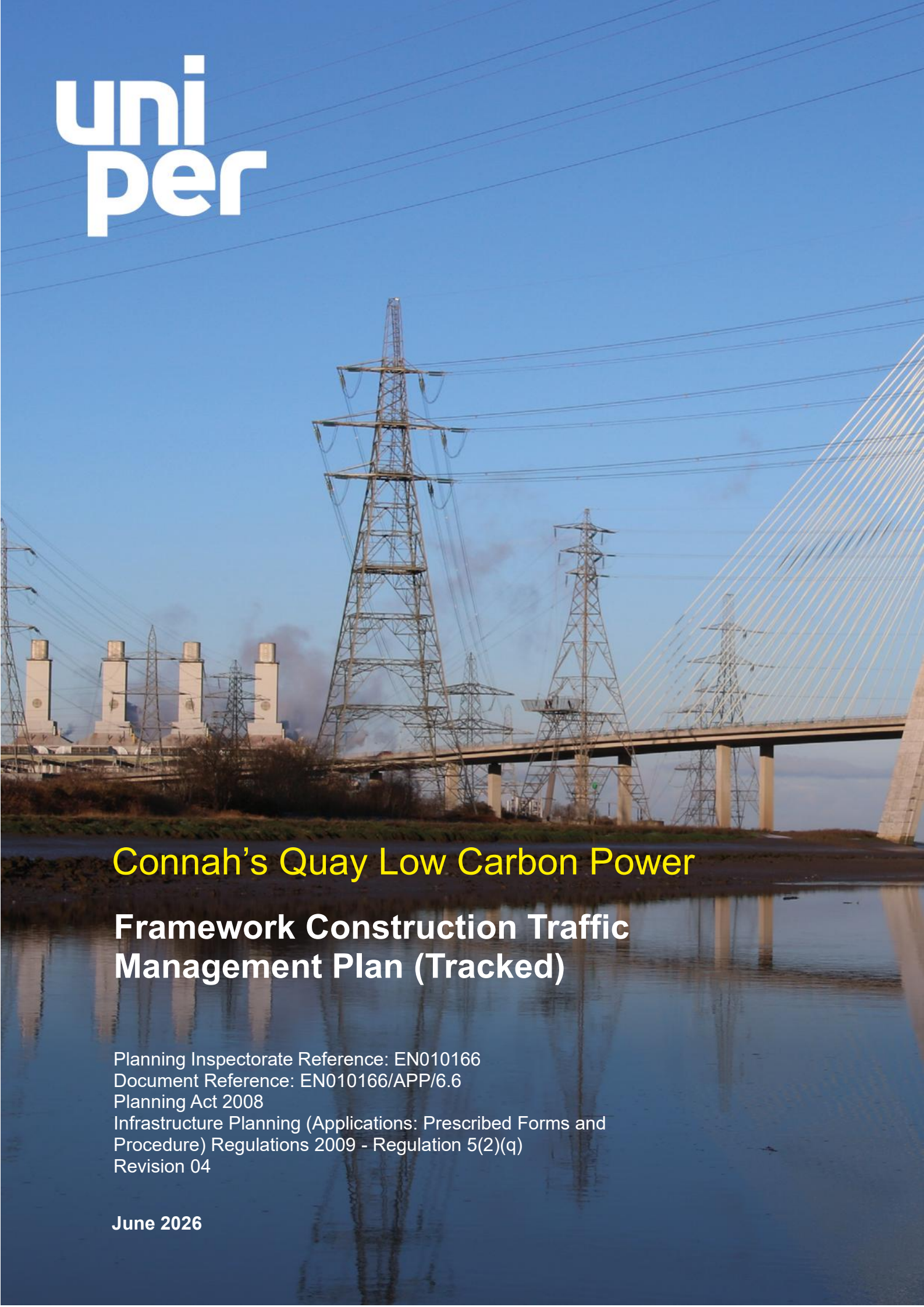

Connah's Quay Low Carbon Power

Framework Construction Traffic Management Plan (Tracked)

Planning Inspectorate Reference: EN010166
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Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(q)
Revision 04

June 2026

Prepared for:
Uniper UK Limited

Prepared by:
AECOM Limited

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1. Introduction

1.1 Overview

1.1.1 This **Framework Construction Traffic Management Plan** (**CTMP**) (**EN010166/APP/6.6**) forms part of the application (the Application) for a Development Consent Order (DCO), that has been submitted to the Secretary of State (the SoS) for the Department for Energy Security and Net Zero (DESNZ), under Section 37 of the Planning Act 2008 (Ref 1).

1.1.2 Uniper UK Limited (the Applicant) is seeking a DCO for the construction, operation (including maintenance) and decommissioning of a proposed low carbon Combined Cycle Gas Turbine (CCGT) Generating Station fitted with Carbon Capture Plant (CCP) (the Connah's Quay Low Carbon Power (CQLCP) Abated Generating Station) and associated supporting infrastructure (collectively the Proposed Development) on land at, and in the vicinity of, the existing Connah's Quay Power Station (Kelsterton Road, Connah's Quay, Flintshire, CH6 5SJ), North Wales (the Order limits).

1.1.3 A description of the Proposed Development is provided in **Chapter 4: The Proposed Development** of the **Environmental Statement** (**ES**) **Volume II** (**EN010166/APP/6.2.4**).

1.1.4 The Proposed Development falls within the definition of a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(a) and Sections 15(1) and (3A) of the Planning Act 2008 (Ref 1), as it is an onshore generating station in Wales that would have a generating capacity greater than 350 MW electrical output (350 MWe).

