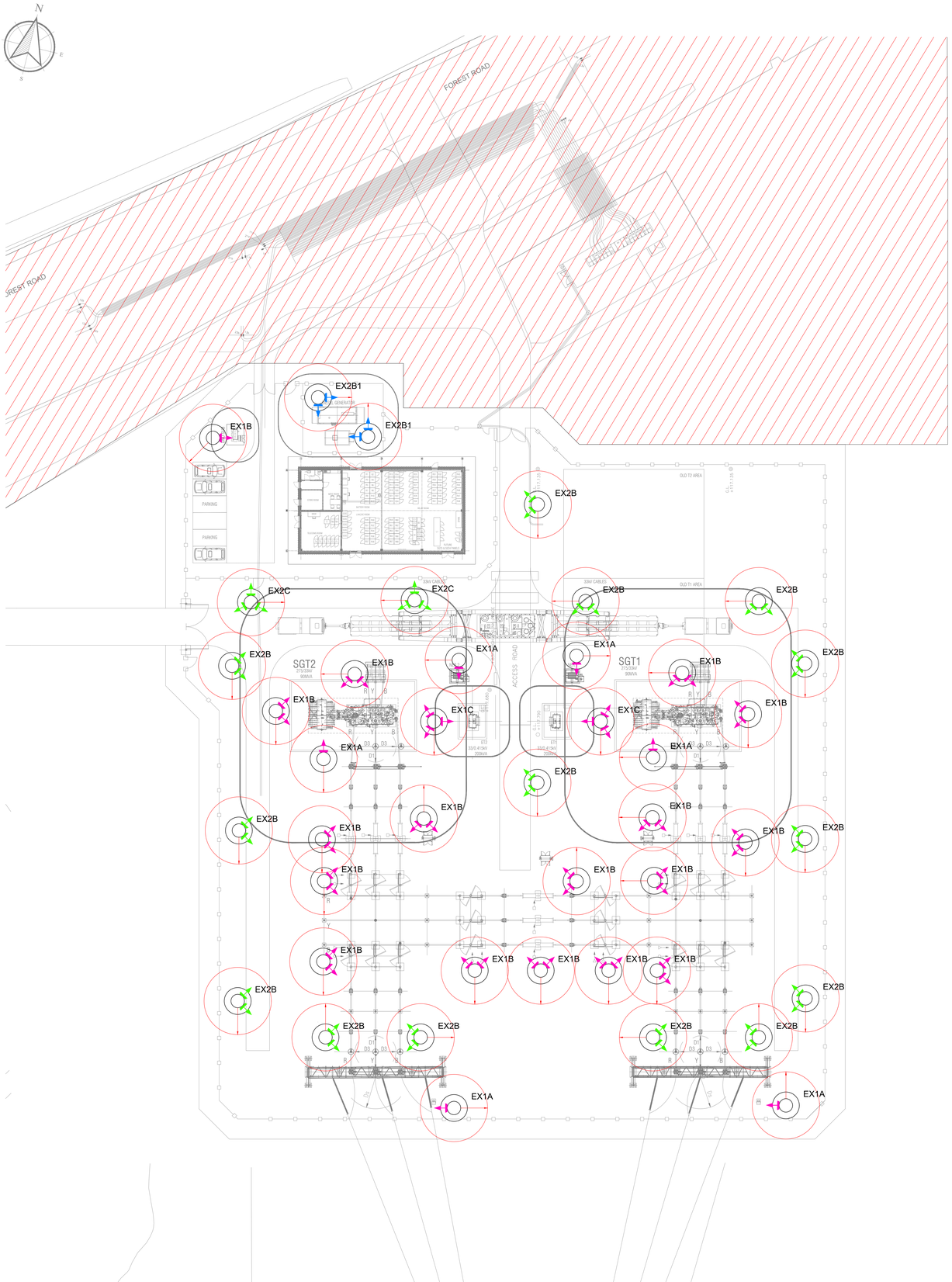


PLAN VIEW

Scale: 1 : 500

1:250 0 12.5m 25m

1 METER RADIUS | 2 METER RADIUS | 5 METER RADIUS | PROPOSED TILT DIRECTION OF COLUMN

EX1A - SINGLE HEAD COLUMN MOUNTED
LUMINAIRE AS PER THORN AREA FLOOD PRO 2
90W (15107LM) 4000K LED - 96635879 (25° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EX1B - TWIN HEAD COLUMN MOUNTED
LUMINAIRE AS PER THORN AREA FLOOD PRO 2
90W (15107LM) 4000K LED - 96635879 (25° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EX1C - TRIPLE HEAD COLUMN MOUNTED
LUMINAIRE AS PER THORN AREA FLOOD PRO 2
90W (15107LM) 4000K LED - 96635879 (25° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EX2A - SINGLE HEAD COLUMN MOUNTED
LUMINAIRE AS PER THORN AREA FLOOD PRO 2
63W (10981LM) 4000K LED - 96635908 (45° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EX2B - TWIN HEAD COLUMN MOUNTED
