARE TO BE SCALED FROM THE DRAWING (ONLY WRITTEN DIMENSIONS TO BE FOLLOWED).
3. SITE ENGINEER SHOULD VERIFY ALL THE DIMENSIONS AND LEVELS AT SITE BEFORE EXECUTION OF WORK IN THE FIELD.
4. ABUTMENT AND SUB-STRUCTURE TO BE DESIGNED SEPARATELY. DIMENSIONS OF SUB-STRUCTURE ARE TENTATIVE ONLY.
5. FOR REINFORCEMENT DETAIL OF SUPER STRUCTURE (PSC SLAB) SEE DRAWING NUMBER RDSO/B-10272/R.
6. WING/RETURN WALL AS PER CE/CON PLAN NO-B/14/02-11.
7. DROP WALL/ CURTAIN WALL AS PER DESIGN.
8. AS A PRECAUTIONARY MEASURE PROPER DROP WALL WITH BOULDER PITCHING AND CC FLOORING WILL BE PROVIDED AS PER THIS PLAN.
9. FOR MASS CONCRETE CC M-15 AND FOR ABUTMENT M-35 WILL BE USED EXCEPT OTHERWISE MENTIONED. ALL CONCRETING SHALL BE DONE CONFORMING TO IRS CONCRETE BRIDGE CODE.
10. ALL REINFORCEMENT SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE (FE-415 CONFORMING TO IS: 1786).
11. THE BACKFILL BEHIND ABUTMENT, WING WALL AND RETURN WALL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE WITH UP TO DATE ALL CORRECTION SLIPS.
12. CIRCULAR WEEP HOLES OF 10 MM PVC PIPE SHALL BE PROVIDED IN THE WING WALL AND RETURN WALL ABOVE HFL AT INTERVALS OF 1000MM HORIZOTALLY AND VERTICALLY IN A STAGGERED POSITION.
13. THE MAXIMUM DESIGN FOUNDATION PRESSURE IS 20.0 T/m² SITE ENGINEER SHOULD GET THE SOIL CLASSIFICATION AND BEARING CAPACITY TESTED AND APPROVAL LEVEL SHOULD BE ENSURED.
14. ORDINARY PORTLAND CEMENT (OPC) GRADE 43 / 53 CONFIRMING I.S:811/I.S.12269 CAPABLE OF ACHIEVING THE REQUIRED DESIGED CONCRETE STRENGTH SHALL BE TAKEN IN CASE OF LOWER BEARING CAPACITY OR BAD SOIL.
15. ONLY ONE TYPE OF CEMENT AND STELL SHALL BE USED ON A PARTICULAR BRIDGE AND BRAND OF CEMENT AND STEEL SHOULD BE APPROVED BY SITE ENGINEER.
16. THE LOCATION AND PROVISION OF CONSTRUCTION JPOINTS SHALL BE DECIDED BY THE SITE ENGINEER. CONSTRUCTION JOINTS SHALL BE TESTED AS PER THE RELEVENT SPECIFICATION.
17. CONCRETE SHALL BE PRODUCED IN MECHANICAL MIXTURE OF CAPACITY NOT LESS THAN 200 LITERS HAVING INTEGRAL WEIGH BATCHING FACILITY AND AUTOMATIC WATER MEASURING AND DISPENSING.
18. PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE FORM AND/ OR NEEDLE VIBRATORS.
19. SHARP EDGES OF CONCRETE SHALL BE CHAMBERED.
20. THIS BRIDGE LIES IN SEISMIC ZONE IV.
21. PROVISION OF INSPECTION STAIRCASE SHOULD BE MADE ON SITE.
22. A MINIMUM DEPTH BELOW FLOOR LEVEL OF CURAIN WALL SHOULD BE 2M ON UPSTREAM SIDE AND 2.5M ON DOWNSTREAM SIDE AS PER IRS 89" AND SHOW DROP AND CURTAIN WALL WITH THESE DIMENSIONS.
23. FLEXIBLE APRON 1M THICK COMPRISING OF LOOSE STONE BOULDER (WEIGHING NOT LESS THAN 40KG) SHOULD BE PROVID BEYOND THE CURTAIN WALLS FOR A MINIMUM DISTANCE OF 3M ON UPSTREAM SIDE AND 6M ON DOWNSTREAM AS PER IRC SP13.
24. FOOTPATH T-SLABS AS PER RDSO DRAWING NO. B-10294 MUST BE PROVIDED ON SITE.
25. TRANSITION SYSTEM MUST BE PROVIDED AT BOTH END OF ABUTMENT AS PER RDSO DRG. NO. GE/SK/GL/9/12A/REV.0/2024.

LOADING STANDARD
25T-AXLE LOAD-2008

FOR EPC TENDER ONLY

(G.K.MISHRA) SSE/W/CON/GKP	RANJEET KUMAR SINGH (R.K.SINGH) SSE/DRG./CON/CPR	JE/DES/CON/GKP	(BILAL AHMAD) SSE/DESI/CON/GKP	DRAWN	CHK. BY

		CE / CON / I/GKP	(SANJAY KANOJIA)
DY. CE / CON /BSB	(PANKAJ PANDEY)	DY. CE / CON. / P&D	(SHAILENDRA SINGH)
XEN / CON / GKP.	(S.K.SINGH)	XEN / C / DESIGN	(R.K.SINGH)

CONST. & HQ. OFFICER'S SIGNATURE

CLIENT : NORTH EASTERN RAILWAY

PROJECT : CHITAUNI-TAMKUHI ROAD NEW LINE PART-1

TITLE : GENERAL ARRANGEMENT DRAWING FOR PROPOSED BR. NO. 34 (1X9.15M) PSC SLAB (MINOR) KM 19/9-10

BETWEEN STATION :-CHITAUNI-MADHUBANI | KM : 19/9-10CH:- 19926.465M

TYPE OF MAP : GENERAL ARRANGEMENT DRAWING

FILE NO. AAA/2644/STR/BR.NO. 34/GAD/001

CONSULTANT: aarvee associates architects engineers & consultants pvt. ltd.

CE/CON./ Plan No. B/CTE-TOI//32/07 2025 | SCALE AS SHOWN

Date: 2/ 7/2025 | SHEET : 1/1