

# **Construction Traffic Management Plan (CTMP)**

## **Installation of Battery Energy Storage System (BESS), Substation, Transformers and Associated Infrastructure**

**Land South of Eccles Substation, Scottish Borders, Scotland,  
TD12 4LU**

**On behalf of Bishops Dal Energy Storage Limited**

Date: January 2025 | Pegasus Ref: P24-O160\_TR\_R001

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# Document Management

Version	Date	Author	Checked/ Approved by:	Reason for revision
1	23 <sup>rd</sup> December 2024	AJ	JK/KE	
2	24 <sup>th</sup> December 2024	AJ	JK/KE	Client Review Comments.v1
3	14 <sup>th</sup> January 2025	AJ	JK/KE	Client Review Comments.v2



# Contents

1.	Introduction.....	1
	Scoping.....	2
	Report Structure .....	2
2.	Site Characteristics and Context.....	4
	Site Location and Description.....	4
	Existing Local Road Network.....	4
	A697.....	5
	Local Road Safety.....	5
	Baseline Traffic Conditions.....	6
	Public Rights of Way (PRoW) and Core Paths (CP).....	7
	Summary .....	8
3.	Development Proposals and Access.....	9
	Development Proposals.....	9
	Construction Vehicular Site Access.....	9
	Emergency Site Access .....	10
	Operational / Maintenance Site Access .....	11
	Construction Compound.....	12
	Proposed Mitigation .....	12
4.	Construction Traffic Routing.....	14
5.	Vehicle Trip Attraction .....	16
	Construction Phase .....	16
	Operational Phase.....	18
	Summary .....	18
6.	Summary and Conclusions .....	19

# Appendices Contents

Appendix A – Site Layout Plan.....	21
Appendix B – Construction Traffic Route Plans.....	22
Appendix C – ATC Summary Data.....	23
Appendix D – Core Paths Map .....	24
Appendix E – Site Access Drawings.....	25
Appendix F – Site Access Swepth Path Analysis.....	26
Appendix G – Emergency Access Swept Path Analysis.....	27

# 1. Introduction

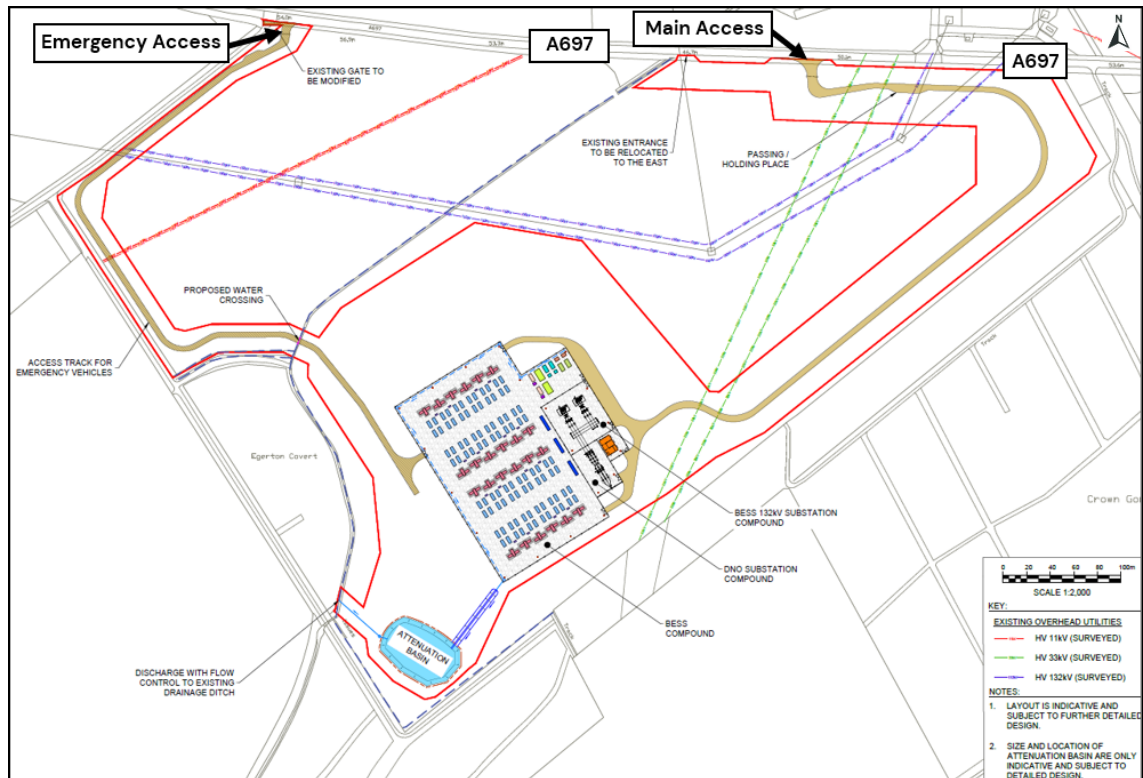
- 1.1. This Construction Traffic Management Plan (CTMP) has been prepared by Pegasus Group on behalf of Bishops Dal Energy Storage Limited (the Applicant) to consider the transport matters associated with the construction and operation of a proposed Battery Energy Storage Scheme (BESS) on land to the south of Eccles Substation, Scottish Borders, Scotland, TD12 4LU. The CTMP has been prepared further to a desktop review and a site visit undertaken on 7<sup>th</sup> February 2024.
- 1.2. The proposed development site (The Site) comprises an area of 13.20 hectares of agricultural land to the south of the A697 in Coldstream, TD12 4JA. The site lies circa 5km to the northwest of Coldstream and 34km southeast of Carfraemill and the A68 (Trunk Road).
- 1.3. The applicant is seeking to develop a 150MW ESS facility south of Eccles Substation. The ESS will consist of battery storage enclosures (BSEs), power conversion systems (PCSs), transformers, electrical infrastructure, foundations, access track, crane hardstanding, and spares storage containers. The grid connection will be via an onsite 132kV substation.
- 1.4. Proposals include primary access to The Site via a new priority access south off the A697 located approximately 100m to the west of Eccles Substation access which replaces the existing field access 100m further to the west. The existing field access will be removed, and the verge reinstated.
- 1.5. The internal access route from the A697 routes from the site entrance eastwards before turning to continue in a southwest direction to provide access to the BSEs from the east. This access will be used by all vehicles (except emergency vehicles) during both the construction and operation phases.
- 1.6. A secondary emergency vehicle access will be provided approximately 450m to the west of the primary access point with a route which travels southwest and then southeast to allow access to the BSEs (in the event of an emergency) from the west. This accords with the National Fire Chiefs Council (NFCC) 'Gridscale Battery Energy Storage System planning – Guidance for FRS' document<sup>1</sup> which is followed by the Scottish Fire and Rescue Service.
- 1.7. The Local Planning (LPA) and Local Roads Authority (LRA) for this area is Scottish Borders Council (SBC). The Section 36 planning application will be determined by the Scottish Ministers (Energy Consents Unit, ECU) and Scottish Borders LPA and LRA have been consulted.
- 1.8. Further details of the layout of the BESS scheme proposal are shown on **Plate 1.2** below extracted from the Site Layout Plan Ref: 05389-RES-LAY-DR-PT-001 Rev6 and included in **Appendix A**.

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<sup>1</sup> [Grid Scale Battery Energy Storage System-planning Guidance for FRS](#)



**Plate1.2: Site Layout**



Source: Infrastructure Layout Drawing annotated by Pegasus Group

## Scoping

- 1.9. Pre-application advice was sought via the LPA, (SBC) in July 2024 in relation to the above development proposals which included SBC Roads, as the LRA.
- 1.10. The pre-application submission included information in relation to transport and access.
- 1.11. A Scoping Meeting was held on the 19<sup>th</sup> of September 2024 where the principles of access, the location and form, were discussed and agreed with the LRA Officer.

## Report Structure

- 1.12. The structure of the remainder of this CTMP following this introduction is set out below:
  - **Section 2** – A summary of the site context including the local road network, any existing Public Rights of Way/Core Paths and Road safety review;
  - **Section 3** – A comprehensive description of the proposed site including access and internal site arrangements;
  - **Section 4** – Sets out the proposed construction traffic routing to / from the site;
  - **Section 5** – Sets out the vehicular trip attraction of the development proposals; the forecast vehicle numbers, size and frequency during construction and to a lesser extent operation; and

- **Section 6** – Summarises and concludes the document.

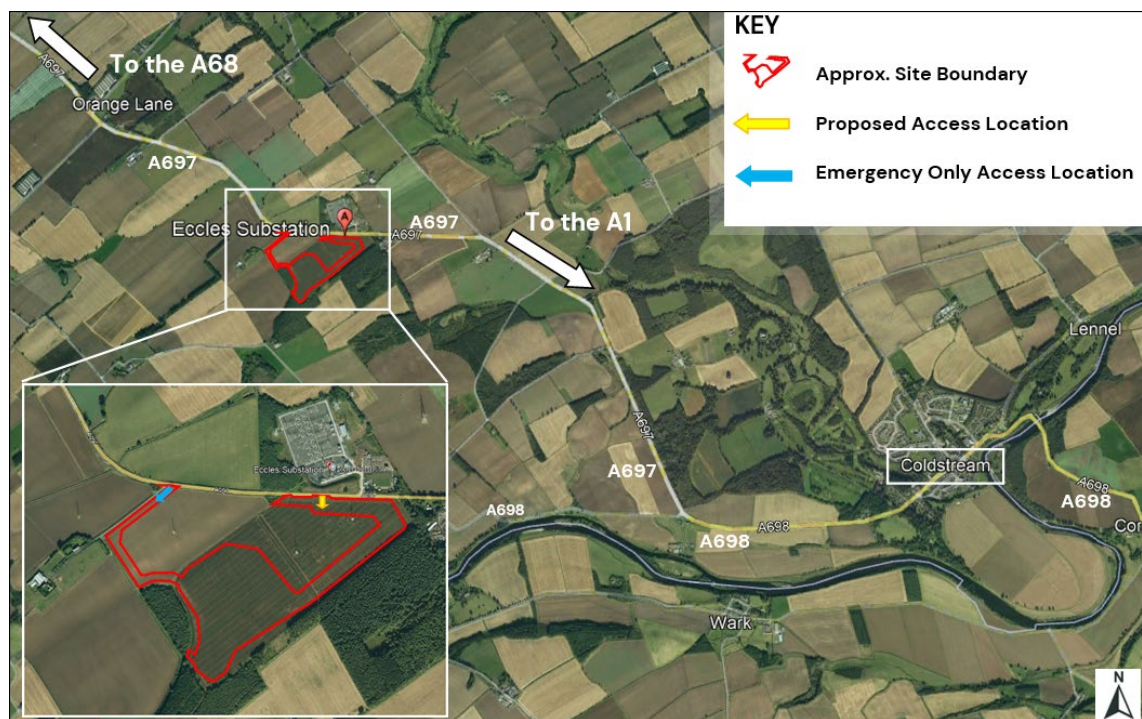
- 1.13. It will be the responsibility of the applicant and appointed contractor to comply with all statutory regulations and guidelines as appropriate, in relation to construction and operation movement activities.
- 1.14. The appointed contractors will be provided with a copy of this CTMP and will adhere to it as part of the planning consent. The CTMP will form part of the information provided as part of construction personnel's on-site induction processes. The contact details of the contractor and those of the LRA officer(s) will be exchanged before commencement of the works on site.

