12. Fire Risk Statement

12.1. Kent Fire Rescue Service (KFRS) provided a consultation response (Ref: CAS-065072) on 22 February 2024 and a meeting was held on 11th April 2024 to discuss their concerns. The applicant has provided a Fire Risk Statement (FRS) (Appendix 9) which indicates how Chimmens Solar Farm has been designed to address fire risk in several ways. The FRS contains key mitigation measures against the risk of fire ignition and propagation within the battery energy storage units which are designed as part of a hybrid solar and battery storage project.

12.2. Note that the design of Chimmens Solar Farm is significantly different to a that of a typical AC connected Battery Energy Storage System (BESS), whereby all Battery Storage Enclosures (BSEs) are located in one dedicated compound. Chimmens Solar Farm adopts DC connected batteries located adjacent to the solar inverters as part of a hybrid solution, resulting in dispersed BSE locations across the site. The hybrid battery storage design therefore reduces the overall risk of fire spread between BSEs compared with an AC BESS site of a similar energy storage capacity.

12.3. Battery technology and associated understanding of fire risk is continually evolving within the industry. As such, this document sets out key principles and mitigation measures based on the current understanding of battery fire risk but does not include a detailed Fire Risk Management Plan. A detailed Fire Risk Management Plan would be developed during detailed design, following battery selection.

Appendix 9

Fire Risk Statement

Chimmens Solar Farm

Ref	05009-7510884

Revision History

Issue	Date	Name	Latest changes
01	09/04/2024	Daniel Cole	First Created
02	30/04/2024	Joseph McAlpine	Updated to include further information on the fire vehicle swept path analysis and water supplies onsite following a discussion with Kent Fire Service.

Contents

1 Introduction

Renewable Energy Systems Ltd (RES) is developing a 49.9MW solar farm development called Chimmens Solar Farm located in near Horton Kirby and Fawkham in Dartford, Kent.

This document forms the Chimmens Solar Farm fire risk statement. The document indicates how the project has been developed to address fire risk in several ways. It contains key mitigation measures against the risk of fire ignition and propagation within the battery energy storage units which are designed as part of a hybrid solar and battery storage project.

Note that the design of Chimmens Solar Farm is significantly different to a that of a typical AC connected Battery Energy Storage System (BESS), whereby all Battery Storage Enclosures (BSEs) are located in one dedicated compound. Chimmens Solar Farm adopts DC connected batteries located adjacent to the solar inverters as part of a hybrid solution, resulting in dispersed BSE locations across the site. The hybrid battery storage design therefore reduces the overall risk of fire spread between BSEs compared with an AC BESS site of a similar energy storage capacity.

Battery technology and associated understanding of fire risk is continually evolving within the industry. As such, this document sets out key principles and mitigation measures based on the current understanding of battery fire risk but does not include a detailed Fire Risk Management Plan. A detailed Fire Risk Management Plan would be developed during detailed design, following battery selection.

2 Project Description

2.1 General project information

The site infrastructure layout for Chimmens Solar Farm is included in Appendix A which identifies 14 no. inverter locations, each of which comprises a battery storage system, an inverter, a transformer, DC to DC converters, electrical infrastructure, foundations, access track, and crane hardstanding. A typical layout for the inverter locations is included in Appendix B. The grid connection will be via an onsite 132kV substation, located to the southeast of the site as shown in Appendix A.

2.2 Battery selection

The proposed battery technology for the development is anticipated to be lithium iron phosphate (LFP). LFP has better stability against thermal runaway at higher temperatures compared to some other battery chemistries. This is supported by the UL 9540A test results of RES' preferred battery system which show that, at a unit level following deliberate initiation of thermal runaway:

- No flaming outside the initiating battery rack was observed.
- Surface temperatures of modules within the target battery rack adjacent to the initiating battery rack do not exceed the temperature at which thermally initiated cell venting occurs.
- Wall surface temperature rise does not exceed 97°C above ambient.
- Explosion hazards were not observed during the test.

Data from UL9540A testing can also be used to inform detailed design of the site and safety systems.

Each battery storage system is considered to comprise two end-to-end Battery Storage Enclosures (BSEs). Each BSE has approximately capacity of 1.8MW / 3.7MWh and footprint of approximately 6.1 x 2.4m. The exact battery form factor will be determined during detail design phase.

3 Design Mitigation Measures

The following points define all the preliminary design decisions that have been carried out to minimise the risk against fire ignition and propagation within the site.

3.1 Fire response strategy

It is the intention that the site would be self-sufficient during potential a battery-based fire event and would not require fire service intervention to prevent fire spread or any other significant risks to people or property. The risk of fire spread between battery storage systems is considered low due to the separation of systems associated with each inverter and the dispersed nature of inverters across the site.

During detailed design, following battery product selection and in liaison with the Fire Service, a project specific Fire Risk Management Plan will be developed, including:

- A fire risk appraisal that identifies and designs any further mitigations required to achieve the strategy above.
- An emergency response plan.

3.2 Fire spread

The site layout aligns with applicable NFPA 855 spacing criteria as well as the spacing recommendations outlined in FM Global Property Loss Prevention Datasheet 5-33 (Interim revision July 2023) in order to mitigate the risk of fire spread between battery systems in the event a fire. The layout allows minimum distance of 8m between battery storage systems of adjacent inverters and a minimum of 3m between battery storage systems and any other infrastructure. A typical layout for the inverter and storage locations is included in Appendix B.

The site has been developed to include inverter locations at appropriate areas of the farm and positioned to benefit from existing field boundaries and existing vegetation (trees and hedgerows) to minimise potential visual impacts.

The ground surface over a minimum 3m distance surrounding each BSE will be covered in stone to mitigate the risk of ground level fire spread. Long grasses within the site will be minimised though suitable species selection and maintenance. A Landscape Ecology Management Plan will be produced that details the maintenance measures for species rich grassland including management through low intensity grazing by sheep.

3.3 Protection systems

Each BSE will have a dedicated fire protection system, comprising flammable gas detection and venting, fire detection and alarm, and an automatic fire suppression system. Additionally, key battery health and environment parameters will be continuously monitored with alarms sent to a control centre. Automatic electrical disconnection will be enacted by the battery management system should operational temperature, current or voltage limits be breached. There will be multiple levels of alarms that warn the operator of proximity to safe operating limits. BSEs will be designed to include adequate deflagration venting.

3.4 Access to Battery Storage Enclosure

All BSEs will be accessed via external doors only, i.e. no internal corridor to eliminate the risk of people being caught inside an enclosure during a fire or thermal runaway gas venting incident.

3.5 Location of Battery Storage Enclosures

The inverter locations are selected based on distances from the solar table arrays whilst achieving maximum possible distances with nearby residential properties and utilising existing vegetation (hedgerows and trees) where possible to minimise environmental impacts. The design has achieved:

- At least 250m between inverter locations and nearby residential properties.
- In line with NFPA 855 (2023), there are no existing or planned bushes or trees within 10m of any BSEs.

3.6 Access for emergency services

The access strategy for Chimmens Solar Farm is identified in the Construction Traffic Management Plan.

- Construction stage access to the solar farm (and hybrid battery storage) is proposed via Gabriel Spring Road East via a new temporary simple priority junction to the north of the carriageway, approximately 600m west of Three Gates Road. A temporary road will route across the field to the north before joining existing tracks and proceeding west towards the site.
- Operation stage access the solar farm (and hybrid battery storage) is proposed via Mussenden Lane via an existing site access.
- A secondary access via Mussenden Lane for emergency vehicles only will ensure that emergency vehicles have an alternative option for accessing the site if the prevailing wind direction causes smoke from the fire to impede use of the site's primary access.
- A Flood Risk Assessment and Drainage Impact Assessment has been completed and the entire site is located within Flood Zone 1. Fluvial flood risk to the site is considered to be Low and therefore access for emergency services to safely reach the development during design flood conditions has been considered and achieved.
- All access pinch points (at gates), for both construction and operation phases, will be a minimum of 4m wide.
- Chimmens Solar Farm will provide new access tracks throughout the solar farm to all inverter locations with BSEs, allowing emergency vehicles to access the site if required. All new internal access tracks will be approximately 4.5m wide.

Access through the site has been assessed for a fire vehicle, as demonstrated in 05009-RES-LAY-DR-PT-006]. Turning heads have been included to prevent the anticipated need for a fire vehicle to need to reverse more than 20m when turning around on site.

3.7 Water supply

As detailed in Section 3.1, fire service intervention is not intended to be required for a battery-based fire. Anticipated attendance from firefighters would primarily be only to monitor the fire from a distance.

Nonetheless, liaison with Kent Fire Service has highlighted the need to allow for an onsite water supply in case unexpected fire service intervention is required. The intention of this supply is to facilitate firefighting until backup water provisions are in place. Unless agreed otherwise in the development of the Fire Risk Management Plan, the onsite water supply would provide 1,900 litres per minute for at least 2 hours in line with the NFCC Guidance. This would be achieved through provision of 6no. tanks with a minimum volume of 40,000l each, distributed throughout the site at the locations identified in 05009-RES-LAY-DR-PT-005.

To aid provision of back-up water supplies, it is noted that a fire hydrant is located at the junction of Mussenden Lane and Speed Gate Hill approximately 350m from site (Grid Reference: E:557983, N:165859). The hydrant location relative to the development is shown in Figure 3-1 below.

