

0 100  
This drawing may have been reduced original scale: 1:100mm

Reference Drawings Legend Notes

- SHESO NOTES**
- WARNING: AS SITE WORKS PROGRESS, ADDITIONAL SERVICES MAY BE IDENTIFIED THAT ARE NOT SHOWN ON THESE DRAWINGS. HSC47 SHALL BE TAKEN AS GUIDANCE FOR AVOIDING DANGER FROM UNDERGROUND SERVICES.
  - THE CONTRACTOR SHALL PRODUCE CLEAR METHOD STATEMENTS AND RISK ASSESSMENTS WHICH ARE TO INCLUDE MEASURES FOR CONTROLLING THE IMPRESSED VOLTAGE CONDITIONS AND FOLLOW THESE AT ALL STAGES OF CONSTRUCTION.

- GENERAL NOTES**
- ALL WORKS TO BE CARRIED OUT BY COMPETENT PERSONNEL.
  - BOAT OF GARTEN SUBSTATION RATING 132kV 3050A 31.5kA 3s.
  - THE INFORMATION PROVIDED IS TO BE TAKEN AS A GENERAL GUIDE AND THE ACCURACY CANNOT BE GUARANTEED. THE ACTUAL POSITION OF SERVICES MUST BE VERIFIED AND ESTABLISHED ON SITE BEFORE ANY MECHANICAL EXCAVATION TAKES PLACE.
  - ALL SURVEY INFORMATION IS REFERENCED TO ORDNANCE SURVEY NATIONAL GRID OSGB36.
  - TRENCH CROSS-SECTIONS ARE TAKEN IN THE DIRECTION SHOWN BY THE ARROW ON THE SECTION MARKERS.
  - CABLE TO BE PULLED IN THE SAME DIRECTION AS THE INSTALLATION OF THE PUSH-FIT DUCTS.

- MATERIAL SPECIFICATION**
- INSTALLATION OF 132kV CABLE SYSTEM TO BE IN ACCORDANCE WITH SP-PS-LT-2300 REV 01 AND NGS 3.05.07 ISSUE 10.
  - INSTALLATION OF 33kV CABLE SYSTEM TO BE IN ACCORDANCE WITH TG-NET-CAB-001 REV 01 AND NGS 3.05.07 ISSUE 10.
  - 150mm/160mm PVC DUCTS TO BE PUSH FIT TYPE WITH COATED SPIGOT ENDS AND TO BE INSTALLED IN ACCORDANCE WITH SP-PS-LT-2300 REV 01 AND ENA TS 12-14.
  - 82mm/88.9mm PVC DUCTS TO BE PUSH FIT TYPE AND INSTALLED IN ACCORDANCE WITH ENA TS 12-24.
  - SELECTED SAND TO BE IN ACCORDANCE WITH SP-PS-LT-2300 REV 01 AND NGS 3.05.07 ISSUE 10.
  - CONCRETE SPECIFICATION MINIMUM STRENGTH GRADE C20/25. NO REINFORCEMENT TO BE USED.
  - POLYMERIC CABLE COVERS TO BE A MINIMUM OF 14mm THICK AND TO BE INSTALLED IN ACCORDANCE WITH SP-PS-LT-2300 REV 01, SP-NET-CAB-441 REV 01 AND NGS 3.05.07 ISSUE 10. CABLE COVERS TO BE OVERLAPPED TO ENSURE CABLES HAVE A MINIMUM COVERING OF 50mm ON EACH SIDE.
  - CABLE WARNING TAPE TO BE A MINIMUM OF 25mm THICK AND TO BE INSTALLED IN ACCORDANCE WITH SP-PS-LT-2300 REV 01, SP-NET-CAB-441 REV 01 AND NGS 3.05.07 ISSUE 10.
  - 8mm OD OTS MICRO DUCT TO BE INSTALLED IN ACCORDANCE WITH SP-NET-CAB-502 AND NGS 3.05.07 ISSUE 6.
  - 100mm/110mm FIBRE OPTIC DUCT TO BE RIGID PVC MANUFACTURED TO BS EN 61386-24 AND TO BE COLOURED GREEN. 100mm/110mm DUCT TO HAVE 4mm HIPS SUB DUCTS WITH 30mm ID AND 35mm OD. FIBRE OPTIC DUCTS TO BE INSTALLED IN ACCORDANCE WITH W-PS-733 REV 05.
  - GEOTEXTILE WRAP TO BE INSTALLED TO ENSURE SELECTED SAND BACKFILL AND DUCTS HAVE COMPLETE ENCLOSURE. GEOTEXTILE WRAP TO BE OVERLAPPED BY 1000mm AT EACH SECTION.
  - CABLE MARKER POSTS ARE TO BE INSTALLED AT EACH CHANGE IN DIRECTION OF THE CABLES, AT EACH FLEED OR LAND BOUNDARY, EITHER SIDE OF ROAD CROSSINGS, AT EACH WATER COURSE CROSSING AND EVERY 250m ON STRAIGHT SECTIONS.

