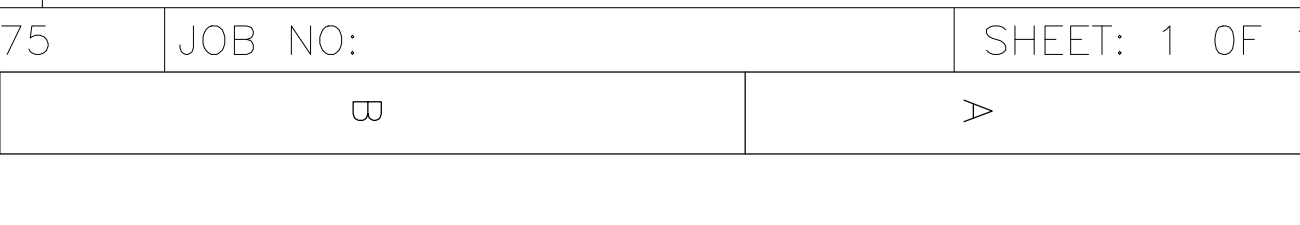
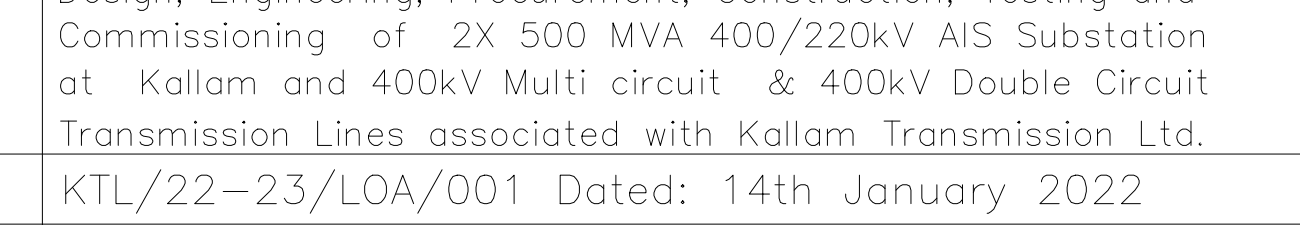