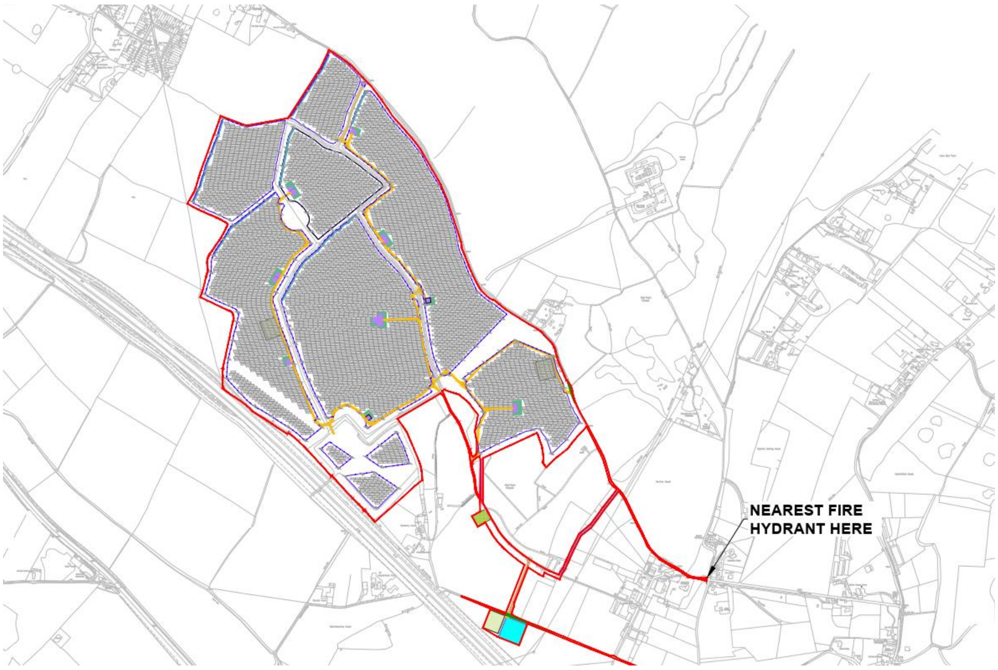


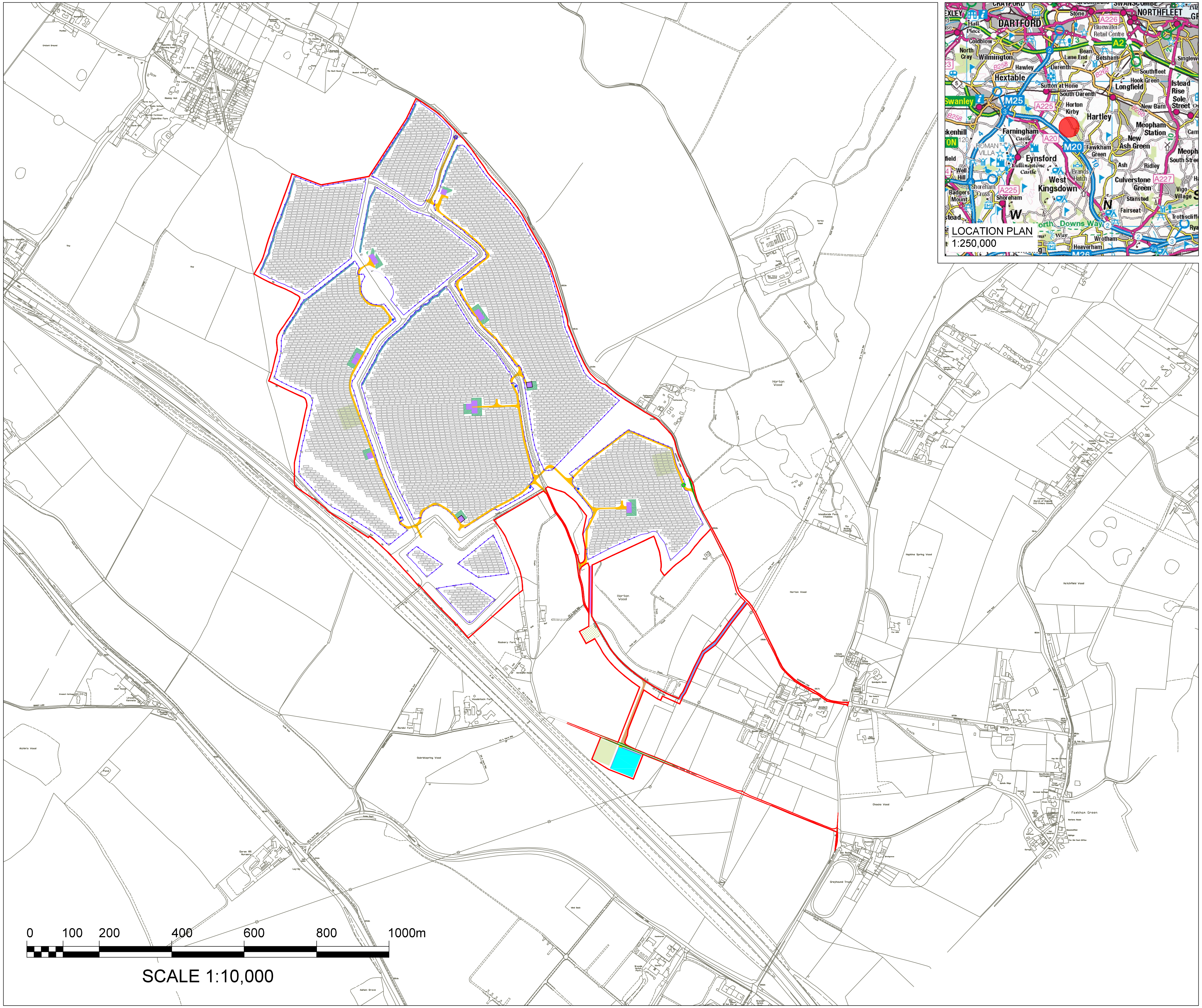
Figure 3-1 - location of nearest fire hydrant to development site

4 Conclusion

During the preliminary design, efforts have been made to mitigate, minimise, and prevent any fire hazard on site by incorporating specific design factors as described in this document. During detailed design and following battery product selection, a project specific fire risk appraisal will be used to verify the strategy presented in this document and an emergency response plan will be developed through liaison with Kent Fire & Rescue Service.

Appendix A Site Infrastructure Layout

05009-RES-LAY-DR-PT-003	Infrastructure Layout	Rev 06
05009-RES-LAY-DR-PT-004	Infrastructure Layout Enlargements	Rev 06



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- OPTIONAL CABLE ROUTE
- TEMPORARY HARDSTAND FOR HDD
- SITE ENTRANCE - VISIBILITY SPLAY
- FIREFIGHTING WATER STORAGE LOCATION
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3	FG	DC	PM	2023-11-17	'Excluded from site boundary' removed

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:10,000 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

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FIGURE 4 INFRASTRUCTURE LAYOUT

RES DRAWING NUMBER	REV
05009-RES-LAY-DR-PT-003	6

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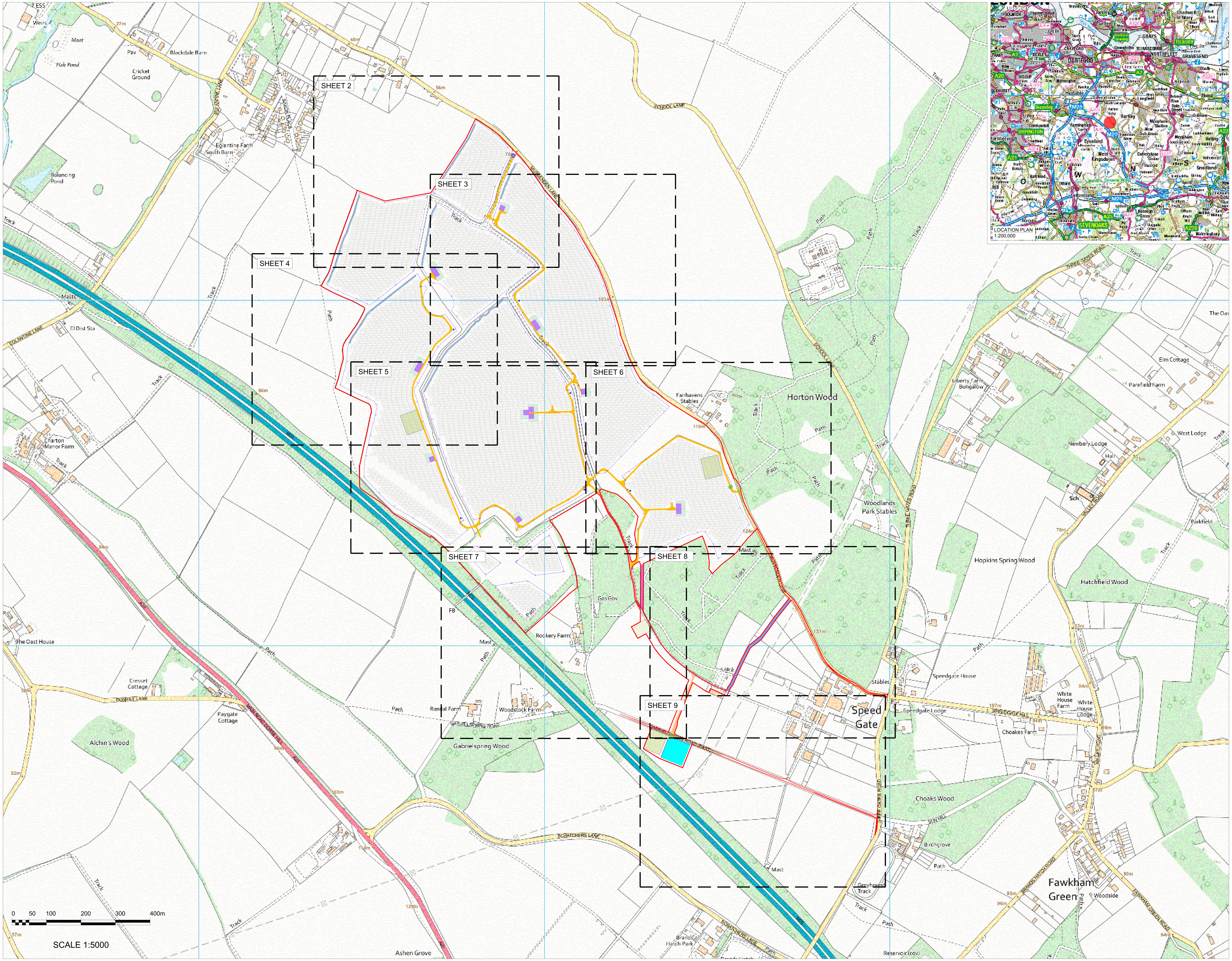

