

# OAKLANDS FARM SOLAR PARK

Applicant: Oaklands Farm Solar Ltd

**Environmental Statement** 

Chapter 4 - Figures 4.11 – 4.15c

January 2024

Document Ref: EN010122/APP/6.1/Fig 4.11 - 4.15c

Revision: -

Planning Act 2008

Infrastructure Planning (Application: Prescribed Forms and

Procedure) Regulations 2009 - 5(2)(a)

Figure 4.11: Indicative Access Track Cross-section

Figure 4.12: Location of watercourse crossings

Figure 4.13: Indicative watercourse crossing reinforcement

Figure 4.14: Indicative Underground Cabling Installation

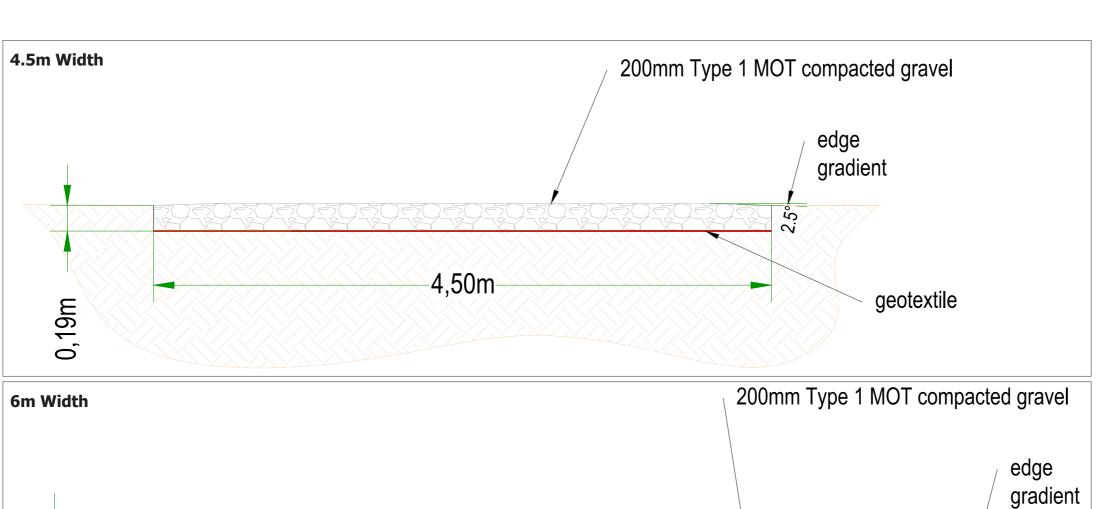
Figure 4.15a and b: 132 kV Cable Trench Sections

Figure 4.15c: 132kV Joint Bay Details



Oaklands Farm Solar Park - Environmental Statement Volume 2 Chapter 4: Project Description Figures 4.11 to 4.15

