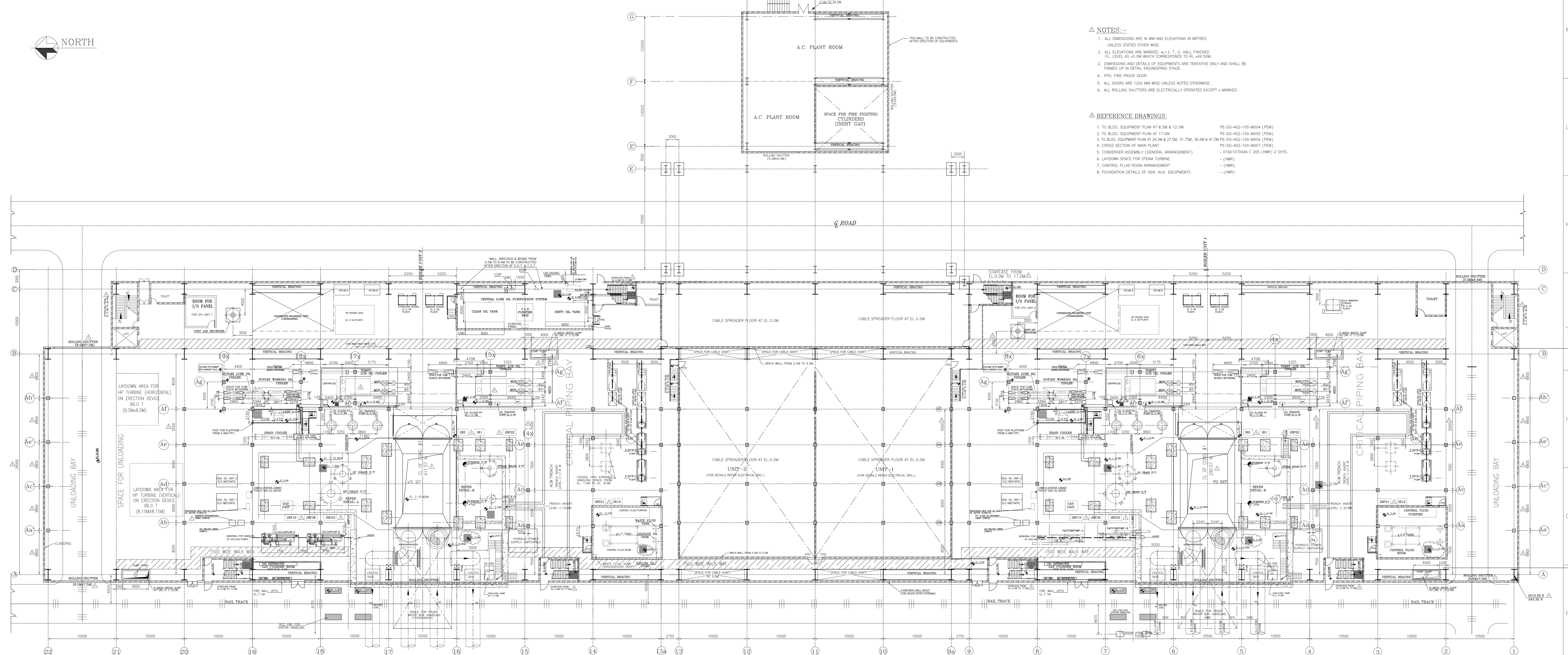




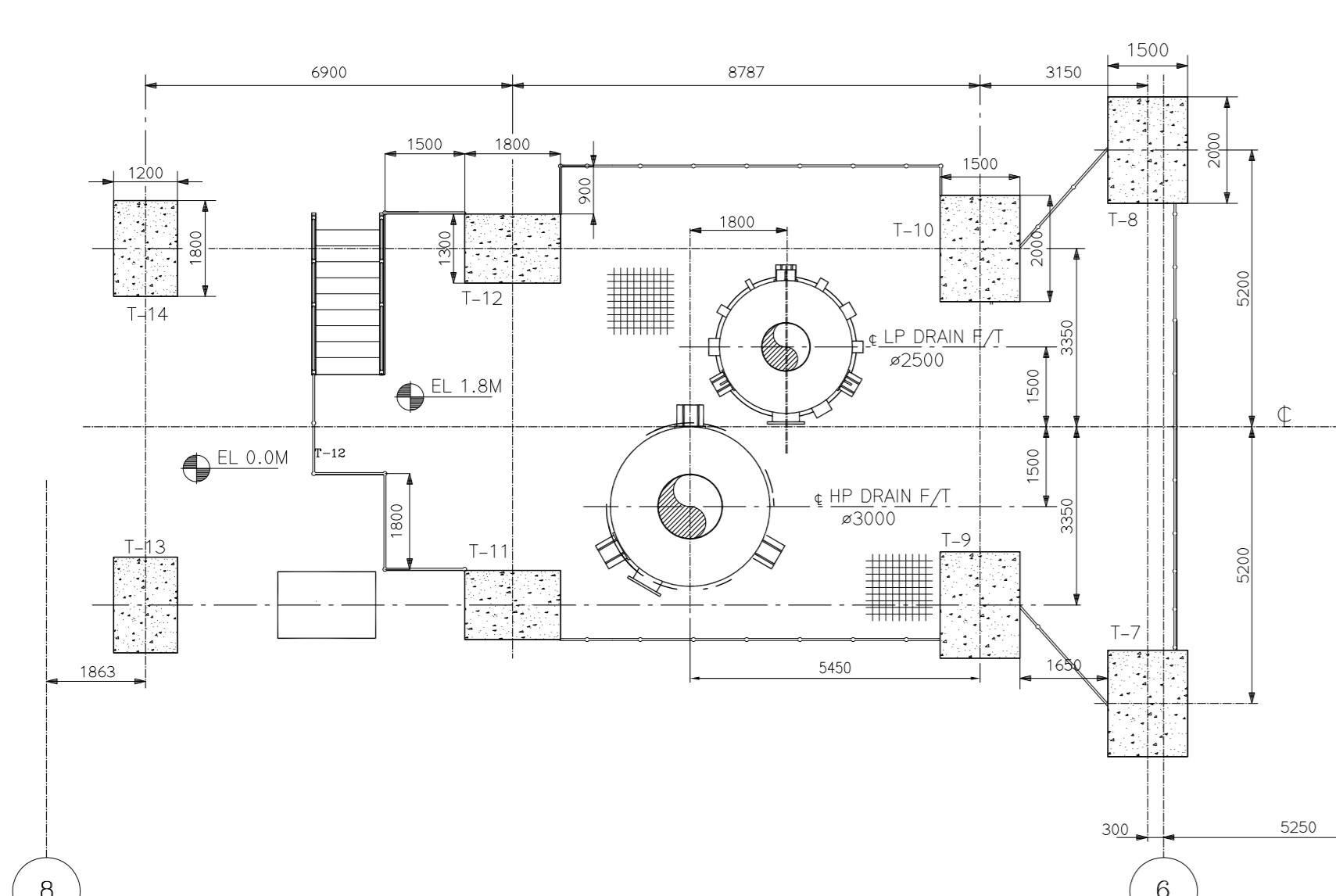
- NOTES:-**
1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
 2. ALL ELEVATIONS ARE MARKED w.r.t. G. HALL FINISHED F.L. LEVEL AS -0.30M WHICH CORRESPONDS TO RL - 49.20M.
 3. DIMENSIONS AND DETAILS OF EQUIPMENTS ARE TENTATIVE ONLY AND SHALL BE FINISHED UP IN DETAIL ENGINEERING STAGE.
 4. FFD: FIRE PROOF DOOR.
 5. ALL DOORS ARE 1200 MM WIDE UNLESS NOTED OTHERWISE.
 6. ALL ROLLING SHUTTERS ARE ELECTRICALLY OPERATED EXCEPT - MARKED.

- REFERENCE DRAWINGS:**
1. TO BLDG. EQUIPMENT PLAN AT 8.5M & 12.0M PE-DG-402-100-M004 (PEM)
 2. TO BLDG. EQUIPMENT PLAN AT 17.0M PE-DG-402-100-M005 (PEM)
 3. TO BLDG. EQUIPMENT PLAN AT 24.0M & 27.5M, 36.0M & 47.5M PE-DG-402-100-M006 (PEM)
 4. CROSS SECTION OF MAIN PLAN PE-DG-402-100-M007 (PEM)
 5. CONDENSER ASSEMBLY (GENERAL ARRANGEMENT) - (HWB)
 6. LAYDOWN SPACE FOR STEAM TURBINE - (HWB)
 7. CONTROL FLUID ROOM ARRANGEMENT - (HWB)
 8. FOUNDATION DETAILS OF GEN. AUX. EQUIPMENTS - (HWB)