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FIGURE 5 INFRASTRUCTURE LAYOUT ENLARGEMENTS

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SHEET 2 OF 9

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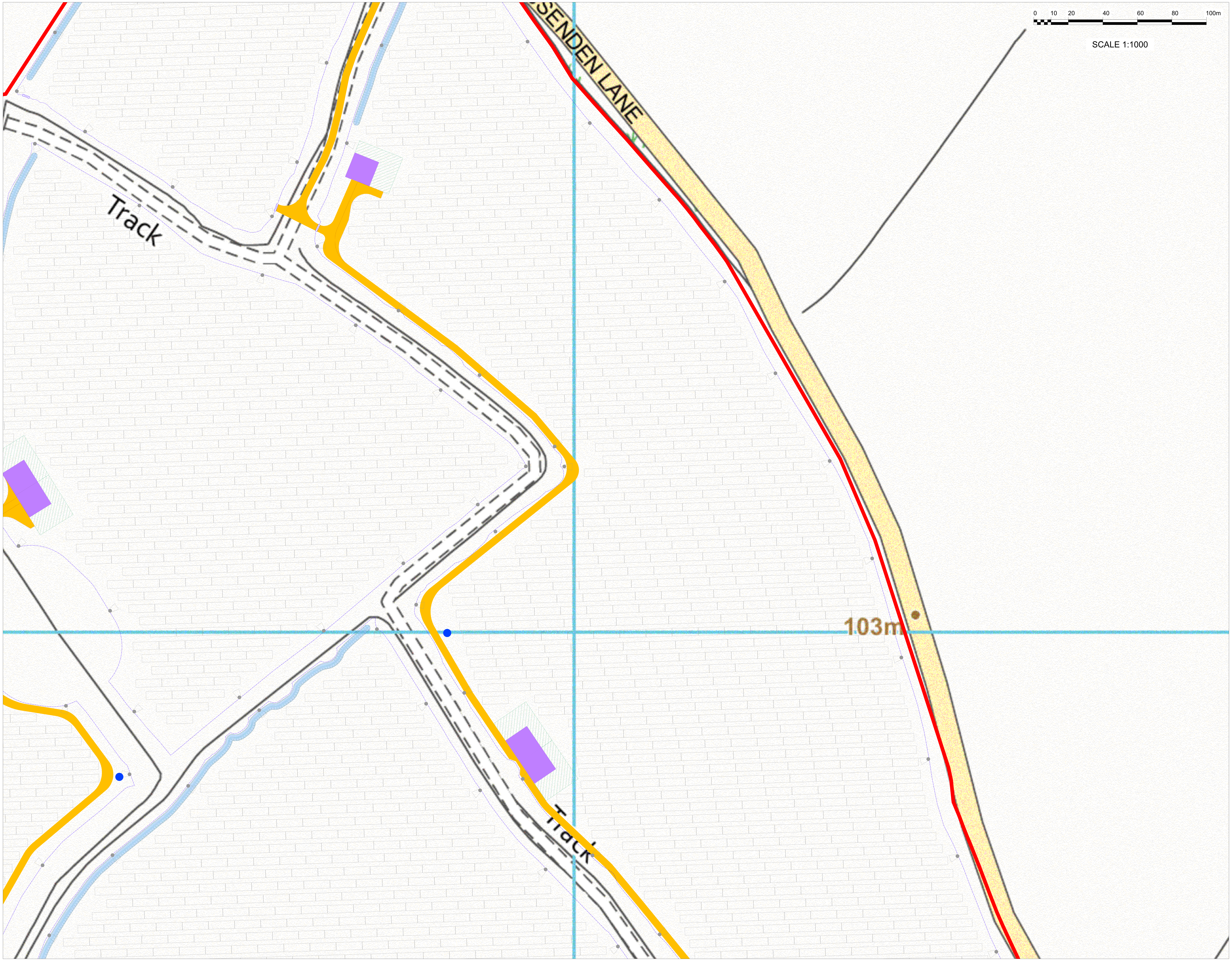

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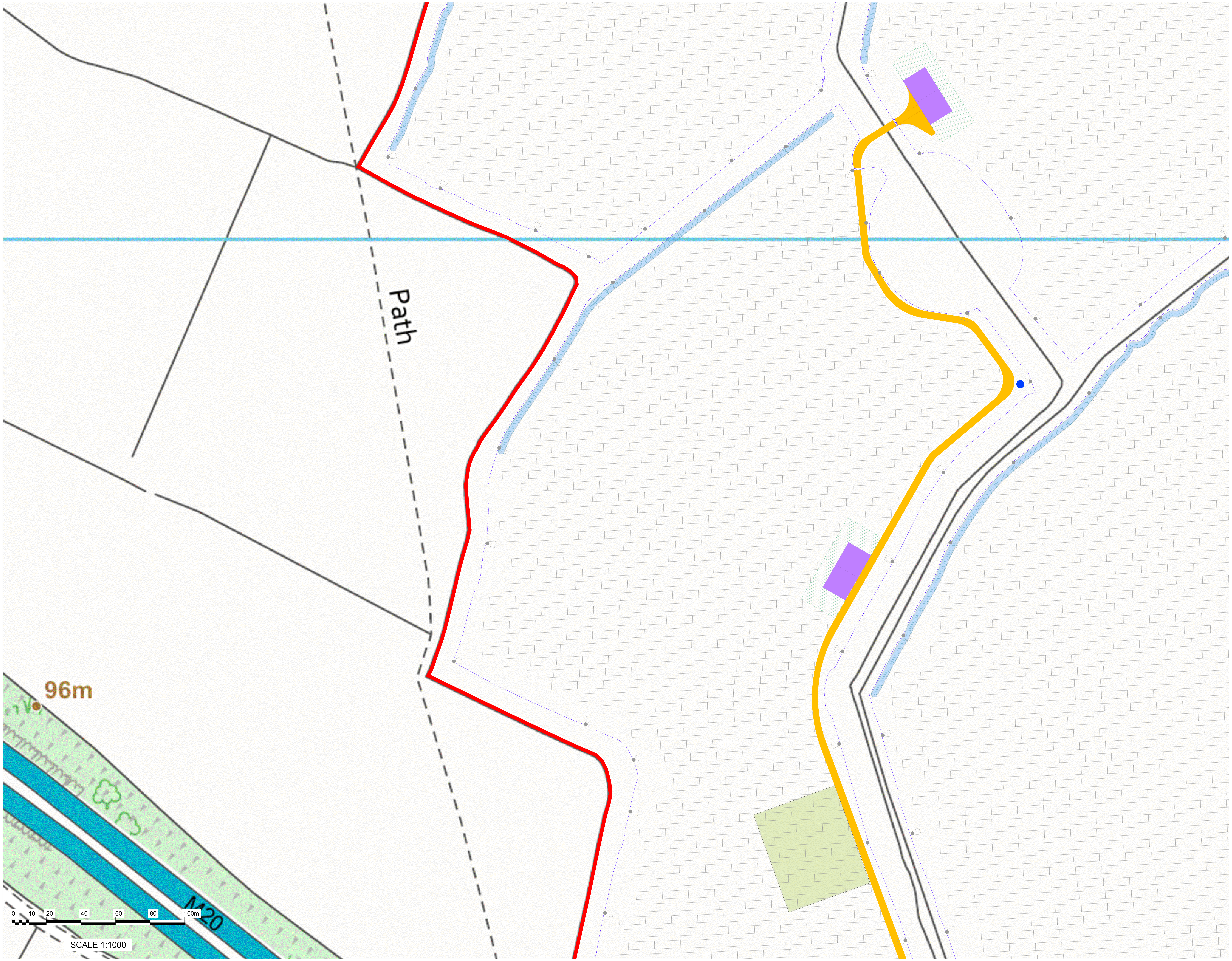

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SHEET 4 OF 9

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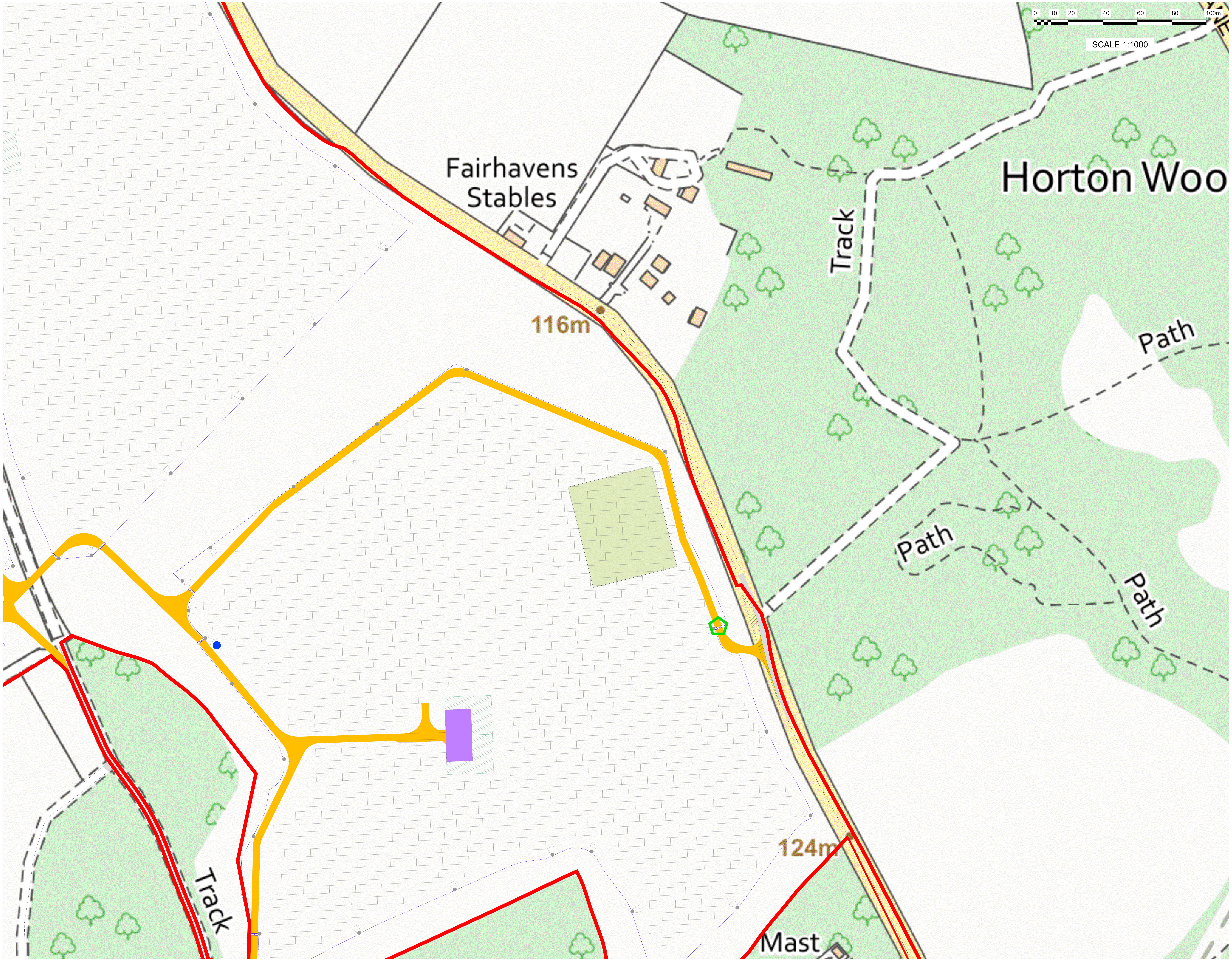

