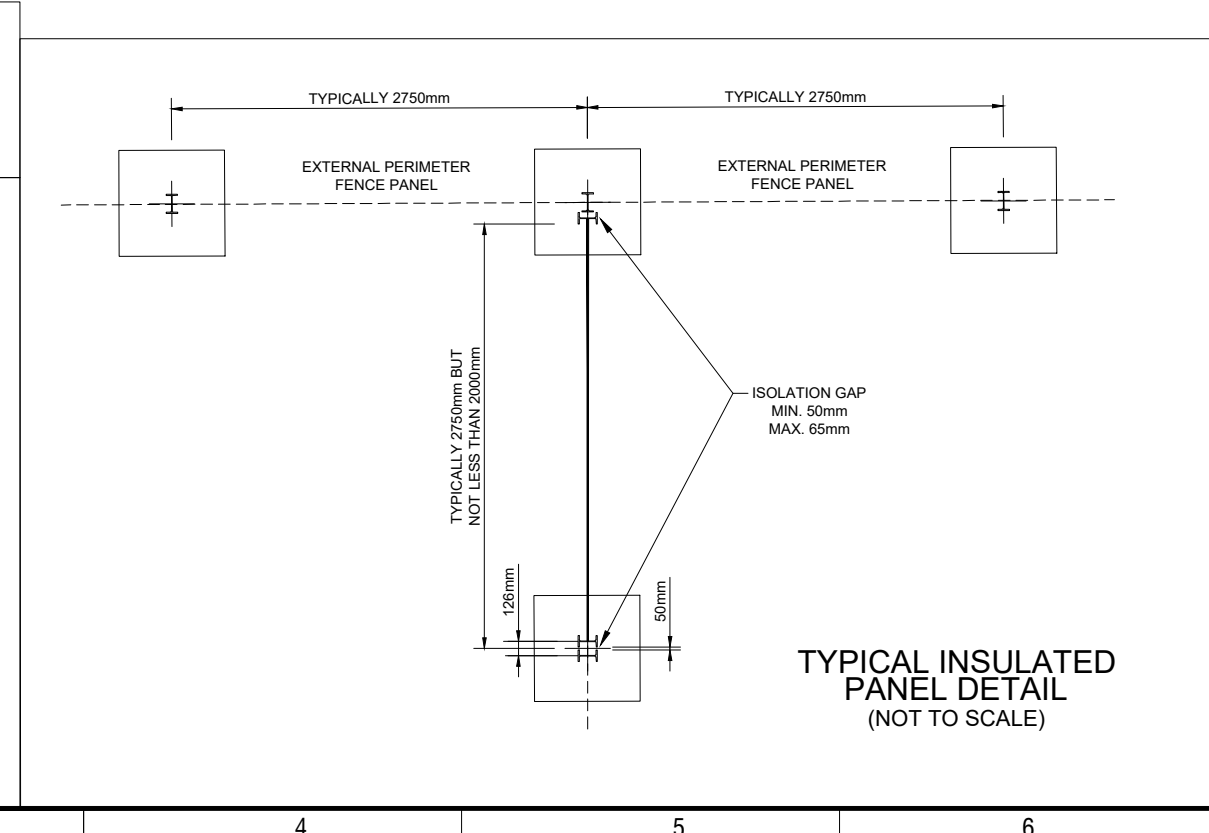


SETTING OUT COORDINATES			
POINTS	EASTING	NORTHING	NOTES
SOP01	286999.645	627424.32	PALISADE FENCE
SOP02	287096.801	627551.131	PALISADE FENCE
SOP03	287113.038	627563.609	PALISADE FENCE
SOP04	287146.534	627607.33	PALISADE FENCE
SOP05	287185.287	627612.461	PALISADE FENCE
SOP06	287363.732	627475.747	PALISADE FENCE
SOP07	287368.653	627438.58	PALISADE FENCE
SOP08	287329.954	627388.066	PALISADE FENCE
SOP09	287312.093	627401.75	PALISADE FENCE
SOP10	287307.076	627395.201	PALISADE FENCE
SOP11	287266.251	627426.479	PALISADE FENCE
SOP12	287293.527	627462.081	PALISADE FENCE
SOP13	287178.628	627550.11	PALISADE FENCE
SOP14	287164.732	627531.973	PALISADE FENCE
SOP15	287159.572	627535.925	PALISADE FENCE
SOP16	287139.806	627510.126	PALISADE FENCE
SOP17	287318.551	627373.182	PALISADE FENCE
SOP18	287253.897	627288.793	PALISADE FENCE
SOP19	287226.746	627309.595	PALISADE FENCE
SOP20	287179.11	627346.091	PALISADE FENCE
SOP21	287076.878	627424.415	PALISADE FENCE
SOP22	287048.265	627387.069	PALISADE FENCE
SOP23	287150.498	627308.744	PALISADE FENCE
SOP24	287181.853	627284.721	PALISADE FENCE