Final report
Prepared by LUC
November 2024

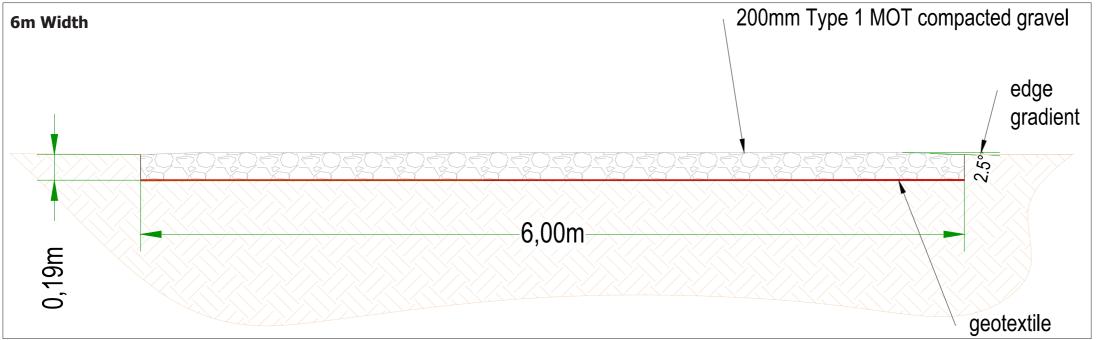


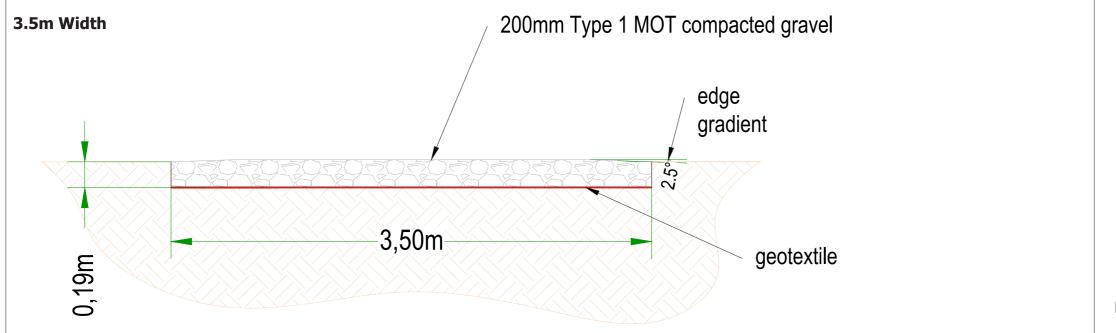


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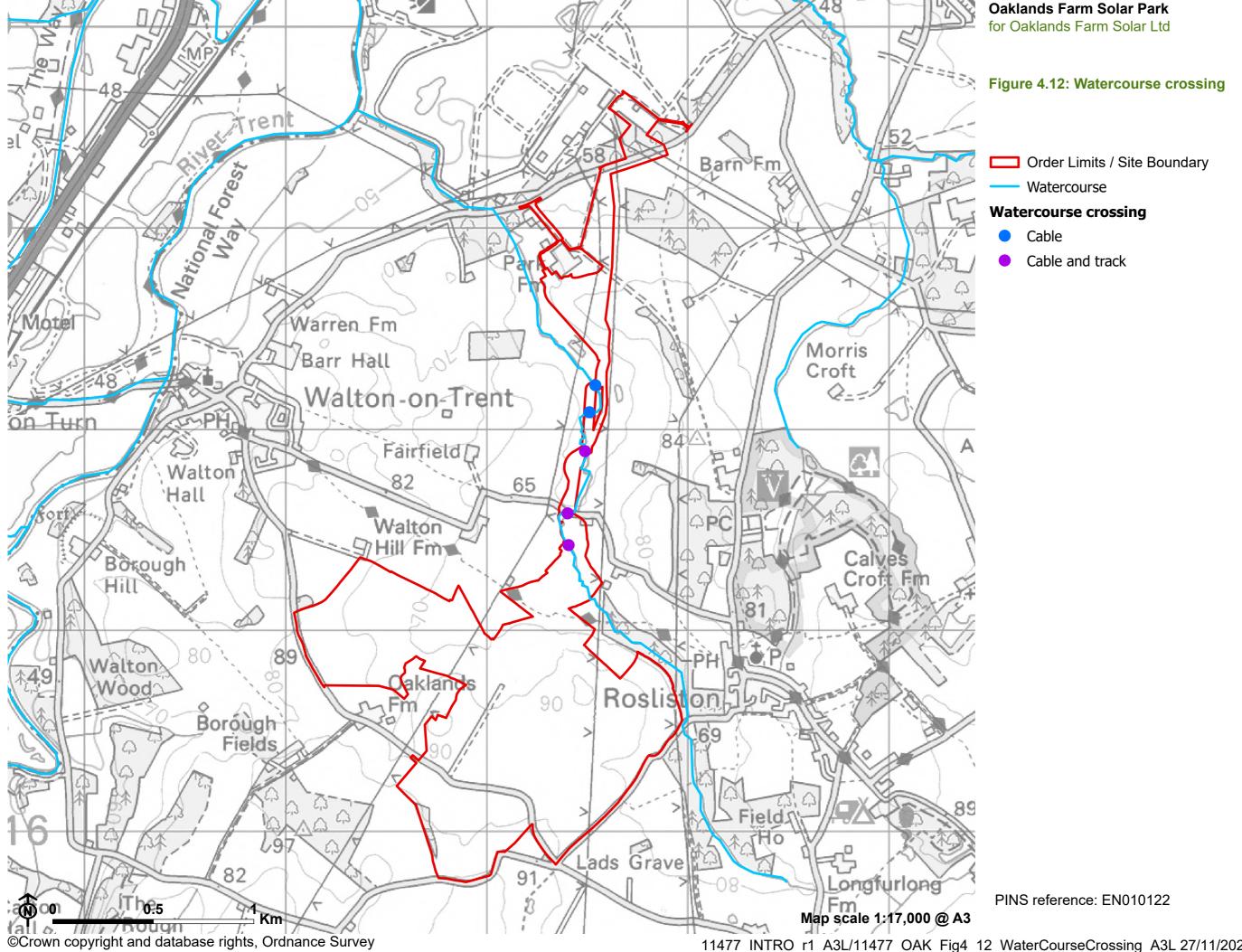