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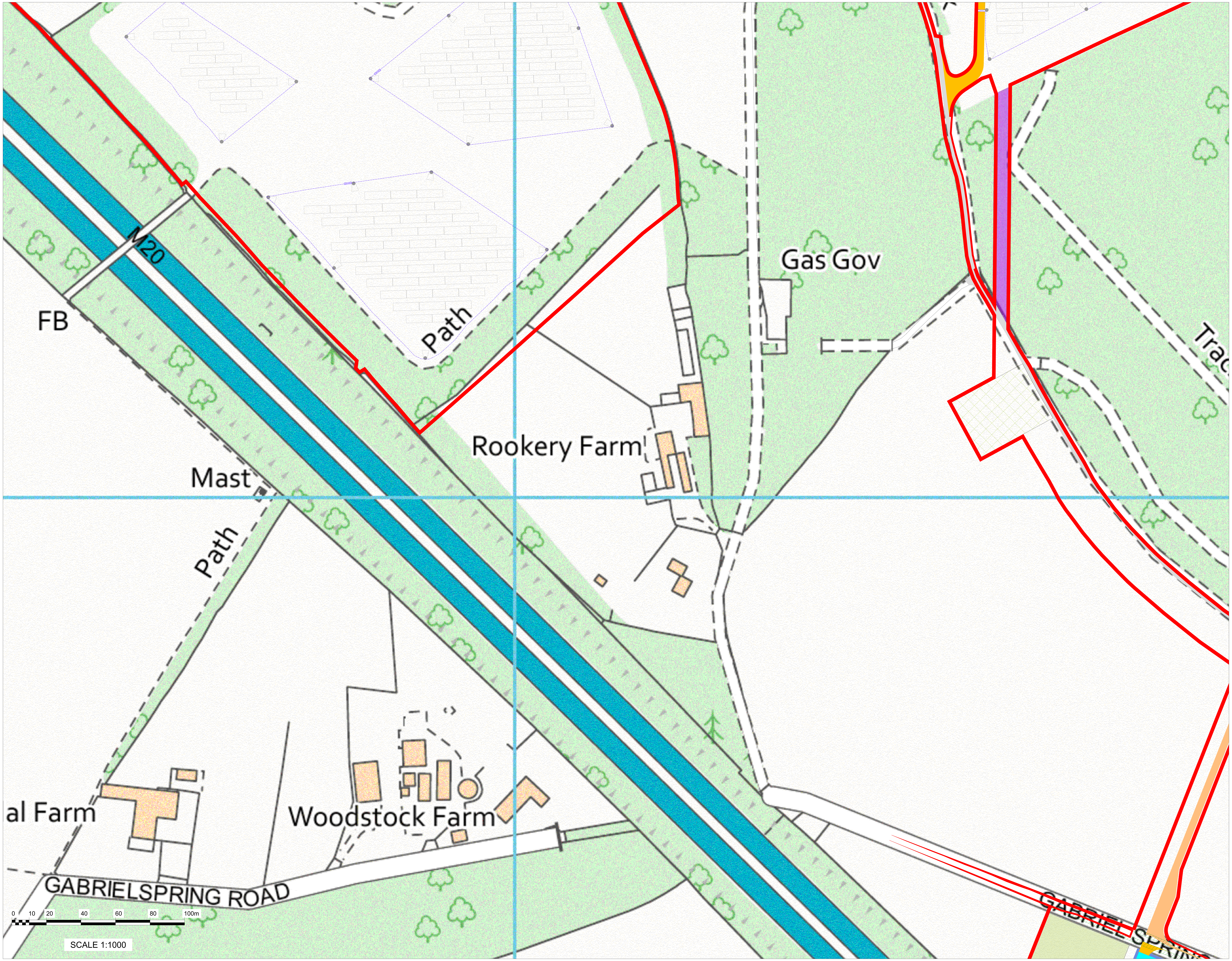

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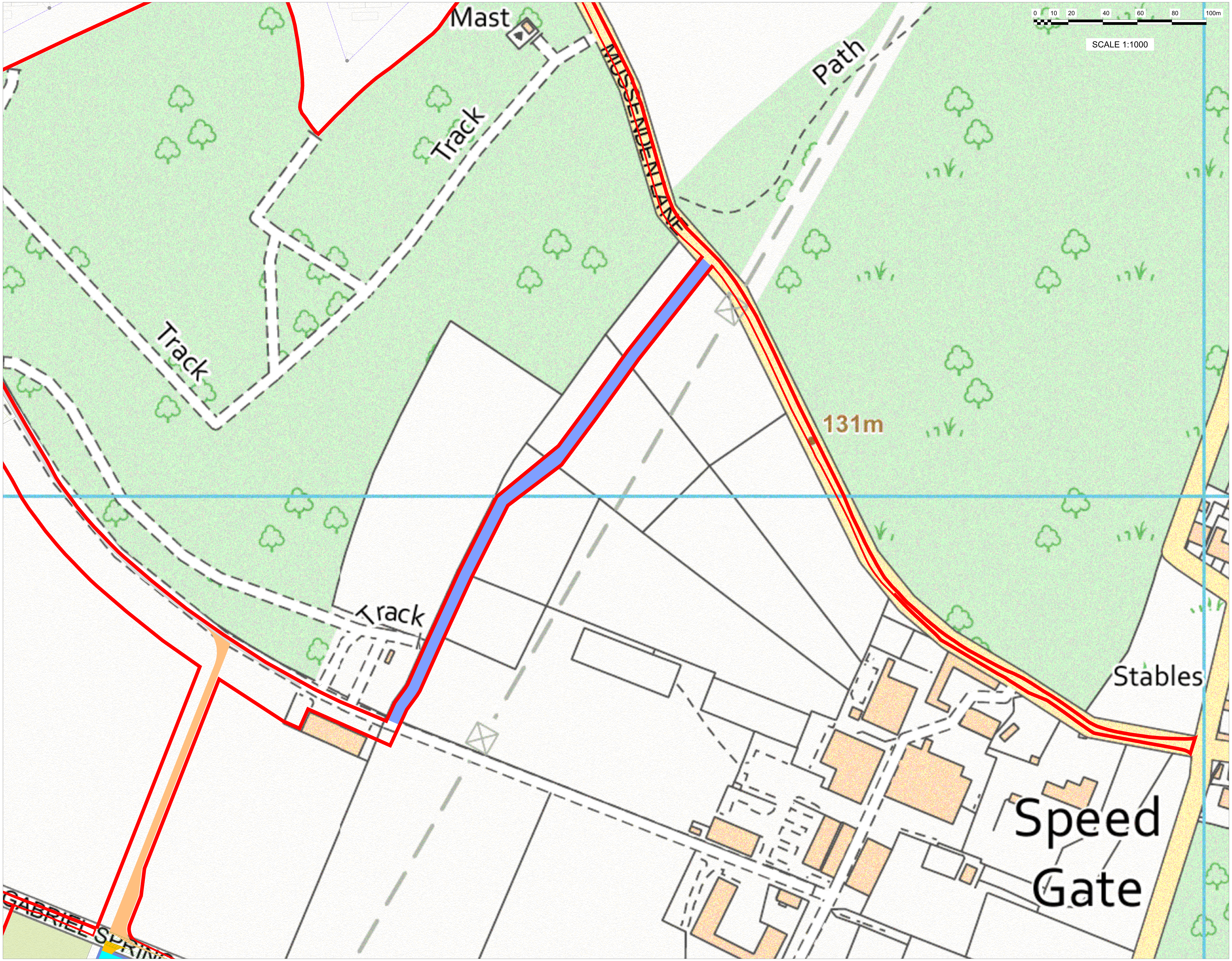

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SHEET 8 OF 9

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6	FG	PM	JM	2024-05-23	Minor amendments (key updated)
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4	FG	DC	PM	2024-03-04	Site layout update (swales, secondary access)
3	FG	DC	PM	2023-11-17	'Excluded from site boundary' removed, scale bar added

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:1,000 @ A1	DATUM: N/A
LAYOUT DWG: N/A	T-LAYOUT NO.: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 5 INFRASTRUCTURE LAYOUT ENLARGEMENTS

RES DRAWING NUMBER: 05009-RES-LAY-DR-PT-004 REV: 6

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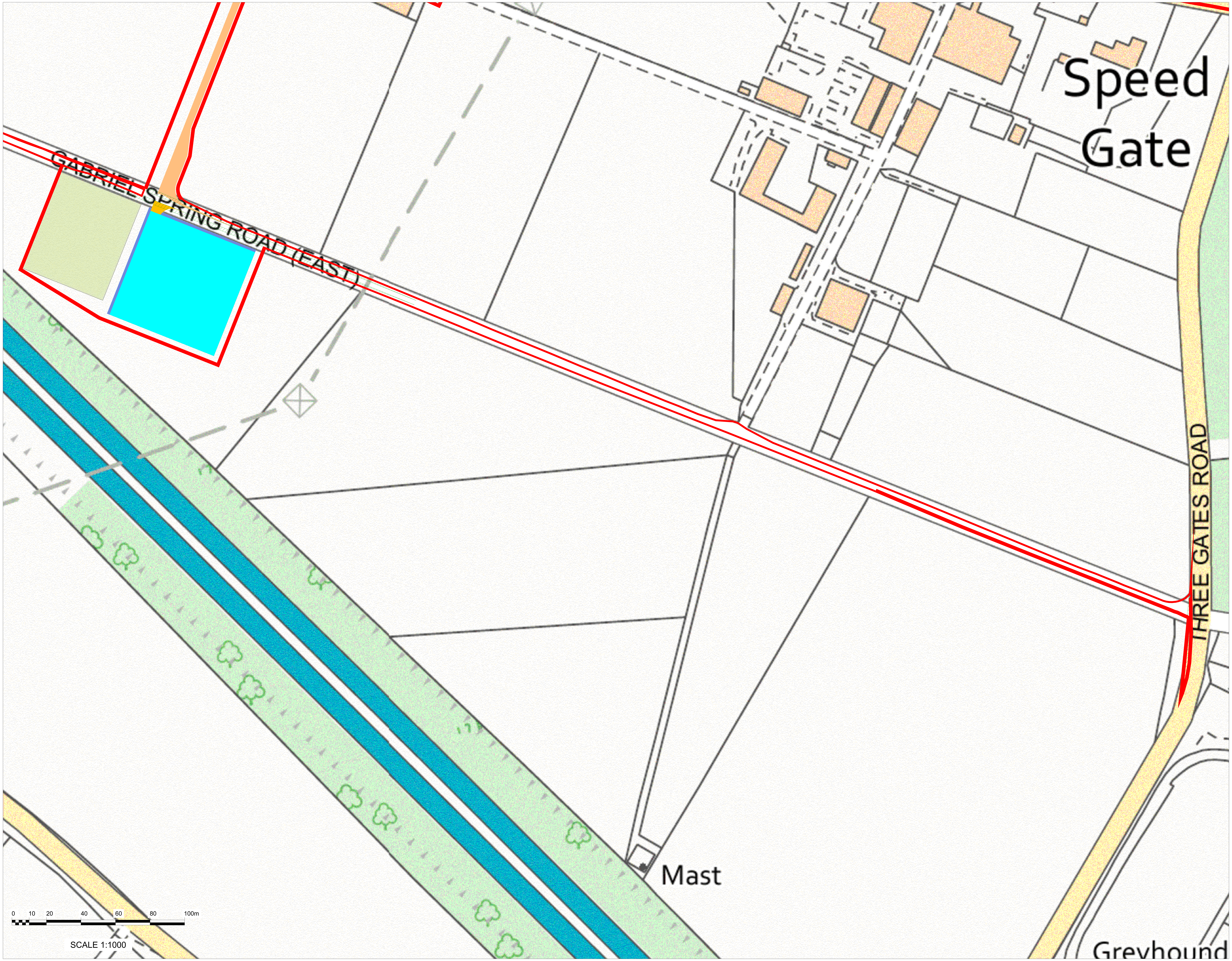