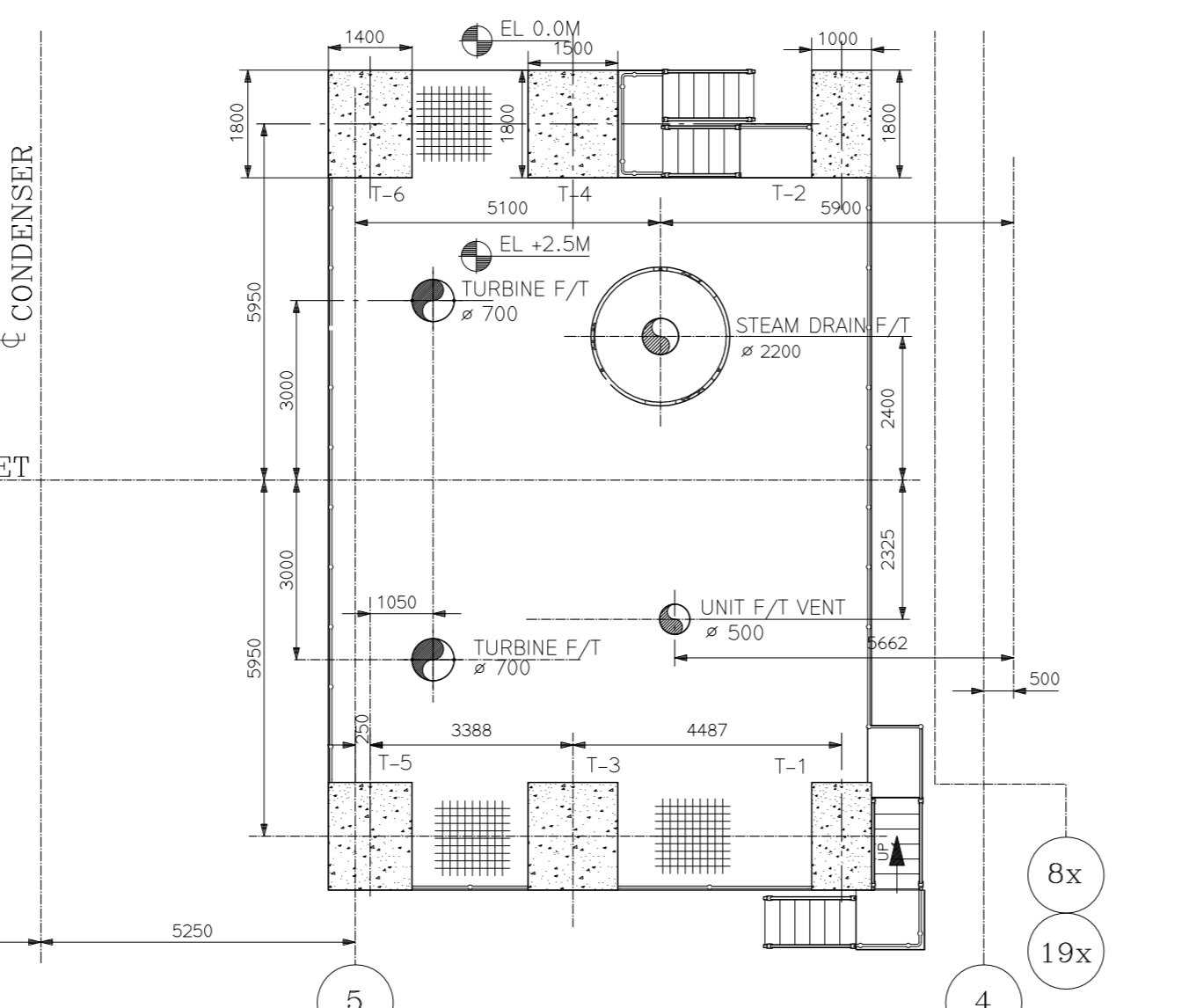


PLAN AT 0.0M

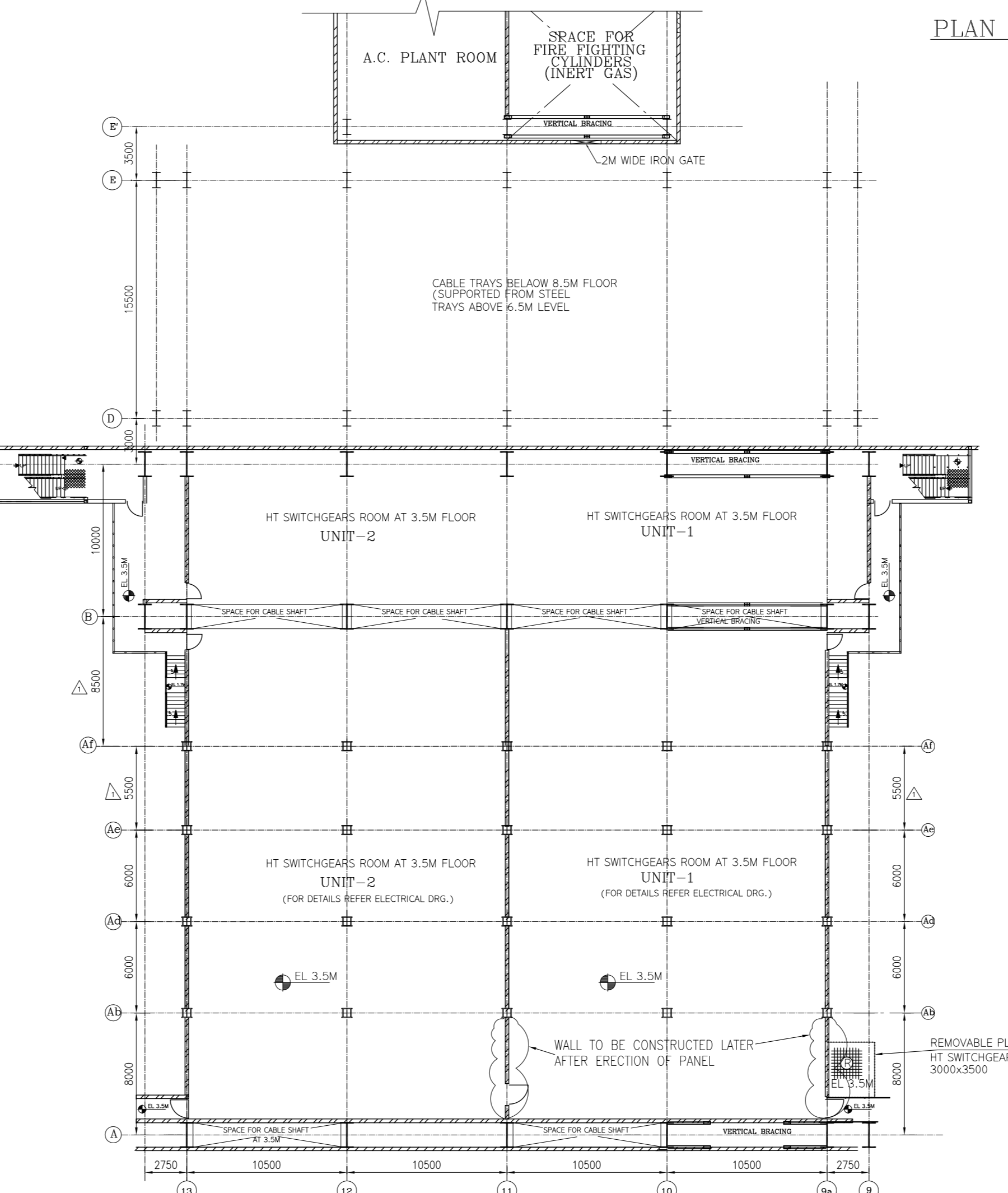
- LEGEND:**
- CHEQUERED PLATE FLOORING
 - REMOVABLE CHEQUERED PLATE
 - GRATED FLOORING
 - REMOVABLE GRATING
 - CONCRETE BLOCK
 - CUT OUTS
 - HAND RAILING
 - PARAPET WALL
 - GLASS PARTITION
 - BRICK WALL
 - RAIL TRACK



PLAN AT EL. 1.8M IN TG FOUNDATION AREA (DETAIL -A)



PLAN AT EL. 2.5M IN TG FOUNDATION AREA (DETAIL -B)



PLAN AT EL. 3.5M

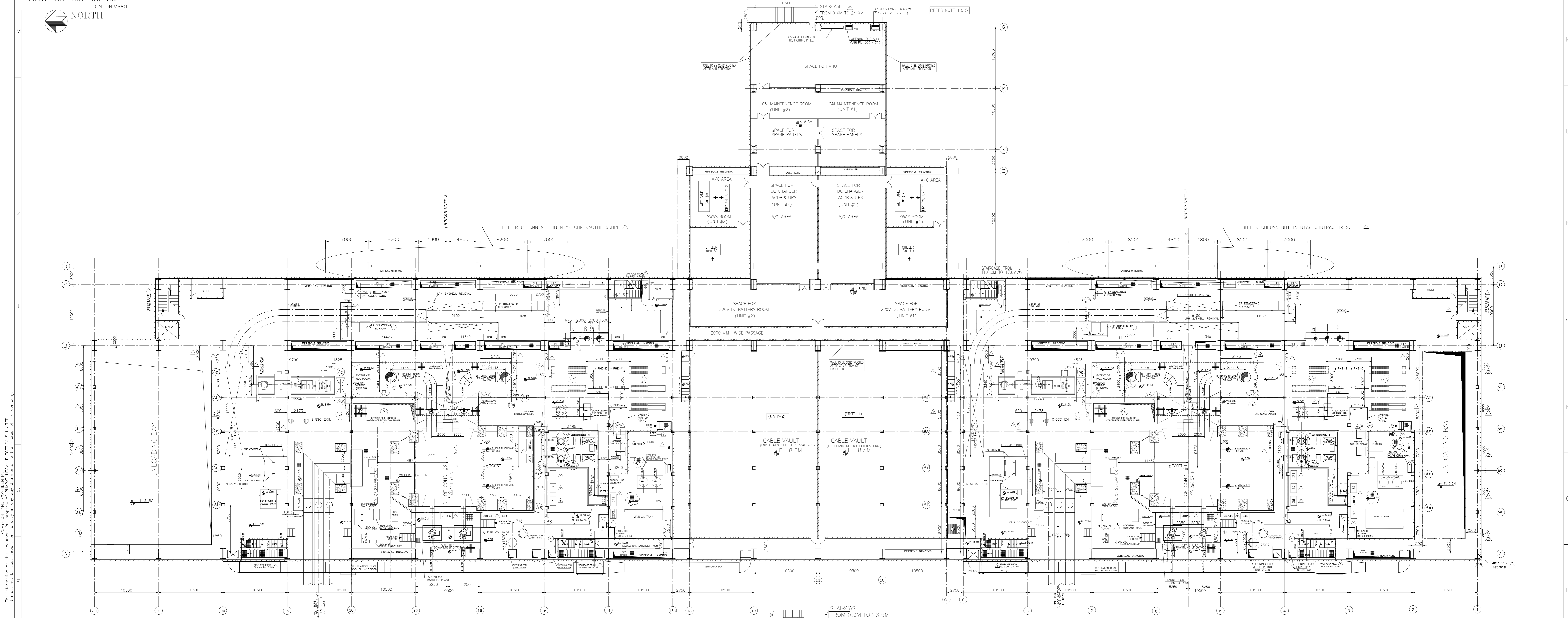
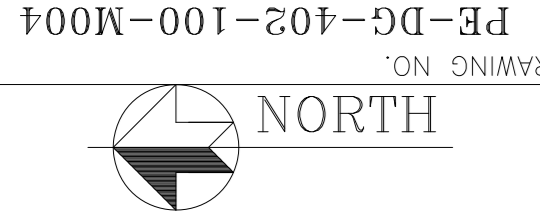
CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (सार्वजनिक लिमिटेड)		
	NEVELI LIGNITE CORPORATION LIMITED (NLC LTD)		
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड		
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD		
PACKAGE : STEAM TURBINE GENERATOR PACKAGE (NTA2)			
PROJECT	NEVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEVELI		
DEPT	POWER SECTOR	NAME	SS
DRN	PROJECT ENGINEERING MANAGEMENT	SS	03.03.2014
CHK	NEW DELHI	SS	03.03.2014
APPD		SS	03.03.2014
TITLE: TG BUILDING EQUIPMENT PLAN AT 0.0M			
DEPT	SCALE: 1:200	DRAWING NO.	PE-DG-402-100-M003
SIGN		SHEET	1 OF 1
DATE		REV	1

JOB NO.	402			
STATUS	CONTRACT			
DISTRIBUTION				
TO				
REV	DATE	ALTD	CHD	APPD
1	22.07.2014	SS	ABU/MS	AMH
1. DRAWING REVIEWED AS PER RECEIVED AS PER CUSTOMER COMMENTS AND LETTER REF NO. PEG-NNTPP/NTA2/051/2014 DATED 14.04.2014				
2. WIDTH OF THE A-B BAY, FLOOR LEVELS AND LOCATION OF EQUIPMENTS AND AUX. COLLARS ARE REVISED IN LINE WITH TENDER DRAWINGS.				
3. DRAWING GENERALLY UPDATED & AS MARKED THIS.				