SOP25	287196.31	627273.645	PALISADE FENCE
SOP26	287217.99	627301.942	PALISADE FENCE
SOP27	287223.402	627309.007	PALISADE FENCE
SOP28	287203.533	627313.018	PALISADE FENCE
SOP29	287192.13	627321.755	PALISADE FENCE
SOP30	287190.913	627320.167	PALISADE FENCE
SOP31	287182.261	627326.796	PALISADE FENCE
SOP32	287183.477	627328.384	PALISADE FENCE
SOP33	287172.178	627337.041	PALISADE FENCE
SOP34	287011.868	627411.176	GRP HANDRAIL
SOP35	287196.873	627269.435	GRP HANDRAIL
SOP36	287221.406	627301.469	GRP HANDRAIL
SOP37	287252.649	627277.529	GRP HANDRAIL
SOP38	287318.522	627134.886	POST & WIRE FENCE
SOP39	287331.025	627156.706	POST & WIRE FENCE
SOP40	287326.238	627165.514	POST & WIRE FENCE
SOP41	287326.294	627177.056	POST & WIRE FENCE
SOP42	287323.957	627191.014	POST & WIRE FENCE
SOP43	287323.354	627196.703	POST & WIRE FENCE
SOP44	287322.095	627200.417	POST & WIRE FENCE
SOP45	287319.461	627202.947	POST & WIRE FENCE
SOP46	287258.092	627239.13	POST & WIRE FENCE
SOP47	287235.17	627255.432	POST & WIRE FENCE
SOP48	287233.83	627255.733	POST & WIRE FENCE
SOP49	287232.765	627254.867	POST & WIRE FENCE