## 2. Site Characteristics and Context

### Site Location and Description

- 2.1. The proposed development site (The Site) comprises an area of 10.99 hectares of agricultural land to the south of the A697 in Coldstream, TD12 4JA. It is located circa 5km northwest of the town of Coldstream and is bound by the A697 to the north, agricultural fields to the west, further agricultural fields, and woodland to the south and a private road leading to a residential property to the west.
- 2.2. The A1 (located circa 75km south of the site at Northgate) and the A68 (located circa 34km north of the site at Carfraemill) are part of the Scottish Trunk Road Network, managed by Transport Scotland, and both roads provide access to the A697 leading towards the site. The A68 is closest Trunk Road to the site, it links Edinburgh in the north to England in the south (the A1(M) and Darlington at its southern extent).
- 2.3. The Site location with reference to Coldstream and the local road network is shown in **Plate 2.1** as well as being featured on the Construction Routing Plans, included at **Appendix B**.

**Plate2.1 – Site Location (Aerial View)**



Source: Google Earth Image annotated by Pegasus Group

### Existing Local Road Network

- 2.4. This section of the report outlines the road network surrounding the development site which in the case of The Site is limited to the A697 from which access is proposed. The A697 links directly to the Trunk Road network at the A68 in the northwest and the A1 to the east as discussed above.

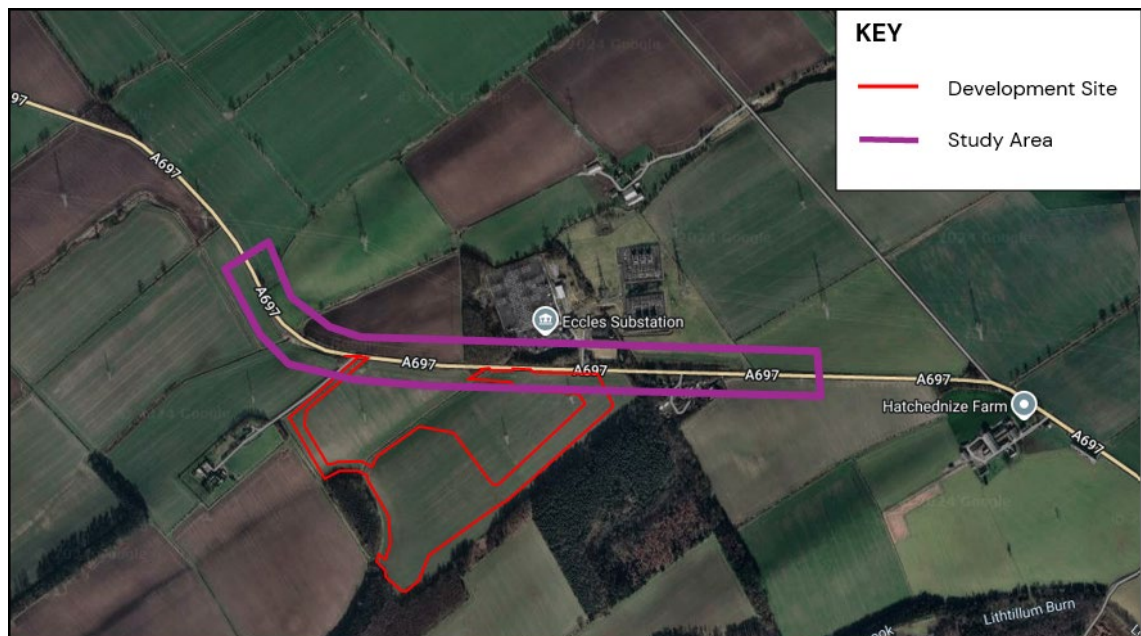
## A697

- 2.5. The A697 is a two-way single carriageway measuring approximately 7.3 metres in width and is subject to a 60mph posted speed limit. There are no footways adjacent to the carriageway, nor any street lighting in the vicinity of The Site.
- 2.6. The A697 serves as a main route for people travelling south from the Scottish Borders area into England as well as providing access to residential villages and towns along its route, such as Coldstream and Greenlaw.
- 2.7. It provides access to the existing Eccles substation, north of The Site (accessed circa 100m to the east) as well as existing businesses located along the route that use the route for deliveries (both import and export). Therefore, the road is already subject to heavy goods vehicles (HGVs) and articulated loads.
- 2.8. The A697 is therefore considered to be appropriate to accommodate HGVs for the construction phase of development.

## Local Road Safety

- 2.9. A road safety review has been undertaken using Personal Injury Collision (PIC) data obtained from the Crashmap website which holds records of all recorded incidents from the Department for Transport (DfT), as directed by SBC Roads Authority. The data has been interrogated for the most recently available five-year period of 01/01/2018 – 31/12/2022 as agreed with the LRA. **Plate 2.1** shows the study area.

**Plate 2.1 – Road Safety Study Area**



Source – Crashmap website (19 December 2024) annotated by Pegasus Group

- 2.10. The study area, in accordance with the requirements set out within SBC's Transport Assessment guidance, includes a circa 1.5 km length of the A697 (extending from circa 500m west of the emergency access and to a point circa 500m east of the main site access).

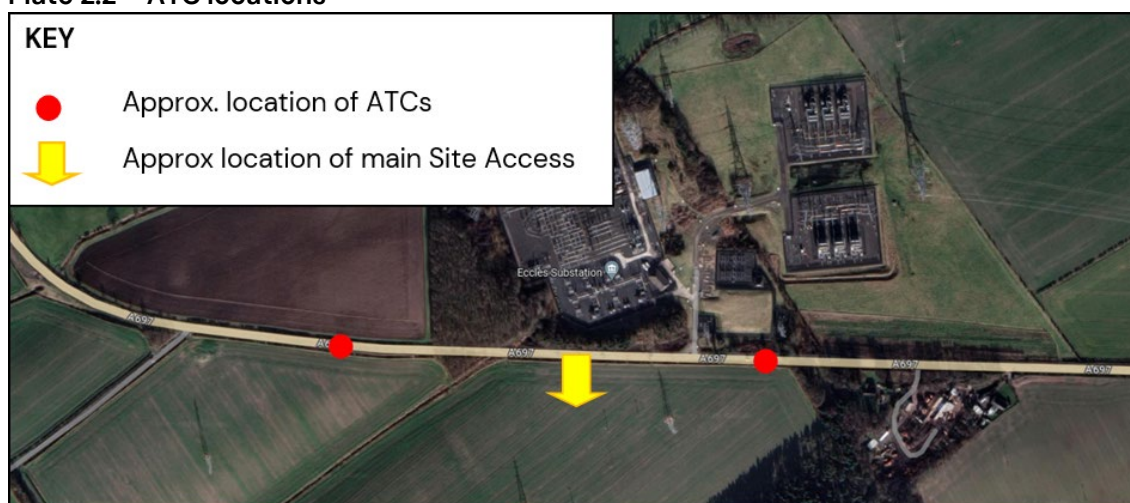


- 2.11. The results of the search confirm that during the most recent five-year period available there have been no reported collisions within the study area. It is therefore concluded that, as there are no recorded PICs in the vicinity of the site the available data does not indicate any inherent road safety concerns likely to be exacerbated by the development proposals.

## Baseline Traffic Conditions

- 2.12. Two Automatic Traffic Count (ATC) surveys were undertaken on the A697 for a seven-day period from Saturday the 19<sup>th</sup> of May 2024 to Friday the 24<sup>th</sup> of May 2024 to record volume of traffic and vehicle speeds within the vicinity of the proposed site access point. The ATC locations east and west of the proposed site access are shown on **Plate 2.2**.

**Plate 2.2 – ATC locations**



Source – Streetwise Ltd (Traffic Survey Company – confirmation of installation)

- 2.13. A summary of the ATC data is included at **Appendix C** and the recorded weekday speeds on the A697 are summarised at **Table 2.1**.

**Table 2.1 – Summary of Recorded Vehicle Speeds**

ATC Number and Location	Direction of Traffic	Average 5-day recorded speeds	Average 5-day 85 <sup>th</sup> percentile speeds (mph)
ATC 1 – A697 (West of access point)	Westbound	53.9	62.4
	Eastbound	49.9	56.9
ATC 2 – A697 (East of access point)	Westbound	52.4	59.8
	Eastbound	52.3	59.7

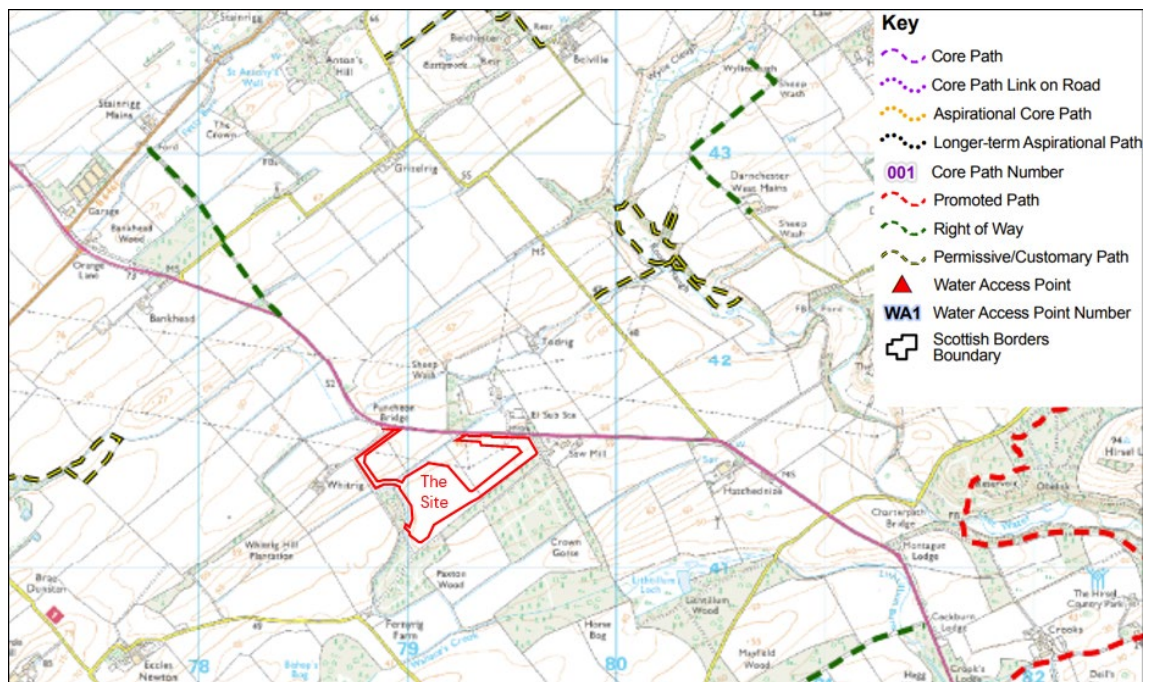
- 2.14. The recorded traffic speeds from the traffic survey confirms that vehicles travel at or slightly above the posted 60mph speed limit. Eastbound traffic flows from ATC 1, having just negotiated a bend in the road are slightly lower than the westbound traffic speed and lower than the recorded 85<sup>th</sup> percentile speeds recorded at ATC2, east of the proposed site access.

- 2.15. The average of the 85<sup>th</sup> percentile traffic flow from the two ATC across the 5-day week is 59.7mph which confirms the required visibility splay to equal the DMRB 60mph standard requirement of 2.0m by 215m.

## Public Rights of Way (PRoW) and Core Paths (CP)

- 2.16. Scotland does not have any definitive map for Public Rights of Way (PRoW) which shows where access is permitted for non-motorised modes of travel. ScotWays has catalogued and provides information on outdoor access which includes general access rights, public rights of way and core paths.
- 2.17. ScotWays with the help of NatureScot and Local Authorities created a national record of public rights of way, amalgamating information about rights of way, Heritage Paths<sup>2</sup> and Scottish Hill Tracks from a range of sources called the Catalogue of Rights of Way (CROW)<sup>3</sup>. There is no identified Heritage Path in the vicinity of the site and the nearby Hatchednize Farm (the nearest farm to the east).
- 2.18. It has been identified that there are no Core paths crossing the development site, nor are there within the immediate vicinity. The Core Path map<sup>4</sup> for the development site area is provided in **Appendix D** and shown in **Plate 2.4** below.

