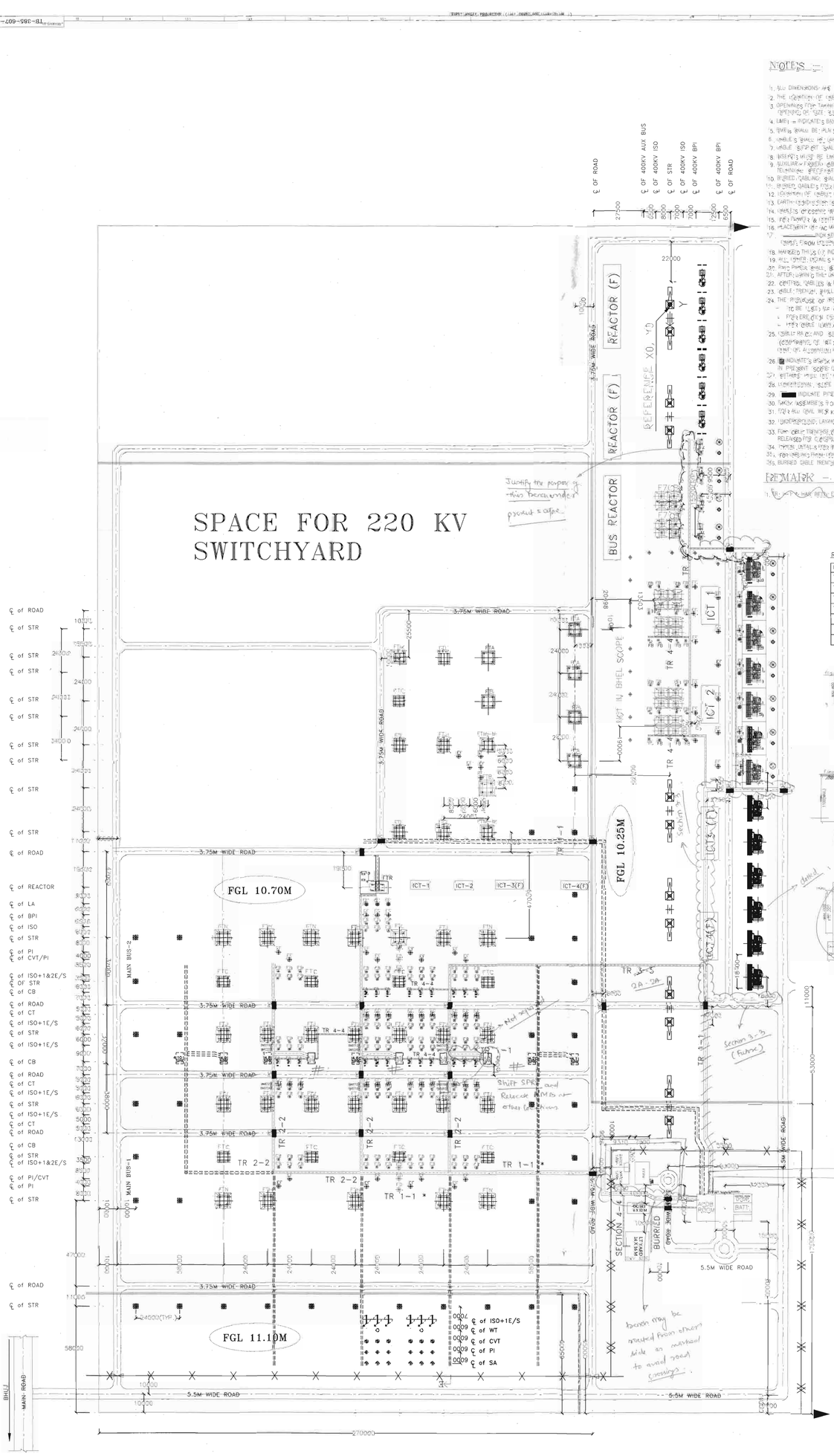


NOTES :-

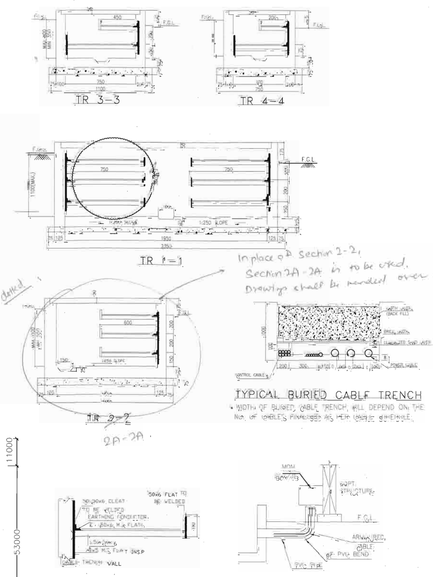
1. ALL DIMENSIONS ARE IN mm.
2. THE LOCATION OF CABLE TRENCHES MARKED IN THIS DWG MAY BE SLIGHTLY MODIFIED TO SUIT SITE CONDITIONS.
3. OPENINGS FOR TANKS (INCL PIPE PIPES & TIE EQUIPMENTS) SHALL BE UNMARKED IN THIS DRAWING. OPENING OF SIZE 1000(L) x 10 DIA. NO/VTL PIPE SHALL BE PROVIDED BELOW TOP CABLE SUPPORT.
4. LABEL = INDICATES BAY NAME BUILDING BLOCK.
5. PIPES SHALL BE PLACED IN THE LOCATION SHOWN. EXACT LOCATION TO BE SUITABLY DECIDED AT SITE.
6. CABLES SHALL BE LAID IN TRENCHES ON CABLE SUPPORT (ANGLES)
7. CABLE SUPPORT SHALL BE BONDED AT OVER 0.075m INTERVAL.
8. JOINTS MUST BE UNDERGROUND EVERY 0.75m INTERVAL FOR FUTURE USE - SUPPLIER.
9. AUXILIARY POWER CABLES SHALL BE LAID IN TOP TIER AND CONTROL CABLES IN BOTTOM TIER S, AS PER TECHNICAL SPECIFICATION.
10. BURIED CABLING SHALL BE DONE AS PER SPECIFICATION FOR EALLATION OF CABLES.
11. BURIED CABLES FOR LIGHTING PURPOSE SHALL BE AS PER LIGHTING LAYOUT.
12. CONTROL CABLES INDICATED INSIDE BUILDING SHALL BE SHOWN SEPARATELY.
13. EARTHING SYSTEM: SOME AS FLAT TO BE WELDED TO THE CABLE SUPPORT (STEEL) INSULATION OF CABLES.
14. CABLES OF COMMUNICATION PURPOSE SHALL BE LAID IN DUCT.
15. FOR POWER & CONTROL SEPARATE PIPES SHALL BE USED (COMMON 600 MM WIDE FOR EACH PHASE - I.E., 400KV BUS).
16. PLACEMENT OF AC MAIN AND ITS CABLE PIPELINE FOR TENTATIVE CHANGE DIMENSIONS TO BE SUITABLY DECIDED AT SITE.
17. ——— INDICATES CABLES LAID IN PVC PIPES OF 50/40mm OUTER DIA AT DEPTH OF 600mm (MAX.) (SIMILAR FROM EQUIPMENT TO CONTROL PANEL SHALL RUN IN PVC PIPES.
18. MARKED THUS (X) INDICATES CLEAR ENTRANCE FROM EQUIPMENT.
19. ALL OTHER LOCALS INFORMATION ETC. WHICH SHALL BE INTERPRETED IN THE PRESENT DWG DRAWINGS.