SETTING OUT COORDINATES			
POINTS	EASTING	NORTHING	NOTES
SOP50	287228.153	627248.164	POST & WIRE FENCE
SOP51	287218.533	627239.151	POST & WIRE FENCE
SOP52	287205.313	627237.921	POST & WIRE FENCE
SOP53	286981.584	627317.392	POST & WIRE FENCE
SOP54	286967.042	627332.02	POST & WIRE FENCE
SOP55	286968.079	627352.621	POST & WIRE FENCE
SOP56	286984.995	627386.197	POST & WIRE FENCE
SOP57	286987.353	627394.654	POST & WIRE FENCE
SOP58	286985.264	627403.568	POST & WIRE FENCE
SOP59	286980.62	627417.101	POST & WIRE FENCE
SOP60	286979.119	627425.334	POST & WIRE FENCE
SOP61	286979.876	627430.643	POST & WIRE FENCE
SOP62	286999.008	627487.672	POST & WIRE FENCE
SOP63	287004.749	627498.224	POST & WIRE FENCE
SOP64	287017.381	627516.086	POST & WIRE FENCE
SOP65	287047.404	627554.718	POST & WIRE FENCE
SOP66	287062.505	627582.069	POST & WIRE FENCE
SOP67	287071.436	627593.197	POST & WIRE FENCE
SOP68	287089.493	627622.316	POST & WIRE FENCE
SOP69	287100.023	627643.394	POST & WIRE FENCE
SOP70	287113.873	627659.765	POST & WIRE FENCE
SOP71	287120.316	627664.285	POST & WIRE FENCE
SOP72	287128.454	627668.199	POST & WIRE FENCE
SOP73	287135.452	627669.196	POST & WIRE FENCE
SOP74	287188.233	627672.69	POST & WIRE FENCE
SOP75	287196.524	627669.701	POST & WIRE FENCE
SOP76	287204.307	627665.641	POST & WIRE FENCE
SOP77	287210.652	627661.389	POST & WIRE FENCE
SOP78	287215.504	627657.407	POST & WIRE FENCE
SOP79	287239.248	627633.5	POST & WIRE FENCE
SOP80	287269.622	627597.434	POST & WIRE FENCE
SOP81	287289.177	627579.051	POST & WIRE FENCE
SOP82	287314.135	627552.796	POST & WIRE FENCE
SOP83	287362.393	627492.816	POST & WIRE FENCE
SOP84	287367.896	627487.631	POST & WIRE FENCE
SOP85	287374.737	627479.301	POST & WIRE FENCE
SOP86	287377.56	627470.258	POST & WIRE FENCE
SOP87	287385.453	627437.529	POST & WIRE FENCE
SOP88	287443.134	627323.305	POST & WIRE FENCE
SOP89	287445.233	627317.471	POST & WIRE FENCE
SOP90	287446.183	627308.855	POST & WIRE FENCE
SOP91	287444.535	627293.165	POST & WIRE FENCE
SOP92	287491.199	627267.345	POST & WIRE FENCE
SOP93	287353.282	627153.741	POST & WIRE FENCE
SOP94	287351.831	627121.291	POST & WIRE FENCE
SOP95	287356.91	627119.672	POST & WIRE FENCE
SOP96	287337.572	627155.834	ENTRANCE GATE
SOP97	287343.42	627155.055	ENTRANCE GATE
SOP98	287416.646	627375.771	FIELD GATE
SOP99	287419.295	627370.499	FIELD GATE