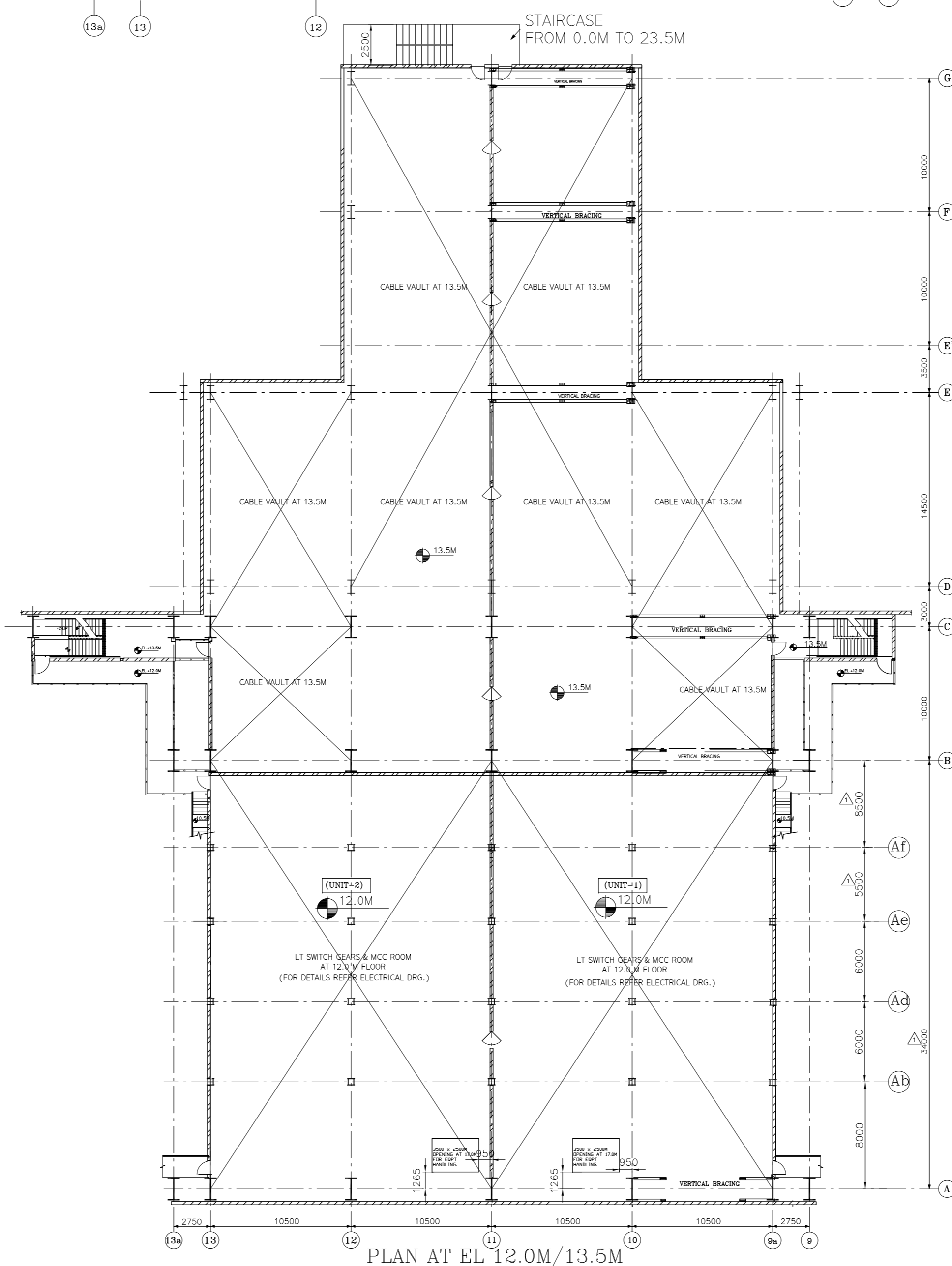
Varun Jain
S A Khan
Dhanraj K...

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ELECTRONIC FILE NAME: 402_100_M003_R1



PLAN AT EL 8.5M



PLAN AT EL 12.0M/13.5M
SCALE: 1:200

NOTES:-

1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
2. ALL ELEVATIONS ARE MARKED w.r.t. T. G. HALL FINISHED FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL +69.50M.
3. DIMENSIONS AND DETAILS OF EQUIPMENTS ARE TENTATIVE ONLY AND SHALL BE FIRMED UP IN DETAIL ENGINEERING STAGE.
4. PFD: FIRE PROOF DOOR.
5. ALL DOORS ARE 1200 MM WIDE UNLESS NOTED OTHERWISE.
6. ALL ROLLING SHUTTERS ARE ELECTRICALLY OPERATED EXCEPT * MARKED.

REFERENCE DRAWING:

- | | |
|--|---------------------------------|
| 1. TG BLDG. EQUIPMENT PLAN AT 0.0M | PE-DG-402-100-M003 (PEM) |
| 2. TG BLDG. EQUIPMENT PLAN AT 17.0M | PE-DG-402-100-M005 (PEM) |
| 3. TG BLDG. EQUIPMENT PLAN AT 24.0M & 27.5M, 31.75M, 36.0M & 47.5M | PE-DG-402-100-M006 (PEM) |
| 4. TG BLDG. & BOILER CROSS SECTION | PE-DG-402-100-M008 (PEM) |
| 5. CONDENSER ASSEMBLY (GENERAL ARRANGEMENT) | 016010700259-C161 (HWR) 2 SHTS. |
| 6. GENERATOR OUTLINE | - (HWR) |
| 7. OIL ROOM ARRANGEMENT | - (HWR) |
| 8. VALVE ROOM ARRANGEMENT | - (HWR) |
| 9. LP BYPASS VALVE ARRANGEMENT | - (HWR) |
| 11. FOUNDATION DETAILS OF GEN. AUXILIARY EQUIPMENTS | - (HWR) |
| 12. GENERAL ARRANGEMENT OF LP HEATER No.1 | - (HWR) |
| 13. GENERAL ARRANGEMENT OF LP HEATER No.2 | - (HYD) |
| 14. GENERAL ARRANGEMENT OF LP HEATER No.3 | - (HYD) |

LEGEND:

- CHISQUERED PLATE FLOORING
- REMOVABLE CHISQUERED PLATE
- GRATED FLOORING
- REMOVABLE GRATING
- CONCRETE BLOCK
- HAND RAILING WITH TOE GUARD
- PARAPET WALL
- CUT OUTS

CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (एनएलसी लिमिटेड)	
	NEVELI LIGNITE CORPORATION LIMITED (NLCLTD)	
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड	
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD	

PACKAGE : STEAM TURBINE GENERATOR PACKAGE (NTA2)
PROJECT: NEVELI NEW THERMAL POWER PROJECT (NNTPP)
2x500 MW LIGNITE FIRED UNITS AT NEVELI

JOB NO.	402			
STATUS	CONTRACT			
DISTRIBUTION				
TO				
REV	DATE	ALD	CHD	APPD
1	22.07.2014	OS	600/605/AMH	AMH

1. DRAWING REVISED AS PER RECEIVED AS PER CUSTOMER COMMENTS (SEE LETTER REF NO. PSE/NT/NTA2/461/2014 DATED 14.08.2014).

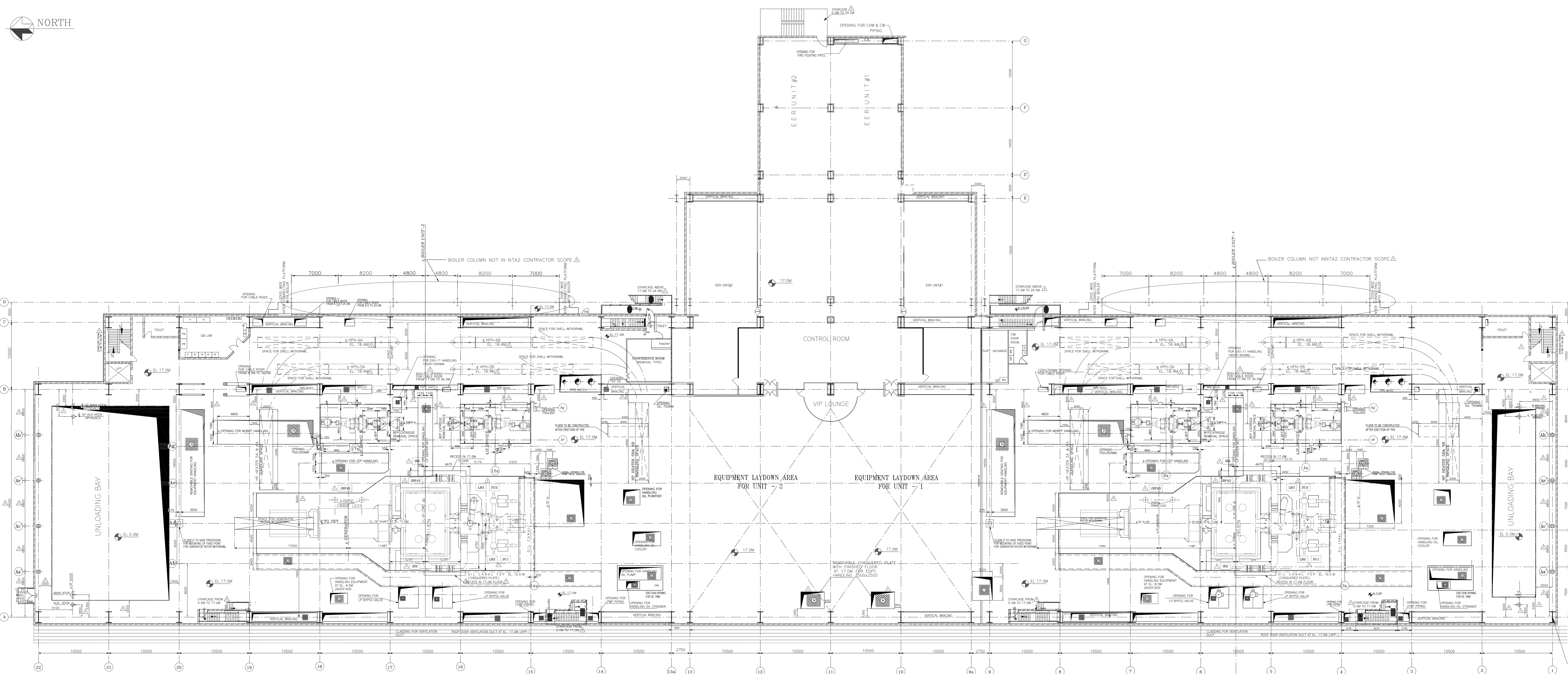
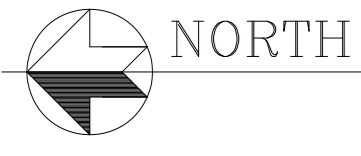
2. WIDTH OF THE A-B BAY, FLOOR LEVELS AND LOCATION OF EQUIPMENTS AND AIR COOLERS ARE REVISED IN LINE WITH TENDER DRAWINGS.