20. PVC PIPES SHALL BE SUPPLIED WITH BOTH PVC & OTHER EMBEDDED IN CONCRETE (FOR UNDERGROUND CABLES).
21. AFTER LAYING THE CABLES THE ENDS OF PIPES SHALL BE FULLY SEALED TO PREVENT INGRESS OF WATER INSIDE THE PIPE.
22. CONTROL CABLES & POWER CABLES MUST BE LAID IN SEPARATE PVC PIPES.
23. CABLE TRENCHES SHALL BE PROVIDED IN MAIN BUILDING FOR SUPPLY OF EQUIPMENT.
24. THE PURPOSE OF BHEL LAYOUT DRAWING IS FOR USE AS FOLLOWS.
   - TO BE USED FOR CIVIL INPUT FOR CABLE TRENCHES.
   - FOR ERECTION OF CABLE PULLS AT SITE.
   - FOR CABLE LAYING AND MATTING AT SITE.
25. CABLE TRAY AND SUPPORTS SHALL BE PAINTED AFTER INSTALLATION WITH 2 COATS OF METEL PRIMER (COMPRISING OF RED OXIDE & ZINC CHROMATE IN A SYNTHETIC MEDIUM) AND 2 FINISHING COATS OF ALUMINIUM PAINT.
26. MOUNTING STRUCTURE SHALL BE PROVIDED IN TRENCH WHERE CABLE PULLING TO EQUIPMENT IN PRESENT SCOPE IS TRENCH.
27. SETTING LINE (SECTION) SHALL BE UNIFORM & MEASURED WHERE CABLE BE LAID IN PVC PIPE.
28. DIMENSION SIZE IN CIVIL METER SHALL BE TYPICALLY 1:500.
29. INDICATE PIPE VOLUME.
30. SHOW ASSUMED FOR CABLE TRENCHES SHALL BE PROVIDED ON THE FACE OF TRENCH WALL MARKED THUS.
31. FOR ALL CIVIL WORKS FOR OPEN POWER GRID APPROVED/VALIDATED DRAWS SHALL BE FOLLOWED.
32. UNDERGROUND LAYOUT OF FIBER OPTIC CABLE SHALL BE DONE IN 2 PIPE.
33. FOR CABLE TRENCHES OPEN WITH DEFLECTION, BEND'S MEANS ADDED TO THE STRAIGHT CABLE PATH. SECTION DRAWING RELEASED FOR CONSTRUCTION FOR BHUJ S/S.
34. DETAIL DETAILS FOR PIPE AND CABLE TRENCH ARRANGEMENT FOR EQUIPMENTS LIKE CT, CVT, CB & SA ARE ISSUED SEPARATELY.
35. FOR UNDERGROUND PIPELINE BEND TO BE GIVEN IN MAIN TRENCH, CABLE SHALL BE LAID BEYOND THAT MINIMUM PER ARE PREFERABLY FILLED FIRST.
36. BURIED CABLE TRENCH TO BE USED FOR CABLES FOR DC SUPPLY PANEL/BOX & LIGHTING.

