HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS TYPICALLY ASSOCIATED WITH THE WORKS SHOWN ON THESE DRAWINGS - THE FOLLOWING HAZARDS HAVE BEEN IDENTIFIED AS REQUIRING PARTICULAR CONSIDERATION

1. WORKS TO BE CARRIED OUT ADJACENT TO A HIGH VOLTAGE ENVIRONMENT. ALL WORKS TO PROCEED IN ACCORDANCE WITH 'HSG 47' (UNDERGROUND CABLES) & 'GS6' (OVERHEAD LINES) & SCOTTISH POWER ELECTRICAL & MECHANICAL SAFETY RULES HANDBOOK 5th 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 OHL ROUTE.
2. 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 DOMS 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).
3. 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.
4. STEEP GROUND - CARE TO BE TAKEN WHEN MOVING AND OPERATING MACHINERY. ALL VEHICLES AND MACHINERY TO BE APPROPRIATE FOR THE CONDITIONS.
5. 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 SLIPPAGE IN THE SLOPE AND TO MAXIMISE THE MATERIAL FOR REUSE.
6. CARE SHOULD BE TAKEN TO PREVENT ANY CONTAMINATION OR SILT RUN-OFF FROM ENTERING ANY ADJACENT WATERCOURSES OR DRAINAGE SYSTEMS. 10-m BUFFER SHALL BE LEFT TO EXISTING WATERCOURSES AT ALL TIMES.
7. 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
8. LOCATIONS FOR STORAGE OF EXCAVATED MATERIAL TO BE REVIEWED BY CONTRACTOR FOR SLOPE STABILITY AND AGREED WITH THE SPEN CONSTRUCTION MANAGER.

PLATFORM EXTENTS SETTING OUT COORDINATES

POINTS	EASTING	NORTHING	CFL*	NOTES
01	286995.439	627423.763	301.16m	
02	287094.659	627553.269	301.97m	
03	287110.896	627565.748	302.07m	
04	287144.907	627610.142	302.35m	
05	287186.123	627615.6	302.50m	
06	287366.542	627477.375	302.50m	
07	287371.79	627437.742	302.36m	
08	287254.334	627284.43	301.39m	
09	287225.36	627306.628	301.39m	
10	287196.869	627269.441	301.16m	

*CFL = COMPOUND FINISHED LEVEL

	VOLUMES
SOFT STRIP	19,603m3
GRANULAR CUT	191,207m3
ROCK CUT	139,964m3
FILL REQUIRED	233,722m3

NOTE:
VOLUMES STATED ARE FOR PLATFORM EARTHWORKS ONLY. REFER TO SPECIFIC DRAWINGS FOR ACCESS ROAD AND TEMPORARY COMPOUND EARTHWORKS.

NOTE THAT VOLUMES SHOWN ARE NET, AND NO BULKING FACTOR HAS BEEN APPLIED.

REFER TO INDICATIVE CUT & FILL DEPTHS DRAWING (BT3423-2-1100-DO-AECOEC-1040) AND EARTHWORKS CUT & FILL ANALYSIS DOCUMENT BT3423-2-1100-RN-AECOEC-0003) FOR FURTHER DETAILS.

NOTES:
1. ALL DIMENSIONS AND LEVELS ARE IN METRES UNLESS OTHERWISE NOTED.
2. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING.
3. 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.
4. 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.
5. 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.
6. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE BASIS OF DESIGN REPORT, EARTHWORKS SPECIFICATION AND ALL OTHER RELEVANT DOCUMENTATION, DRAWINGS AND STANDARD DETAILS.
7. 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.
8. 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.
9. 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.
10. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SP ENERGY NETWORKS' ENGINEERING SPECIFICATION AND DRAWINGS.
11. THE CONTRACTOR SHALL AVOID MULTIPLE HANDLING OF EXCAVATED MATERIALS WHERE POSSIBLE.
12. LEVEL INFORMATION FOR GROUND CONDITIONS ARE EXTRAPOLATED BETWEEN LIMITED AVAILABLE EXPLORATORY HOLES TO COVER THE SITE AREA. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. TEMPORARY WORKS DESIGN ASSOCIATED WITH THE CONSTRUCTION OF THE WORKS SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
18. THE PROPOSED TEMPORARY ROAD ALIGNMENT AND ASSOCIATED CONSTRUCTION DETAILS ARE PROVIDED AS A PRELIMINARY DESIGN. THIS DESIGN SHALL BE ASSESSED AND INVESTIGATED BY THE CONTRACTOR AS PART OF THEIR TEMPORARY WORKS DESIGN AND CONSTRUCTION WORKS MANAGEMENT RESPONSIBILITIES.
19. 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.
20. 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.
21. FOR PLATFORM BEARING TEST LOCATIONS PLEASE REFER TO DRAWING BT3423-2-1100-DO-AECOEC-1017 & AECOM EARTHWORKS SPECIFICATION.

REFERENCE DRAWINGS:

FOR SITE CLEARANCE, REFER DRAWING BT3423-2-1100-DO-AECOEC-1003.
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 PLATFORM BEARING TEST LOCATION PLAN, REFER DRAWING BT3423-2-1100-DO-AECOEC-1017.
FOR SUBSTATION ACCESS ROAD, REFER DRAWING BT3423-2-1100-DO-AECOEC-1020.
FOR PROTECTION OF SCOTTISH WATER PIPES, REFER DRAWING BT3423-2-1100-DO-AECOEC-1030.
FOR INDICATIVE CUT & FILL DEPTHS, REFER DRAWING BT3423-2-1100-DO-AECOEC-1040.
FOR PROPOSED DRAINAGE LAYOUT, REFER DRAWING BT3423-2-1100-DO-AECOEC-1050.
FOR TEMPORARY CONTRACTORS COMPOUND, REFER DRAWING BT3423-2-1100-DO-AECOEC-1060.

NOTES:

SUBSTATION ELECTRICAL LAYOUT BASED ON SPEN DRAWNG BT3423-2-00JA-DA-SPTEK-1111 Rev.0M, December 2024.
TOPOGRAPHIC SURVEY CARRIED OUT BY L&M SURVEYS, January 2024.

KEY:

CUT SLOPE (GRADIENT VARIES)
FILL SLOPE (GENERALLY 1:2 GRADIENT)
PLANNING BOUNDARY (20.645 Ha)

0 25 50 m
1:1000

Rev.	Date	Drawn	Reviewed	Approved	Reason / Description of changes.
0G	28.02.24	JM	EP	RQ	TENDER DESIGN REISSUE
0F	21.02.24	JM	EP	RQ	TENDER DESIGN REISSUE
0E	30.12.24	JM	EP	RQ	TENDER DESIGN ISSUE
0D	07.11.24	JM	EP	RQ	OUTLINE DESIGN ISSUE
0C	25.10.24	JM	EP	RQ	OUTLINE DESIGN ISSUE
0B	03.10.24	EP	JM	RQ	OUTLINE DESIGN ISSUE
0A	18.09.24	EP	JM	RQ	OUTLINE DESIGN ISSUE

SP ENERGY NETWORKS

AECOM

Status: FOR INFORMATION
NOEMI LOPEZ SOLANO
2025.03.10 09:51:16 +01'00'

Project: REDSHAW 400/132kV SUBSTATION ENABLING WORKS

Location: REDSHAW

Drg. Title: PROPOSED PLATFORM LAYOUT

Drawn	Rev'd	App'd
EP	JM	RQ

Drg. No.: BT3423-2-1100-DO-AECOEC-1010
SPEN Ref. No. : ####
Sheet: Next:
Rev: 0G
Scale: 1:1000
Size: A1