**Figure 4.11: Indicative Access Track** Cross Sections (4.5m/6m/3.5m)









licence number 100019265, (27/11/2023)

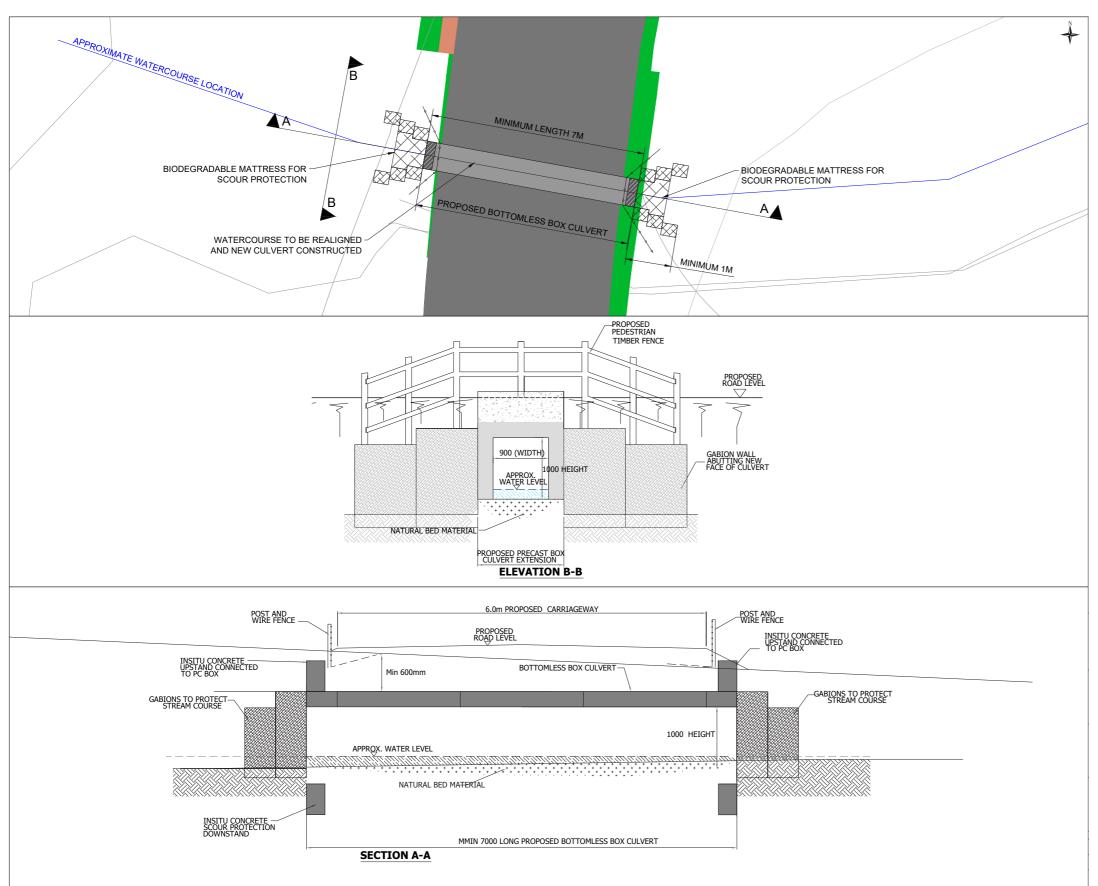
11477\_INTRO\_r1\_A3L/11477\_OAK\_Fig4\_12\_WaterCourseCrossing\_A3L 27/11/2023EB:davies\_h