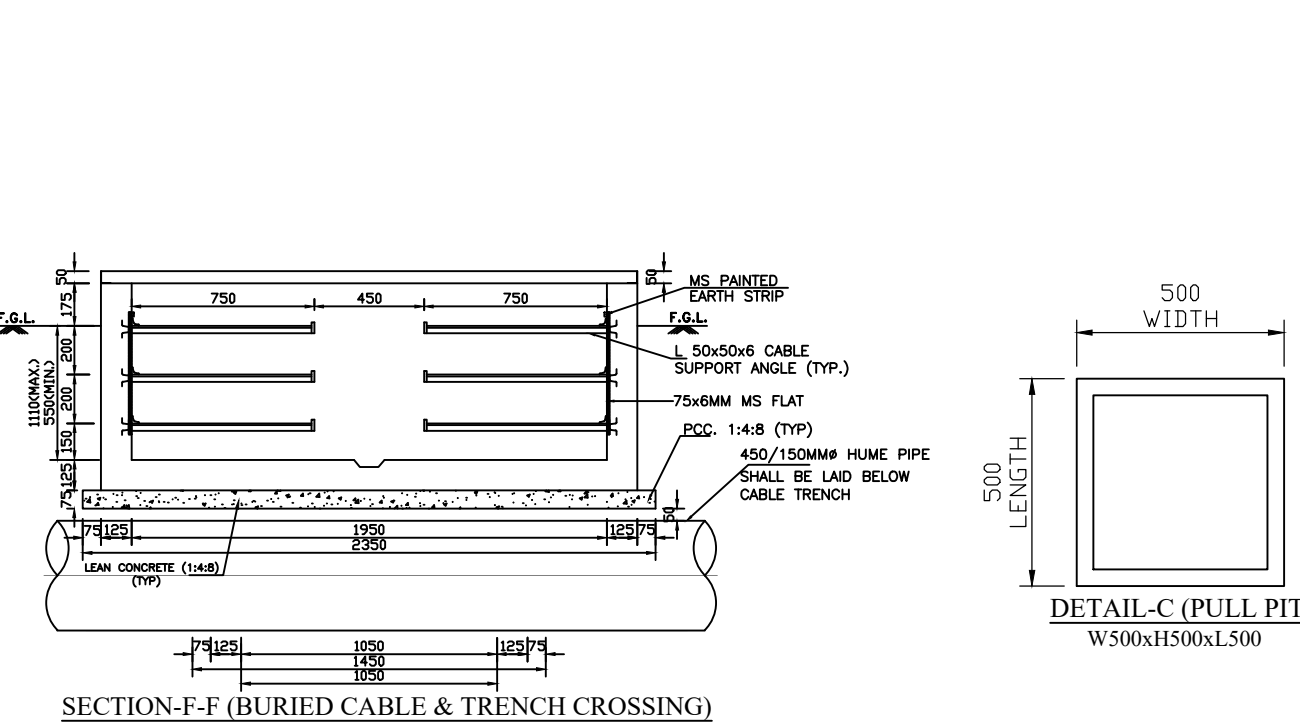