**Plate 2.4 – Core Paths Local to the Site**



Note: Base Map Source – Scottish Borders Adopted Core Path Plan Area 26 (annotated by Pegasus Group)

<sup>2</sup> <https://scotways.com/heritage-path/>

<sup>3</sup> [Scotways/CROW](https://scotways.com/CROW)

<sup>4</sup> [www.scotborders.gov.uk](http://www.scotborders.gov.uk) – greenlaw-east-coldstream-core-paths

## Summary

- 2.19. The development proposals will not have any impact on Core Paths or and recognised access routes.
- 2.20. There are no existing road safety issues identified in the study area within the vicinity of the site access or on the surrounding road likely to be exacerbated by the development proposals.
- 2.21. Based on the above, it is concluded that the local road network is safe and suitable to accommodate the anticipated construction and operational traffic associated with the development of the BESS.

### 3. Development Proposals and Access

#### Development Proposals

- 3.1. The proposed development will comprise the installation of a 150MW BESS facility south of Eccles Substation. The BESS will consist of battery storage enclosures (BSEs), power conversion systems (PCSs), transformers, electrical infrastructure, foundations, access track, mobile crane hardstanding, and spares storage containers. The grid connection will be via an onsite 132kV substation. The site layout is available on drawing ref: O5389-LAY-DR-PT-001 Rev6 provided in **Appendix A**.
- 3.2. The Point of Connection (POC) is proposed within a substation compound adjacent to the northeast boundary of the BESS compound (all within The Site red line boundary) therefore not affecting roads.

#### Construction Vehicular Site Access

- 3.3. Proposals include primary access to The Site via a new priority access south off the A697 located approximately 100m to the southwest of Eccles Substation access which replaces the existing field access 100m further to the west. The existing field access will be removed, and the verge reinstated.
- 3.4. As set out in more detail in **Chapter 4** it is proposed that construction vehicles will route to and from the site via the A697 from the east and west.
- 3.5. The internal access route from the A697 routes from the site entrance eastwards before turning to continue in a southwest direction to provide access to the BSEs from the east. This access will be used by all vehicles (except emergency vehicles) during both the construction and operation phases.
- 3.6. A secondary emergency vehicle access will be provided approximately 450m to the west of the primary access point with a route which travels southwest and then southeast to allow access to the BESS compound (in the event of an emergency) from the west in addition to the general access from the east (described in paragraph 3.5 above). This accords with the National Fire Chiefs Council (NFCC) Gridscale Battery Energy Storage System planning – Guidance for FRS document which is followed by the Scottish Fire and Rescue Service<sup>5</sup>.
- 3.7. As set out further in **Chapter 5**, it is anticipated that construction will generate a maximum total of 5,090 two-way trips by HGVs throughout the 21-month construction period, which equates to a maximum of 26 daily two-way trips (13 HGV deliveries).
- 3.8. Visibility splays have been informed by the ATC surveys undertaken on the A697 between Saturday the 18<sup>th</sup> of May and Friday the 24<sup>th</sup> of May 2024. It should be noted that the posted speed limit is National Speed Limit (60mph) and the 85<sup>th</sup> percentile calculated speeds were in general accordance with this speed limit, as set out in **Section 2**.

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<sup>5</sup> [firescotland.gov.uk- battery-energy-storage-systems](https://firescotland.gov.uk/battery-energy-storage-systems)



- 3.9. Pegasus drawing P24-0160-SK01 shows the indicative site access arrangement and demonstrates that the required visibilities are achievable within land owned by the applicant or under the control of the LRA (the adopted public road extent), subject to some potential vegetation trimming to maintain visibility above 600mm.
- 3.10. A Swept Path Analysis (SPA) for a 16.5m Heavy Goods Vehicle (HGV) has been undertaken and is included on Pegasus drawing P24-0160-SK03 included as **Appendix F**. This is the largest vehicle to regularly access the site during construction. The vehicle is shown to be able to access and egress the site in a forward gear. A turning area will be provided within the construction compound. If considered necessary bankspeople will be deployed at the site access to guide vehicles into and out of the site.
- 3.11. The access junction has been designed to allow for one HGV to enter and exit the site from a single lane of the A697 (no over-run into the adjacent oncoming lane to turn) at a time, but not concurrently. An on-egress passing lane is included within the site access track with clear visibility of the access to facilitate the priority to incoming vehicles.
- 3.12. An SPA for a 16.5m HGV has been undertaken to show an incoming vehicle passing an occupied passing bay and to show the HGV accessing the bay and then as the incoming vehicle has passed exiting the lane onto the track and continuing on to exit The Site. The SPA is shown on Pegasus drawing P24-0160-SK05 included as **Appendix F**.
- 3.13. This single access/egress methodology was chosen so that the junction design did not become over-engineered, particularly as the junction is to be retained for operational traffic following construction.
- 3.14. The arrival(s) and departure(s) of delivery vehicles will be managed on a case-by-case basis, and bankspersons used as necessary to guide vehicles into and out of the site, as required.

## Emergency Site Access

- 3.15. In accordance with the National Fire Chiefs Council (NFCC) Gridscale Battery Energy Storage System planning – Guidance for FRS document a secondary emergency access will be provided to serve the site from an alternate direction to the main site access. In the event of an emergency The Site may be accessed from the A697 via two internal access tracks which provide access to the BSE from the west and from two locations in the east.
- 3.16. The emergency access will be provided from the A697 solely for the use of emergency vehicles in the event of an incident, located in the northwestern edge of The Site area, circa 430m west of the proposed main site access as shown on the indicative Site Layout Plan (**Appendix A**).
- 3.17. The location of the secondary access point has been agreed in principle with SBC Roads Authority during a meeting held on the 19<sup>th</sup> of September 2024. The emergency access is provided through the modification of an existing field access as agreed.
- 3.18. The emergency site access is proposed to be implemented during the construction phase of the site and will remain in situ for the full lifecycle of the project.

- 3.19. Neither construction nor operational traffic associated with the site are permitted to use the emergency site access. The emergency site access is not intended to provide access for pedestrians or cycles and will not be promoted as such.
- 3.20. The access will be managed by a gate such that its use is limited to emergency vehicles only.
- 3.21. Pegasus drawing P24-O160-SK07 shows the indicative site access arrangement. The access uses an existing agricultural field access adjacent to a private access, both of which are in use. The existing achievable visibility is circa 174m within land owned by the applicant or under the control of the LHA (the adopted public road extent) subject to some potential vegetation trimming to maintain visibility above 600mm. This is slightly below the DMRB requirement for a new direct access, however as a modification of an existing access with no inherent road safety concerns it is considered acceptable.
- 3.22. A Swept Path Analysis (SPA) for a fire appliance has been undertaken and is included on Pegasus drawing P24-O160-SK04 included as **Appendix G**. The vehicle is shown to be able to access and egress the site in a forward gear.
- 3.23. The access arrangement will be modified to be slightly wider than existing to allow for a fire appliance to enter and exit the site from a single lane of the A697 (no over-run into the adjacent oncoming lane to turn) at a time. An on-egress passing lane is included within the site access track with clear visibility of the access to facilitate the priority to incoming vehicles.
- 3.24. An SPA for a fire appliance has been undertaken to show an incoming vehicle passing an occupied passing bay and to show the vehicle accessing the bay and then as the incoming vehicle has passed exiting the lane onto the track and continuing on to exit The Site. The SPA is shown on Pegasus drawing P24-O160-SK06 included as **Appendix G**.

## Operational / Maintenance Site Access

- 3.25. The main access from the A697, shown on Pegasus drawing P24-O160-SK01 (included as **Appendix E**), which is proposed for construction access will be retained for use by maintenance vehicles once the site is operational.
- 3.26. As set out further in **Chapter 5**, once operational, it is anticipated that maintenance vehicles will access the site on an ad-hoc basis, when required. The operational trip generation of the site will therefore be low, typically one two-way vehicle trips per week. Maintenance trips will generally be made by 4x4 or a small van type vehicle.
- 3.27. It is not anticipated that any vehicles larger than a 7.5t Transit Van will require access to the site during operation, except in the potential event of a replacement of a large component.
- 3.28. Whilst the contractor's construction compound will have been removed, space will remain within the site for vehicles to turn around to ensure that reversing will not occur onto the adjacent carriageway.

## Construction Compound

- 3.29. A temporary construction compound will be located within the site. The compound will be of a suitable size for an articulated vehicle to enter and exit in a forward gear. The compound will include areas for the storage of plant and equipment.
- 3.30. A temporary car parking area (including spaces for minibuses) will be provided on the site within a contractor's compound. Parking will therefore be contained within the site and no unnecessary parking will occur on the local road network. Arrivals and departures of HGVs will be managed to ensure that no HGVs wait on the public road (incoming vehicles to the site will be given priority over exiting vehicles).

## Proposed Mitigation

- 3.31. The arrival and departure of HGVs at the site will be strictly managed by the site manager. Drivers will adhere to a delivery schedule and will be required to call ahead to ensure that any emerging HGVs can be held within the construction compound. No HGVs will be permitted to wait on the access track (except in designated passing bays on egress) or on public roads.
- 3.32. If considered necessary by the Roads Authority, deliveries to the site can be restricted to set hours outside of the typical road peaks. However, the proposed construction route does not route past any sensitive locations (such as schools), and it is therefore considered that no delivery timing restrictions are necessary.
- 3.33. Temporary signage will be erected in the vicinity of the site and local road network during the construction phase. Diagram 7301 'WORKS TRAFFIC ONLY' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate that heavy construction vehicles are turning. Signage will be white text and red background 1050 x 750mm mounted in 'A' frames, as illustrated at **Plate 3.1** below.

**Plate 3.1 – Diagram 7301**



1. Temporary Construction Traffic signage (Diagram 7301 'WORKS TRAFFIC' in the TSRGD)

- 3.34. As set out at **paragraph 3.12**, if considered necessary, bankspeople will be located at the site access off the A697 to assist HGVs entering and exiting the site.
- 3.35. Wheel washing facilities will be provided within the site prior to the exit of the construction compound if ground conditions require this. This will mitigate spoil entering the public road. A road sweeper can also be provided, if / when necessary. This can be secured by an appropriately worded planning condition.

## 4. Construction Traffic Routing

- 4.1. It is proposed that the designated route for all traffic associated with the construction phase of the development may be taken from the Trunk Road Network; the A68 in the west and the A1 in the east. It has been confirmed by SBC Roads Authority that there are no weight restrictions on Coldstream Bridge to the east so construction traffic may route to and from the site from the east and west as follows:
- 4.2. From the East – A1
- i. Routing from the A1 at Tweedmouth onto the East Ord Roundabout, vehicles will exit the East Ord Roundabout, routing southwest onto A698.
  - ii. Vehicles will then continue southeast for approximately 17.8 km to Cornhill on Tweed and the roundabout junction with the A697, taking the second exit on the roundabout to continue on the A698 (Main Street) and on towards Coldstream travelling in a northwest direction for approximately 3.0 km.
  - iii. Vehicles continue through Coldstream continuing on the A698 for a further 2.0km where at the junction with the A697 they proceed ahead following the major route ( the A698 forming the minor arm off to the left at this point).
  - iv. Vehicles continue on the A697 for circa 3.8km passing the entrance to Eccles Substation on the right (north) and a further 0.1km to the site entrance on the left (south). Vehicles turn left into The Site.
- 4.3. From the West – A68
- i. Routing from the A68 at Carfraemill Roundabout, vehicles will take the first exit onto the A697.
  - ii. Vehicles will then continue southeast for approximately 34.7 km passing through Whiteburn and Greenlaw en-route to The Site located to the right (south) off the A697. Vehicles turn right into The Site.
- 4.4. Vehicles exiting the site may turn left or right out of the site and use the reverse of the construction routes to the east or west as outlined above.
- 4.5. This route ensures that construction vehicles associated with the site will use A-roads and that construction vehicles associated with the site will not unnecessarily pass-through small villages or sensitive locations to access the site.
- 4.6. It was confirmed from a site visit (7<sup>th</sup> February 2024) that the A697 is already used by HGV vehicles (assumed to be associated with local agricultural/timber units, and routing between England, the Scottish Borders, and onwards to Edinburgh).
- 4.7. The proposed construction traffic route is shown on Pegasus plans P24-O160-TR-PL01 and P24-O160-TR-PL02 included as **Appendix B**.