KEY:

- SITE BOUNDARY (*OUTSIDE OF LINE DENOTES BOUNDARY*)
- PROPOSED ACCESS TRACK
- TEMPORARY ACCESS TRACK
- EXISTING ACCESS TRACK
- INDICATIVE SOLAR PV ARRAY
- INVERTER & BATTERY STORAGE AREA
- HARDSTAND
- SUBSTATION COMPOUND
- TEMPORARY CONSTRUCTION COMPOUND
- FENCE LINE
- GATE (FENCE)
- OPERATIONAL ACCESS
- EMERGENCY ACCESS ONLY
- CCTV
- SUBSTATION COMPOUND DRAINAGE INFILTRATION TRENCH
- SWALES
- HDD CABLE ROUTE
- OPTIONAL CABLE ROUTE
- TEMPORARY HARDSTAND FOR HDD
- SITE ENTRANCE - VISIBILITY SPLAY
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT

SHEET 9 OF 9

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
6	FG	PM	JM	2024-05-23	Minor amendments (key updated)
5	FG	PM	JM	2024-05-01	Site layout updated as per Fire risk statement
4	FG	DC	PM	2024-03-04	Site layout update (swales, secondary access)
3	FG	DC	PM	2023-11-17	'Excluded from site boundary' removed, scale bar added

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:1,000 @ A1	DATUM: N/A
LAYOUT DWG: N/A	T-LAYOUT NO.: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 5
INFRASTRUCTURE LAYOUT
ENLARGEMENTS

RES DRAWING NUMBER: 05009-RES-LAY-DR-PT-004 REV: 6

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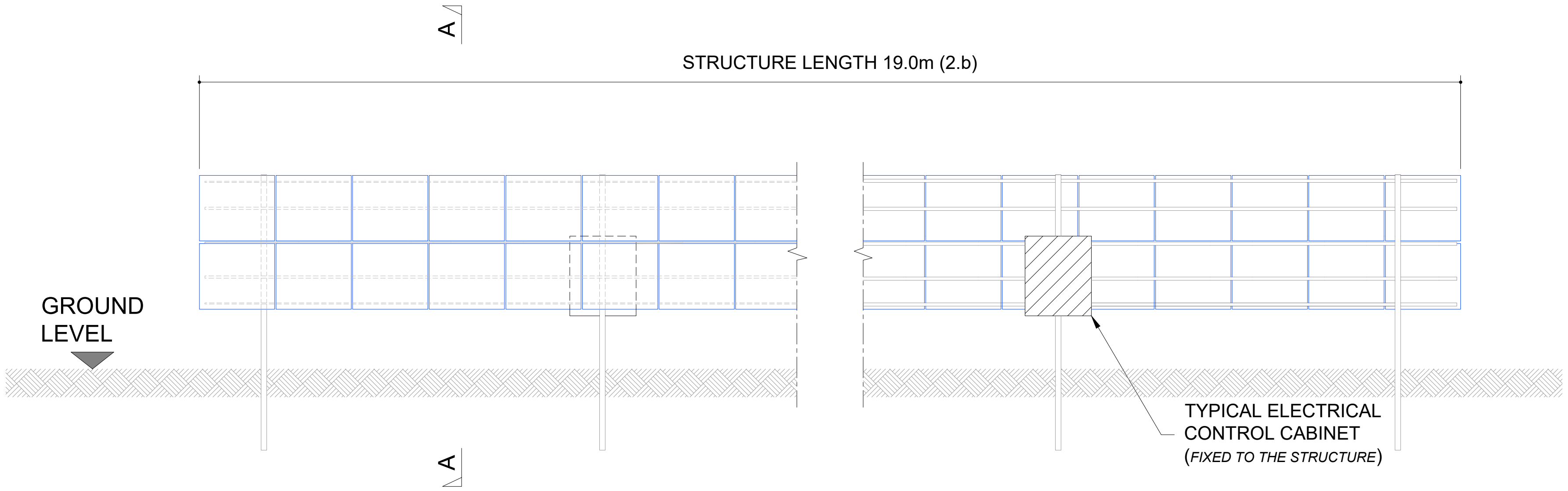
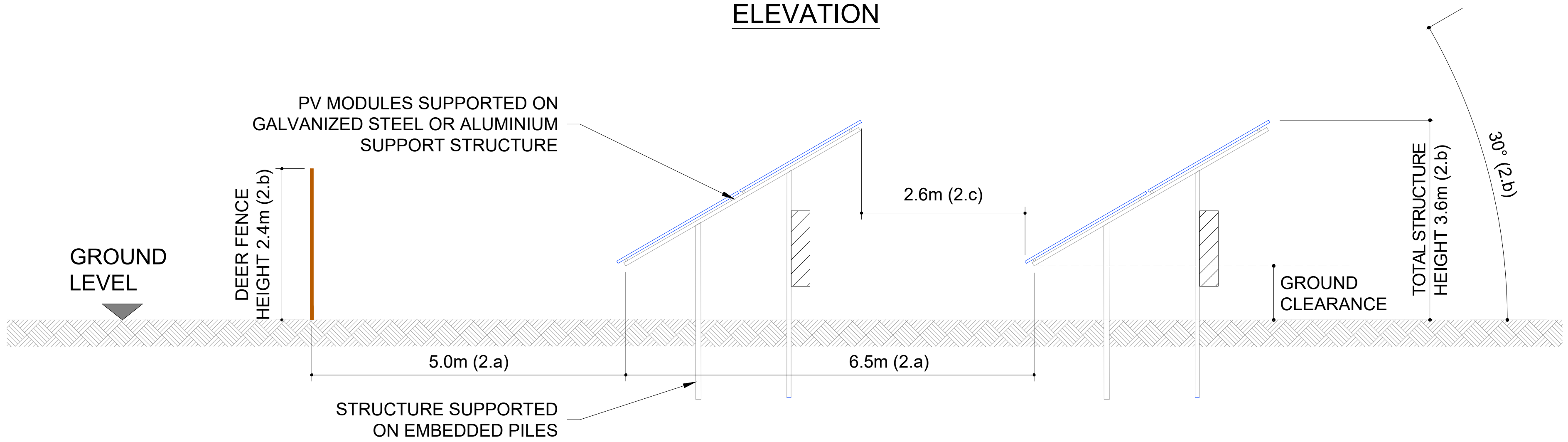
Appendix B Typical Details

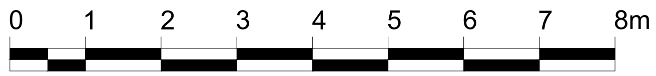
05009-RES-SOL-DR-PT-001	Typical PV Module and Rack Detail	Rev 04
05009-RES-SOL-DR-PT-002	Typical Inverter and Storage Layout	Rev 01



ELEVATION



SECTION A-A



SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE SUBJECT TO DETAILED DESIGN.
2. ALL DIMENSIONS ARE INDICATIVE AND MAY VARY, AS REFERENCE:
   2.a. MINIMUM DIMENSION
   2.b. MAXIMUM DIMENSION
   2.c. MINIMUM 2.0m.
3. GROUND CLEARANCE WILL VARY AS REQUIRED ACCORDING TO TOPOGRAPHY AND MODULE CONFIGURATION.
4. THE PILE DEPTH SHALL BE DETERMINED FOLLOWING DETAILED GEOTECHNICAL SITE INVESTIGATION AND WILL TYPICALLY BE 1.5 - 1.7m. HOWEVER THE MAXIMUM DEPTH COULD BE UPTO 2.4m.
5. PV MODULES ARE SHOWN IN ELEVATION VIEW INSTALLED IN LANDSCAPE, ALTHOUGH THEY MAY BE INSTALLED IN PORTRAIT TO SUIT SITE CONDITIONS.

PAGE 1 OF 2

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
4	FG	IB	PM	2023-12-05	Scale bar added
3	FG	IB	PM	2023-12-04	Minor amends (distance update, notes added)
2	FG	IB	IB	2023-10-09	Updated as per Pegasus comment
1	FG	IB	PM	2023-09-29	First Issue

PURPOSE: PERMITTING
COORDINATES: N/A
SCALE: 1:100 @A3
DATUM: N/A
LAYOUT DRAWING: N/A
T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 8
TYPICAL PV MODULE AND RACK DETAIL