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## Figure 4.13: Indicative Watercourse Crossing Reinforcement

#### NOTE:

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION FOR HIGHWAY WORKS AND THE TURBINE MANUFACTURERS STANDARDS AND ALL RELEVANT DRAWINGS WITHIN THE PROJECT DESIGN PACKAGE.
- ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
- 3. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
- DO NOT SCALE FROM ANY DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSIONS ARE TO BE REFERRED TO THE DESIGNER BEFORE WORK IS PUT TO HAND.
- 5. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTO
- 6. ALL WORKS BY THE CONTRACTOR MUST BE CARRIED OUT IS SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
- THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT OF REGULATIONS.

  THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT REGULATIONS.

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Figure 4.14: Indicative Underground Cabling Installation



## G.L BACKFILL MATERIAL 900-1000 mm FIBRE OPTIC MARKER TAPE 450 mm WIDE CABLE MARKER PROTECTIVE TILE 75 M N N SELECT SAND MATERIAL SEE NOTE 1 - 1200 mm² AI HV CABLES IN TREFOIL DUCTS 188 mm ID / 200 mm OD EMTELLE CLASS 1 DUCTS 75 M N N 90 mm ID / 96.5 mm FIBRE OPTIC PREDUCT 850 NOMINAL

132 kV 1200 mm² IN TREFOIL

DUCTS

TRENCH SECTION DETAIL

OPTION A

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Figure 4.15a: 132 kV Cable Trench Sections (Option A)

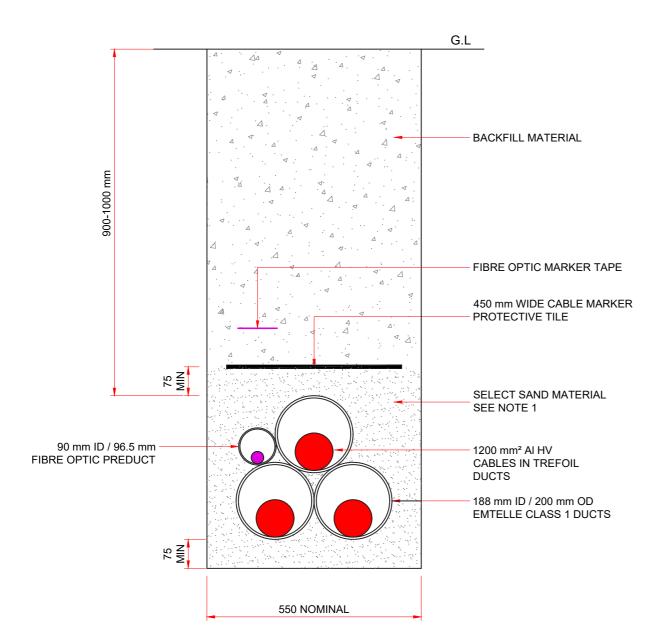
#### NOTES

CABLE SURROUND MATERIAL
 SPECIFIED TO ENA TS 97-1
 REQUIREMENTS

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132 kV 1200 mm² IN TREFOIL

DUCTS

TRENCH SECTION DETAIL

OPTION B

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Figure 4.15b: 132 kV Cable Trench Sections (Option B)