- 4.8. Construction vehicles will only access the site via the designated construction route identified in this CTMP. An appropriate signage scheme will be put in place on the A697 from the A68 in the northwest and from Coldstream in the southeast.

## 5. Vehicle Trip Attraction

### Construction Phase

- 5.1. The Applicant has confirmed that the construction period is likely to take up to 21 months to complete.
- 5.2. The applicant has confirmed that the largest vehicle size to regularly access the site during the construction phase is a 16.5m articulated lorry. Associated goods such as smaller components, tools and other equipment will be delivered on smaller flatbed trucks and low loaders.
- 5.3. The below vehicle numbers have been based on 16.5m HGV movements to and from the site. This has been used to provide a robust assessment. However, not all vehicles will be of this size and the smallest vehicle size possible will be used for the movement of construction materials, plant, and equipment.
- 5.4. The Applicant is committed to ensuring that, wherever possible, local contractors and employees are used in all aspects of BESS development. The major opportunities arise during the construction phase when suitably qualified local firms are often invited to bid for different aspects of construction. Contractors are encouraged to source construction materials locally (i.e. within the county) and to use local transport and plant hire companies where possible, in addition to local services and amenities. Should either a local or non-local workforce be hired, the number of car trips to the site will be minimised wherever possible by shared transport.
- 5.5. Throughout the construction phase there will be a combination of HGVs (for the component and material deliveries) and cars/vans/minibuses (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 regular throughout.
- 5.6. **Table 5.1** below shows the estimated number of HGV movements for the main infrastructure. The applicant has forecasted the heavy goods movements which could be associated with the entire construction period.
- 5.7. The table also indicates during which month(s) of the construction period each delivery / vehicle movement is expected to occur and outlines the expected maximum daily two-way trips for deliveries during these months.
- 5.8. Construction is currently anticipated to commence in December 2028 and to conclude by the end of August 2030, although this is subject to the Energy Network Operator's timings.

**Table 5.1 – Forecasted Heavy Goods Vehicle Movements**

Delivery Type	Estimated total two-way trips over an 21 – month Construction period	Indicative spread of vehicle movements during the Construction phase	Average Monthly two-way trips (active months)	Average Daily two-way (total) trips
Site Mobilisation/Demobilisation (incl Site Welfare)	70	Month 1 and 21	35	2
Temporary Fence	30	Month 1	30	1
Site Welfare Maintenance	126	Months 1-21	6	0.3
General Site Deliveries	126	Months 1-21	6	0.3
Imported Stone	3800	Months 1-9	422	19
Concrete Delivery	420	Months 7-11	84	4
BSE, PCS and MV Skid Delivery	340	Months 7-15	38	2
Electrical Equipment Delivery	60	Months 13-17	12	1
Substation Equipment Delivery	20	Months 17-20	5	0.2
Cable and Ducting Delivery	40	Months 3-7	8	0.4
Permanent Fence Delivery/CCTV	52	Months 19-20	26	1
Spare Container Delivery	6	Month 21	6	0.3
<b>Total</b>	<b>5090</b>	<b>21 months</b>		
<b>Maximum Monthly/Daily Trips</b>		<b>Months 7-10</b>	<b>559</b>	<b>26</b>

Source: Client (Applicant) estimates of construction movements. Numbers are rounded to whole numbers except where the monthly number results in less than one daily two-way trip.

- 5.9. The construction phase is currently programmed to last for a 21-month period and typically a five-day working week with the possibility for weekend working has been forecast. Across this period, it is forecast that circa 2,545 deliveries (5,090 two-way movements) could be made by HGVs associated with construction of the BESS scheme, over the entire construction period.
- 5.10. Months seven to nine (June to August 2029) of the construction period is associated with the peak number of HGV movements when 13 deliveries/26 two-way movements are forecast.). This
- 5.11. Throughout the 21-month construction period, it is forecast that upon commencement months one to six would typically attract between 10 to 12 deliveries per day (20-23 two-way movements per day across the month) and following the peak construction period set out above months 10-21 (September 2029 to August 2030 inclusive) HGV deliveries are



forecast to reduce to between 1-4 per day (2-7 two-way movements per day across the month).

- 5.12. There may also be a small number of construction movements associated with smaller vehicles such as the collection of skips for waste management which are not included at **Table 5.1**.
- 5.13. Additionally, it was suggested by the applicant that construction personnel would generate circa 20<sup>6</sup> Car/LGV two-way trips per day throughout the 21-month construction period. A total of 46 total daily two-way trips is unlikely to be discernible within the daily total traffic variance of flow on the A697.

### **Cumulative Construction Traffic Impacts**

- 5.14. It is understood that there are a number of renewable energy projects, consented and under-consideration which are set out in the Planning and Design and Access Statement reference P24-O160 dated January 2025 and illustrated on drawing number P24-O160\_EN\_O6F. At the time of writing, it is not known if there will be any coincidence of construction phase of any of the schemes, however as the CTMP (an organic management document) is further developed to include the detailed construction programme and construction traffic it will be cognisant of local committed developments to minimise the impact of any coincidental cumulative construction traffic impacts.

## **Operational Phase**

- 5.15. After commissioning, it is anticipated that the vehicle trip generation of the site will be low, typically one vehicle trip per week for equipment maintenance. This would typically be made by light van or 4x4 type vehicles. Whilst the contractor's compound will have been removed, space will remain within the site for such a vehicle to turn around to ensure that reversing will not occur onto the adjacent road.
- 5.16. It is not anticipated that any vehicles larger than a 7.5t Transit Van will require access to the site during operation, except in the potential event of a replacement of a large component.

## **Summary**

- 5.17. While exact vehicle movement figures would be dependent upon arrangements made by the end contractor, it is anticipated that there will be a maximum of circa 26 two-way HGV movements per day (13 HGV deliveries) throughout the construction period. There will also be a small number of construction movements associated with smaller vehicles such as the collection of skips for waste management, the transport of construction workers and sub-contractors, although the numbers involved are forecast to be relatively low on a day-to-day basis and minibuses could be provided for general operatives.
- 5.18. The level of traffic during the temporary construction phase is not considered to be material and it is considered that this will not have a detrimental impact on the safety or operation of the local or trunk road network.

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<sup>6</sup> 450 staff Car/LGV per month over the 22-day working month.

## 6. Summary and Conclusions

- 6.1. This Construction Traffic Management Plan (CTMP) has been prepared by Pegasus Group on behalf of Bishops Dal Energy Storage Limited to address the transport matters associated with the construction and operation of a proposed Battery Energy Storage Scheme (BESS) on land to the south of Eccles Substation, Coldstream.
- 6.2. This CTMP has been prepared further to a site visit undertaken on the 7<sup>th</sup> of February 2024.
- 6.3. The proposals comprise the installation of a BESS scheme with a total export capacity of circa 150 Megawatts (MW). The scheme is proposed to be served from the A697.
- 6.4. It is proposed that access for construction vehicles will be provided via a new priority access south off the A697 located approximately 100m to the west of Eccles Substation access which replaces the existing field access 100m further to the west. The existing field access will be removed, and the verge reinstated.
- 6.5. The internal access route from the A697 will travel east before turning to the southwest to provide access to the BESS compound from the east. This access will be used by all vehicles during both the construction and operation phases.
- 6.6. A secondary emergency vehicle access will be provided approximately 450m to the west of the primary access point with a route which travels southwest and then southeast to allow access to the BESS compound from the west. This accords with the National Fire Chiefs Council (NFCC) Gridscale Battery Energy Storage System planning – Guidance for FRS document which is followed by the Scottish Fire and Rescue Service<sup>7</sup>.
- 6.7. All construction traffic would approach the site via the A697 from either the A1 in the east or the A68 in the northwest, both of which are trunk roads.
- 6.8. Additional HGV traffic on the local road network generated during the construction phase is expected to reach a peak of 26 daily two-way trips per day (months 7–9), with HGV movements reducing thereafter to between 2–7 daily two-way trips. There will additionally be a maximum number of 20 two-way Car/LGV trips generated per day by construction personnel arriving to site during the construction period.
- 6.9. It is considered that the proposed access arrangements are suitable to accommodate the number of temporary construction trips and low operational trips associated with the proposed development.
- 6.10. The A697 route to and from the site from the nearest Trunk Roads (A68 and A1) is already frequented by HGVs, therefore the construction route detailed in this report is considered appropriate.
- 6.11. Mitigation measures, where necessary, will be agreed between the appointed contractor and Scottish Borders Council as the Local Road Authority for the proposed development.

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<sup>7</sup> [firescotland.gov.uk- battery-energy-storage-systems](https://firescotland.gov.uk/battery-energy-storage-systems)

Typical measures are set out at **Section 3** above including examples of appropriate signage and details of the site compound.

- 6.12. The road safety review found that there are no inherent road safety concerns likely to be exacerbated by the forecast construction or operational trips. It is concluded that there are no valid road or transportation reasons which would prevent the proposed development of the site.



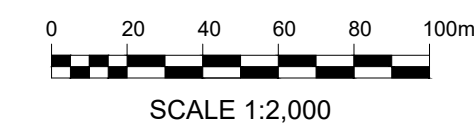
## Appendix A – Site Layout Plan



KEY:

- DEVELOPMENT BOUNDARY (OUTSIDE OF LINE DENOTES BOUNDARY)
  - PALISADE, WELDMESH OR ACOUSTIC FENCE
  - BATTERY STORAGE ENCLOSURE (BSE)
  - 2 No. POWER CONVERSION SYSTEMS (PCS) WITH TWIN MV SKID AND APRON SLAB
  - BESS SUBSTATION BUILDING
  - DNO SUBSTATION BUILDING
  - AUXILIARY TRANSFORMER
  - LV SWITCHGEAR ROOM
  - AGGREGATION PANEL WITH LV PILLAR
  - PRE-INSERTION RESISTOR
  - CAPACITOR BANK
  - HARMONIC FILTER AND RESISTOR
  - SPARES CONTAINER
  - LIGHTING / CCTV COLUMN
  - GRAVEL OR ASPHALT FINISH TO SUIT DETAILED EARTHING DESIGN
  - ACCESS TRACK
  - EMERGENCY ACCESS TRACK
  - STOCK PROOF FENCE
  - SURFACE WATER FILTER DRAIN
  - SURFACE WATER PIPE
  - SURFACE WATER CATCH PIT/ INSPECTION CHAMBER
  - FLOW CONTROL MANHOLE
  - SWALE
  - EXISTING DRAINAGE INFRASTRUCTURE
  - WATER CHANNEL CROSSING CULVERT
  - GATE
- CONTINUED...