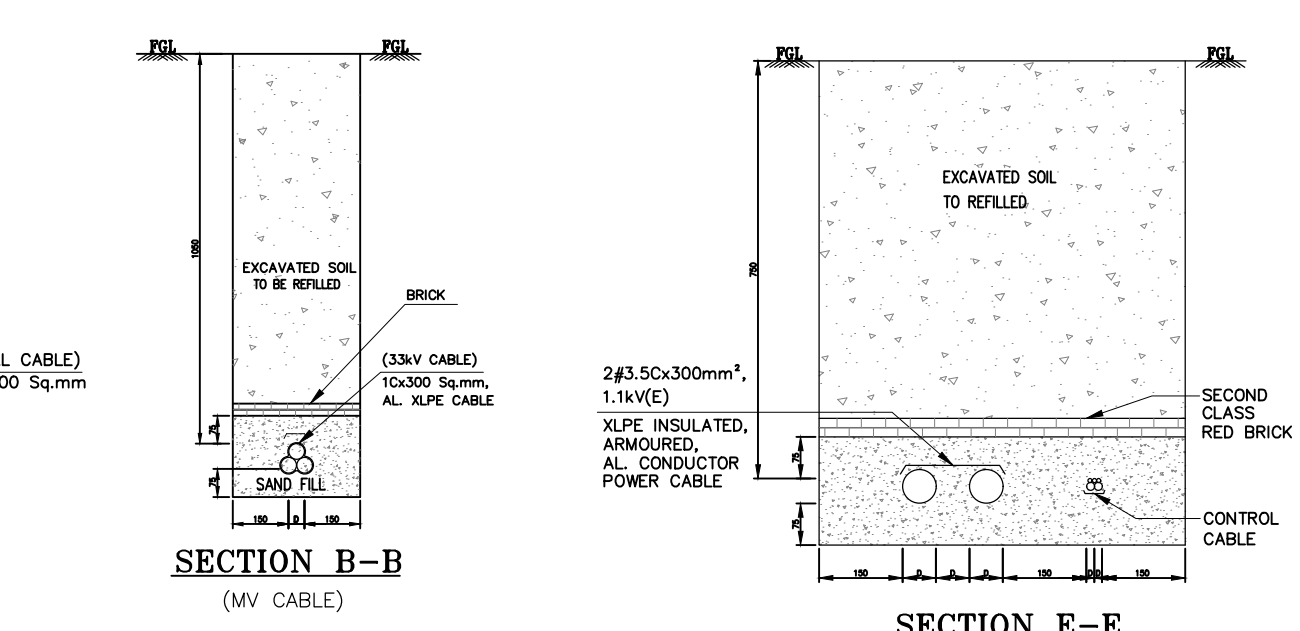
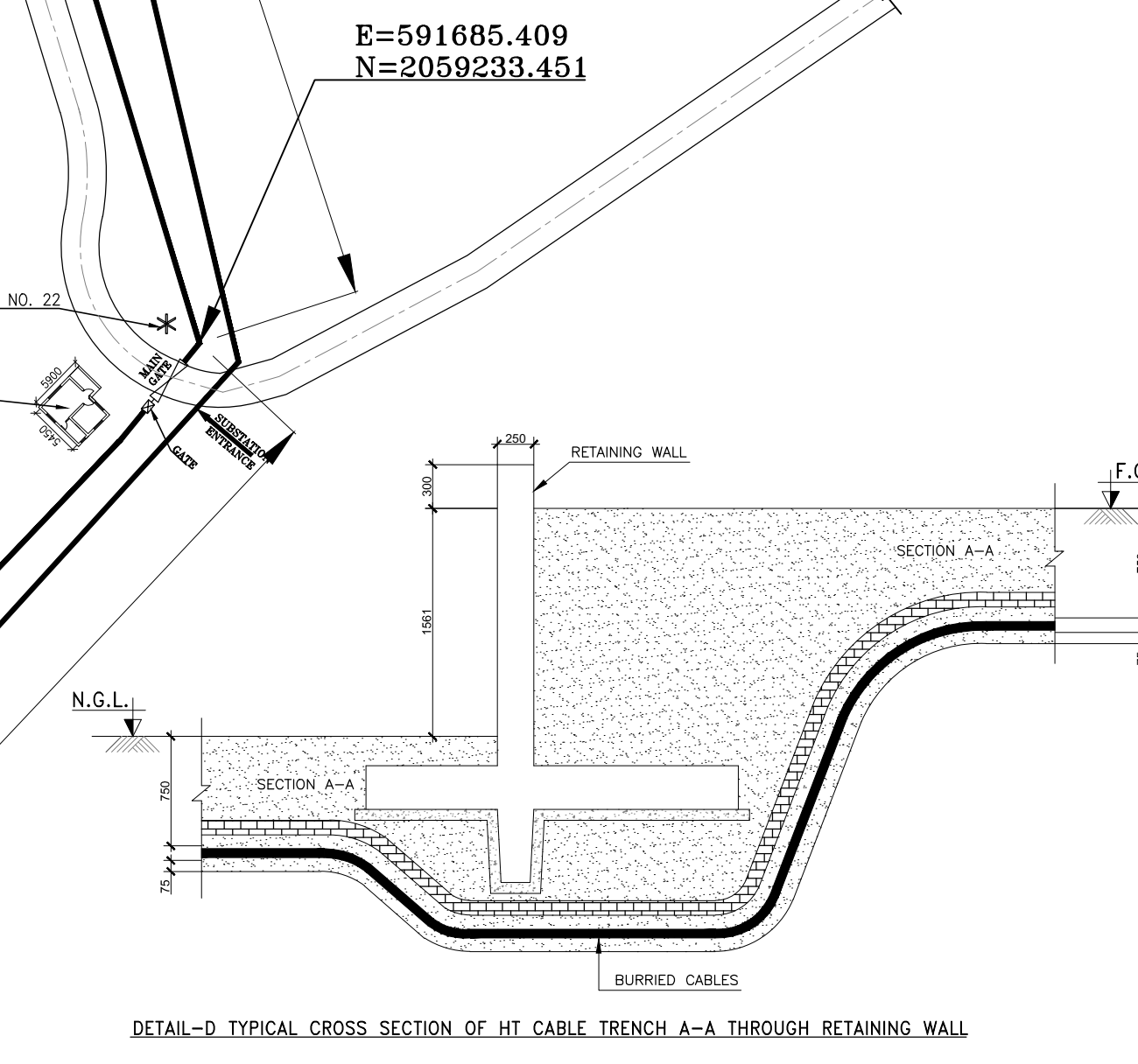