3. DRAWING GENERALLY UPDATED & AS MARKED THIS Δ.

TITLE	TG BUILDING EQUIPMENT PLAN AT 8.5M & 12.0M
DEPT.	POWER SECTOR
SCALE:	1:200
SIGN	
DATE	

DRAWING NO. PE-DG-402-100-M004
SHEET 1 OF 1

Varun Jain
SA Khan
Dhanraj Kataria



NOTES:-

1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHER WISE.
2. ALL ELEVATIONS ARE MARKED w.r.t. T. G. HALL FINISHED FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL 69.50M.
3. CHANGES IN TG BUILDING WILL BE REQUIRED BASED ON THE FINALISATION OF SG PACKAGE BOILER AREA DETAILS.
4. REQUIRED STRUCTURES FOR 'B' AND 'G' ROWS WITH RESPECT TO A/C BUILDING SHALL BE UNDER THE SCOPE OF NTA2 CONTRACTOR. BUILDINGS, ALL STRUCTURAL STEEL WORK INCLUDING CIVIL FOUNDATION, ALL CIVIL WORKS, FLOORINGS, WALLS, FINISHES ETC. REQUIRED UPTO 24.0M LEVEL (ROOF OF THE COMMON CONTROL ROOM) SHALL ALSO BE UNDER THE SCOPE OF NTA2 CONTRACTOR. THE NTA2 CONTRACTOR SHALL MATCH THE 'F' AND 'G' ROWS COLUMNS AND BEAMS WITH THAT OF THE COLUMNS AND BEAMS IN 'B' ROW. SIMILARLY THE REQUIRED STRUCTURES IN 'D-E' BAY SHALL BE UNDER THE SCOPE OF NTA1 CONTRACTOR.
5. THE REQUIRED LOAD DATA SHALL BE SHARED WITH NTA1 CONTRACTOR BY THE NTA2 BIDDER DURING DETAIL ENGINEERING.
6. THE INTERCONNECTION PLATFORM SHOWN SHALL BE PROVIDED UPTO D ROW.

REFERENCE DRAWING:

- | | |
|---|--------------------------|
| 1. TG BLDG. EQUIPMENT PLAN AT 0.0M | PE-DG-402-100-M003 (PEM) |
| 2. TG BLDG. EQUIPMENT PLAN AT 8.5M & 12.0M | PE-DG-402-100-M004 (PEM) |
| 3. TG BLDG. EQUIPMENT PLAN AT 24.0M, 27.5M, 31.75M, 36.0M & 47.5M | PE-DG-402-100-M006 (PEM) |
| 4. TO BLDG. & BOILER CROSS SECTION | PE-DG-402-100-M010 (PEM) |
| 5. GENERAL ARRANGEMENT OF HP HEATER No.5A | (HYD) |
| 6. GENERAL ARRANGEMENT OF HP HEATER No.5B | (HYD) |
| 7. GENERAL ARRANGEMENT OF HP HEATER No.6A | (HYD) |
| 8. GENERAL ARRANGEMENT OF HP HEATER No.6B | (HYD) |

LEGEND:

- CHEQUERED PLATE FLOORING
- REMOVABLE CHEQUERED PLATE
- GRATED FLOORING
- REMOVABLE GRATING
- CONCRETE BLOCK
- HAND RAILING
- PARAPET WALL
- GLASS PARTITION
- CUT OUTS

CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (एनएलसी लिमिटेड)
	NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD

PACKAGE : STEAM TURBINE GENERATOR PACKAGE (NTA2)

JOB NO.	402			
STATUS	CONTRACT			
DISTRIBUTION				
TO				
REV	DATE	ALTD	CHD	APPD
1	22.07.2014	GS	AKV/MS/AMH	

PROJECT	NEYVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEYVELI
DEPT	BHARAT HEAVY ELECTRICALS LTD
DRN	MS/ARV
DESIGN	MS/ARV
CHK	MS/AMH
APPR	AMH
DATE	03.03.2014
DATE	03.03.2014
DATE	03.03.2014

TITLE	TG BUILDING EQUIPMENT PLAN AT 17.0M
DEPT.	SCALE: 1:200
SIGN	DRAWING NO.
DATE	PE-DG-402-100-M005
	SHEET 1 OF 1
	REV. 1

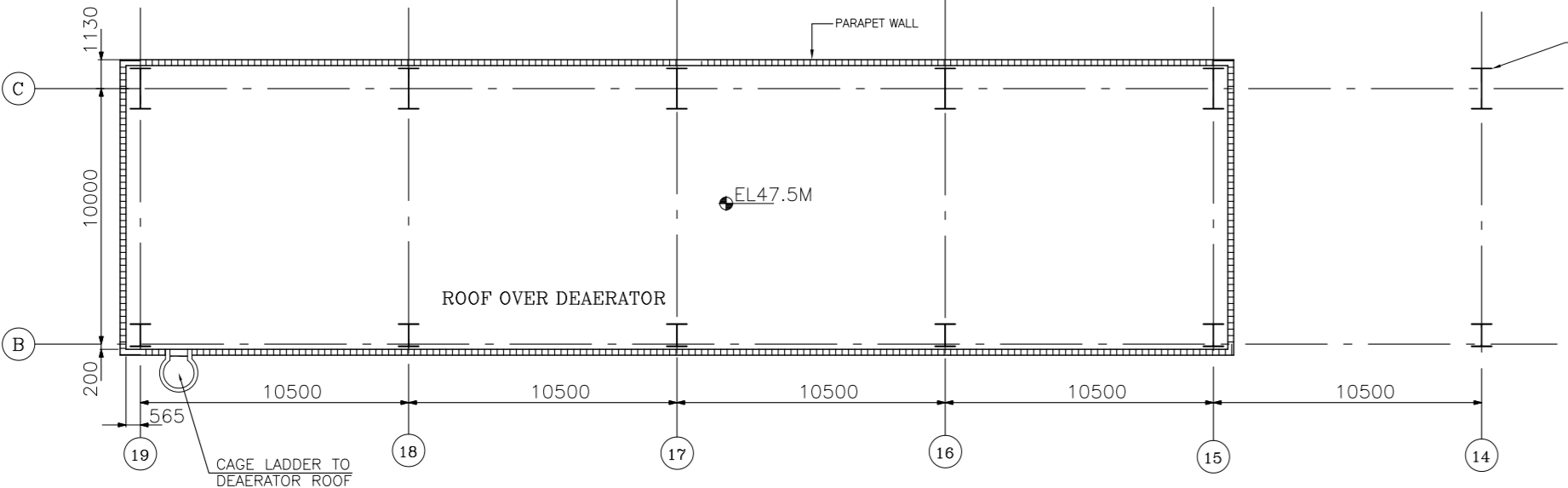
Varun Jain
 SA Khan
 Dhanraj Kataria

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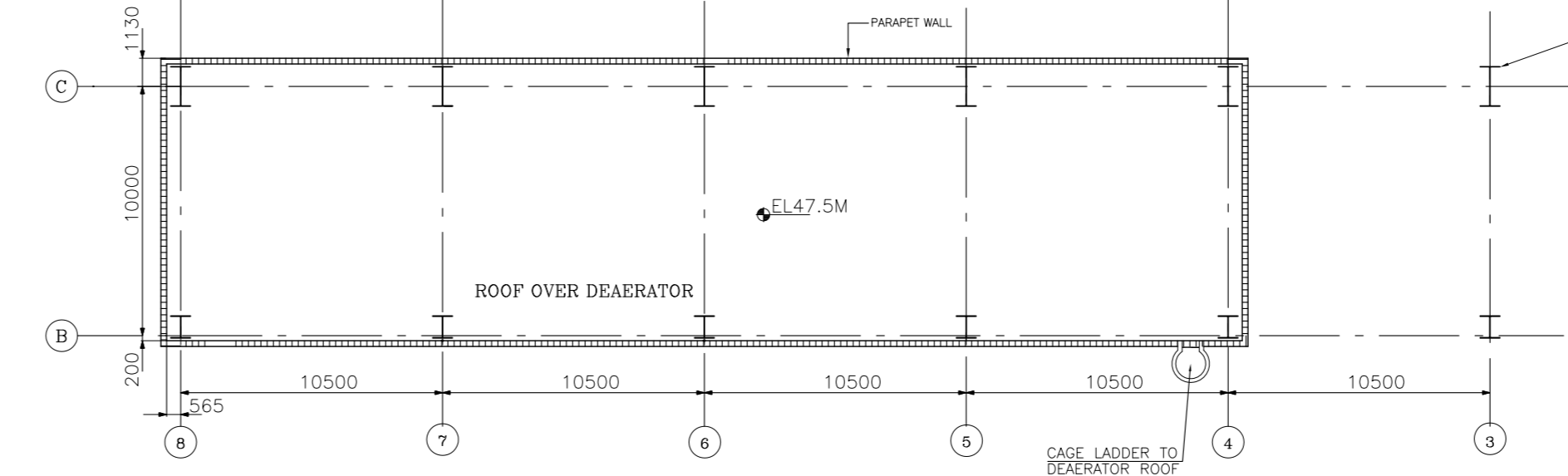
ELECTRONIC FILE NAME: 402_100_M005_R1



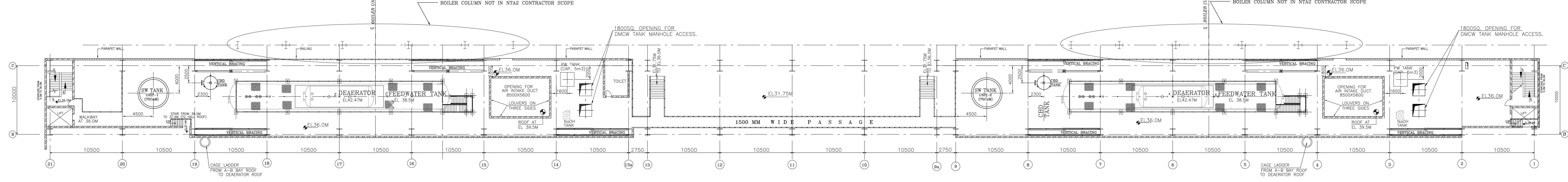
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