- GENERAL NOTES**
- ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS OTHERWISE NOTED.
 - DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING.
 - INFORMATION REGARDING THE LOCATION AND DEPTH OF EXISTING SERVICES ARE BASED ON EXISTING INFORMATION AND ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CARRY OUT ADEQUATE SURVEYS OF EXISTING CABLES AND HAND DIG TRIAL PITS AS NECESSARY.
 - THE CONTRACTOR SHALL TAKE SPECIAL CARE WITH EXISTING SERVICES BOTH SURFACE AND UNDERGROUND. IN THE WORK AREA, IF IT IS NECESSARY TRIAL PITS WILL BE DUG TO VERIFY THE LOCATION OF SERVICES IN ACCORDANCE WITH SP SAFETY RULES & HSG47.
 - IF DURING EXCAVATION THE CONTRACTOR DISCOVERS ANY STRUCTURES OR SERVICES ON SITE WHICH ARE NOT SHOWN ON THE DRAWINGS, HE SHALL IMMEDIATELY INFORM THE SP ENERGY NETWORKS SITE SUPERVISOR, WHO SHALL DECIDE WHAT ACTION TO TAKE AS DEFINED IN NGTS 3.10.03 THIS IS A HOLD POINT.
 - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE BASIS OF DESIGN REPORT, EARTHWORKS SPECIFICATION AND ALL OTHER RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
 - CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN EARTHWORKS PLAN FOR THE PROPOSED WORKS AND SHOULD INCLUDE METHODOLOGY FOR STORING AND REMOVAL FROM SITE OF EXCAVATED MATERIAL.
 - STRIPPING AND STORAGE OF TOPSOIL AND SUBSOIL SHALL BE UNDERTAKEN BY THE CONTRACTOR IN ACCORDANCE WITH BS4428. STRICT PRECAUTIONS SHALL BE TAKEN TO PREVENT THE MIXING OF TOPSOIL AND SUBSOIL.
 - TOPSOIL MUST BE STORED IN HEAPS NOT EXCEEDING 1.5M IN HEIGHT AND 3.0M WIDTH. PREVENT COMPACTION AND CONTAMINATION OF STORAGE HEAPS BY FENCING AND COVERING AS APPROPRIATE.
 - ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SP ENERGY NETWORKS' ENGINEERING SPECIFICATION AND DRAWINGS.
 - ACTUAL GROUND CONDITIONS MAY VARY LOCALLY AND MAY BE DIFFERENT TO WHAT IS SHOWN ON THE SECTIONS. DURING CONSTRUCTION THE CONTRACTOR SHOULD CONSTRUCT THE SLOPES BASED ON THE MATERIAL ENCOUNTERED FOLLOWING THE METHODOLOGY OF THE DESIGN DRAWINGS.
 - TEMPORARY CONTRACTOR'S COMPOUND DRAINAGE INFRASTRUCTURE SHOWN IS INDICATIVE ONLY. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION DRAINAGE PLAN TO SP ENERGY NETWORKS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORKS.
 - WHERE CONSTRUCTION RUN OFF IS DISCHARGED TO GROUND OR WATERCOURSE THE NECESSARY PERMITS SHALL BE OBTAINED AND CARRIED OUT IN ACCORDANCE WITH SEPA BEST PRACTICE.
 - CONTRACTOR SHALL PROTECT EXISTING SERVICES AND SCOTTISHWATER ASSETS AT ALL PROPOSED CROSSING POINTS AS PART OF THEIR TEMPORARY WORKS. CROSSINGS OF EXISTING SERVICES SHALL BE KEPT TO THE MINIMUM REQUIRED.
 - CONFLICTING INFORMATION SHOWN ON THE DESIGNERS DRAWINGS OR DISCREPANCIES BETWEEN THE INFORMATION GIVEN BY THE SP ENERGY NETWORKS ENGINEER AND THAT PROVIDED BY OTHERS MUST BE REFERRED TO THE SP ENERGY NETWORKS ENGINEER BEFORE THE WORKS COMMENCE.
 - TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
 - THE PROPOSED TEMPORARY ROAD ALIGNMENT AND ASSOCIATED CONSTRUCTION DETAILS ARE PROVIDED AS A PRELIMINARY DESIGN DUE TO THE SITE CONSTRAINTS AND SERVICES IN THE AREA. THIS DESIGN SHALL BE ASSESSED AND INVESTIGATED BY THE CONTRACTOR AS PART OF THEIR TEMPORARY WORKS DESIGN AND CONSTRUCTION WORKS MANAGEMENT RESPONSIBILITIES.
 - MINIMUM EXCAVATION LEVEL TO EARTHWORKS FORMATION LEVEL TO BE 370 mm BELOW EXISTING GROUND LEVEL. (CHECKED AGAINST BRE 460 REQUIREMENTS). EXCAVATION TO THE EARTHWORKS FORMATION LEVEL TO FOLLOW EXISTING TOPOGRAPHY.
 - EXISTING SERVICES SHALL BE SPLIT DUCTED (IF NOT ALREADY IN DUCTS OR A PIPE IN PLACE) UNDER HARDSTANDING OR TRAFFICKED AREAS. THEY ALSO SHALL BE ENCASED IN (MIN. 150 MM) C32/40 CONCRETE FOR THE LENGTH UNDER THE HARDSTANDING/TRAFFICKED AREA PLUS AN ADDITIONAL 1.5M EITHER SIDE.