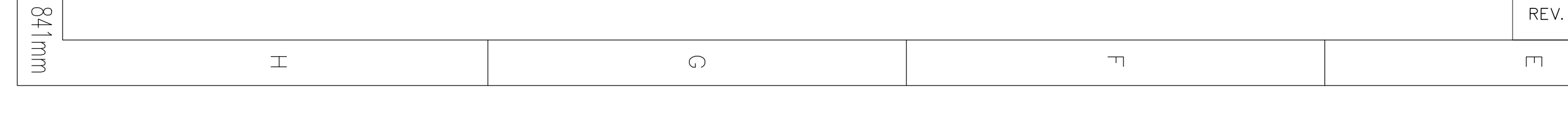
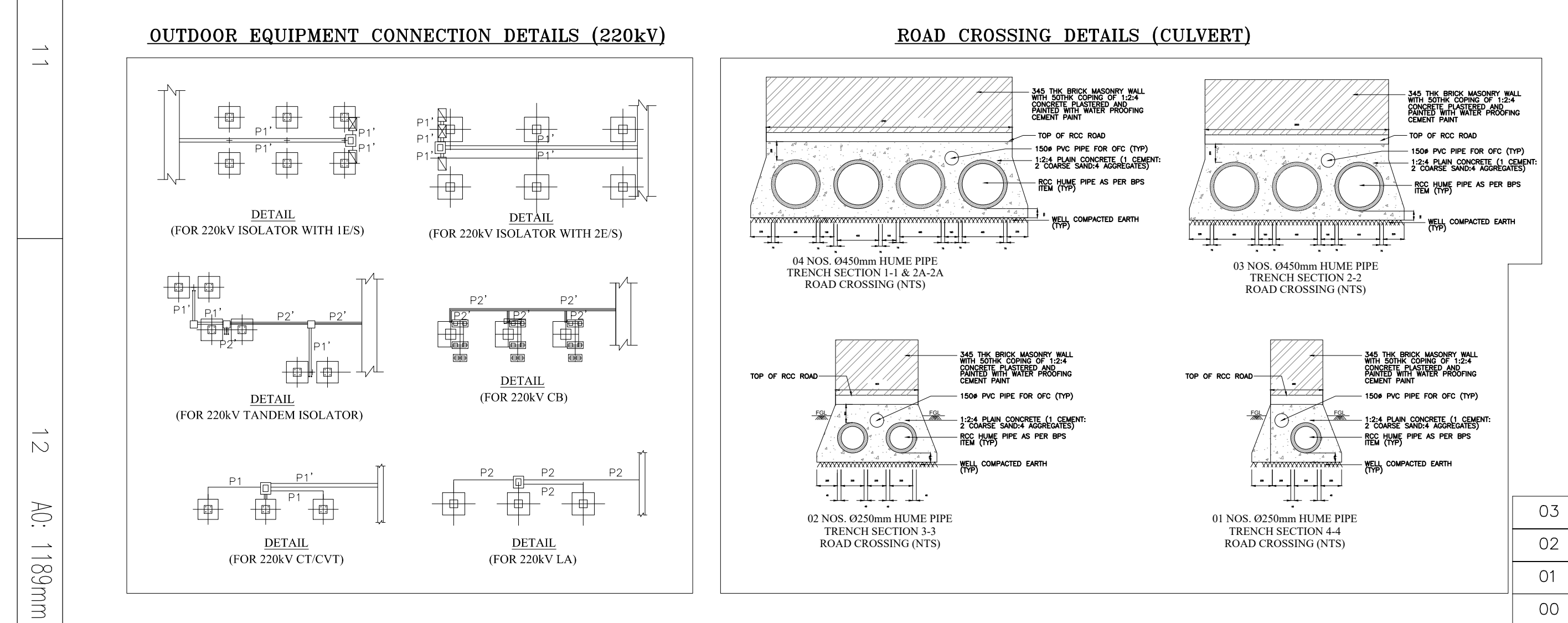
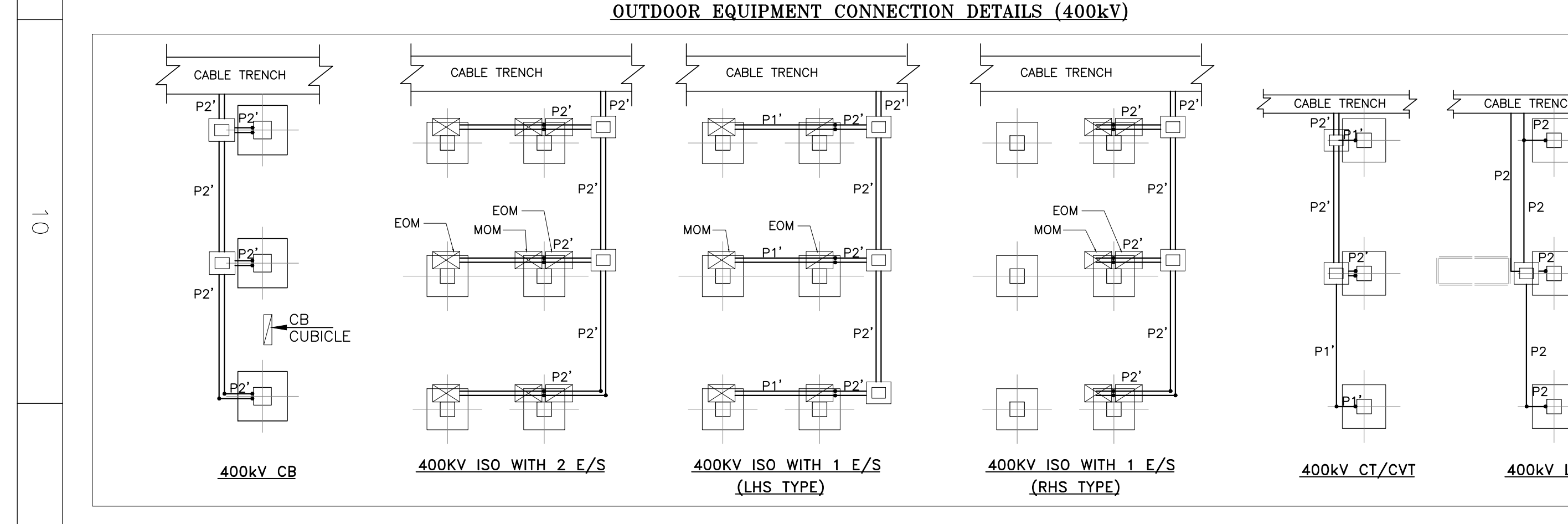
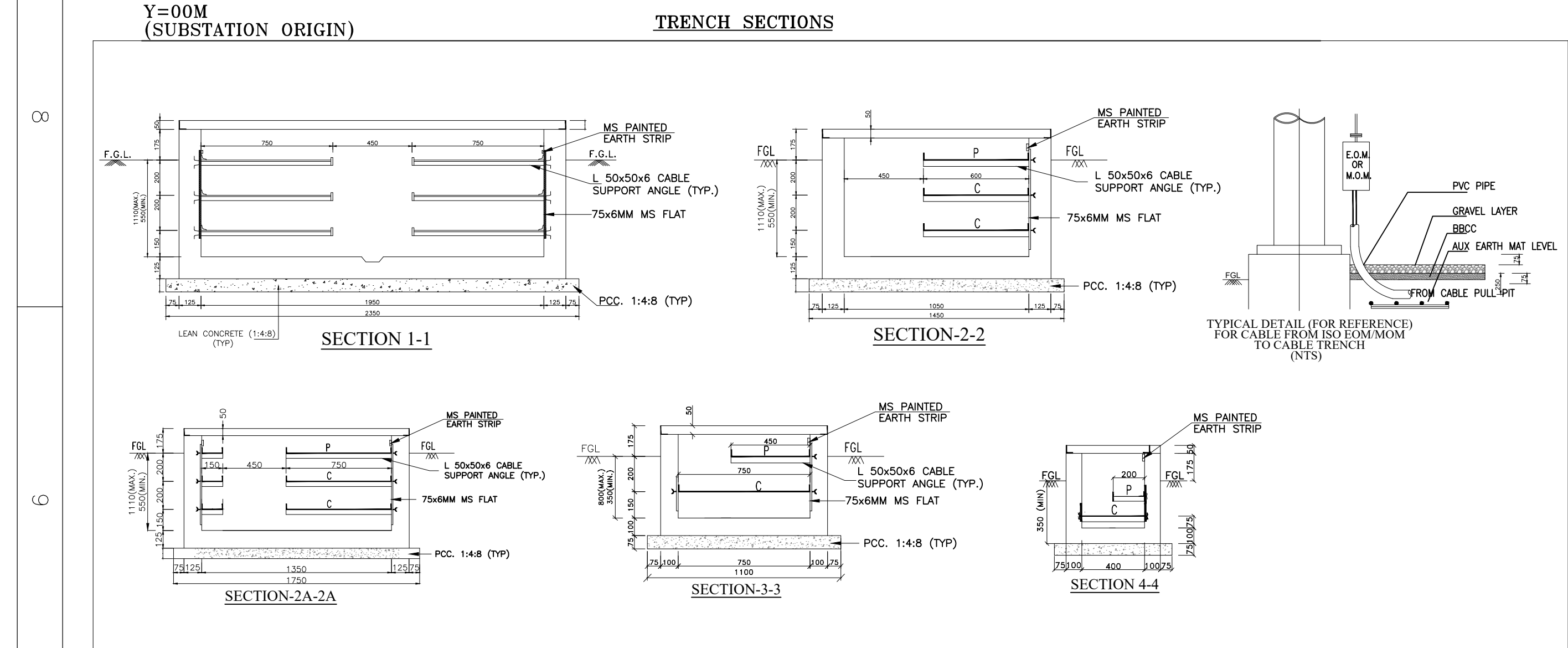
- NOTES:-**
- 1. ALL DIMENSIONS ARE IN MM & LEVELS IN METERS.
  - 2. 230MM THICK BRICK WALL IS PROVIDED WHEREVER MAN TRENCH IS TO BE EXTENDED IN THE FUTURE.
  - 3. POWER & CONTROL CABLES SHALL BE LAID IN SEPARATE TIERS IN CABLE TRENCH. POWER CABLES SHALL BE LAID IN TOP TIERS. CONTROL CABLES SHALL BE LAID IN BOTTOM TIERS INSIDE THE CABLE TRENCH.
  - 4. LIGHTING & OTHER POWER CABLES SHALL BE DIRECTLY BURIED WHEREVER THERE IS NO AVAILABLE CABLE TRENCH.
  - 5. THIS DRAWING HAS TO BE REFERRED FOR CABLE TRENCH ROUTING LAYOUT ONLY AND FOR OTHER CONSTRUCTION DETAILS RELATED TO CIVIL WORK REFER RELEVANT CIVIL DRAWINGS ISSUED DRAWINGS.
  - 6. INDOOR CABLE TRENCH LAYOUT/DETAILS SUBMITTED SEPARATELY.
  - 7. KINDLY REFER THIS LAYOUT FOR CABLE TRENCH PURPOSE ONLY. FOR ANY FOUNDATION DETAILS, REFER CIVIL FOUNDATION LAYOUT.
  - 8. 2NOS. 100MM PVC PIPE + 1 NO. 100MM GI PIPE + 1NO. 100MM PVC PIPE - 1NO. 100MM GI PIPE SHALL BE USED FOR CABLE TRENCH FROM TRENCH UPTO TRANSFORMER MB & REACTOR MB RESPECTIVELY.