6	BM	AP	JH	2024-11-26	UPDATED DEVELOPMENT BOUNDARY AND ACCESS TRACK
5	BM	AP	JH	2024-10-29	UPDATED ACCESS TRACK, DEVELOPMENT BOUNDARY AND LAYOUT
4	BM	AP	CH	2024-08-30	UPDATED DRAINAGE AND EMERGENCY ACCESS ROUTE
3	BM	VM	JH	2024-06-24	UPDATED BOUNDARY, UPDATED ACCESS TRACK AND CHANGED SHEET SIZE
ISSUE/DRAWN/CHKD/APPD/DATE					REVISION NOTES
PURPOSE					COORDINATES
PLANNING					OSGB 1936
SCALE					DATUM
1:2,000 @ A2					N/A
LAYOUT DRAWING					T-LAYOUT NO
N/A					N/A
PROJECT TITLE					
BISHOPS DAL STORAGE					
DRAWING TITLE					
INFRASTRUCTURE LAYOUT					
RES DRAWING NUMBER					REV
05389-RES-LAY-DR-PT-001					6
THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LIMITED AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION					

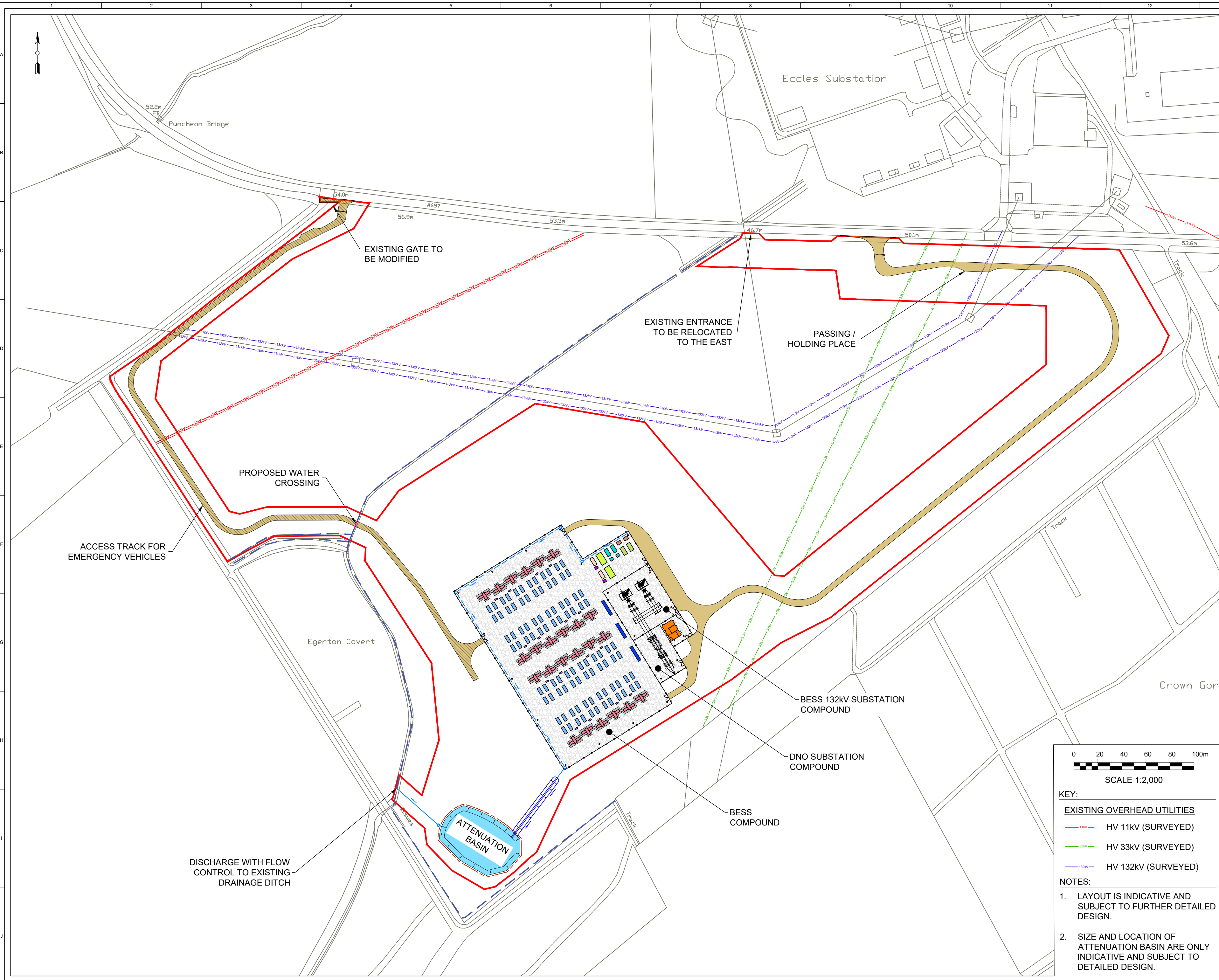


KEY:

- EXISTING OVERHEAD UTILITIES
- 11kV HV 11kV (SURVEYED)
  - 33kV HV 33kV (SURVEYED)
  - 132kV HV 132kV (SURVEYED)

NOTES:

- LAYOUT IS INDICATIVE AND SUBJECT TO FURTHER DETAILED DESIGN.
- SIZE AND LOCATION OF ATTENUATION BASIN ARE ONLY INDICATIVE AND SUBJECT TO DETAILED DESIGN.





## **Appendix B – Construction Traffic Route Plans**



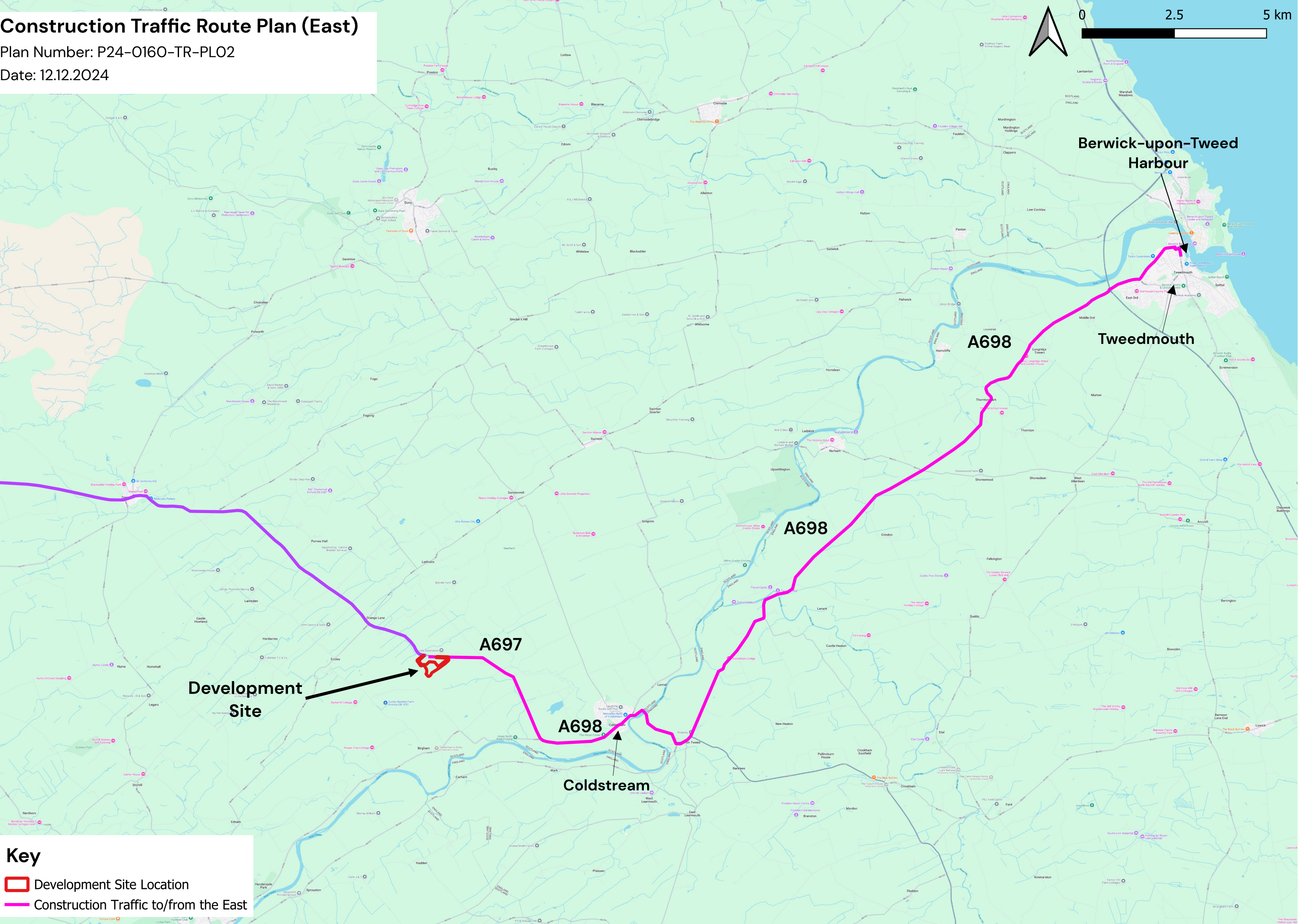
# Construction Traffic Route Plan (East)

Plan Number: P24-0160-TR-PL02

Date: 12.12.2024

## Key

-  Development Site Location
-  Construction Traffic to/from the East

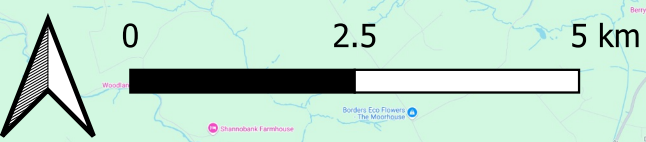




# Construction Traffic Route Plan (West)

Plan Number: P24-O160-TR-PL02

Date: 12.12.2024



Northwest to  
Forth Ports, Leith

A68

Carfraemill

A697

A697

Greenlaw

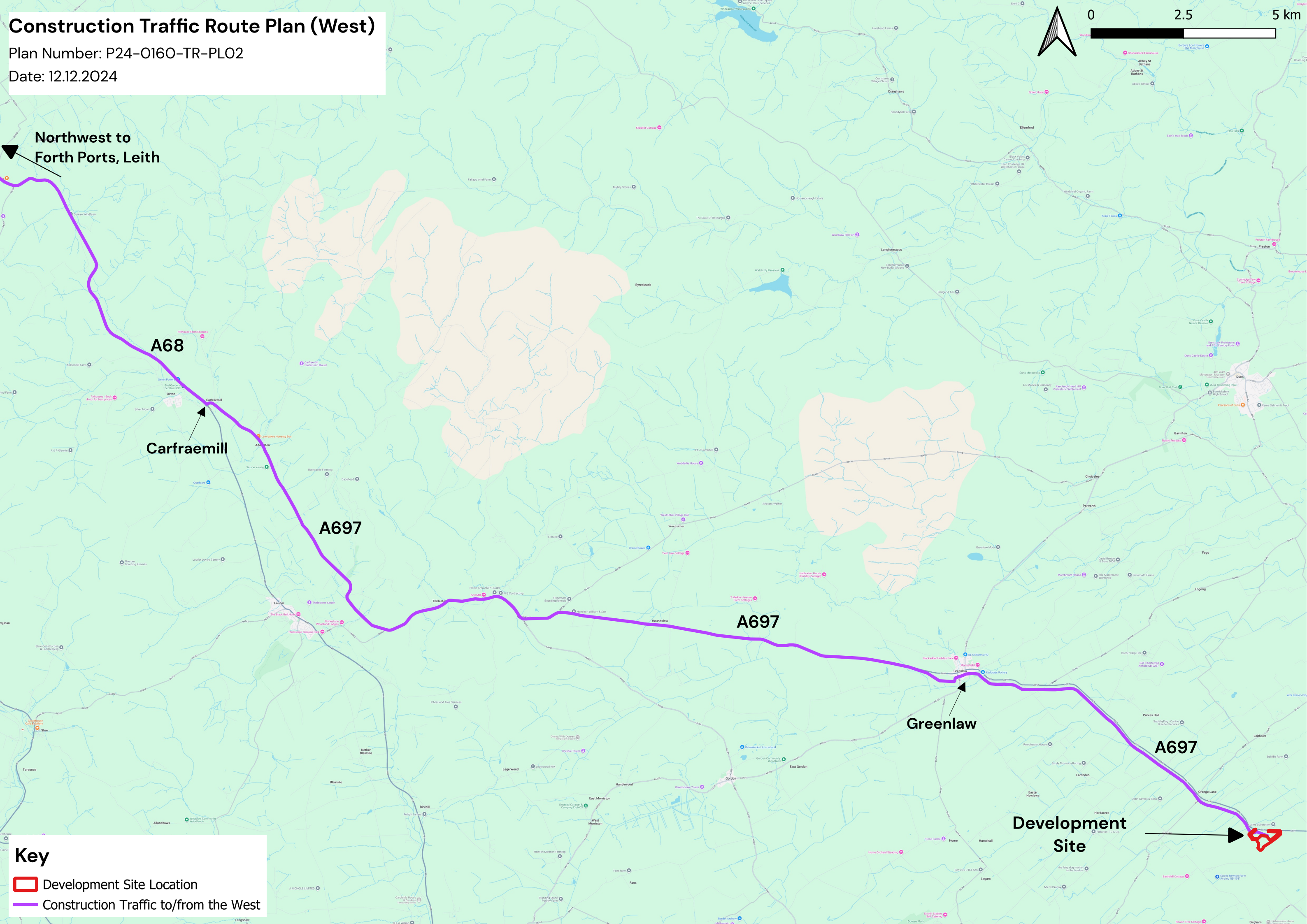
A697

Development  
Site

Key

Development Site Location

Construction Traffic to/from the West







## Appendix C – ATC Summary Data

## Coldstream - ATC 1 - A697

Produced by Streetwise Services Ltd.



### Channel - Eastbound

























	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	730	606	787	806	824	759	968	829	783
Mean Speed	52.5	53.4	52.2	51.3	48.4	48.6	48.9	49.9	50.8
85%ile Speed	59.1	60.0	59.7	59.1	55.1	55.6	54.9	56.9	57.6
No. Vehicles > 60 MPH Limit	90	91	113	107	41	31	35	65	73
% Vehicles > 60 MPH Limit	12.3	15.0	14.4	13.3	5.0	4.1	3.6	8.1	9.7
No. Vehicles > 75 MPH	2	3	1	6	1	1	1	2	2
% Vehicles > 75 MPH	0.3	0.5	0.1	0.7	0.1	0.1	0.1	0.2	0.3

### Channel - Westbound

	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	692	739	931	859	767	829	1407	959	889
Mean Speed	53.4	53.7	52.4	50.7	54.0	55.5	56.7	53.9	53.8
85%ile Speed	60.2	60.6	60.0	59.1	63.7	64.4	64.7	62.4	61.8
No. Vehicles > 60 MPH Limit	110	124	140	103	198	254	451	229	197
% Vehicles > 60 MPH Limit	15.9	16.8	15.0	12.0	25.8	30.6	32.1	23.1	21.2
No. Vehicles > 75 MPH	3	2	4	1	10	8	35	12	9
% Vehicles > 75 MPH	0.4	0.3	0.4	0.1	1.3	1.0	2.5	1.1	0.9

### Eastbound & Westbound

	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	1422	1345	1718	1665	1591	1588	2375	1767	1672
Mean Speed	52.9	53.6	52.3	51.0	51.1	52.2	53.5	52.0	52.4
85%ile Speed	59.5	60.3	59.9	59.1	60.0	61.1	61.8	60.4	60.2
No. Vehicles > 60 MPH Limit	200	215	253	210	239	285	486	295	270
% Vehicles > 60 MPH Limit	14.1	16.0	14.7	12.6	15.0	17.9	20.5	16.2	15.8
No. Vehicles > 75 MPH	5	5	5	7	11	9	36	14	11
% Vehicles > 75 MPH	0.4	0.4	0.3	0.4	0.7	0.6	1.5	0.7	0.6

Class No	Vehicle Description	Class No	Vehicle Description
1	Car, Light Van Taxi 	5	Rigid 2 Axle HGV + 2 Axle (Close coupled) Trailer 
1	Light Goods Vehicle 	6	Rigid 3 Axle HGV + 2 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 1 Axle Caravan or Trailer 	6	Rigid 3 Axle HGV + 3 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 2 Axle Caravan or Trailer 	7	Artic, 2 Axle Tractor + 1 Axle Semi-Trailer 
2	Rigid 2 Axle Heavy Goods Vehicle 	8	Artic, 2 Axle Tractor + 2 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	9	Artic, 2 Axle Tractor + 3 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 1 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 2 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	11	Artic, 3 Axle Tractor + 3 Axle Semi-Trailer 
5	Rigid 2 Axle HGV + 2 Axle Drawbar Trailer 	12	Bus or Coach, 2 Axle 
5	Rigid 2 Axle HGV + 3 Axle Drawbar Trailer 	12	Bus or Coach, 3 Axle 
5	Rigid 2 Axle HGV + 1 Axle Caravan or Trailer 	13	Vehicle with 7 or more Axles 

## Coldstream - ATC 3 - A697

Produced by Streetwise Services Ltd.



### Channel - Eastbound

























	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	733	608	778	732	741	714	915	776	746
Mean Speed	54.2	54.9	53.4	51.8	50.8	52.4	53.1	52.3	52.9
85%ile Speed	60.5	61.8	60.7	59.7	58.4	60.2	59.5	59.7	60.1
No. Vehicles > 60 MPH Limit	125	125	139	104	83	113	122	112	116
% Vehicles > 60 MPH Limit	17.1	20.6	17.9	14.2	11.2	15.8	13.3	14.5	15.7
No. Vehicles > 75 MPH	10	9	13	8	5	5	9	8	8
% Vehicles > 75 MPH	1.4	1.5	1.7	1.1	0.7	0.7	1.0	1.0	1.1

### Channel - Westbound

	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	697	735	932	791	696	794	1332	909	854
Mean Speed	54.6	54.6	53.2	51.6	52.1	52.5	52.6	52.4	53.0
85%ile Speed	61.5	61.4	60.8	59.6	59.9	59.8	59.1	59.8	60.3
No. Vehicles > 60 MPH Limit	138	147	161	105	102	115	158	128	132
% Vehicles > 60 MPH Limit	19.8	20.0	17.3	13.3	14.7	14.5	11.9	14.3	15.9
No. Vehicles > 75 MPH	6	8	9	5	8	2	5	6	6
% Vehicles > 75 MPH	0.9	1.1	1.0	0.6	1.1	0.3	0.4	0.7	0.8

### Eastbound & Westbound

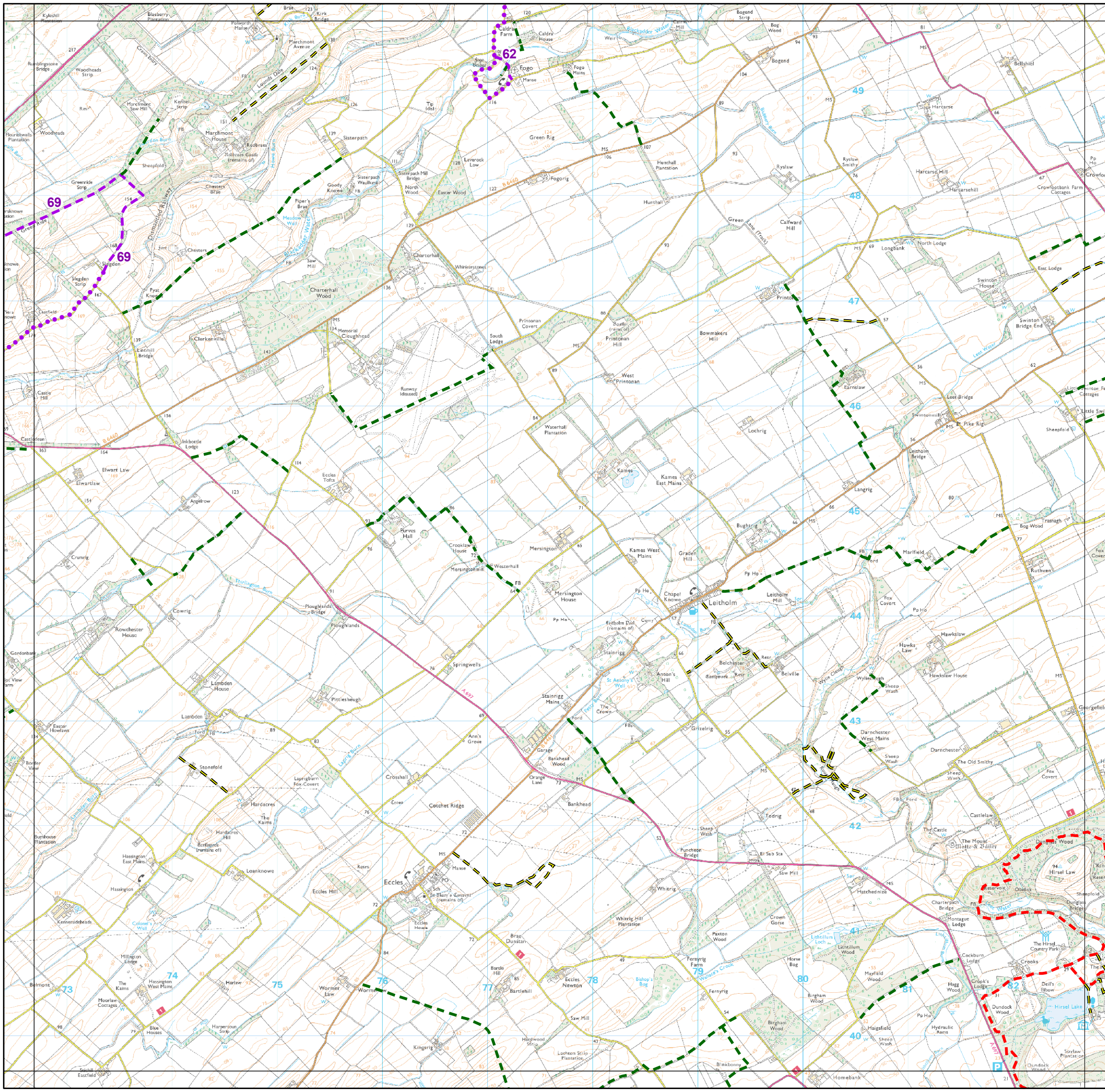
	18/05/2024 Saturday	19/05/2024 Sunday	20/05/2024 Monday	21/05/2024 Tuesday	22/05/2024 Wednesday	23/05/2024 Thursday	24/05/2024 Friday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	1430	1343	1710	1523	1437	1508	2247	1685	1600
Mean Speed	54.4	54.8	53.3	51.7	51.4	52.4	52.8	52.3	53.0
85%ile Speed	61.0	61.5	60.7	59.7	59.3	60.1	59.3	59.8	60.2
No. Vehicles > 60 MPH Limit	263	272	300	209	185	228	280	240	248
% Vehicles > 60 MPH Limit	18.4	20.3	17.5	13.7	12.9	15.1	12.5	14.3	15.8
No. Vehicles > 75 MPH	16	17	22	13	13	7	14	14	15
% Vehicles > 75 MPH	1.1	1.3	1.3	0.9	0.9	0.5	0.6	0.8	0.9

Class No	Vehicle Description	Class No	Vehicle Description
1	Car, Light Van Taxi 	5	Rigid 2 Axle HGV + 2 Axle (Close coupled) Trailer 
1	Light Goods Vehicle 	6	Rigid 3 Axle HGV + 2 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 1 Axle Caravan or Trailer 	6	Rigid 3 Axle HGV + 3 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 2 Axle Caravan or Trailer 	7	Artic, 2 Axle Tractor + 1 Axle Semi-Trailer 
2	Rigid 2 Axle Heavy Goods Vehicle 	8	Artic, 2 Axle Tractor + 2 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	9	Artic, 2 Axle Tractor + 3 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 1 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 2 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	11	Artic, 3 Axle Tractor + 3 Axle Semi-Trailer 
5	Rigid 2 Axle HGV + 2 Axle Drawbar Trailer 	12	Bus or Coach, 2 Axle 
5	Rigid 2 Axle HGV + 3 Axle Drawbar Trailer 	12	Bus or Coach, 3 Axle 
5	Rigid 2 Axle HGV + 1 Axle Caravan or Trailer 	13	Vehicle with 7 or more Axles 














## Appendix D – Core Paths Map





## Scottish Borders Adopted Core Path Plan Area 26

### Key

-  Core Path
-  Core Path Link on Road
-  Aspirational Core Path
-  Longer-term Aspirational Path
-  Core Path Number
-  Promoted Path
-  Right of Way
-  Permissive/Customary Path
-  Water Access Point
-  Water Access Point Number
-  Scottish Borders Boundary

### Index Overview

15	16	17
25	26	27
34	35	36

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Countryside and Access Team  
Planning & Economic Development  
[corepaths@scotborders.gov.uk](mailto:corepaths@scotborders.gov.uk)  
Tel: 01835 825 060.