**REFERENCE INFORMATION**

30001463-DE-0001, 30001463-DE-0002, 30001463-DE-0003, 30001463-DE-0004  
 30001463-DE-0005, 30001463-DE-0006, 30001463-DE-0007, 30001463-DE-0008,  
 30001463-DE-0009, 30001463-DE-0010, 30001463-DE-0011, 30001463-DE-0012, 30001463-DE-0013 &  
 30001463-DE-0014.

Revision	Description	Drawn	Checked	Approved	Date
02	FOR ACCEPTANCE (UPDATED)	KV	TK	AH	29/10/2018
01	FOR ACCEPTANCE	KV	TK	AP	23/10/2018
P1	FIRST ISSUE	KV	TK	AP	09/08/2018



SSEN Drawing Number: 0020\_CAB 132kV\_OF\_DWG\_1110\_1001\_01



**Project** BOAT OF GARTEN - NETHY BRIDGE  
132kV UNDERGROUND CABLES

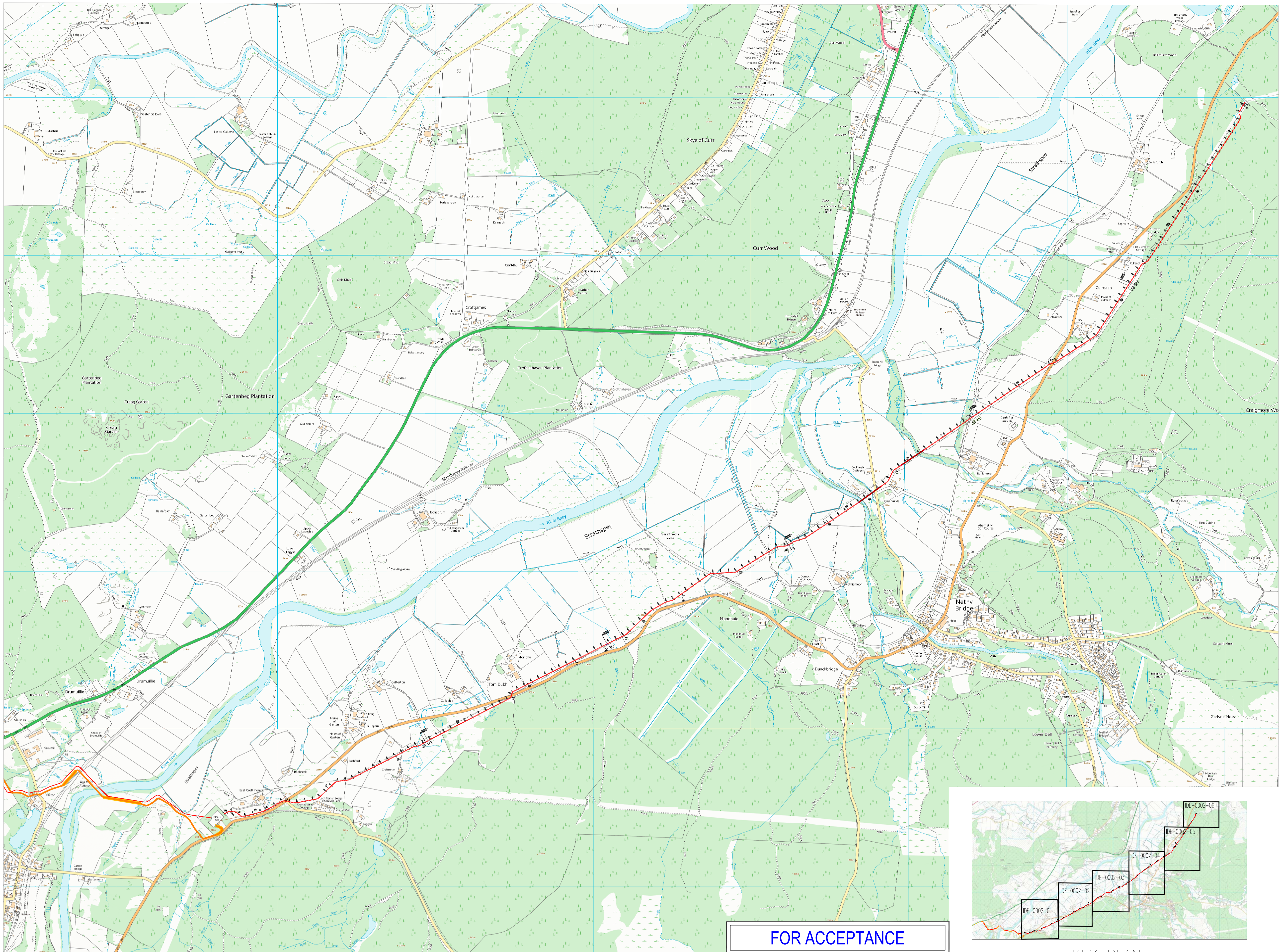
**Title** CABLE ROUTE OVERALL LAYOUT

Scale: 1:1000  
 (when plotted @ A1)

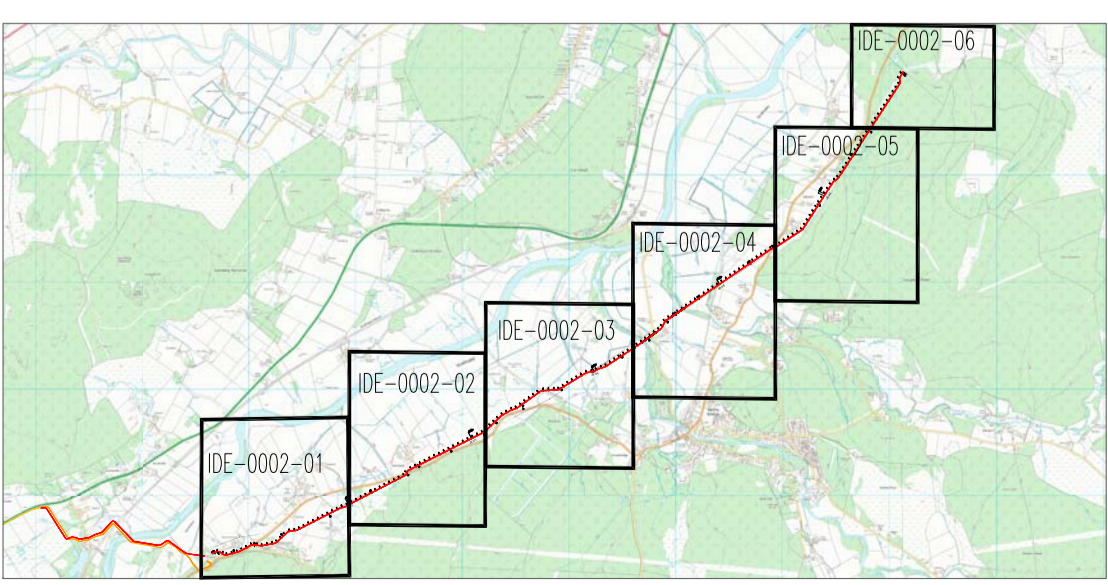
Drawn	Checked	Approved
KV	TK	AH
Date 02/05/2018	Date 02/05/2018	Date 09/08/2018



Project number	Drawing number	Revision
30001463	IDE-0001	02



**FOR ACCEPTANCE**



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