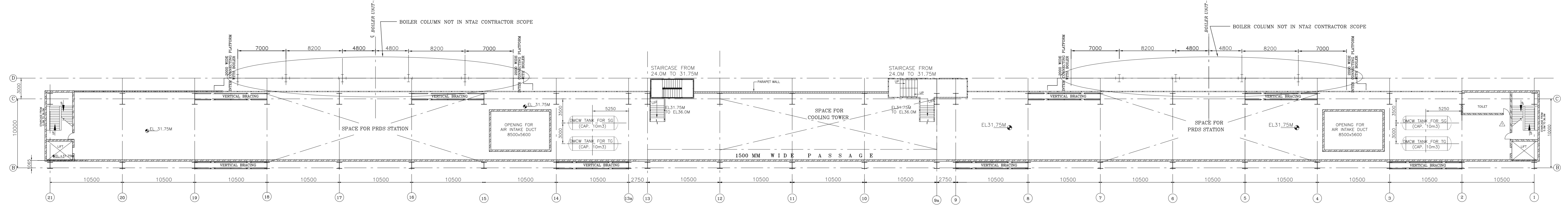
PLAN AT EL. 47.5M Δ



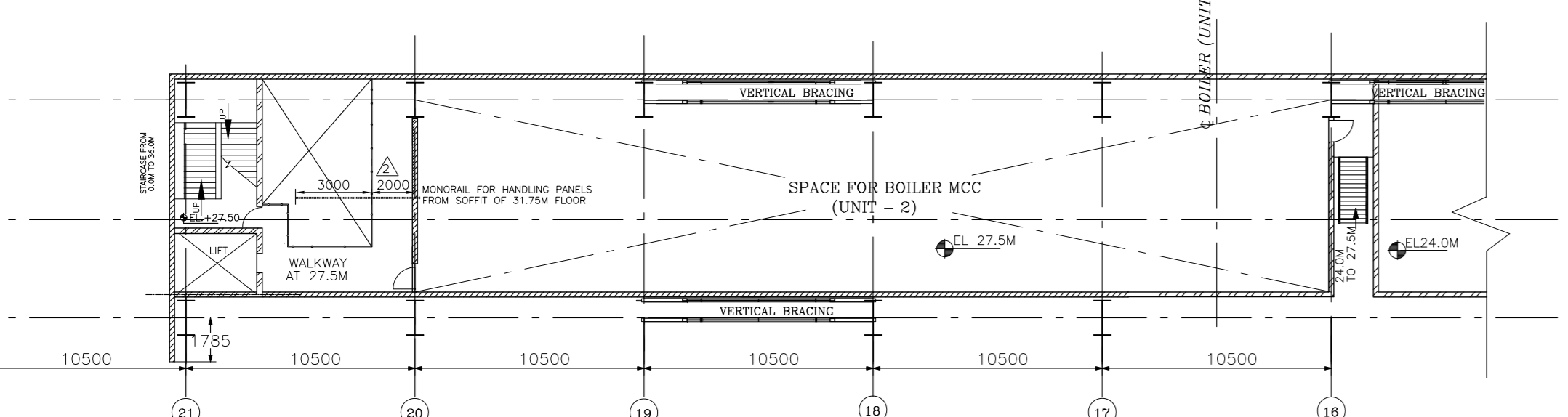
PLAN AT EL. 47.5M Δ



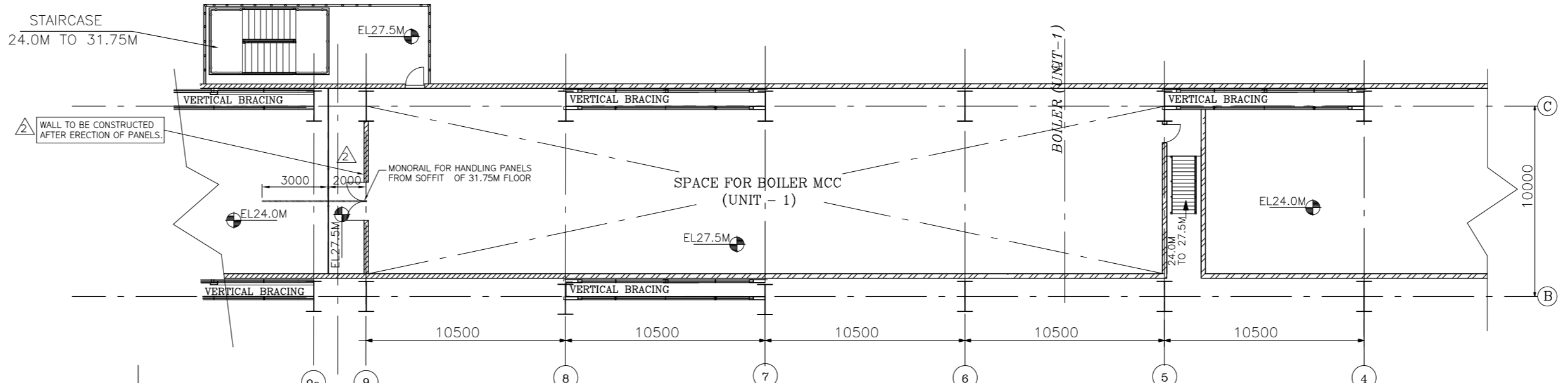
PLAN AT EL. 36.0M Δ



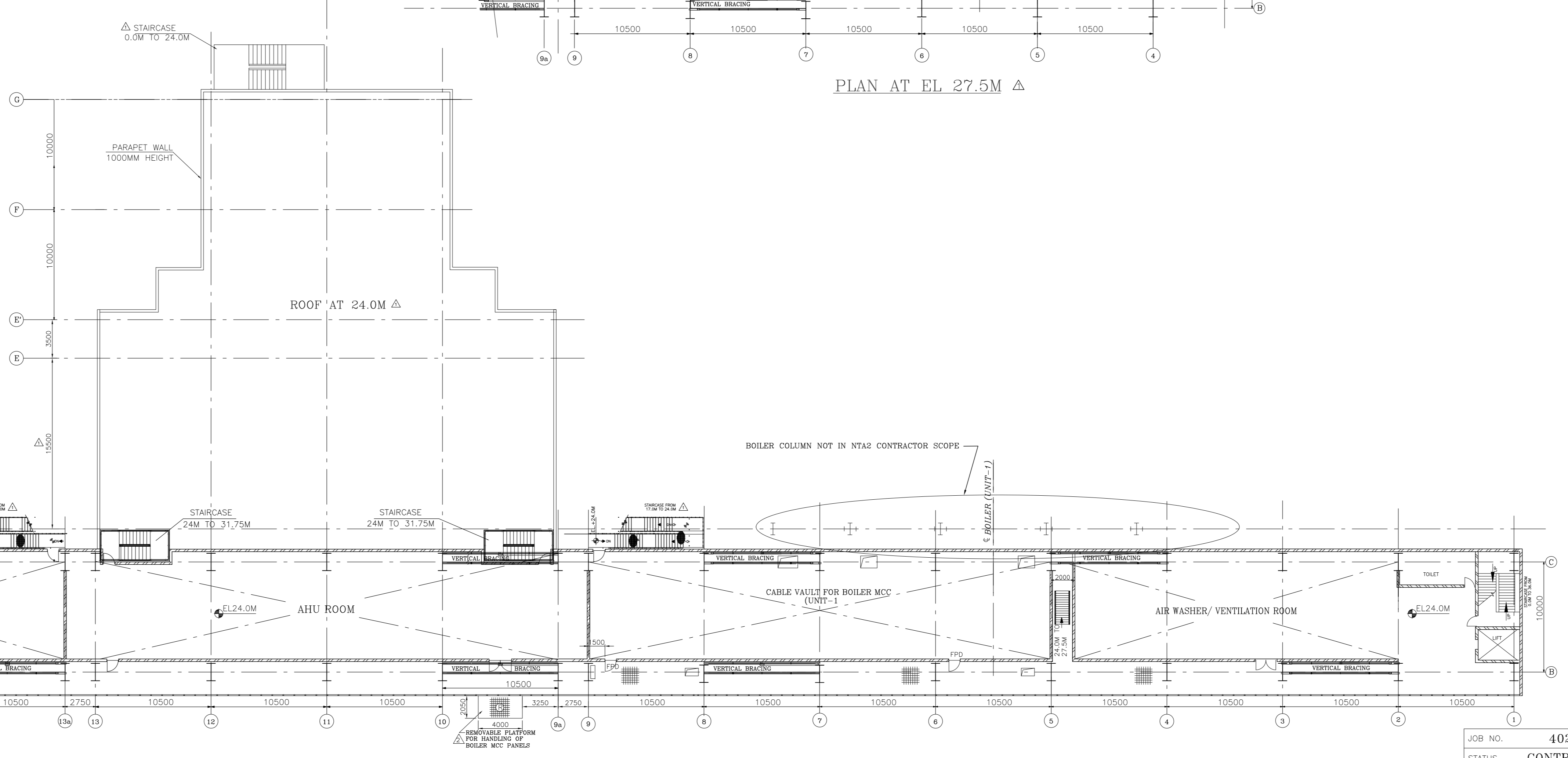
PLAN AT EL. 31.75M Δ



PLAN AT EL. 27.5M Δ



PLAN AT EL. 27.5M Δ



PLAN AT EL. 24.0M Δ

NOTES:-

- 1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
2. ALL ELEVATIONS ARE MARKED w.r.t. T. G. HALL FINISHED FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL 69.50M.
3. CHANGES IN TG BUILDING WILL BE REQUIRED BASED ON THE FINALISATION OF SG PACKAGE BOILER AREA DETAILS.
4. THE INTERCONNECTION PLATFORM SHOWN AT 31.75M SHALL BE PROVIDED UPTO D ROW.

REFERENCE DRAWINGS: Δ

- 1. TG BLDG. EQUIPMENT PLAN AT 0.0M
2. TG BLDG. EQUIPMENT PLAN AT 8.5M & 12.0M
3. TG BLDG. EQUIPMENT PLAN AT 17.0M
4. TG BLDG. & BOILER CROSS SECTION
5. GA OF SPRAY CUM TRAY DEAERATOR
6. GA OF SPRAY CUM TRAY DEAERATOR
7. DEAERATOR PLATFORM ASSY.

LEGEND:

- CHEQUERED PLATE FLOORING
REMOVABLE CHEQUERED PLATE
GRATED FLOORING
REMOVABLE GRATING
CONCRETE BLOCK
HAND RAILING
PARAPET WALL
GLASS PARTITION
CUT OUTS
BRICK WALL

Table with customer and consultant information: NEVELI LIGNITE CORPORATION LIMITED (NLC LTD) and M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD.