#### NOTES

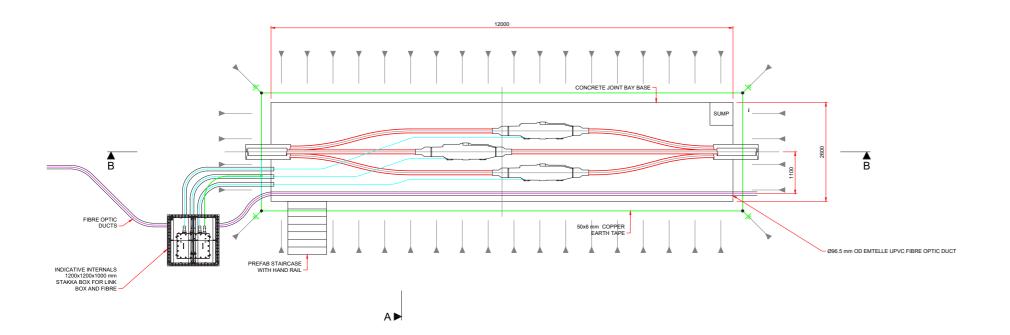
1. CABLE SURROUND MATERIAL SPECIFIED TO ENA TS 97-1 REQUIREMENTS

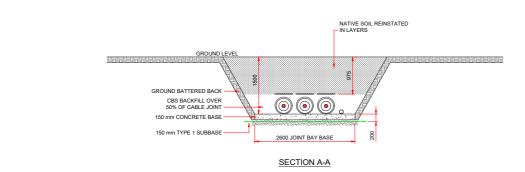
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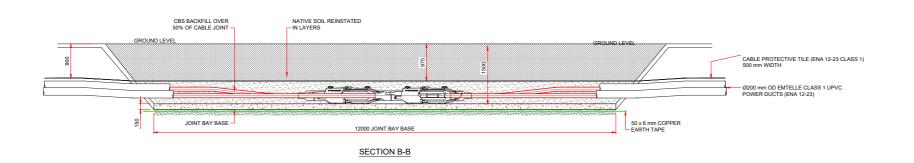












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### Figure 4.15c: 132kV Joint Bay Details

- 1. JOINT BAY EARTH RESISTANCE TO ACHIEVE BELOW
  10 Ω, TBC BY CABLE MANUFACTURER
  2. REFER TO CABLE MANUFACTURER CABLE DESIGN
  REPORT FOR BACKFILL THERMAL CONDUCTIVITY
- REPORT FOR BACKFILL THERMAL CONDUCTIVITY
  REQUIREMENTS FOR SEPARATION, DEPTH AND
  THERMAL CONDUCTIVITY OF BACKFILL.

  3. 300 mm BARE CU CONDUCTORS TO BE INSTALLED AND
  CONNECTED TO EACH CORNER OF THE JOINT BAY TO A
  LENGTH OF 15 m

  4. CONDUCTORS TO BE CAD WELD TO THE CORNERS OF THE
  EXISTING 50X6 mm EARTH MAT.

  5. CONDUCTOR TO BE INSTALLED TO A DEPTH OF 600 mm

  6. DIMENSIONS ARE INDICATIVE AND CAN BE ALTERED AS PER
  SPECIFIC REQUIREMENTS.

- SPECIFIC REQUIREMENTS.

#### LEGEND:

50x6 mm COPPER EARTH TAPE

300 mm² CONCENTRIC BONDING LEADS IN 150 mm ID FLEXIBLE DUCTING

FIBRE OPTIC CABLE

EARTH ROD LOCATION

### Prepared by:



