



Transport Statement

Killymallaght BESS

Ref 05195-7424123

Revision History

Issue	Date	Name	Latest changes
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1 Introduction

1.1 Purpose of the Report

This transport statement has been produced to support the development of a Battery Energy Storage System (BESS) on lands near Killymallaght substation, just north of Trench Road by Renewable Energy Systems Ltd (RES). Its principal objective is to provide details of the proposed transport management arrangements during the construction of the project and to provide details of transport movements during construction and operation of the project.

1.2 Policy Context

An overview of relevant national and local transport planning policies has been undertaken and listed below.

- Planning Policy Statement 3- Access, Movement and Parking, DOE (2005)
- Strategic Planning Policy Statement
- Guidelines for the Environmental Assessment of Road Traffic (1993)

During pre-application consultation with the Derry City & Strabane District Council there was not any design strategy proposed by the council.

1.3 Site Location

The site is located on greenfield field used as an agricultural land, approximately 2.5 km south-west of Newbuildings town. The location of the proposed development is within Derry City & Strabane District Council and is shown in *Figure 1*.



Figure 1: Site Location (Photo source: Google Earth - taken May 2023)

1.4 Project Description

The proposed development will consist of the installation of several battery enclosures, associated foundations, transformers, inverters, electrical infrastructure, security infrastructure, access track, crane hardstanding, storage containers and associated works.

During construction, temporary construction facilities will include site offices, welfare areas, parking and storage areas for plant and materials.

There are three phases of the life of the proposed development. All three phases have been considered in this assessment and are as follows:

- The Construction Phase;
- The Operational Phase; and
- The Decommissioning Phase.

Of all the three phases, the construction phase is considered to have the greatest impact in terms of transport. Construction plant, bulk materials and electrical equipment will be transported to site, potentially have an increase in traffic.

The operational phase is restricted to occasional maintenance operations which generate significantly lower volumes of traffic that are not considered to be in excess of daily traffic variation levels on the public road network.

The decommissioning phase involves fewer trips on the public road network than the construction phase, as minor elements of infrastructure are likely to be left in place, adding to local infrastructure that can potentially be used for further agricultural or leisure uses in the future.

2 Transport Route

2.1 Description of the Route to Site

It is proposed that all equipment and construction material deliveries shall take the following route to site:

- Vehicles will follow A6;
- Vehicles will leave A6 onto Belt Rd;
- Vehicles will continue on Trench Rd;
- Vehicles will approach proposed site entrance from Trench Rd.

In the event of any road closures on the proposed delivery route, all vehicles will follow the designated diversion route.

An access route plan can be seen in *Appendix A*.

2.2 Strategic Road Network Assessment

The proposed development site sits on the land to the northwest of Trench Rd.

2.2.1 A6

The A6 is a trunk road that runs from Belfast to Derry via County Antrim and County Londonderry in Northern Ireland. The A6, in its majority is a dual carriage road. There is a section between Castledawson and Dungiven that A6 turns into single carriage road. *Figure 2* indicates A6 road near Lisnagelvin.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any major alterations anticipated.



Figure 2: A6 junction with Belt Rd (Photo source: Google Earth - taken Apr 2023)

2.2.2 Belt Road/Trench Road

Belt Road is a major road that runs between A6 and Trench Road in Northern Ireland. Belt Road is a single carriage until the proposed site entrance. Belt Road turns into Trench Road with the same characteristics (width, number of lanes). **Figure 3** indicates Trench Road from the proposed site entrance location.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any major alterations anticipated.

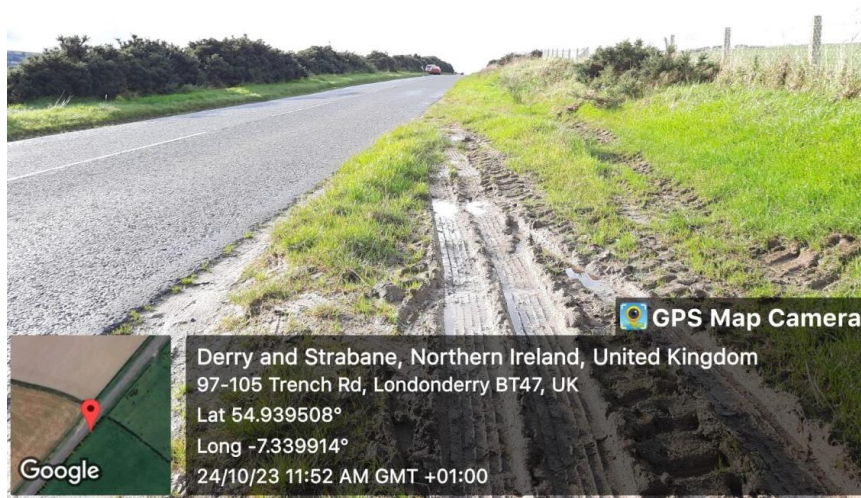


Figure 3: Trench Road from proposed site entrance

2.2.3 Site Access Track

The access track utilised in accessing the site begins at the existing site entrance junction with trench road. The proposed access track is approximately 190m and it will be constructed on the existing field and will head west until it bends towards southwest to approach site.

2.2.4 Passing Places and/or Widening

It is not envisioned that passing places or widening of the roads will be necessary. Narrower sections of the Trench Road could accommodate passing places/widened sections if required, any such locations would be identified and agreed prior to the start of construction. If required, the detailed design of the passing places/widened sections will be in accordance with Design Manual for Roads and Bridge (DMRB) and with any guidance provided by Derry City & Strabane District Council at this stage.

2.2.5 Proposed Site Entrance

The proposed site entrance is located at trench road with approximate coordinates E242348, N410392 (ITM65-Irish Grid). The speed limit on the road that the proposed entrance sits, is 60MPH. The proposed site entrance is an existing access for the field. In addition, 215m visibility can be secured from both directions with no major enabling works.

A Swept Path Analysis (SPA) has been carried out for potential delivery vehicles entering and exiting site. The SPA proves that standard minor enabling works on the verge will likely be all that is required to form the site entrance.

The Site Entrance drawing can be found in *Appendix B*.

3 Construction Traffic

3.1 Delivery Vehicles

3.1.1 Civil Engineering Construction

On site hardstanding areas, tracks and equipment foundations shall be constructed using stone and concrete. The majority of deliveries at this stage will use tipper lorries, concrete trucks and flatbed trucks. Plant required for the works will also be delivered on low loaders or other suitable transportation vehicles.

3.1.2 Large Component Deliveries

These components will be delivered using articulated lorries. Associated goods such as smaller components, tools and other equipment will be delivered on flatbed trucks and low loaders. The majority of deliveries will fall under the UK Standard Vehicle Regulations. Large components will typically be installed by mobile crane.

The scope of the construction project may require abnormal loads being delivered subject to supplier confirmation. Should the need for an abnormal load or STGO vehicle(s) be identified during the development of the final delivery solution and confirmation of the final supplier, the route will be fully assessed, and suitable measures implemented e.g. the use of escort vehicles, as required by law.

3.1.3 Miscellaneous Equipment

Electrical and communications cables, fencing panels, drainage materials and other such miscellaneous materials will be delivered to site on flatbed trucks or low loaders. Occasional deliveries of small packages will also take place with vans and other light goods vehicles.

Site offices, welfare facilities and equipment storage containers will be delivered on flatbeds and low loaders and will be maintained on an ad-hoc basis.

Regular deliveries of fuel and water for the site plant and emptying chemical toilet waste will be made using a mini tanker.

3.1.4 Staff/Workforce

The daily commute of workers in cars, vans and small trucks will form a large proportion of the site traffic. However, the chosen Contractor will encourage all sub-contractors, labourers and tradespeople to car/van share for their journeys to and from the site to reduce the number of vehicle movements involved. Parking for the workforce will be fully accommodated on site. Parking on, or near to, the adopted highway will not be permitted.

3.2 Vehicle Movements

Throughout the construction phase there will be a combination of HGVs (for the component and material deliveries) and cars/vans (for construction staff), on site. HGV movements are expected to be most intense throughout the first few weeks of construction whilst car/van movements are expected to be constant throughout. An estimated number of deliveries and movements for the main infrastructure can be found in the delivery table below.

Movement	Class	Estimated Number of Vehicles	Movements
Site Mobilisation/Demobilisation	HGV	30	60
Temporary Fence Delivery	HGV	20	40
Site Welfare Maintenance	HGV	30	60
General Site Deliveries	HGV	38	76
Imported Stone	HGV	630	1260
Concrete Delivery	HGV	68	136
Onsite Battery containers , PCS and Transformer Unit Delivery	HGV	120	240
Electrical Equipment Delivery	HGV	20	40
Substation Equipment Delivery	HGV	5	10
Cable and Ducting Delivery	HGV	30	60
Permanent Fence Delivery/CCTV	HGV	25	50
Spare Container Delivery	HGV	2	4
Total		1018	2036

Table 1: Delivery table

It is expected that there will be a daily maximum of approximately 20 HGV movements.

Vehicle movements can vary depending on site conditions, programming, weather restrictions, etc., and therefore these numbers should be treated as a guideline only.

The expected HGV volumes are based on best estimates of trips generated for similar sized battery storage facilities and will be subject to amendments based on local conditions, working practices and timing of works.

Sufficient time will be provided between deliveries to allow for any delays (such as loading / unloading taking longer than expected) and to avoid any vehicles waiting.

3.3 Traffic Management

Details of the potential traffic management arrangements during the construction phase will be agreed with Derry City & Strabane District Council. Any operations will be performed in accordance with local and national standards and specifications.

3.4 Timing Restrictions

It is anticipated that all traffic movements will be carried out between 08.00 to 18.00 on Monday to Friday and 08.00 to 13.00 on Saturdays and at no time on Sundays or Bank or National Holidays unless otherwise agreed in advance with Derry City & Strabane District Council.

3.5 Duration of Works

The programme of works is anticipated to take place over approximately a 15-month period. A detailed programme of works will be produced prior construction commences.

4 Construction Activity

4.1 Site Access and Entrance Work

The site entrance is proposed to be formed on one of the existing field entrances on Trench Road. A new access track approximately 190m is proposed to be constructed after this point towards the proposed compound entrance northwest of site entrance junction.

4.2 Construction Working Areas

During construction, a temporary construction working area will be set up within the wider field for construction works and temporary facilities. The temporary facilities will include site offices, welfare areas, parking, a turning area for vehicles, and storage areas for plant and materials. Once construction of the site is completed, all portacabins, machinery and equipment will be removed from site.

Vehicles will drive into the site forwards, turn around on site and exit forwards. Measures shall be in place to manage the timing of the delivery of material and plant to the site; if the site has insufficient space to accommodate a delivery (e.g., due to an ongoing delivery or obstructive site works), the delivery vehicle will be instructed to wait in a safe location, remote from site, if necessary, until suitable space is available.

4.3 Mud Prevention Measures

During the works, measures shall be in place to ensure that mud and debris is not spread onto the adjacent public highway. The public highway will be regularly inspected, and any deposited debris or mud will be dealt with immediately by means of a road sweeper.

Cleaning of vehicles, including provision of wheel washing facilities, prior to exiting site onto the public road is expected to ensure mud is not spread out of the site.

4.4 Pollution Control

Best practice measures will be implemented to minimise pollution due to construction. These measures are detailed in the outline Construction Environmental Management Plan (CEMP) which forms a separate document to this.

4.5 Emergency Services

The Police, Fire and Ambulance service will be given written notice of the construction works and invited to site for an additional briefing.

4.6 Local Services

RES will make every reasonable effort to ensure that there is no disruption to local services e.g., bin collections and school buses.

5 Operational Activity

5.1 Routine Operational Phase Traffic

Once operational, the facility will be remotely controlled and as such will be unmanned. However, there will be a visit to the site approximately once a month by car, van, or light goods vehicle, to carry out regular inspections and routine maintenance. Parking for these visits will be accommodated on site.

5.2 Non-Routine Operational Phase Traffic

It is possible that one or more medium or large components may require replacement during the operational life of the facility. The nature of the traffic associated with such works will be similar to that used in the construction phase of the project but will be present for a much shorter duration. Should the scale of the works be such that traffic management measures would be required to manage vehicle movements to and from the site, the necessary permissions shall be sought from the local authority in line with due process.