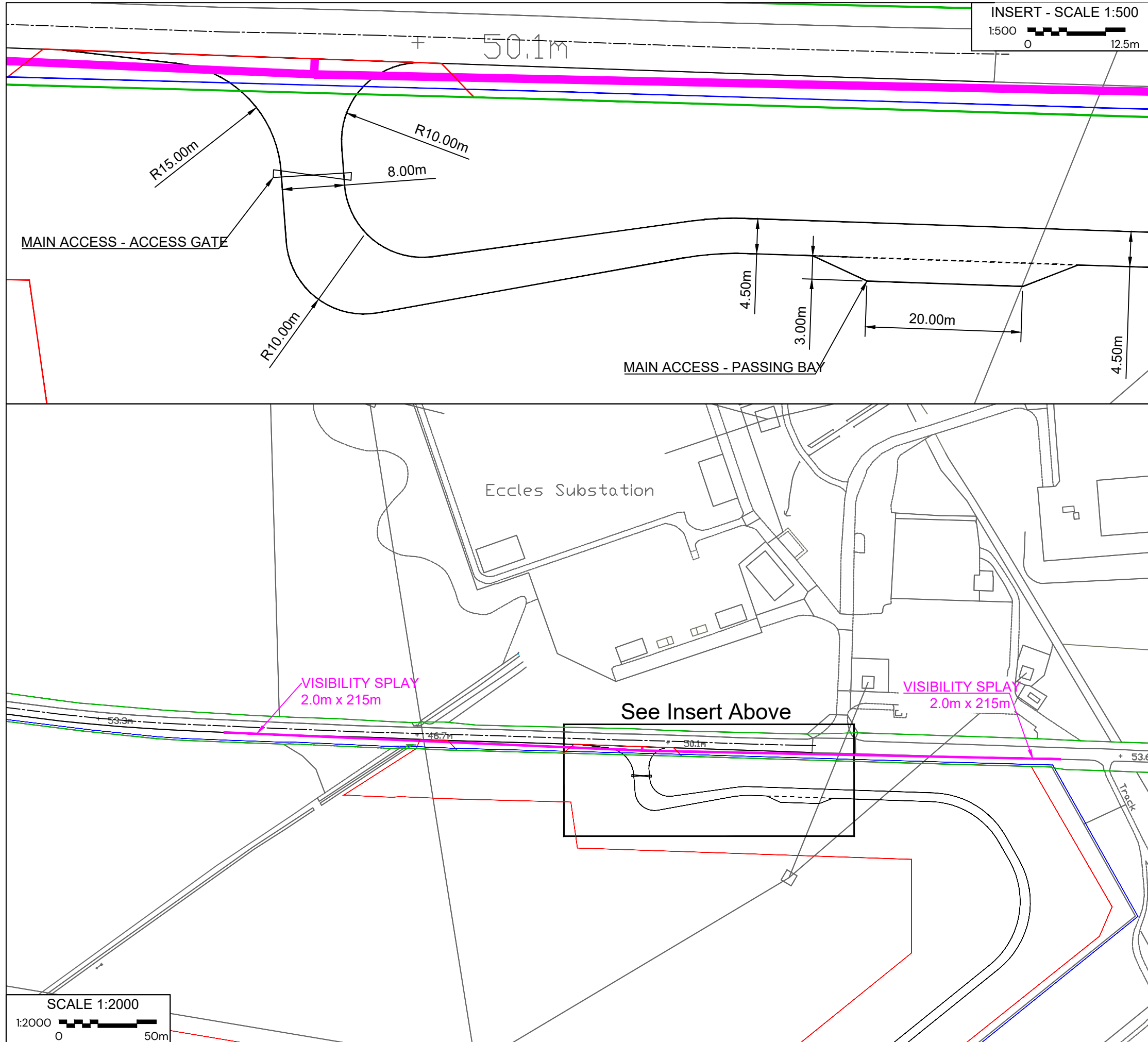
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## Appendix E – Site Access Drawings

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INSERT - SCALE 1:500  
1:500  
0 12.5m

KEY:

- REDLINE BOUNDARY
- CLIENT OWNERSHIP
- ADOPTED PUBLIC HIGHWAY EXTENT
- VISIBILITY SPLAY BASED ON DMRB REQUIREMENTS FOR A DIRECT ACCESS & 60MPH ROAD (2.0 x 215m)

NOTES:

- THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE USED FOR COSTING OR CONSTRUCTION. PEGASUS GROUP ACCEPT NO LIABILITY FOR THE MISUSE OF THIS DRAWING FROM ITS INTENDED PURPOSE.
- THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.
- THE CLIENT HAS CONFIRMED THE USE OF A 16.5M HGV TO ACCESS THE SITE FOR CONSTRUCTION PHASE RELATED DELIVERIES, WITH THIS BEING THE MOST ONEROUS VEHICLE TO ACCESS THE SITE

DD.MM.YY

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY
-----	------	-------------	------------	-------------

DRAWING NAME:  
INDICATIVE SITE LAYOUT OF MAIN ACCESS  
GEOMETRY AND VISIBILITY

PROJECT:  
LAND SOUTH OF ECCLES SUBSTATION  
SCOTTISH BORDERS

CLIENT:  
BISHOPS DAL ENERGY STORAGE LIMITED

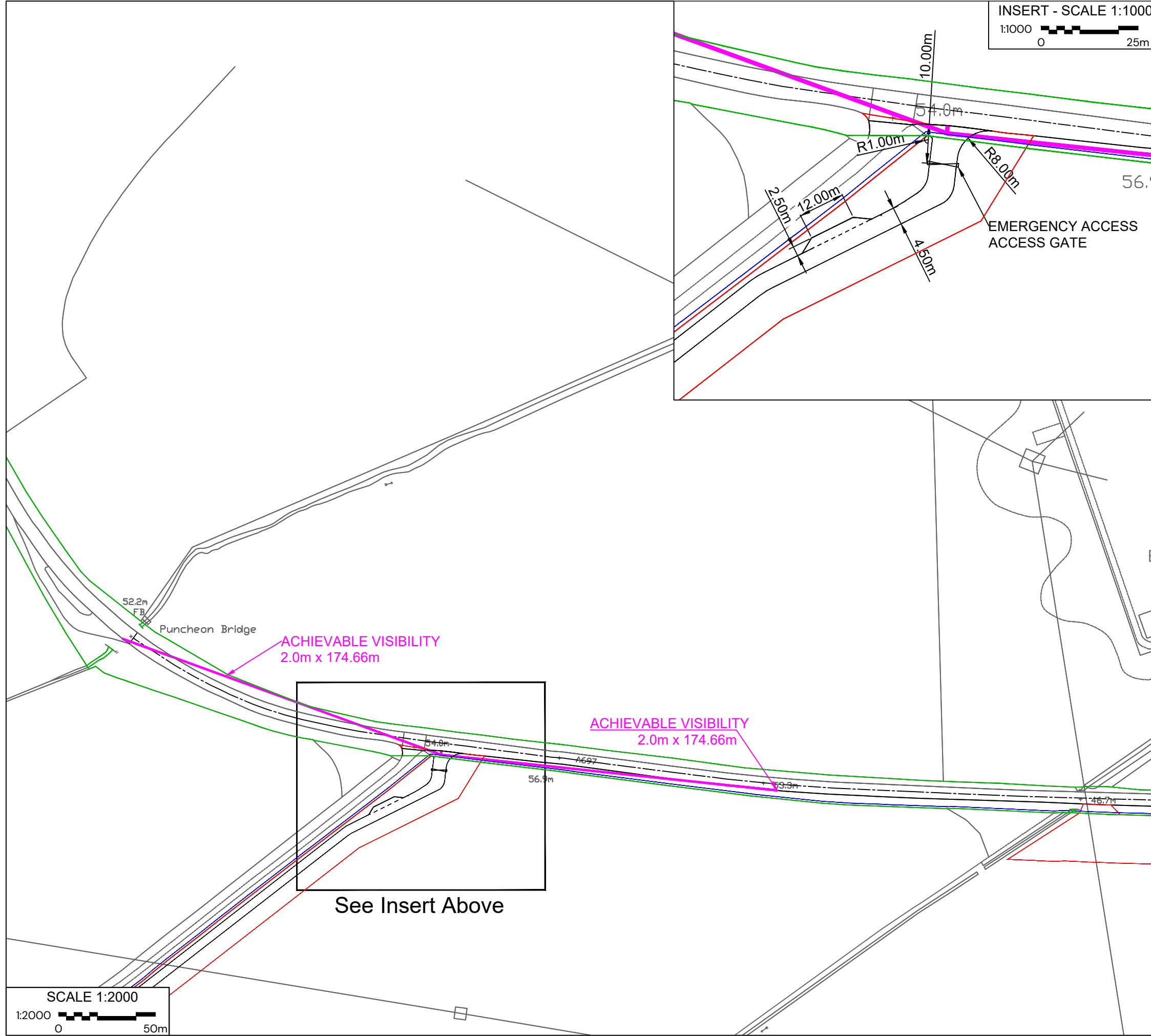
DATE: 05.12.2024  
SCALE: SEE INSERTS  
DRAWN BY: AJ  
APPROVED BY: JK

DRAWING NUMBER:  
P24-0160-TR-SK01

PG OFFICE:  
BIR

PEGASUS GROUP

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INSERT - SCALE 1:1000  
1:1000 0 25m

- KEY:**
- REDLINE BOUNDARY
  - CLIENT OWNERSHIP
  - ADOPTED PUBLIC HIGHWAY EXTENT
  - ACHIEVABLE VISIBILITY SPLAY (2.0 x 174.66m)

- NOTES:**
- THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE USED FOR COSTING OR CONSTRUCTION. PEGASUS GROUP ACCEPT NO LIABILITY FOR THE MISUSE OF THIS DRAWING FROM ITS INTENDED PURPOSE.
  - THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.
  - THE CLIENT HAS CONFIRMED THE USE OF A 16.5M HGV TO ACCESS THE SITE FOR CONSTRUCTION PHASE RELATED DELIVERIES, WITH THIS BEING THE MOST ONEROUS VEHICLE TO ACCESS THE SITE

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY

DRAWING NAME:  
**INDICATIVE SITE LAYOUT OF EMERGENCY ACCESS - GEOMETRY AND ACHIEVABLE VISIBILITY**

PROJECT:  
**LAND SOUTH OF ECCLES SUBSTATION  
SCOTTISH BORDERS**

CLIENT:  
**BISHOPS DAL ENERGY STORAGE LIMITED**

DATE: 05.12.2024	SCALE: SEE INSERTS	DRAWN BY: AJ	APPROVED BY: JK
---------------------	-----------------------	-----------------	--------------------

DRAWING NUMBER: P24-0160-TR-SK07	PG OFFICE: BIR	<b>PEGASUS GROUP</b>
-------------------------------------	-------------------	----------------------





## **Appendix F – Site Access Swept Path Analysis**

The top diagram, labeled "INGRESS FROM EAST", shows a path starting from the right (east) and moving left towards a building. The path is marked with green arrows and a red line. A dimension line indicates a distance of 50.1m from the start of the path to the building entrance. The bottom diagram, labeled "EGRESS TO EAST", shows a path starting from the building and moving right (east) towards the road. This path is also marked with green arrows and a red line, with a dimension line indicating a distance of 50.1m from the building entrance to the start of the path. Both diagrams include a building footprint, a road, and various utility lines (green, blue, black, and dashed grey).