  - 9. INSERT PLATE TO BE PROVIDED AT AN INTERVAL OF 750MM.
  - 10. ALL PVC PIPES SHALL BE PROVIDED WITH SLOPES TOWARDS THE CABLE TRENCHES FOR EASY DRAINAGE OF RAIN WATER.
  - 11. AFTER LAYING THE CABLES THE ENDS OF PIPES SHALL BE SUITABLY SEALED AT SITE TO PREVENT INGRESS OF WATER INSIDE THE PIPES.
  - 12. SEPARATE PIPES SHALL BE PROVIDED FOR TRENCH COVERS AT APPROPRIATE LOCATION.
  - 13. NECESSARY OPENINGS IN CABLE TRENCHES SHALL BE PROVIDED FOR PVC PIPES AT APPROPRIATE LOCATION.
  - 14. SIZE OF PIPES/CONDUITS SHALL BE SELECTED ON 40% FILL CRITERIA AND SHALL BE AS PER TYPICAL PIPE DETAILS.
  - 15. CONDUITS SHALL BE KEPT AT LEAST 300MM AWAY FROM HOT PIPES, HEAVY DEVICE ETC..
  - 16. PVC/HDP/GEI PIPES SHALL BE BURIED IN THE GROUND AT A DEPTH AT 250MM BELOW F.G.L.
  - 17. PVC PIPES USED SHALL BE OF CLASS-4 AS PER IS 4885.
  - 18. THE ROUTE SHOWN FOR CABLE TRENCH & PIPES ARE TENTATIVE & MAY BE SHIFTED TO AVOID FOULING WITH THE FOUNDATIONS.
  - 19. INSERT PLATES WILL BE PROVIDED AT AN INTERVAL OF 750MM WHEREVER CABLES ARE TO BE SUPPORTED WITHOUT THE USE OF CABLE TRAYS. WHILE AT ALL OTHER PLACES THESE WILL BE AT AN INTERVAL OF 200MM.