6 Decommissioning Activity

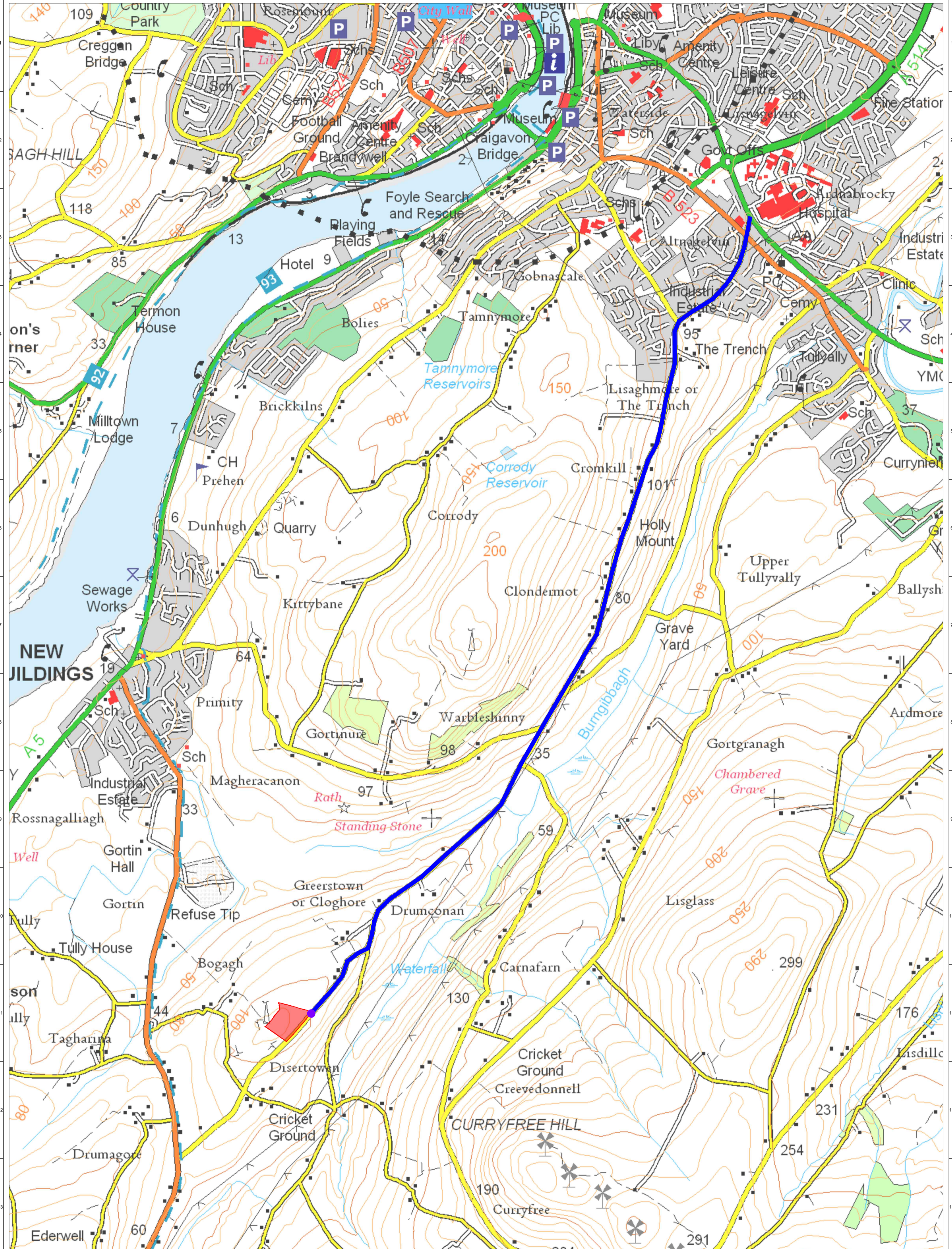
The traffic effects during the decommissioning phase can only be fully assessed closer to that period. As elements of the Proposed Development are likely to remain in-situ, the traffic flows associated with the decommissioning works will be lower than those associated with the construction phase. The construction phase therefore represents a worst-case assessment and as such, no further assessment of the decommissioning phase has been considered at this point. No potential significant decommissioning effects are predicted as part of the Proposed Development.