REMARK :-

1. ALL CABLE TRAY BETWEEN BUILDING AND PERIPHERAL STRUCTURE SHALL BE PROVIDED WITH COVER.

REFERENCE DWG :-

DWG. NO.	TITLE
TB-385-510-001	SINGLE LINE DIAGRAM 765/400kV BHUJ S/S
TB-385-510-002	ELECTRICAL LAYOUT PLAN FOR 765/400kV BHUJ S/S
TB-385-607-601	765kV FOUNDATION LAYOUT FOR BHUJ
TB-385-607-602	400kV FOUNDATION LAYOUT FOR BHUJ



In place of Section 2-2, Section 2A-2A is to be used. Drawings shall be modified over shortly.

Please follow our comments on 765kV yard cable trench layout.

PVC PIPES : CLASS IV (AS PER IS:4985)

S.NO.	TRENCH	TYPE	FOR SINGLE CABLE	FOR MULTI CABLE	FOR FUTURE USE
1.	TRENCH	4E (SINGLE)	-	-	-
2.	4E (SINGLE)	2 NOS. 4E (SINGLE)	-	-	-
3.	TRENCH	1 NO. 4E (SINGLE)	-	-	-
4.	TRENCH	1 NOS. 4E (SINGLE)	-	-	-
5.	TRENCH	1 NOS. 4E (SINGLE)	-	-	-
6.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
7.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
8.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
9.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
10.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
11.	TRENCH (BELOW ROAD)	1 NOS. 4E (SINGLE)	-	-	-
12.	TRENCH	4E (SINGLE)	-	-	-
13.	TRENCH	4E (SINGLE)	-	-	-

TABLE - 1

QUANTITY OF PIPE NOS. FOR ROAD CROSSING		
S.NO	400kV CD	3000kV CD
TR-1-2	02 NO.	01 No.
TR-3-3	01 NO.	01 NO.

PVC PIPES : CLASS IV (AS PER IS:4985)

S.NO.	TRENCH	TYPE	FOR SINGLE CABLE	FOR MULTI CABLE	FOR FUTURE USE
1.	TRENCH	4E (SINGLE)	-	-	-
2.	4E (SINGLE)	2NOS. 4E (SINGLE)	-	-	-
3.	TRENCH	1 NO. 4E (SINGLE)	-	-	-
4.	TRENCH	2NO. 4E (SINGLE)	-	-	-

ADDITIONAL INFORMATION	POWER GRID CORPORATION OF INDIA LTD
STATUS OF DRAWING	NAME OF CUSTOMER
DISTRIBUTION OF PRINTS	NAME OF PROJECT: Joint for Establishment of 765/400/220kV BHUJ POOL (New) S/S and Extension of 765kV Bhadla(PG) S/S under Green Energy Corridor - Inter-State Transmission Scheme (ISTS) - Part C NOA NO.: CC-CS/484-WRS/SS-2853/11/GB/NOA-I & II/5727 & 5728 Dtd 31 March 2016

BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION

	NAME	SIGN.	DATE
DRAWN	JK		19.07.16
CHECKED	SK		
APPROVED	AS		

SCALE: NTS

TITLE: CABLE TRENCH LAYOUT FOR 400kV YARD 765/400/220 KV BHUJ POOL SS (NEW)

DRAWING NO. TB-385-510-008 REV. 0

SHEET No. 01 TOTAL SHEET No. 01

REV.	DATE	ALTERED / CHECKED / APPROVED	ZONE

C/E NWR/WR/PGCIL 12/09/16