  - 20. A SLOPE OF 1:250 SHALL TO BE GIVEN IN THE DIRECTION PERPENDICULAR TO THE RUN OF THE TRENCH FOR ALL SECTIONS.
  - 21. INSERT LEVELS FOR MAN TRENCHES WILL BE AS PER FOUNDATION LAYOUT, HOWEVER THE SAME MUST BE CHECKED AT SITE BEFORE CONSTRUCTION.
  - 22. EARTH FLAT IN CABLE TRENCH (50MM X 6MM M.S.) WILL RUN ALONG THE TOP TIER OF EACH CABLE TRENCH SECTION. IT WILL BE WELDED AT EVERY SUPPORT. PROVISION WILL BE KEPT TO CONNECT EXTERNAL EARTH LAYOUT AT EVERY 50MM INTERVAL. THE M.S. FLAT SHALL BE PAINTED WITH TWO COATS OF RED OXIDE PRIMER AND TWO COATS OF POST OFFICE RED ENAMEL PAINT.
  - 23. ALL CABLE TRENCHES SHALL HAVE A SLOPE OF 1:1000 IN THE DIRECTION OF MAIN RUN AWAY FROM THE BUILDING.
  - 24. OUTDOOR CABLE TRENCH INTERCONNECTION BETWEEN SPR, FPPH, & CRB SUBMITTED IN INDOOR CABLE TRENCH LAYOUT.
  - 25. CABLE FROM TRENCH UPTO EQUIPMENT SHALL RUN IN PVC/HDP/GEI PIPE AS MARKED IN THE DRAWING. HOWEVER CABLES FROM FGL TO EQUIP. MB SHALL BE TAKEN PERFORMED CABLE TRAY.
  - 26. JWB/SMK/CC/EDM/MOM LOCATION SHOWN IS TENTATIVE ONLY. PIPE ROUTING SHALL BE DONE AS PER LOCATION OF BOXES/SES IN SUPERVISION OF SITE IN CHARGE.