LUMINAIRES AS PER THORN AREA FLOOD PRO 2
63W (10981LM) 4000K LED - 96635908 (45° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EX2C - TRIPLE HEAD COLUMN MOUNTED
LUMINAIRES AS PER THORN AREA FLOOD PRO 2
63W (10981LM) 4000K LED - 96635908 (45° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

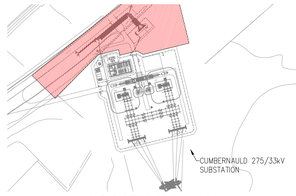
EX2B1 - TWIN HEAD COLUMN MOUNTED
LUMINAIRES AS PER THORN AREA FLOOD PRO 2
63W (10981LM) 4000K LED - 96635908 (25° TILT)
4M HEAVY DUTY MID HINGED FLANGE MOUNTED COLUMN

EXISTING AREA TO REMAIN AS IS.

EXISTING LIGHTING COLUMN TO REMAIN AS IS.

EXISTING LIGHTING COLUMN PROPOSED LOCATIONS.

110mm OUTER DIAMETER EXTERNAL LIGHTING DUCT.

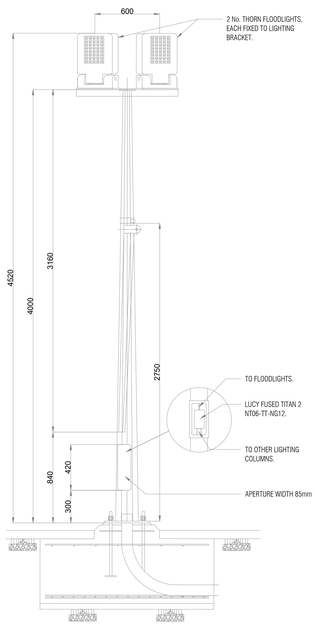


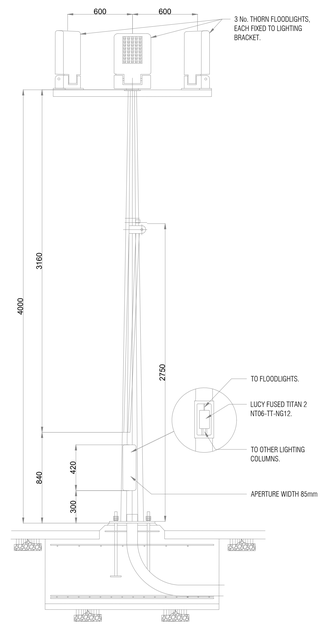
LOCATION PLAN

(SCALE 1:2500)

NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION ALL OTHER DRAWINGS AND DOCUMENTS RELATING TO THIS PROJECT.
2. DO NOT SCALE FROM THIS DRAWING.
3. THE COMPLETE ELECTRICAL SERVICES INSTALLATION SHALL COMPLY AND BE CARRIED OUT IN ACCORDANCE WITH BRITISH STANDARDS INCLUDING BUT NOT LIMITED TO:
   - BS 7671:2018+A3:2024 (REQUIREMENTS FOR ELECTRICAL INSTALLATIONS 18TH EDITION) AND ALL RELEVANT GUIDANCE NOTES.
   - BS5266 PT 1 2025 CODE OF PRACTICE FOR THE EMERGENCY LIGHTING OF PREMISES.
   - BS EN 1838: 2024 LIGHTING APPLICATIONS EMERGENCY LIGHTING.
   - BS7430 2011 +A1:2015 CODE OF PRACTICE FOR PROTECTIVE EARTHING OF ELECTRICAL INSTALLATIONS.
   - SP ENERGY NETWORKS: SUB-03-034 - GENERAL SPECIFICATION FOR THE CIVIL ENGINEERING AND BUILDING DESIGN AND CONSTRUCTION OF 275kV & 400kV SUBSTATION.
4. EXTERNAL COLUMN LUMINAIRES TO BE WIRED USING XLPE/SWALSOH CABLING AND 2C SWA LSOH LIGHTING CONTROL CABLE DRAWN THROUGH DUCTS.
5. THE EXTERNAL LIGHTING DESIGN WILL COMPLY WITH ILP GUIDANCE NOTE 01/21 AND THE SCOTTISH GOVERNMENT GUIDANCE NOTE ON CONTROLLING LIGHT POLLUTION AND REDUCING LIGHTING ENERGY CONSUMPTION AND LTP GUIDANCE NOTE 08/18 BATS AND ARTIFICIAL LIGHTING IN THE UK.
6. THE EXTERNAL LIGHTING WILL COMPLY WITH SP ENERGY NETWORKS SUB-03-034 WITH THE FOLLOWING LIGHTING LEVELS:
   - FOR SAFE ACCESS AND EMERGENCY EGRESS FOR PERSONNEL MAINTAINED AVERAGE OF 6.0LUX, MINIMUM OF 2.5LUX.
7. THE EXTERNAL LIGHTING INSTALLATION WILL COMPLY FULLY WITH BS7671: 2018 + AMD 3 18TH EDITION OF THE IET REQUIREMENTS FOR ELECTRICAL INSTALLATION.
8. THE ELECTRICAL CONTRACTOR WILL SUPPLY AND INSTALL ALL IDENTIFICATION AND NOTICE LABELS INLINE WITH THE REQUIREMENTS OF THE BS7671:2018 AMD 3. ALL EQUIPMENT WILL BE LABELLED USING REVERSE ENGRAVED TRAFFOLYTE LABELS.
9. CABLES TO BE LABELED AT BOTH ENDS, CHANGES IN DIRECTION AND AT EACH SIDE OF WALL PENETRATIONS USING CRITCHLEY MARKERS.
10. ALL EXTERNAL LUMINAIRES TO BE IP65 RATED AND BE FOLD DOWN WITH HINGE LOCATED AT THE MID-POINT OF THE COLUMN. INSTALLER TO ENSURE THAT THE COLUMN CAN FOLD DOWN UNHINDERED TO LEVEL.
11. THE PROPOSED LIGHTING COLUMNS SHALL BE COMPLETE WITH A CROSSARM, BOLT DOWN BASE AND LOCKABLE BASE COMPARTMENT. THE FLOODLIGHT COLUMNS AND CROSSARMS SHALL BE GALVANISED TO BS EN 1461 AND SHALL COMPLY WITH BS 5649.
12. ALL EXTERNAL COLUMN MOUNTED LUMINAIRES SHALL BE SUPPLIED VIA UNDERSLUNG DUCTING.
13. CABLING AT COLUMNS WILL BE TERMINATED IN SUITABLY RATED FUSED CUTOUTS LOCATED BEHIND CABLE ACCESS PANEL.
14. REFER TO CIVIL & STRUCTURAL DRAWING FOR DETAILS OF DUCTS AND FOUNDATION DETAIL FOR COLUMNS.
15. COLUMNS WILL BE SUPPLIED IN ACCORDANCE WITH EN40 STANDARD AND AS DESIGNATED IN PD 6547 TABLE A.1
16. THE LIGHTING COLUMNS SHALL BE INSTALLED 2m CLEAR OF FENCES TO AVOID BECOMING A "CLIMBING AID" AND TO MAINTAIN SEPARATION FROM THE FENCE EARTHING SYSTEM. ALL EXPOSED METALWORK OF THE FLOODLIGHTING COLUMNS AND THE ASSOCIATED CROSSARMS SHALL BE BONDED TO THE SUBSTATION EARTH IN ACCORDANCE WITH EART-03-002.
17. THE LIGHTING COLUMNS SHALL BE ERECTED IN SUCH A WAY THAT THEY DO NOT INFRINGE SAFETY DISTANCE OF THE LIVE APPARATUS. TOPPLE ZONES ARE SHOWN FOR THE COLUMNS.





FLOODLIGHT COLUMN GENERAL ARRANGMENT

Scale: 1 : 20

DRAWING TO BE PRINTED IN COLOUR

Rev.	Date	Drawn	Reviewed	Approved	Reason / Description of changes.
P01	06.03.2026	RH/DW	SM	SH	ISSUED FOR REVIEW

SP Energy Networks | MORGAN SINDALL INFRASTRUCTURE | Baker Hicks

Location: CUMBERNAULD

Project: DWNO - DENNY TO WISHAW NETWORK OPTIMISATION

Drg. Title: STAGE 1B 400/132/33kV ELECTRICAL SUBSTATION LAYOUT EXTERNAL LIGHTING LAYOUT

Drg. No.: 22119-BHK-CUMB-SUB-D-E-000701

Rev: P01

Status Code	Description	SPEN Ref. No. :	Scale:	Sheet:	Next:	Size:
S3	REVIEW & COMMENTS	-----	AS SHOWN	-	-	A0

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