RES DRAWING NUMBER: 05009-RES-SOL-DR-PT-001
REV: 4

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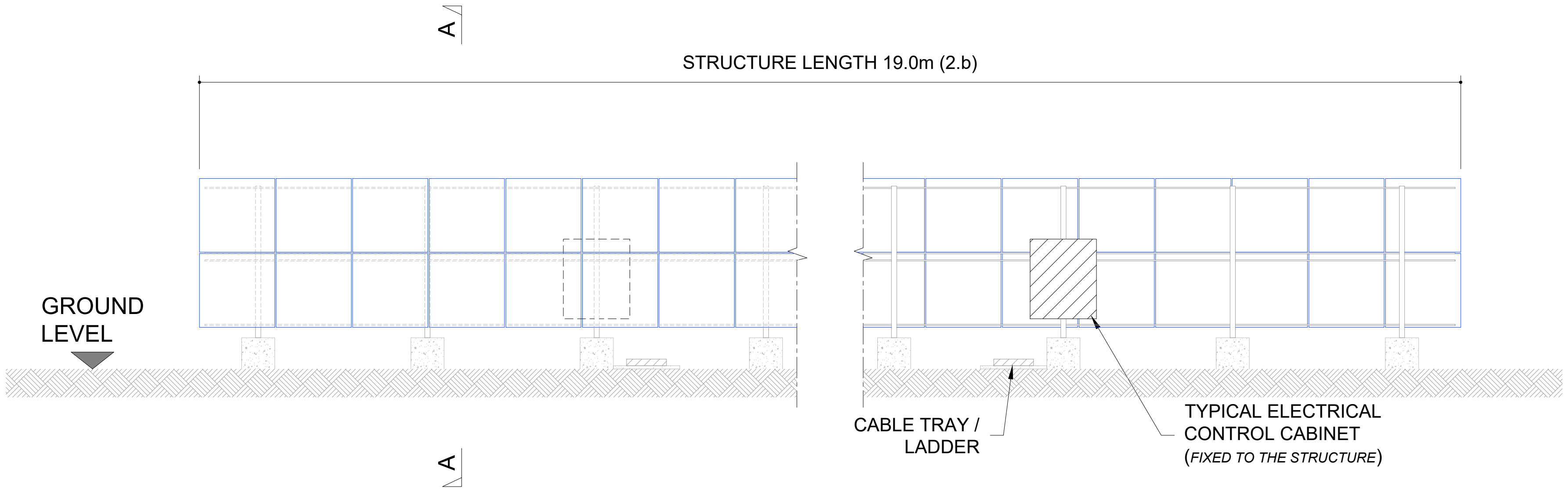
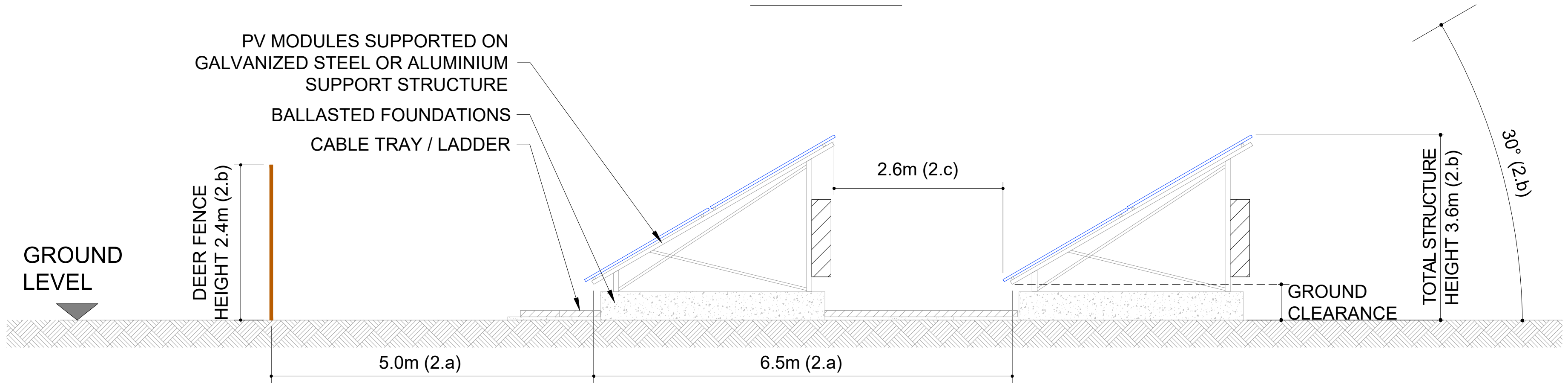
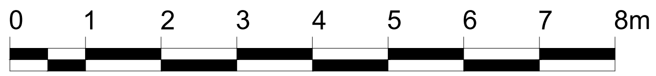


Front Back

ELEVATION



SECTION A-A



SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE SUBJECT TO DETAILED DESIGN.
2. ALL DIMENSIONS ARE INDICATIVE AND MAY VARY, AS REFERENCE:
   2.a. MINIMUM DIMENSION
   2.b. MAXIMUM DIMENSION
   2.c. MINIMUM 2.0m.
3. GROUND CLEARANCE WILL VARY AS REQUIRED ACCORDING TO TOPOGRAPHY AND MODULE CONFIGURATION.
4. PV MODULES ARE SHOWN IN ELEVATION VIEW INSTALLED IN LANDSCAPE, ALTHOUGH THEY MAY BE INSTALLED IN PORTRAIT TO SUIT SITE CONDITIONS.
5. SUPPORT FRAME IS CONNECTED DIRECTLY TO THE BALLASTED FOUNDATION.

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
4	FG	IB	PM	2023-12-05	Scale bar added
3	FG	IB	PM	2023-12-04	Minor amends (distance update, notes added)
2	FG	IB	IB	2023-10-09	Updated as per Pegasus comment
1	FG	IB	PM	2023-09-29	First Issue

PURPOSE: PERMITTING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 8
TYPICAL PV MODULE AND RACK DETAIL

RES DRAWING NUMBER: 05009-RES-SOL-DR-PT-001 REV: 4

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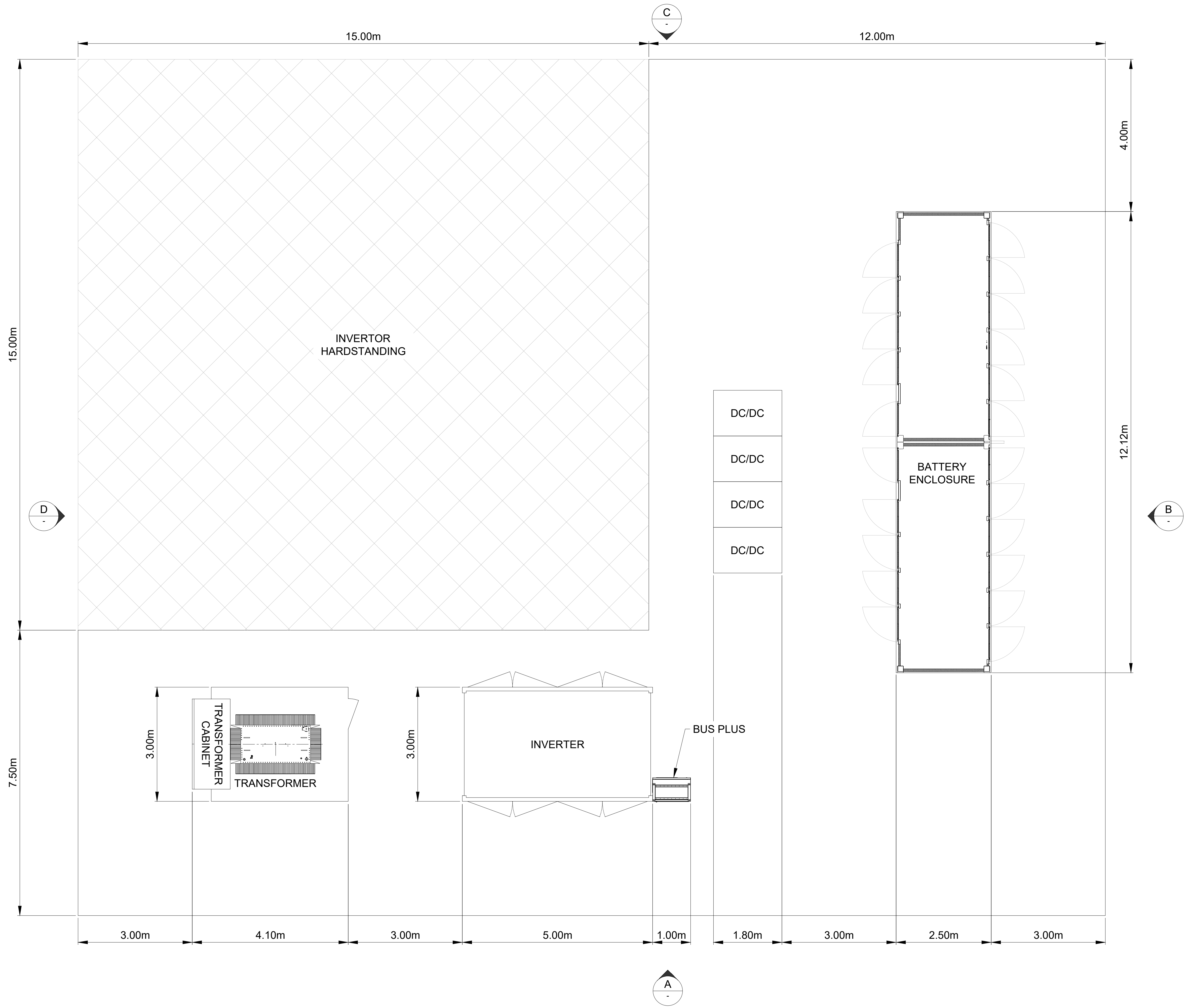

PLAN

NOTES

1. ALL DIMENSIONS ARE MAXIMUM ANTICIPATED AND SUBJECT TO DETAILED DESIGN
2. ROOM & DOOR POSITIONS ARE INDICATIVE AND SUBJECT TO DETAILED DESIGN.
3. APPROXIMATE FINISHED FLOOR LEVEL 300mm ABOVE EXISTING GROUND.
4. LAYOUT ORIENTATION IS INDICATIVE AND SUBJECT TO DETAILED DESIGN.