- LEGENDS:-**
- PVC PIPE
  - CABLE PULL CHAMBER
  - ROAD CROSSING THROUGH CABLE CULVERT
  - ISOLATOR M.O.M.
  - ISOLATOR 2.0M
  - P1 : 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P2 : 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P1' : 1 X 100 DIA PVC PIPE FOR POWER AND 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P2' : 1 X 100 DIA PVC PIPE FOR POWER AND 2 X 100 DIA PVC PIPE CONTROL CABLE
  - CIRCUIT BREAKER CUBICLE
  - RAY MARSHALLING KIOSK
  - PRESENT SCOPE
  - INDICATES FUTURE SCOPE/NOT IN SCOPE OF SUPPLY

- REFERENCE DRAWING:-**
- 1. ELECTRICAL LAYOUT PLAN & SECTION  
KEC-SB210-KLM-ESE-305-DRG-001, REV-04
  - 2. INDOOR CABLE TRENCH LAYOUT FOR CONTROL ROOM BUILDING  
FOR 400/220KV KALLAM SUBSTATION  
KEC-SB210-KAL-ESE-330-DRG-101, REV-00
  - 3. 220KV SPR CABLE TRENCH LAYOUT & SECTION  
FOR 400/220KV KALLAM SUBSTATION  
KEC-SB210-KAL-ESE-330-DRG-102
  - 4. 400KV SPR CABLE TRENCH LAYOUT & SECTION  
FOR 400/220KV KALLAM SUBSTATION  
KEC-SB210-KAL-ESE-330-DRG-103
  - 5. CABLE TRENCH LAYOUT FOR FIFTH ROOM BUILDING  
FOR 400/220KV KALLAM SUBSTATION  
KEC-SB210-KAL-ESE-330-DRG-104
  - 6. FOUNDATION LAYOUT PLAN (BWP)  
KEC-SB210-KLM-ESC-600-DRG-002