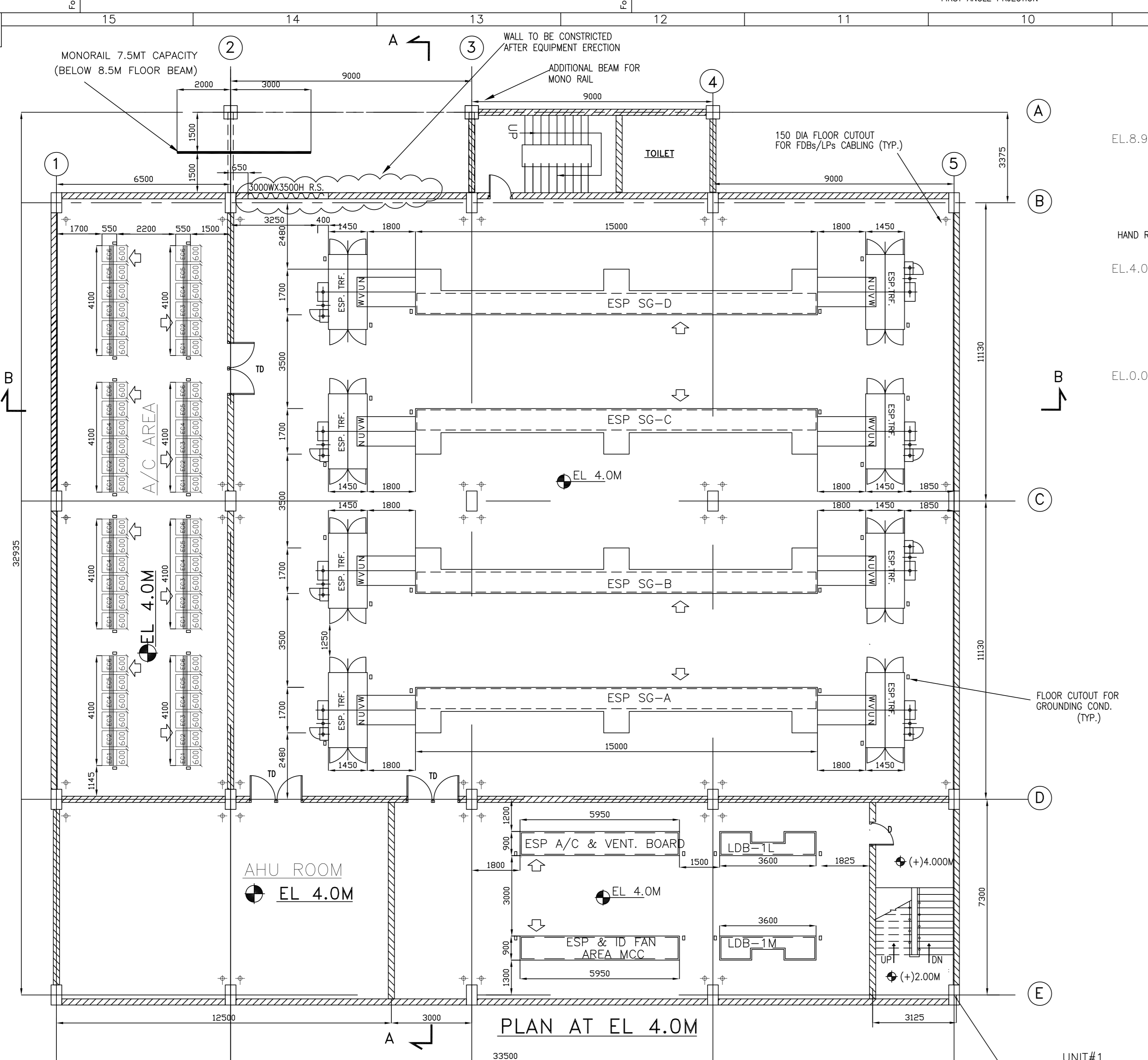
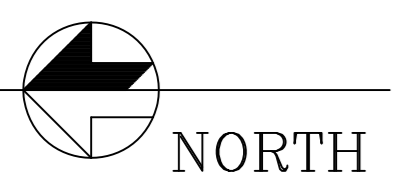
Table with project details: NEVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEVELI.

Table with drawing title and scale: TG BUILDING EQUIPMENT PLAN AT 24.0M, 27.5M, 31.75M, 36.0M & 47.5M. SCALE: 1:250.

Table with revision history: REV. 1, 2, 3 with columns for DATE, ALTD, CHD, APPD.

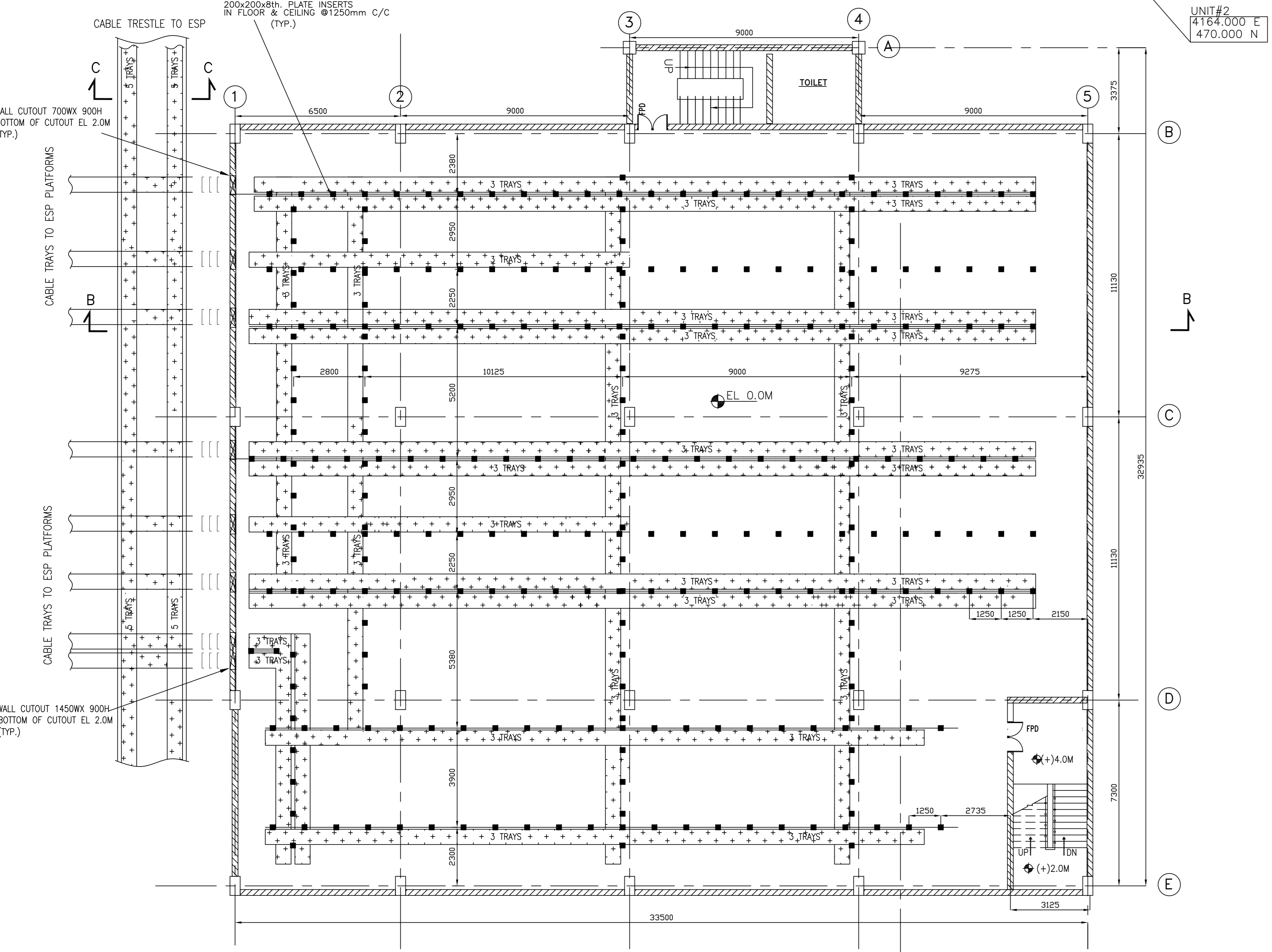
Handwritten signatures and names: Varun Jain, SA Khan, Dinesh Kumar.

Vertical text on the left margin: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST BE USED DIRECTLY OR INDIRECTLY IN THE INTEREST OF THE COMPANY.

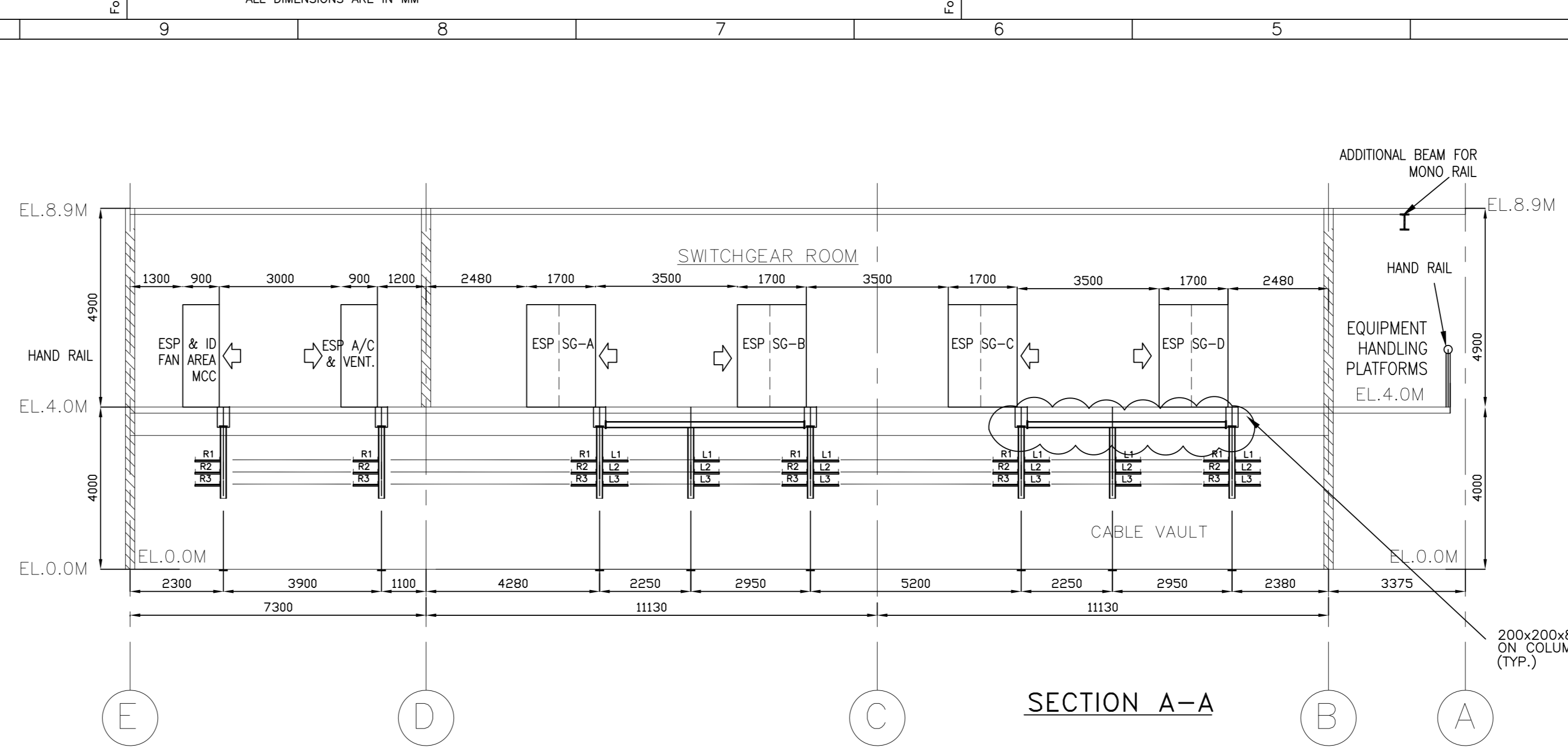


PLAN AT EL 4.0M

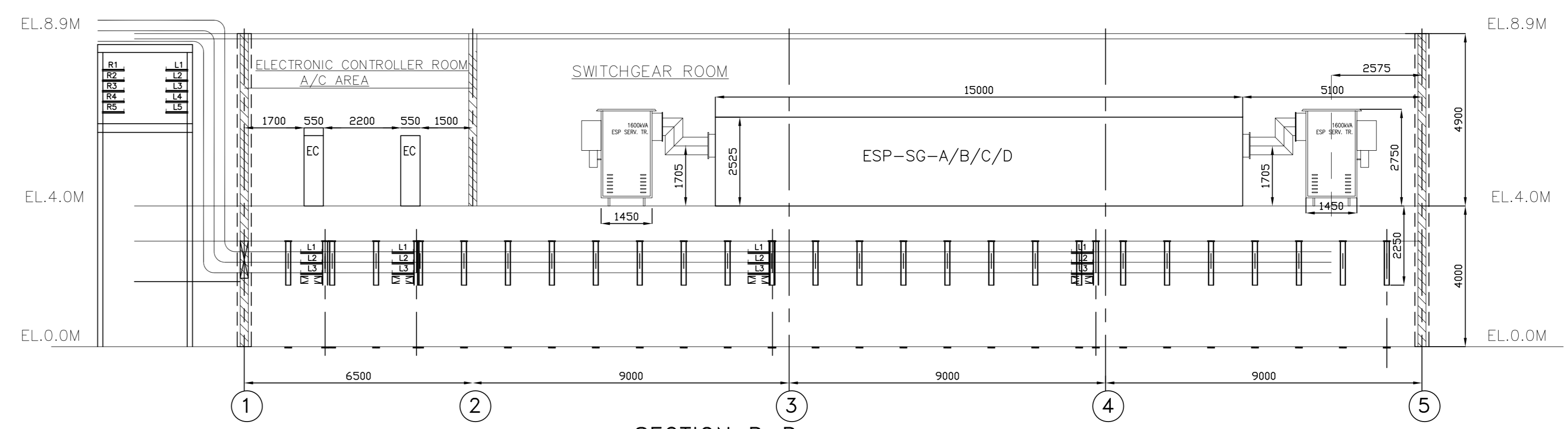
UNIT#1
4165.500 E
198.500 N
UNIT#2
4164.000 E
470.000 N