Appendix A - Indicative Access Route

05195-RES-ACC-DR-PT-004 - Access Route Plan

Appendix B - Site Entrance

05195-RES-ACC-DR-PT-001



KEY:

- DEVELOPMENT AREA
- DELIVERY ROUTE
- ACCESS POINT

ISSUE	DRAWN	CHKD	APPR	DATE	REVISION NOTES
1	BM	AP	PD	2024-04-03	FIRST ISSUE

PROJECT TITLE	KILLYMALLAGHT ENERGY STORAGE FACILITY
DRAWING TITLE	ACCESS ROUTE PLAN
RES DRAWING NUMBER	05195-RES-ACC-DR-PT-004
REV	1

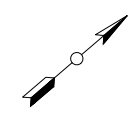
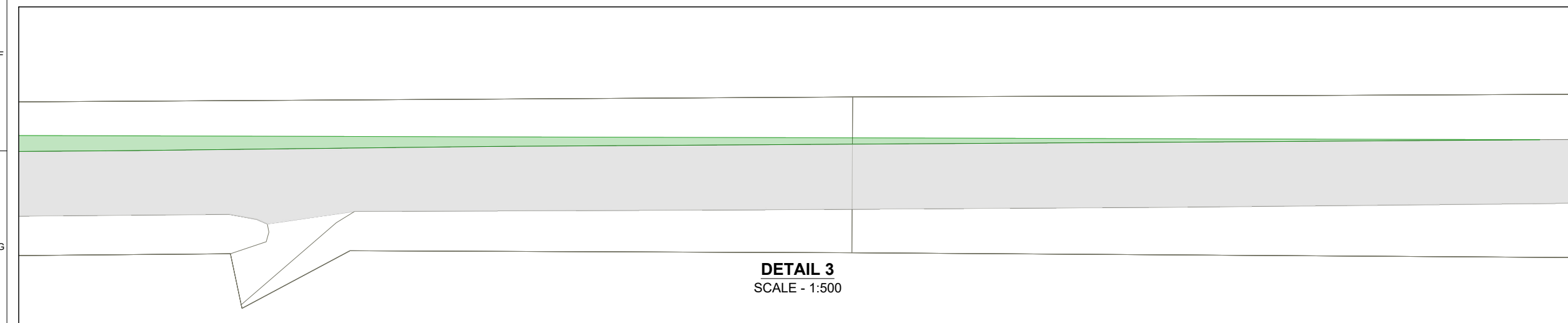
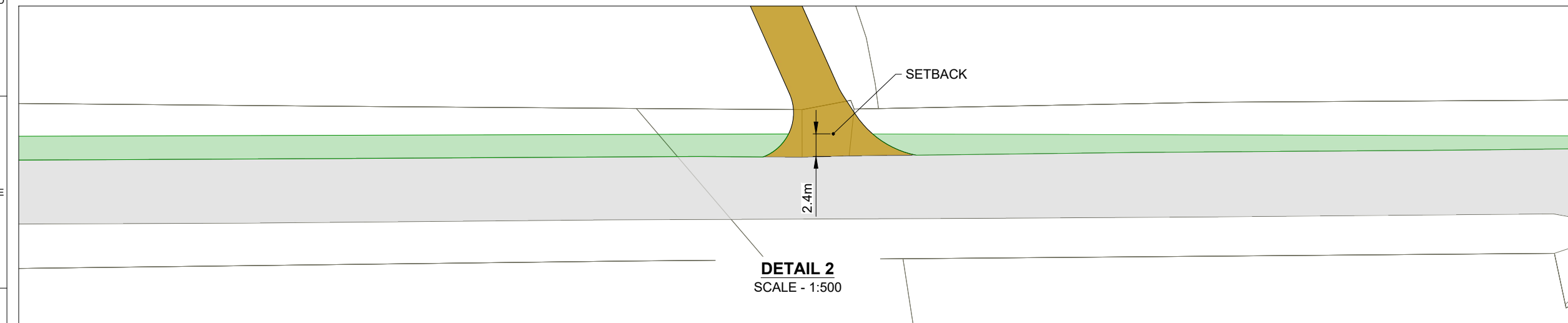
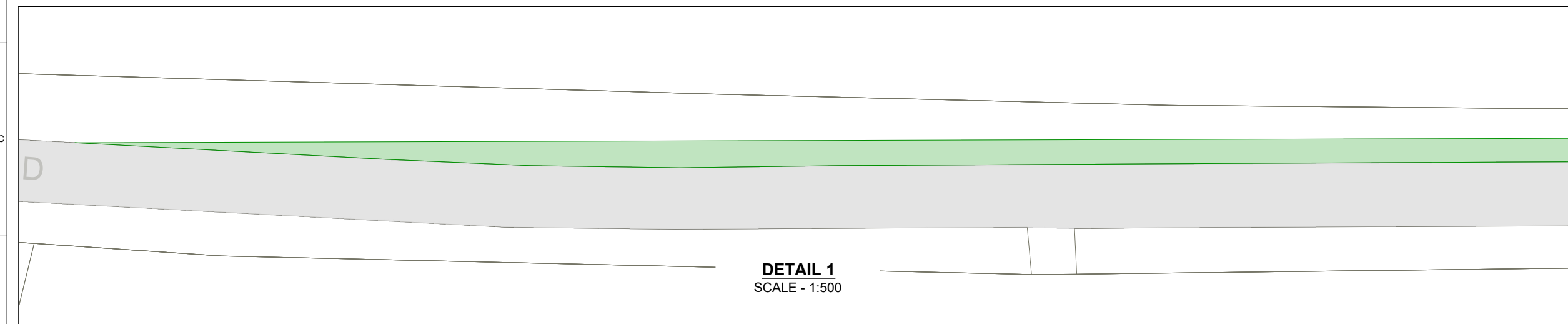
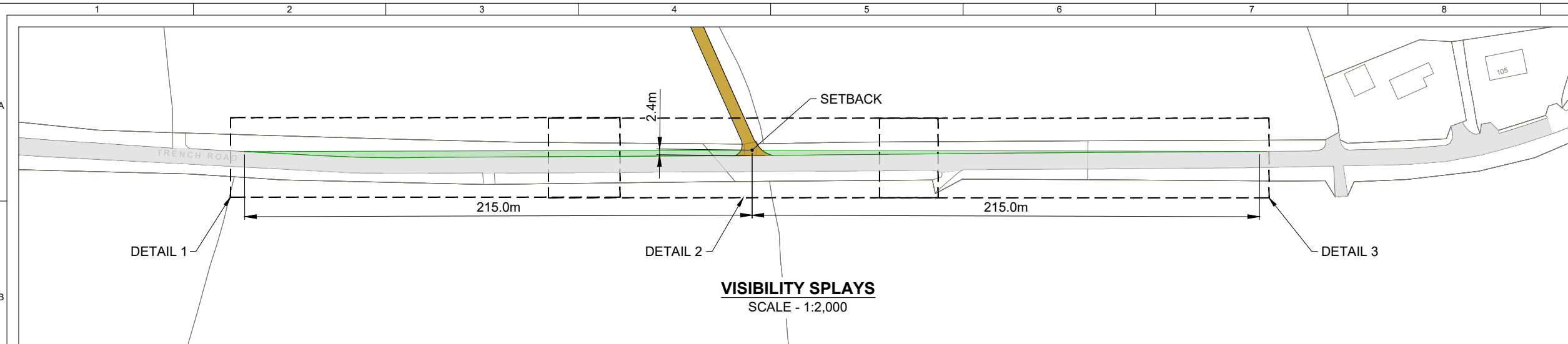
PURPOSE	PLANNING	PROJECTION	TM65 IRISH GRID
SCALE	1:15,000 @ A2	DATUM	N/A
LAYOUT DRAWING	N/A	T-LAYOUT NO	N/A

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KEY:

- EXISTING ROAD
- PROPOSED ACCESS TRACK
- VISIBILITY SPLAY



1	BM	AP	MK	2024-04-03	FIRST ISSUE
ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
PURPOSE					COORDINATES
PLANNING					TM65 IRISH GRID
SCALE					DATUM
AS SHOWN @A3					N/A
LAYOUT DRAWING					T-LAYOUT NO
N/A					N/A

PROJECT TITLE
KILLYMALLAGHT
ENERGY STORAGE FACILITY

DRAWING TITLE
SITE ENTRANCE
VISIBILITY SPLAY

RES DRAWING NUMBER	REV
05195-RES-ACC-DR-PT-001	1

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