- HEALTH, SAFETY & ENVIRONMENTAL INFORMATION**
- IN ADDITION TO THE HAZARD/RISKS TYPICALLY ASSOCIATED WITH THE WORKS SHOWN ON THESE DRAWINGS, THE FOLLOWING HAZARDS HAVE BEEN IDENTIFIED AS REQUIRING PARTICULAR CONSIDERATION
- WORKS TO BE CARRIED OUT ADJACENT TO A HIGH VOLTAGE ENVIRONMENT. ALL WORKS TO PROCEED IN ACCORDANCE WITH HSG 47 (UNDERGROUND CABLES) & GSP (OVERHEAD LINES) & SCOTTISH POWER ELECTRICAL & MECHANICAL SAFETY RULES HANDBOOK 3rd EDITION. TREAT ALL CABLES AS LIVE UNTIL PROVEN OTHERWISE. LOCATION OF THE KNOWN EXISTING SERVICES IS SHOWN FROM EXISTING INFORMATION AND GPR SURVEY RECORDS AND IS THEREFORE INDICATIVE ONLY. CARE IS REQUIRED SINCE UNKNOWN SERVICES MAY EXIST. THE ACTUAL LOCATION OF THE SERVICES SHOULD BE CONFIRMED BY THE CONTRACTOR. PARTICULAR CARE IS REQUIRED WHILE WORKING IN THE SURROUNDING AREA TO THE EXISTING 400KV ZV ONE ROUTE.
 - PARTICULAR CARE IS REQUIRED WHEN WORKING AROUND THE 2 NO EXISTING SCOTTISH WATER PIPES RUNNING WITHIN THE FIELD PARALLEL TO B7078. CONTRACTOR TO FOLLOW AND ADHERE TO APPROPRIATE SCOTTISH WATER DMS PROCEDURES IN PLACE FOR THE SCHEME AT ALL TIMES. LOCATION OF SW ASSETS IS SHOWN BASED ON EXISTING INFORMATION AND GPR SURVEY RECORDS AND IS THEREFORE INDICATIVE ONLY. THE ACTUAL LOCATION OF THE PIPES SHOULD BE CONFIRMED BY THE CONTRACTOR AS PER SCOTTISH WATER REQUIREMENTS (i.e. USE OF SW APPROVED CONTRACTOR).
 - EXCAVATIONS SHOULD BE ADEQUATELY SUPPORTED AND PROTECTED DURING CONSTRUCTION. EXCAVATION MAY BE REQUIRED BENEATH GROUND WATER LEVEL. THE CONTRACTOR SHOULD DEVELOP APPROPRIATE MITIGATION SUCH AS SUMP AND PUMP AS WHEN REQUIRED.
 - STEEP GROUND - CARE TO BE TAKEN WHEN MOVING AND OPERATING MACHINERY. ALL VEHICLES AND MACHINERY TO BE APPROPRIATE FOR THE CONDITIONS.
 - SURFACE WATER SHOULD BE MANAGED AT THE SITE DURING THE EXCAVATION PROCESS EITHER WITH THE INSTALLATION OF THE PERMANENT OR TEMPORARY DRAINAGE SYSTEM TO HELP PREVENT SLURRING IN THE SLOPE AND TO MAXIMISE THE MATERIAL FOR REUSE.
 - CARE SHOULD BE TAKEN TO PREVENT ANY CONTAMINATION OR SILT RUN-OFF FROM ENTERING ANY ADJACENT WATERCOURSES OR DRAINAGE SYSTEMS. 10m BUFFER SHALL BE LEFT TO EXISTING WATERCOURSES AT ALL TIMES.
 - CARE SHOULD BE TAKEN WHEN WORKING ADJACENT TO EXISTING EQUIPMENT/STRUCTURES TO PREVENT ANY DE-STABILISATION OF FOUNDATIONS/STRUCTURES BY CONSTRUCTION, EXCAVATION OR EQUIPMENT MOVEMENT.
 - LOCATIONS FOR STORAGE OF EXCAVATED MATERIAL TO BE REVIEWED BY CONTRACTOR FOR SLOPE STABILITY AND AGREED WITH THE SPEN CONSTRUCTION MANAGER.