SHEET 1 OF 2

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	SM	PM	2023-09-29	First issue

PURPOSE: PERMITTING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 12
TYPICAL INVERTER AND STORAGE LAYOUT

RES DRAWING NUMBER	REV
05009-RES-SOL-DR-PT-002	1

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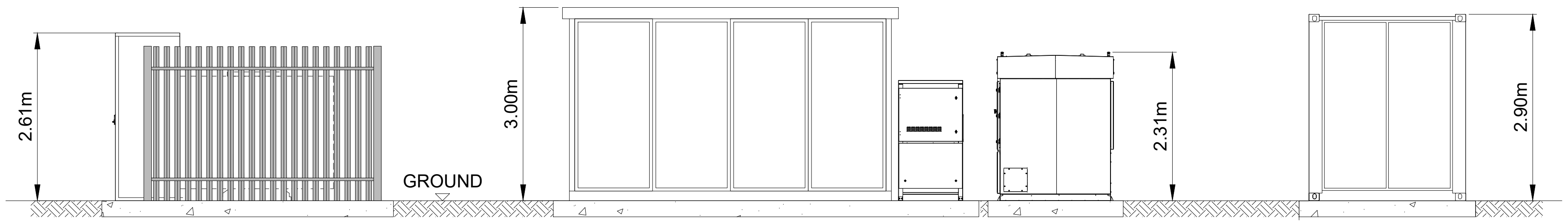

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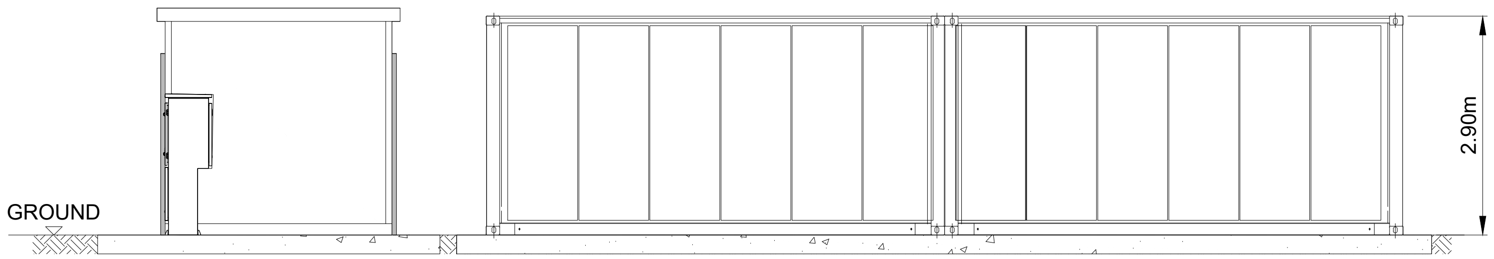

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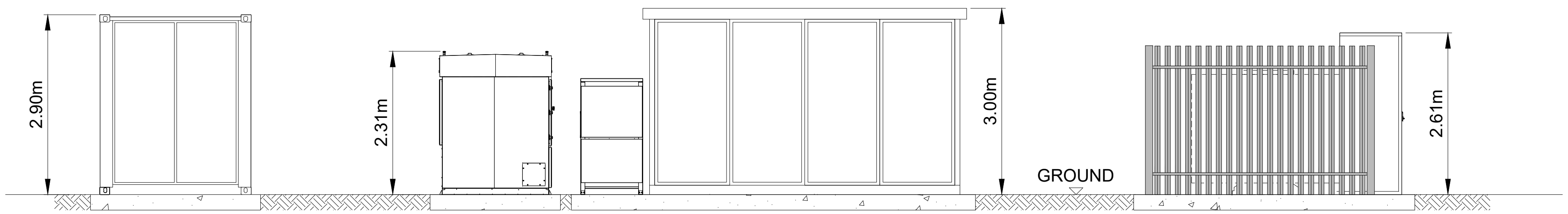

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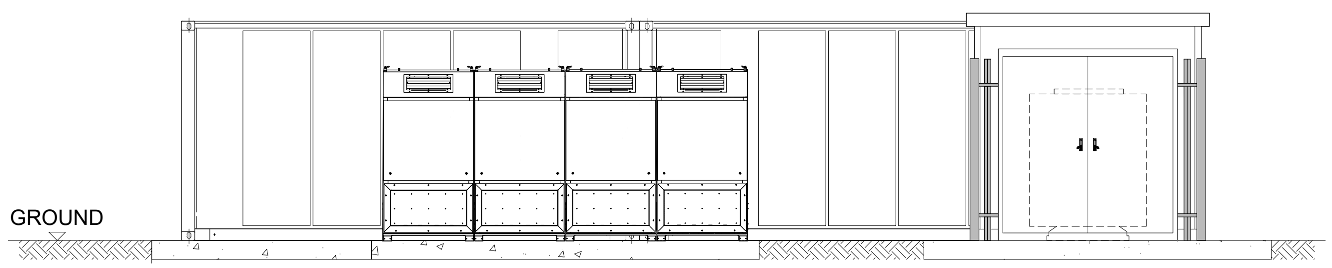

ELEVATION 'D'

NOTES

1. ALL DIMENSIONS ARE MAXIMUM ANTICIPATED AND SUBJECT TO DETAILED DESIGN
2. ROOM & DOOR POSITIONS ARE INDICATIVE AND SUBJECT TO DETAILED DESIGN.
3. APPROXIMATE FINISHED FLOOR LEVEL 300mm ABOVE EXISTING GROUND.
4. LAYOUT ORIENTATION IS INDICATIVE AND SUBJECT TO DETAILED DESIGN.

SHEET 2 OF 2

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	SM	PM	2023-09-29	First issue

PURPOSE PERMITTING	COORDINATES N/A
SCALE 1:100 @A3	DATUM N/A
LAYOUT DRAWING N/A	T-LAYOUT NO N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 12
TYPICAL INVERTER AND STORAGE LAYOUT

RES DRAWING NUMBER	REV
05009-RES-SOL-DR-PT-002	1

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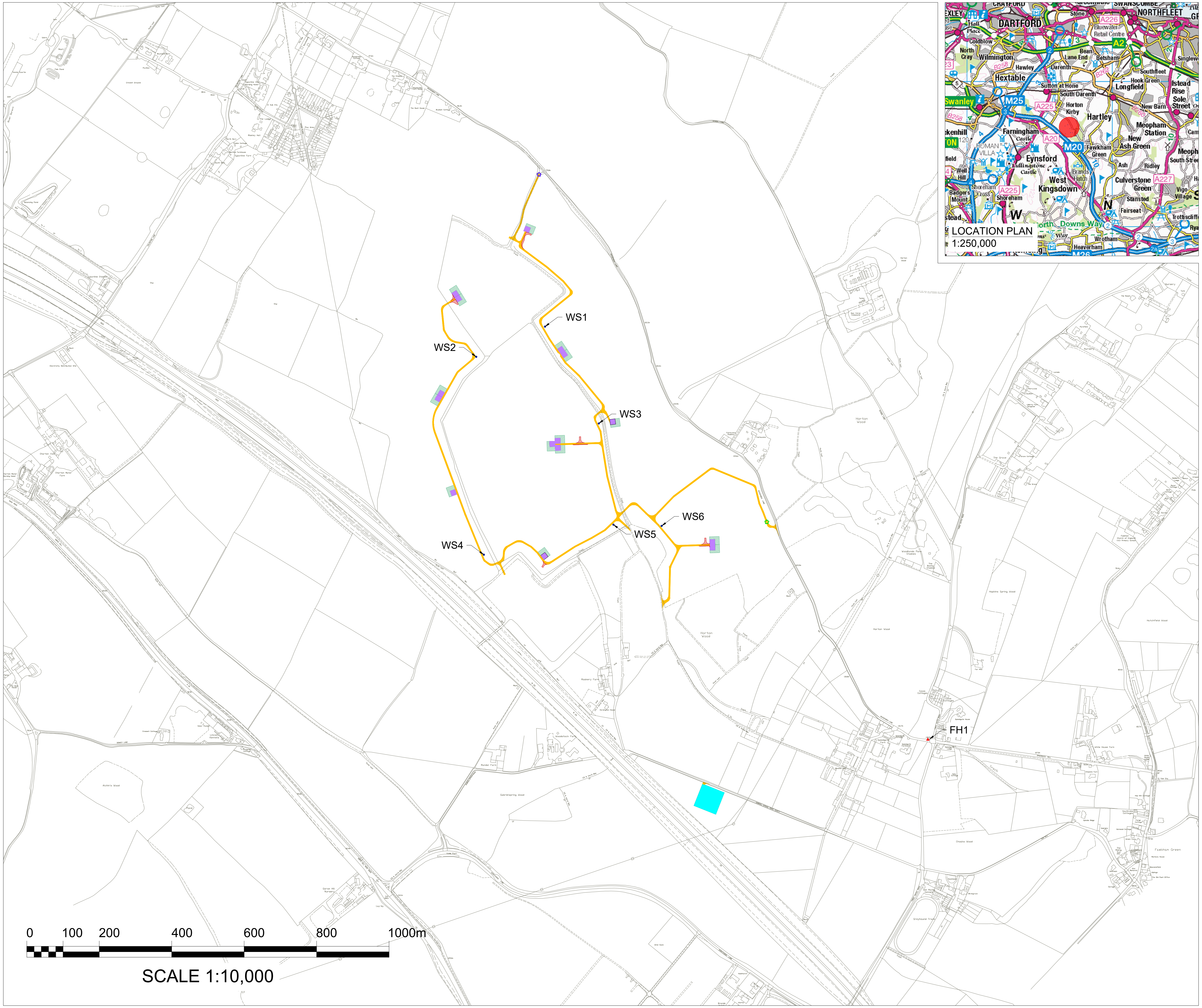
Appendix C Emergency response drawings

05009-RES-LAY-DR-PT-005	Site Water Supplies	Rev 01
05009-RES-LAY-DR-PT-006	Emergency Vehicle Onsite Swept Path Analysis	Rev 01



KEY:

- PROPOSED ACCESS TRACK
- INVERTER & BATTERY STORAGE AREA
- HARDSTAND
- SUBSTATION COMPOUND
- OPERATIONAL ACCESS
- SECONDARY ACCESS
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT
- EMERGENCY VEHICLE TURNING HEAD

NOTES:

1. WATER TANK SIZE, NUMBER, TYPE AND EXACT LOCATION TO BE AGREED WITH KENT FIRE SERVICE DURING DEVELOPMENT OF FIRE MANAGEMENT PLAN.
2. WATER TANKS COULD BE ABOVE GROUND OR BURIED.