N

1:500  
012.5m

KEY:

REDLINE BOUNDARY

CLIENT OWNERSHIP

ADOPTED PUBLIC HIGHWAY EXTENT

NOTES:

1.

THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE USED FOR COSTING OR CONSTRUCTION. PEGASUS GROUP ACCEPT NO LIABILITY FOR THE MISUSE OF THIS DRAWING FROM ITS INTENDED PURPOSE.

2.

THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.

3.

THE CLIENT HAS CONFIRMED THE USE OF A 16.5M HGV TO ACCESS THE SITE FOR CONSTRUCTION PHASE RELATED DELIVERIES, WITH THIS BEING THE MOST ONEROUS VEHICLE TO ACCESS THE SITE

13.6

6.53

1.37

4.78

3

3.7

1.88

0.29

Max

Max

90° Horiz

10° Vert

6.4

7.8

1.4

1.4

2.52

1.4

Articulated Vehicle (16.5m)

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Max Track Width

Lock to lock time

Kerb to Kerb Turning Radius

16.500m

2.550m

3.681m

0.411m

2.500m

6.00s

6.530m

-DD.MM.YY-

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY
-----	------	-------------	------------	-------------

DRAWING NAME:  
INDICATIVE SITE LAYOUT OF MAIN ACCESS GEOMETRY AND VISIBILITY

PROJECT:  
LAND SOUTH OF ECCLES SUBSTATION  
SCOTTISH BORDERS

CLIENT:  
BISHOPS DAL ENERGY STORAGE LIMITED

DATE:  
05.12.2024

SCALE:  
1:500@A3

DRAWN BY:  
AJ

APPROVED BY:  
JK

DRAWING NUMBER:  
P24-O16O-TR-SK03

PG OFFICE:  
BIR

PEGASUS GROUP

**KEY:**

REDLINE BOUNDARY

CLIENT OWNERSHIP

ADOPTED PUBLIC HIGHWAY EXTENT

**NOTES:**

- THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE USED FOR COSTING OR CONSTRUCTION. PEGASUS GROUP ACCEPT NO LIABILITY FOR THE MISUSE OF THIS DRAWING FROM ITS INTENDED PURPOSE.
- THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.
- THE CLIENT HAS CONFIRMED THE USE OF A 16.5M HGV TO ACCESS THE SITE FOR CONSTRUCTION PHASE RELATED DELIVERIES, WITH THIS BEING THE MOST ONEROUS VEHICLE TO ACCESS THE SITE

**Articulated Vehicle (16.5m)**

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

**DRAWING NAME:**

**INDICATIVE SITE LAYOUT OF MAIN ACCESS GEOMETRY AND VISIBILITY**

**PROJECT:**

**LAND SOUTH OF ECCLES SUBSTATION**

**SCOTTISH BORDERS**

**CLIENT:**

**BISHOPS DAL ENERGY STORAGE LIMITED**

**DATE:** 05.12.2024 **SCALE:** 1:500@A3 **DRAWN BY:** AJ **APPROVED BY:** JK

**DRAWING NUMBER:** P24-0160-TR-SK03 **PG OFFICE:** BIR

**PEGASUS GROUP**

# INGRESS



1:500  
0 12.5m

**KEY:**

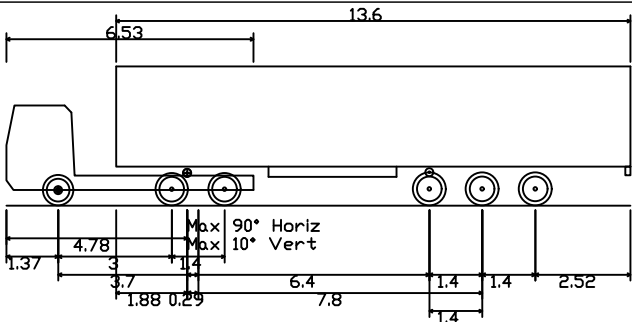
REDLINE BOUNDARY

CLIENT OWNERSHIP

ADOPTED PUBLIC HIGHWAY EXTENT

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2. THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.



Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

# EGRESS

- DD.MM.YY -

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY
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DRAWING NAME:  
INDICATIVE SITE LAYOUT OF PASSING  
BAYS – SWEEP PATH ANALYSIS

PROJECT:  
LAND SOUTH OF ECCLES SUBSTATION  
SCOTTISH BORDERS

CLIENT: BISHOPS DAL ENERGY STORAGE LIMITED

DATE: 05.12.2024 SCALE: 1:500@A3 DRAWN BY: AJ APPROVED BY: JK

DRAWING NUMBER:  
P24-O16O-TR-SK05

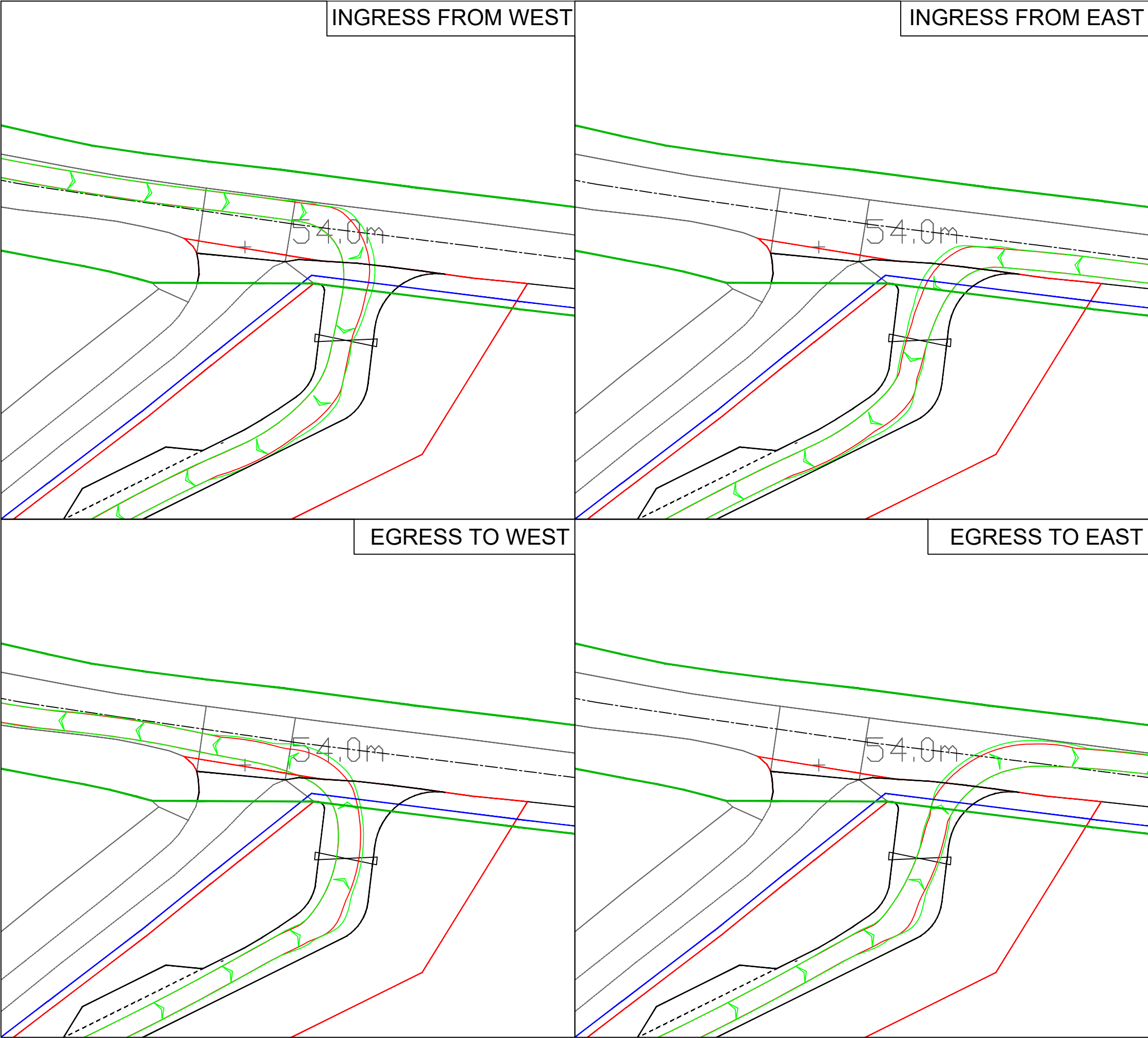
PG OFFICE:  
BIR





## **Appendix G – Emergency Access Swept Path Analysis**

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N

1:500

012.5m

KEY:

REDLINE BOUNDARY

CLIENT OWNERSHIP

ADOPTED PUBLIC HIGHWAY EXTENT

NOTES:

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2. THIS DRAWING IS BASED UPON DRAWING 05389-RES-LAY-DR-PT-001 REV 6 PRODUCED BY RES ON 26 NOVEMBER 2024.

3. THE CLIENT HAS CONFIRMED THE USE OF A 16.5M HGV TO ACCESS THE SITE FOR CONSTRUCTION PHASE RELATED DELIVERIES, WITH THIS BEING THE MOST ONEROUS VEHICLE TO ACCESS THE SITE

7.7

1.382

4.2

Dennis Sabre Fire Tender (LWB)

Overall Length2.700m

Overall Width2.430m

Overall Body Height3.512m

Min Body Ground Clearance0.397m

Track Width2.380m

Lock to lock time5.00s

Kerb to Kerb Turning Radius7.400m

DD.MM.YY

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY
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DRAWING NAME:

INDICATIVE SITE LAYOUT OF EMERGENCY ACCESS – GEOMETRY AND VISIBILITY

PROJECT:

LAND SOUTH OF ECCLES SUBSTATION  
SCOTTISH BORDERS

CLIENT:

BISHOPS DAL ENERGY STORAGE LIMITED

DATE:

05.12.2024

SCALE:

1:500@A3

DRAWN BY:

AJ

APPROVED BY:

JK

DRAWING NUMBER:

P24-0160-TR-SK04

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EMERGENCY ACCESS  
PASSING BAY

INGRESS



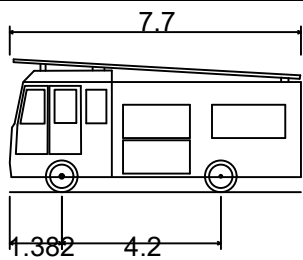
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0 12.5m

KEY:

- REDLINE BOUNDARY
- CLIENT OWNERSHIP
- ADOPTED PUBLIC HIGHWAY EXTENT

NOTES:

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Dennis Sabre Fire Tender (LWB)

- Overall Length 7.700m
- Overall Width 2.430m
- Overall Body Height 3.512m
- Min Body Ground Clearance 0.397m
- Track Width 2.380m
- Lock to lock time 5.00s
- Kerb to Kerb Turning Radius 7.400m

EGRESS

REV	DATE	DESCRIPTION	REVISED BY	APPROVED BY
-----	------	-------------	------------	-------------

DRAWING NAME:  
INDICATIVE SITE LAYOUT OF PASSING  
BAYS – SWEEP PATH ANALYSIS

PROJECT:  
LAND SOUTH OF ECCLES SUBSTATION  
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DATE: 05.12.2024 SCALE: 1:500@A3 DRAWN BY: AJ APPROVED BY: JK

DRAWING NUMBER:  
P24-0160-TR-SK05

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# Expertly Done.

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