INDICATIVE DRAWING FOR TENDER PURPOSE ONLY



E=591652.576  
N=2059433.931

E=591605.587  
N=2059383.387

OF DOOR

SECTION A-A  
(LT. TRAFFIC)

PIPE LAYING DETAILS  
FOR CWT JB (TYP)

DETAIL-X (TYPICAL CROSS SECTION OF CABLE TRENCH 3-3 THROUGH RETAINING WALL)

DETAIL-Y CROSS SECTION OF CABLE TRENCH 1-1 THROUGH RETAINING WALL

OWNER
EPC CONTRACT
PROJECT:
LOA NO.
TRANSMISSION SCHEME
DRG. TITLE
DRG. NO.:
SCALE: 1

FOR APPROVAL					24.03.2023
FOR APPROVAL					15.03.2023
FOR APPROVAL					22.02.2023
FOR APPROVAL					07.12.2022
DESCRIPTION	DRAWN	PREP.	CHKD.	APPD.	DATE

DESCRIPTION

OWNER		KALLAM TRANSMISSION LIMITED Regd. Office: A-52/6, G/F, All Extn, Badarpur, New Delhi - 110044, India.
EPC CONTRACTOR		KEC INTERNATIONAL LTD. 8 <sup>th</sup> FLOOR, BUILDING NO. 8A, DLF CYBER CITY, PHASE III, GURUGRAM (HARYANA) - 122002
PROJECT:	Design, Engineering, Procurement, Construction, Testing and Commissioning of 2X 500 MVA 400/220KV AIS Substation at Kallam and 400KV Multi circuit & 400KV Double Circuit Transmission Lines associated with Kallam Transmission Ltd.	
LOA NO.	KTL/22-23/LOA/001 Dated: 14th January 2022	
TRANSMISSION SCHEME	Transmission System for Evacuation of Power from RE Project in Osmanabad Area (1GW) in Maharashtra.	
DRG. TITLE	OUTDOOR CABLE TRENCH LAYOUT FOR 400/220KV KALLAM SUBSTATION	
DRG. NO.:	KEC-SB210-KAL-ESE-330-DRG-001	
SCALE: 1:675	JOB NO:	SHEET: 1 OF 1