REFERENCES:

[1] FIRE RISK STATEMENT - CHIMMENS SOLAR FARM REF 05009-7510884

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	PM	JM	2024-04-30	First Issue

PURPOSE PERMITTING	COORDINATES OSGB 1936
SCALE 1:10,000 @A3	DATUM N/A
LAYOUT DRAWING N/A	T-LAYOUT NO N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 21
SITE WATER SUPPLIES

RES DRAWING NUMBER: 05009-RES-LAY-DR-PT-005 — REV: 1

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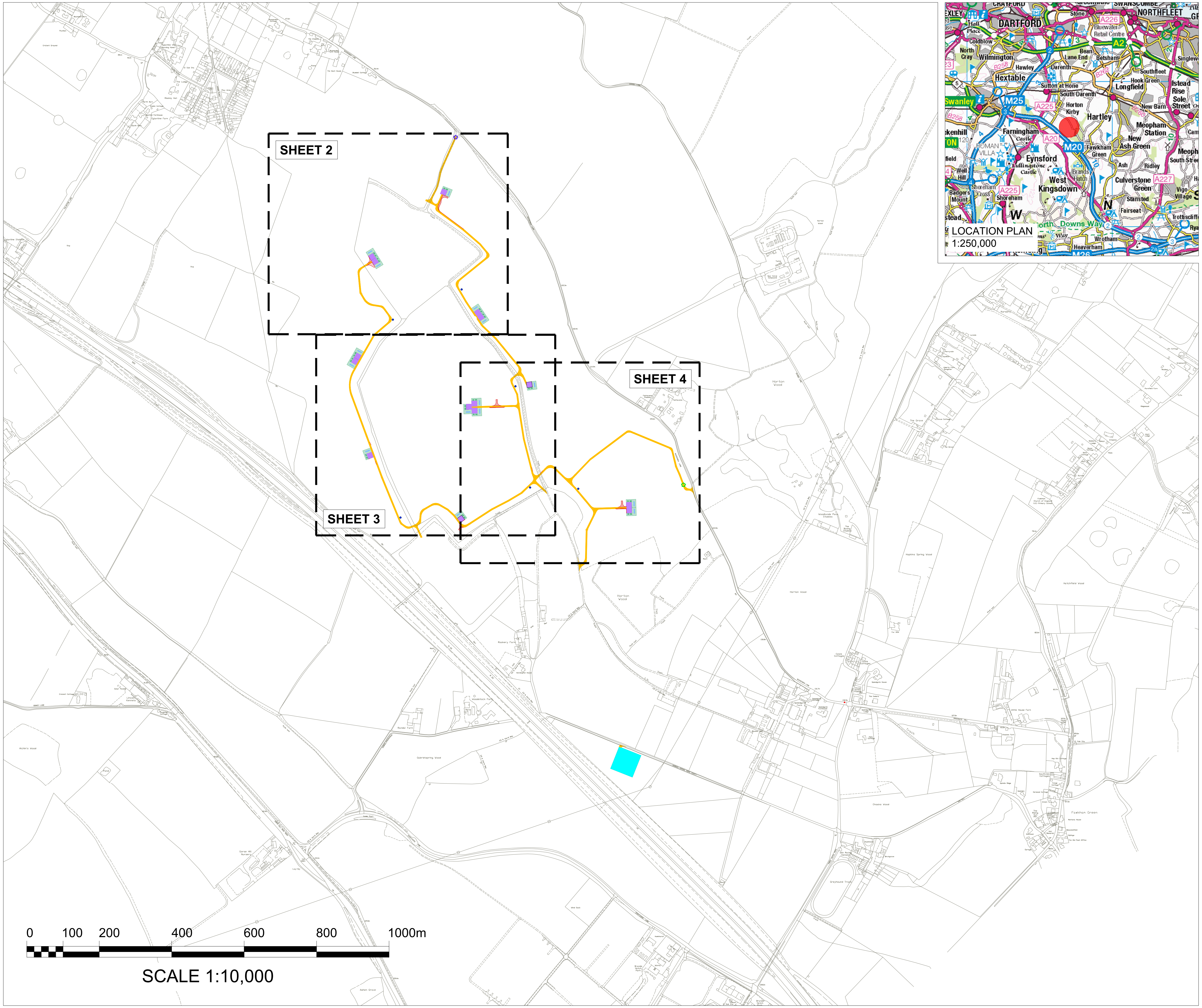
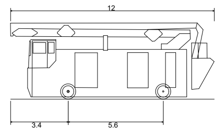


KEY:

- PROPOSED ACCESS TRACK
- INVERTER & BATTERY STORAGE AREA
- INVERTER AND TRANSFORMER
- BATTERY STORAGE
- HARDSTAND
- SUBSTATION COMPOUND
- OPERATIONAL ACCESS
- SECONDARY ACCESS
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT
- EMERGENCY VEHICLE TURNING HEAD

NOTES:

1. EMERGENCY VEHICLE MODEL USED



Aerial Platform/ Turntable Ladder/ Special Appliance	
Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

OVERVIEW
SHEET 1 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	JM	JM	2024-04-30	First Issue

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:10,000 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 22
FIRE EMERGENCY VEHICLE
ONSITE SWEPT PATH ANALYSIS

RES DRAWING NUMBER	REV
05009-RES-LAY-DR-PT-006	1

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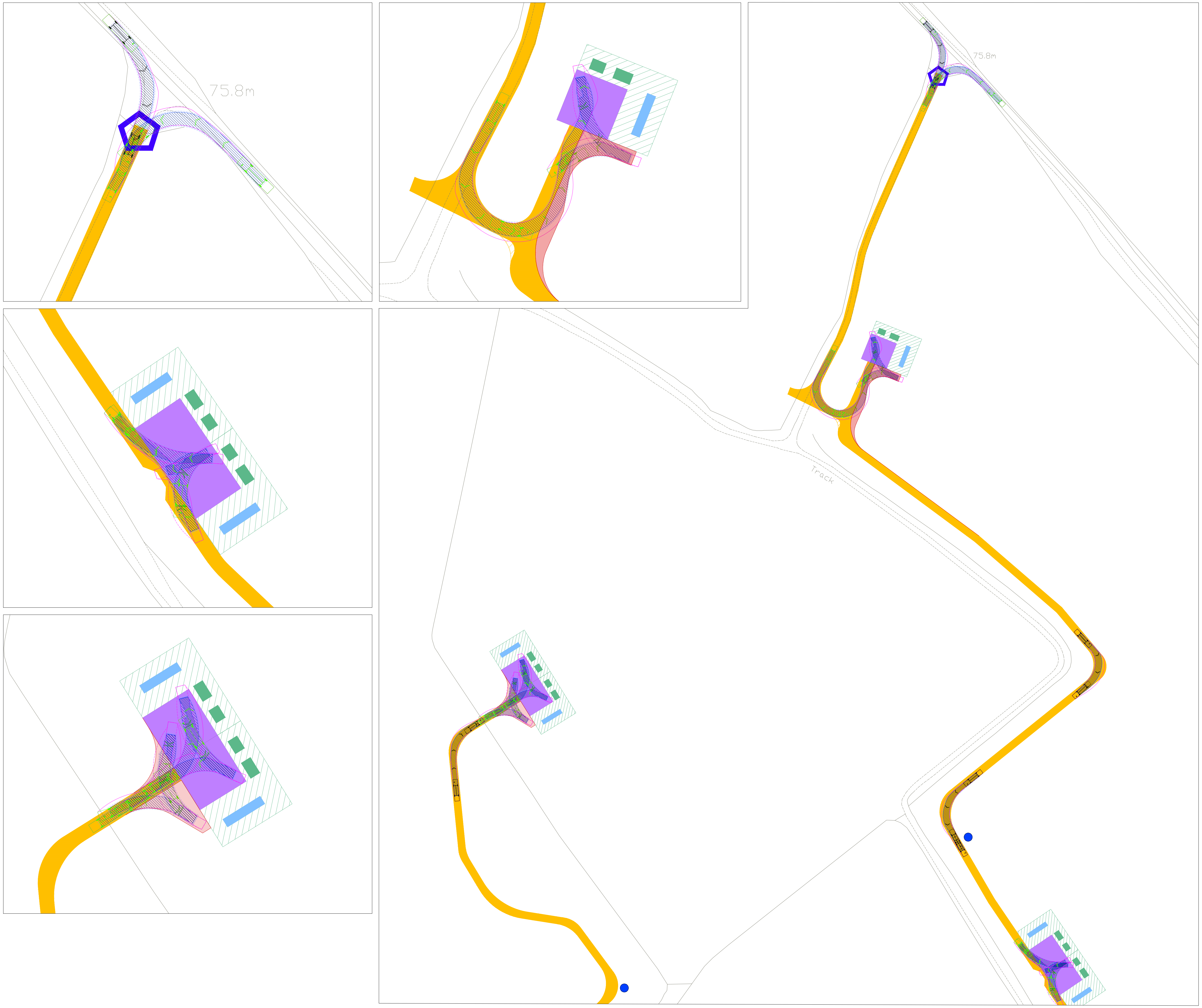
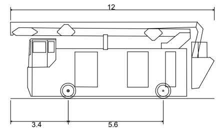


KEY:

- PROPOSED ACCESS TRACK
- INVERTER & BATTERY STORAGE AREA
- INVERTER AND TRANSFORMER
- BATTERY STORAGE
- HARDSTAND
- SUBSTATION COMPOUND
- OPERATIONAL ACCESS
- SECONDARY ACCESS
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT
- EMERGENCY VEHICLE TURNING HEAD

NOTES:

1. EMERGENCY VEHICLE MODEL USED



Aerial Platform/ Turntable Ladder/ Special Appliance

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

SHEET 2 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	JM	JM	2024-04-30	First Issue

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:2,000 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 22
FIRE EMERGENCY VEHICLE
ONSITE SWEPT PATH ANALYSIS

RES DRAWING NUMBER	REV
05009-RES-LAY-DR-PT-006	1

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KEY:

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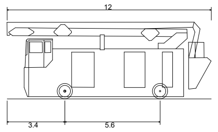
- INVERTER & BATTERY STORAGE AREA
- INVERTER AND TRANSFORMER
- BATTERY STORAGE
- HARDSTAND
- SUBSTATION COMPOUND
- OPERATIONAL ACCESS
- SECONDARY ACCESS
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT
- EMERGENCY VEHICLE TURNING HEAD

NOTES:

1. EMERGENCY VEHICLE MODEL USED



Aerial Platform/ Turntable Ladder/ Special Appliance	
Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

SHEET 3 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	JM	JM	2024-04-30	First Issue

PURPOSE: PERMITTING	COORDINATES: OSGB 1936
SCALE: 1:10,000 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE

CHIMMENS SOLAR FARM

DRAWING TITLE

FIGURE 22
FIRE EMERGENCY VEHICLE ONSITE SWEPT PATH ANALYSIS

RES DRAWING NUMBER	REV
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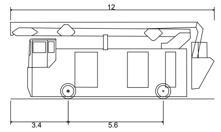
KEY:

- PROPOSED ACCESS TRACK
- INVERTER & BATTERY STORAGE AREA
- INVERTER AND TRANSFORMER
- BATTERY STORAGE
- HARDSTAND
- SUBSTATION COMPOUND
- OPERATIONAL ACCESS
- SECONDARY ACCESS
- FIREFIGHTING WATER STORAGE LOCATION
- FIRE HYDRANT
- EMERGENCY VEHICLE TURNING HEAD

NOTES:

1. EMERGENCY VEHICLE MODEL USED



Aerial Platform/ Turntable Ladder/ Special Appliance

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	FG	JM	JM	2024-04-30	First Issue

PURPOSE: PERMITTING
COORDINATES: OSGB 1936
SCALE: 1:10,000 @A3
DATUM: N/A
LAYOUT DRAWING: N/A
T-LAYOUT NO: N/A

PROJECT TITLE
CHIMMENS SOLAR FARM

DRAWING TITLE
FIGURE 22
FIRE EMERGENCY VEHICLE
ONSITE SWEPT PATH ANALYSIS

RES DRAWING NUMBER: 05009-RES-LAY-DR-PT-006
REV: 1

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