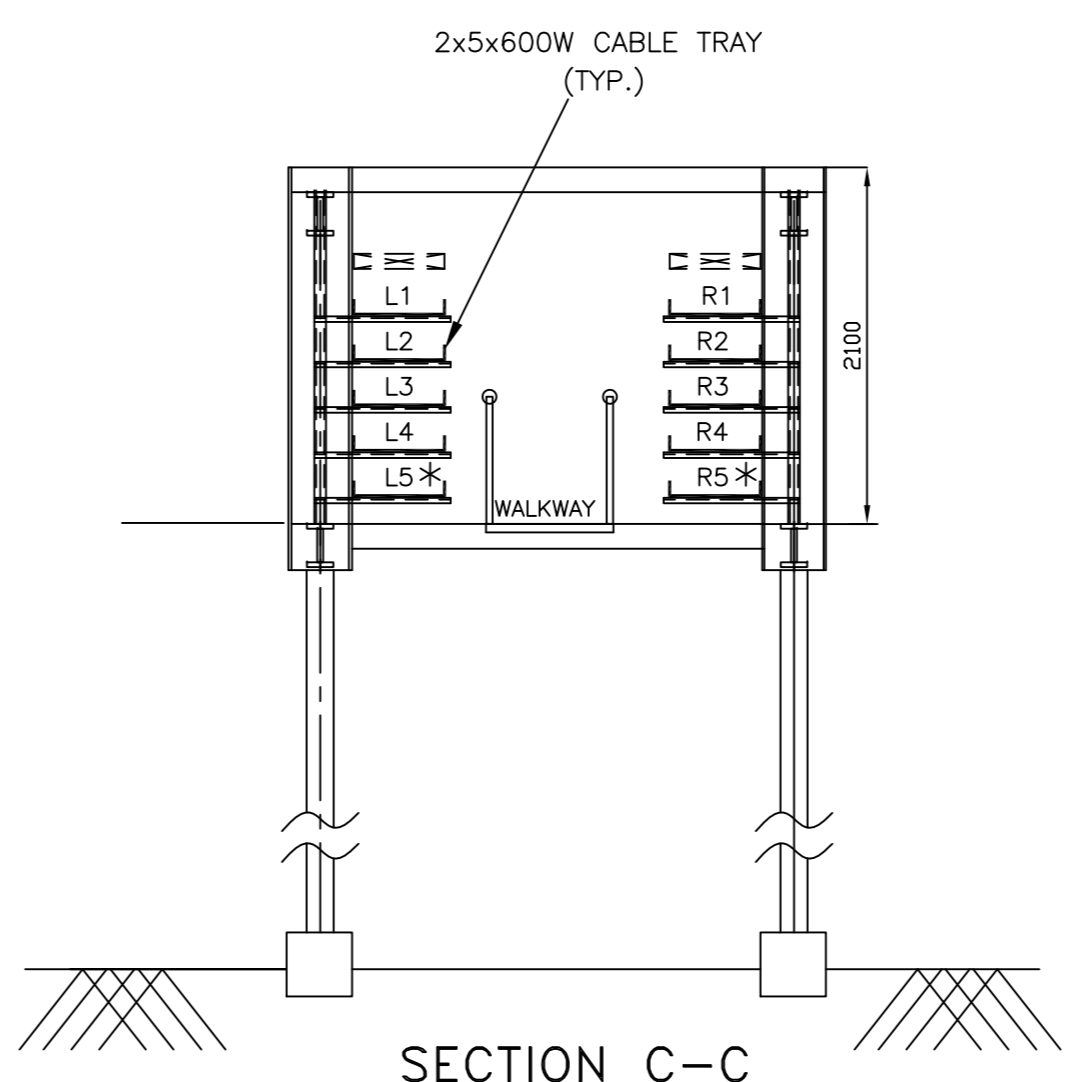
PLAN AT EL 0.0M



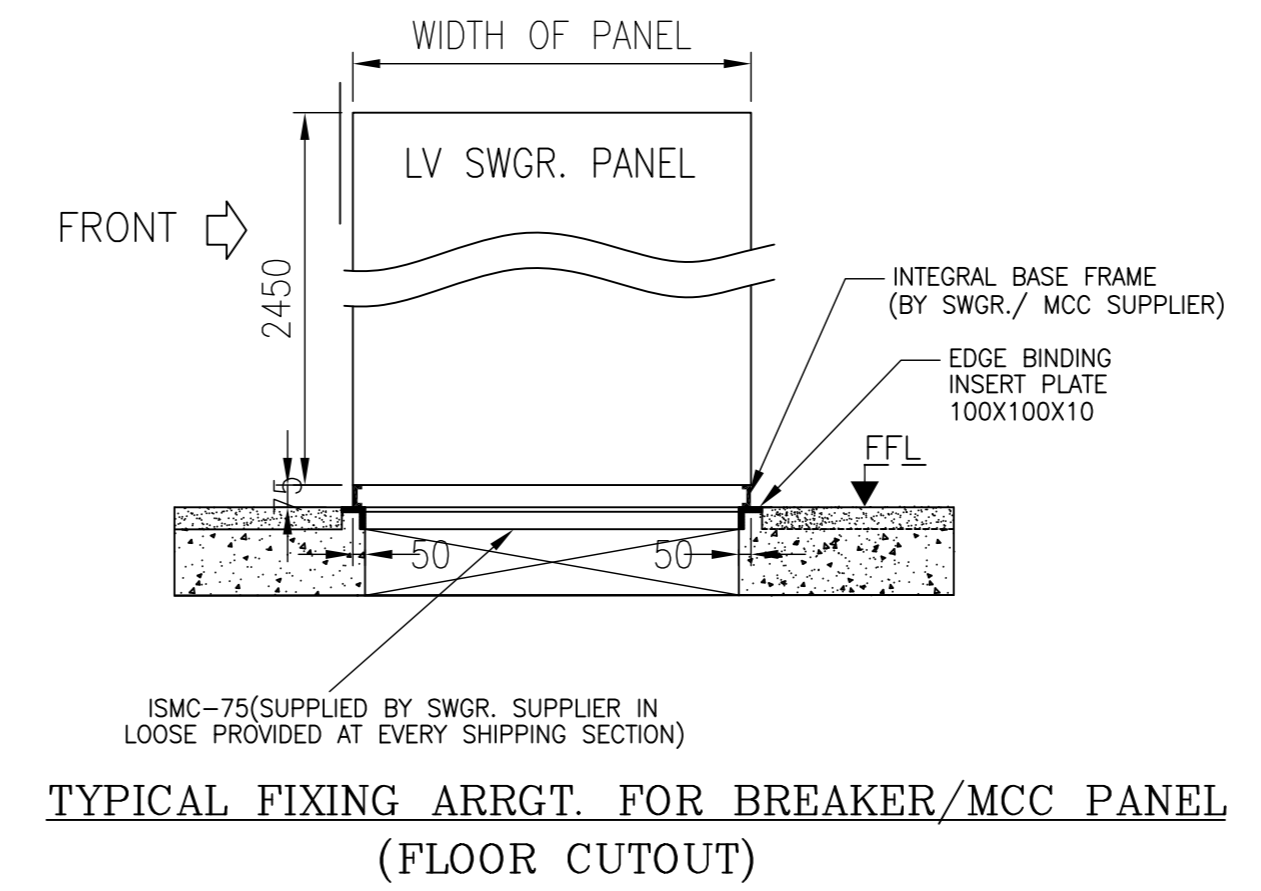
SECTION A-A



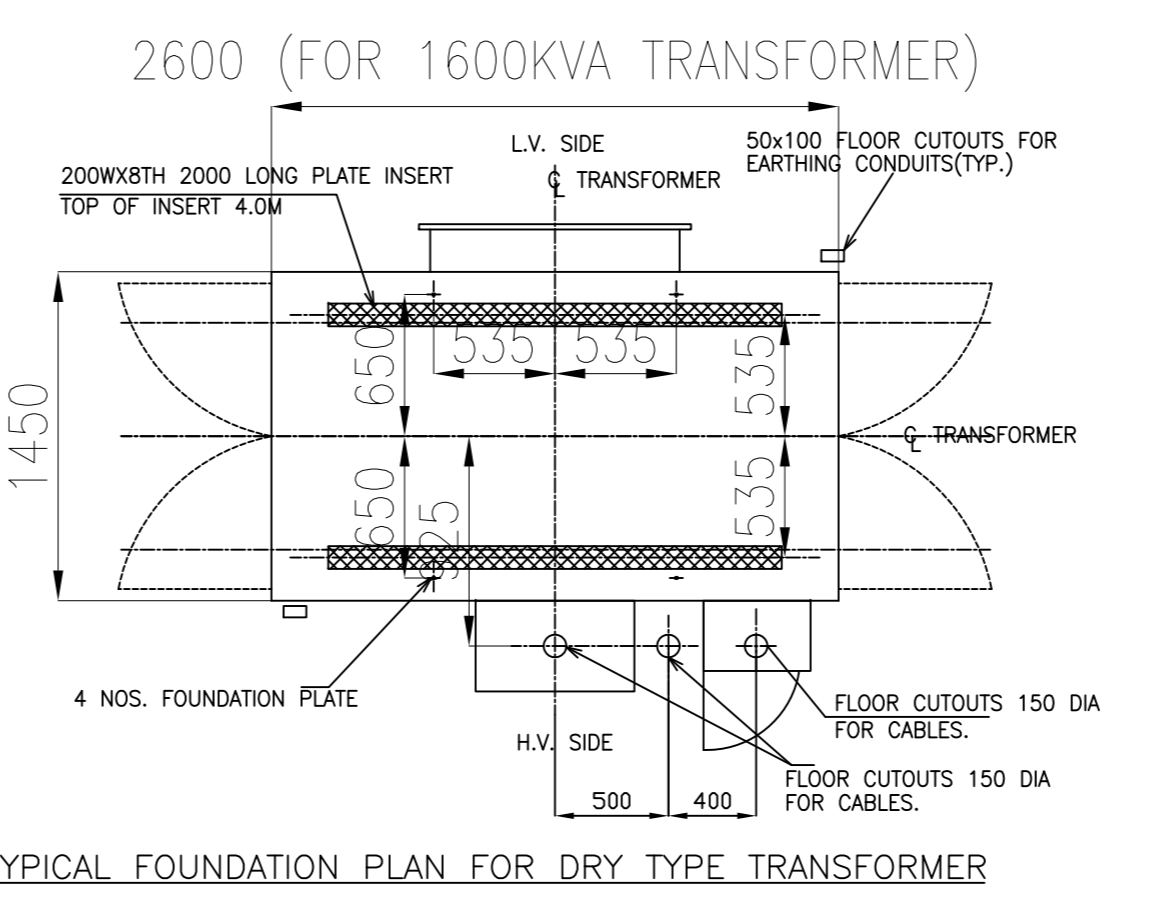
SECTION B-B



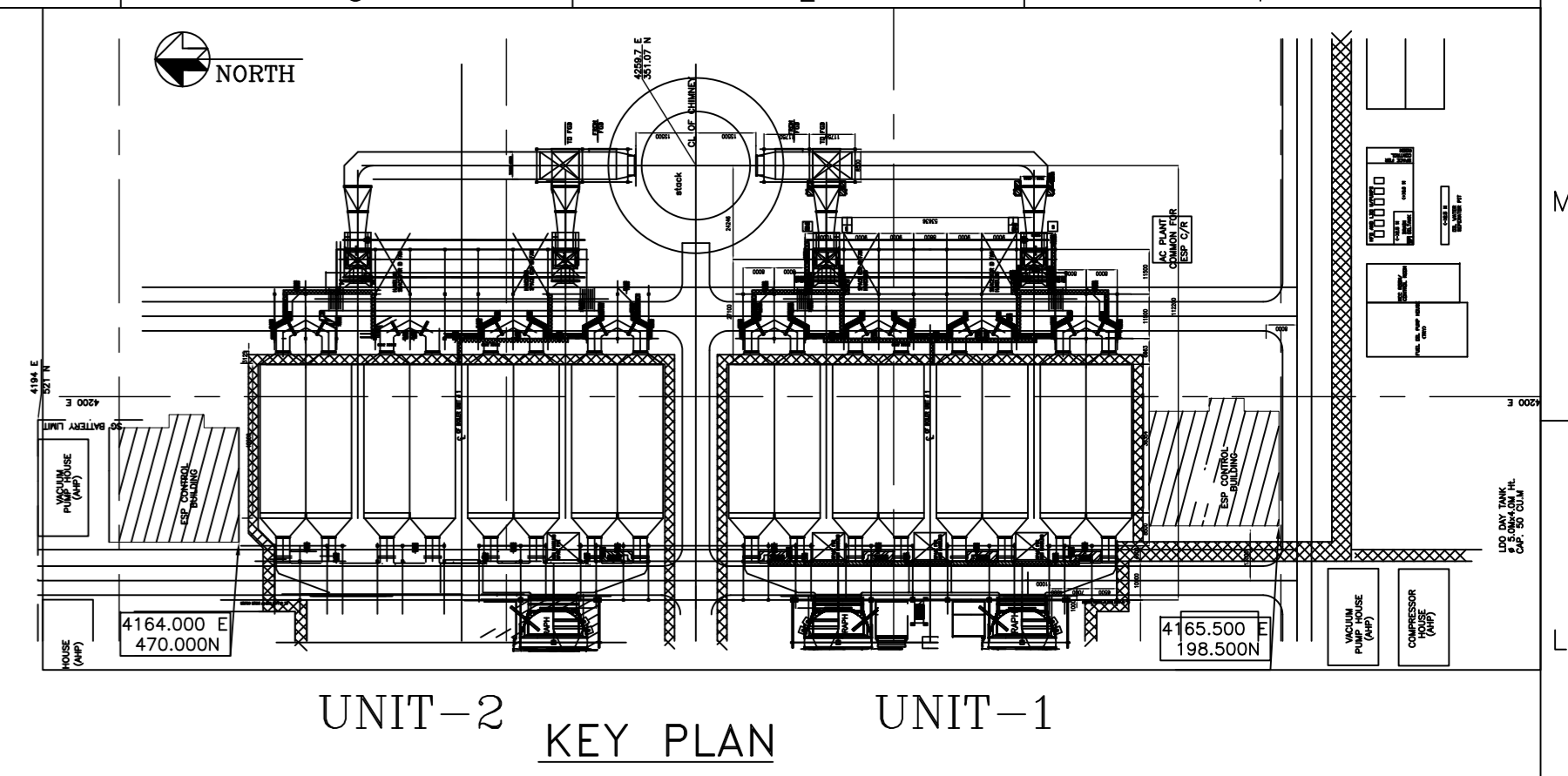
SECTION C-C



TYPICAL FIXING ARRGT FOR BREAKER/MCC PANEL (FLOOR CUTOUT)



TYPICAL FOUNDATION PLAN FOR DRY TYPE TRANSFORMER



UNIT-2 KEY PLAN UNIT-1

REFERENCE DRAWINGS :

S. NO.	TITLE	DRAWING NO.	SOURCE AGENCY
1.	MAIN PLANT EQUIPMENT LAYOUT PLAN	PE-DG-400-100-M002	PEM/ MPL
2.	CROSS SECTION OF MAIN PLANT	-	PEM/ MPL
3.	RECOMMENDED CONTROL ROOM LAYOUT FOR ESP	2-00-114-29869	BHEL/ RANIPET
4.	ELECTRICAL SINGLE LINE DIAGRAM	-	PEM/ ELECT
5.	CABLE ERECTION PHILOSOPHY	PE-DG-400-507-E004	BHEL/ ELECT
6.	DESIGN PHILOSOPHY FOR ELECTRICAL EQUIPMENTS LAYOUT	PE-DC-400-507-E101	BHEL/ ELECT

NOTES :

- ALL ELEVATIONS MARKED ARE W.R.T. T.G. HALL FINISHED FLOOR ELEVATION OF 0.0 M. WHICH CORRESPONDS TO RL +69.50 M.
- ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
- THE PANEL DIMENSIONS INDICATED IN DRAWING ARE TENTATIVE AND ARE SHOWN FOR DEVELOPING CONCEPTUAL LAYOUT.
- FOR MOUNTING & FOUNDATION DETAILS AND FLOOR CUTOUTS RESPECTIVE DRAWINGS SHOWN IN 'REFERENCE DRAWINGS' SHALL BE REFERRED.
- THIS DRAWING IS TO BE REFERRED FOR DETAILS OF ELECTRICAL EQUIPMENT AND CABLING LAYOUT ONLY. LAYOUT SHOWN FOR FACILITIES SUCH AS AC & VENTILATION SYSTEM IS INDICATIVE & FOR INTERFACE PURPOSE. FOR EXACT LAYOUT OF OTHER SYSTEMS, RELEVANT DISCIPLINE DRAWINGS SHALL BE REFERRED.
- ALL AREAS SHOWN IN THIS DRAWING ARE NON A/C UNLESS STATED OTHERWISE.
- BOTTOM MOST/OUTERMOST TWO TRAY OF ALL RUNS SHALL BE PERFORATED TYPE.

LEGEND

- OPERATING FRONT OF THE PANEL
- BRICK WALL
- CABLE TRAYS
- PERFORATED TYPE CABLE TRAY
- DOUBLE LEAF DOOR WITH TRANSCOM ARRANGEMENT (3M (HT. INCLUSIVE OF TRANSCOM ARRANGEMENT) X 2M (WIDTH))
- SINGLE LEAF DOOR (1000Wx2100H)
- FIRE PROOF DOOR
- SPACE FOR FUTURE CABLE TRAYS

TABLE-I

S.NO.	EQUIPMENT	SOURCE
1	ESP SG	BHEL/RANIPET
2	EC	BHEL/RANIPET
3	DT TRANSFORMERS	BHEL/JHANSI.
4	NSP BUSDUCT	BHEL/CBU
5	ESP & ID FAN AREA MCCs	BHEL/CBU
6	AC & VENT MCC	BHEL/CBU
7	LDB	PEM/ELECT.

CUSTOMER		NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)
CONSULTANT		M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD

PACKAGE: STEAM GENERATOR AND AUXILIARIES (NATI)
 NEYVELI NEW THERMAL POWER PROJECT (NTPP)
 2X500 MW LIGNITE FIRED UNITS AT NEYVELI

JOB NO.	400			
STATUS	CONTRACT			
DRG./REF. NO. (INTERNAL)				
PRINT SCALE IN METRE				
REV	DATE	ALTD	CHD	APPO

BHARAT HEAVY ELECTRICALS LTD.	DATE	10/06/2014
POWER SECTOR	DATE	10/06/2014
PROJECT ENGINEERING MANAGEMENT	DATE	10/06/2014
NEW DELHI	DATE	10/06/2014

Electrical Equipment & Cabling Layout in ESP Control Building (UNIT-1)

SCALE	1:100
DRWING NO.	PE-DG-400-100-E008
SHEET	1 OF 1

Varun Jain
 S A Khan
 Dinesh Kumar