- NOTES ON PALISADE FENCE**
- PALISADE FENCE & GATES TO BE AS PER STANDARD SPEN DRAWINGS.
 - ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.
 - IP DENOTES INSULATED FENCE PANEL. MINIMUM LENGTH OF 2000mm.
 - THE UNDERGROUND CONNECTION OF THE EARTHING GRID SHALL BE CONNECTED BY MEANS OF A CADWELD-TYPE OR SIMILAR EXOTHERMIC WELD.
 - ALL MODIFIED FENCE PANELS TO BE SPECIFIED BY THE FENCING CONTRACTOR TO ENSURE MAXIMUM CLEAR SPACE BETWEEN PALES (85mm) IS NOT EXCEEDED. AFTER CONSTRUCTION THERE SHOULD BE NO GAP BETWEEN PALES AND POST GREATER THAN 76mm.
 - CFL = COMPOUND FINISHED LEVEL.
SOP = SETTING OUT POINT.
TOP = TOP OF CONCRETE.
EFL = EARTHWORKS FINISHED LEVEL.
 - WHERE NON-STANDARD PANELS ARE REQUIRED TO MEET CO-ORDINATES SHOWN, THESE ARE TO BE NOT LESS THAN 1186mm IN LENGTH. FOUNDATIONS AND POST POSITIONS TO BE DETERMINED BY THE CONTRACTOR TO SUIT THIS REQUIREMENT.
 - ALL FENCING SHALL BE APPROPRIATELY EARTHED IN ACCORDANCE WITH NGTS.
 - EXTENSION TO PID SYSTEM BY CIVILS WORKS CONTRACTOR.
 - ANY DAMAGE TO EXISTING GALVANISATION SHALL BE REPAIRED WITH 3no COATS OF GALVAFROID OR EQUAL APPROVED TO ACHIEVE 85 MICRON THICKNESS.
 - FENCE FOUNDATION DIMENSIONS FOR NNG TO BE DIMENSIONS SHOWN AS "UP TO 300mm" WITHIN SP ENERGY NETWORKS 3m HIGH LOCHRIN-BAIN FENCE DRAWINGS.
 - EXTERNAL PALISADE FENCE IS BY ENABLING WORKS CONTRACTOR. INTERNAL PALISADE FENCES ARE BY MAIN CIVIL WORKS CONTRACTOR.
- NOTES ON GRP HANDRAIL**
- HANDRAIL TO BE 1100mm HIGH GENERAL DUTY GRP MODULAR HANDRAIL WITH SINGLE MID-RAIL. MINIMUM 50mm TUBE SECTIONS AT MAXIMUM SPACING OF 1800mm c/c. GREY COLOUR.
 - GRP HANDRAIL SHALL BE LOCATED 3000mm DISTANCE FROM SUBSTATION PALISADE FENCE.
 - GRP HANDRAIL TO BE FULLY COMPLIANT WITH VS4592.

REFERENCE DRAWINGS:

FOR PROPOSED PLATFORM LAYOUT, REFER DRAWING BT3423-2-1100-DO-AECOEC-1010.
FOR CROSS-SECTIONS THROUGH PROPOSED PLATFORM, REFER DRAWING BT3423-2-1100-DO-AECOEC-1011.
FOR TYPICAL PLATFORM CONSTRUCTION DETAILS, REFER DRAWING BT3423-2-1100-DO-AECOEC-1015.
FOR TYPICAL FENCING & GATE DETAILS, REFER DRAWING BT3423-2-1100-DO-AECOEC-1016.

KEY:

- 3m-HIGH GALVANISED PALISADE FENCE (BY ENABLING WORKS CONTRACTOR)
- 3m-HIGH GALVANISED PALISADE FENCE (BY MAIN CIVIL WORKS CONTRACTOR)
- SOP01 FENCE SETTING OUT POINT
- IP INSULATION PANEL
- GRP HANDRAIL
- POST & WIRE FENCE

DC	13.03.25	EP	JM	RQ	TENDER DESIGN REISSUE
OD	07.03.25	EP	JM	RQ	TENDER DESIGN REISSUE
OB	28.02.25	EP	JM	RQ	TENDER DESIGN REISSUE
DA	12.02.25	DT	EP	RQ	TENDER DESIGN ISSUE
Rev.	Date	Drawn	Reviewed	Approved	Reason / Description of changes
<div></div>					
Project: REDSHAW 400/132KV SUBSTATION ENABLING WORKS					
Location: REDSHAW					
Title: PROPOSED FENCING LAYOUT					
Status Stamp: 					
Drawn: DT, Rev'd: EP, App'd: RQ					
Dwg. No.: BT3423-2-1100-DO-AECOEC-1018					
SPEN Ref. No.: ###					
Sheet: 0C					
Next: 1:1000					
Size: A1					

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