1.1.5 This Framework CTMP has been produced to accompany the (**ES**) (**EN010166/APP/6.2**) and should be read in conjunction with the Transport Assessment. This Framework CTMP is also supported by a **Framework Construction Workers Travel Plan** (**CWTP**) (**EN010166/APP/6.7**).

1.1.6 Preparation and implementation of a detailed CTMP (or CTMPs) in general accordance with this **Framework Construction Traffic Management Plan** (**EN010166/APP/6.6**) is secured through Requirement 5 in the **Draft DCO** (**EN010166/APP/3.1**). The CTMP(s) must be approved by Flintshire County Council (FCC) as the relevant planning authority, in consultation with the relevant highway authority.

1.2 The Proposed Development

1.2.1 The CQLCP Abated Generating Station would comprise up to two CCGT with CCP units (and supporting infrastructure) achieving a net electrical output capacity of more than 350 megawatts (MW; referred to as MWe for electrical output) and up to a likely maximum of 1,380 MWe (with CCP operational) onto the national electricity transmission network.

1.2.2 Through a carbon dioxide (CO_2) pipeline, comprising existing and new elements, the Proposed Development would make use of CO_2 transport and storage networks owned and operated by Liverpool Bay CCS Limited,

currently under development as part of the HyNet Carbon Dioxide Pipeline project (referred to as the HyNet CO_2 Pipeline Project), that will transport CO_2 captured from existing and new industries in North Wales and North West England, for offshore storage. The captured CO_2 will be permanently stored in depleted offshore gas reservoirs in Liverpool Bay.

1.2.3 For the purposes of the electrical connection, National Grid Electricity Transmission plc (NGET), which builds and maintains the electricity transmission network in England and Wales, is responsible for the operation and maintenance of the existing 400 kV NGET Substation.

1.2.4 **Chapter 4: The Proposed Development** of **ES Volume II** (**EN010166/APP/6.2.4**) provides further description of the Proposed Development. The areas within which each numbered Work (component) of the Proposed Development are to be built are defined by the coloured and hatched areas on the **Works Plans** (**EN010166/APP/2.4**).

1.3 The Order Limits

1.3.1 The Order limits are located approximately 0.6 kilometres (km) north-west of Connah's Quay in Flintshire, North East Wales. The Main Development Area is centered approximately at national grid reference 327347, 371374, and, together with the Proposed CO_2 Connection Corridor, Repurposed CO_2 Connection Corridor, Electrical Connection Corridor, Water Connection Corridor, Construction and Indicative Enhancement Area, Hardstanding Expansion at Connah's Quay North Jetty, and Accommodation Works Area, is wholly within the administrative area of FCC.

1.3.2 The Order limits encompass a total area of approximately 105.11 hectares (ha).

1.4 The Purpose of the Framework CTMP

1.4.1 The purpose of the **Framework CTMP** is to set out the proposed framework for enabling and managing all transport movements to and from the Construction and Operation Area, including Heavy Goods Vehicles (HGVs), Abnormal Indivisible Loads (AIL) and construction staff movements, during the construction of the Proposed Development. The objective of the Framework CTMP is to demonstrate how the undertaker will seek to improve the safety and reliability of deliveries to the Construction and Operation Area, reducing congestion and minimising environmental impacts.

1.4.2 This **Framework CTMP** will be included within all contractor enquiries for the Proposed Development to ensure early understanding and acceptance / compliance with the rules and procedures that will need to be followed during construction. The appointed construction contractor(s) would use this as a document to develop and submit (a) detailed CTMP(s). Preparation and implementation of a detailed CTMP (or CTMPs) in general accordance with this **Framework CTMP** is secured through Requirement 5 in the **Draft DCO** (**EN010166/APP/3.1**). The CTMP(s) must be approved by FCC as the relevant planning authority, in consultation with the relevant highway authorities, including where relevant:

- the North and Mid Wales Trunk Road Agent (NMWTRA), who manage the strategic road network on behalf of the Welsh Government; and

- National Highways, who manage the strategic road network within England.

Report Structure

1.4.3 The remainder of this **Framework CTMP** is structured as follows:

- *Section 2: Site Layout and Access* – describes the site layouts and access strategy for all road users during the construction of the Proposed Development;
- *Section 3: Construction Traffic and Routeing* - outlines the type, number (volume) and routeing of traffic associated with construction of the Proposed Development;
- *Section 4: Construction Management Measures* – sets out the measures to be implemented during construction to mitigate the impacts of the construction traffic;
- *Section 5: Consultation* – sets out the formal process for liaison and communications between the appointed construction contractor and relevant parties;
- *Section 6: Contact List* – provides contact details for all parties relevant to the construction of the Proposed Development; and
- *Appendices* – provides an overview of the AIL route feasibility cautions assessment and the Highway Plan for the proposed AIL access on the A548.

2. Site Layout and Access

2.1 Introduction

2.1.1 This Section of the **Framework CTMP** sets out how construction traffic is intended to access the Main Development Area, including details of internal movements within the Order limits.

2.1.2 The local highway network is shown on **Figure 1.**

2.2 Construction Traffic Access

Main Development Area

2.2.1 Access to the Main Development Area for both construction workers and HGV traffic is forecast to be via the existing site access from Kelsterton Road from the A548 Chester Road. The access from the A548 Chester Road into the Main Development Area includes two grade separated roundabouts linking to the on and off slips of the A548 Chester Road. An under bridge beneath the A548 Chester Road links the two roundabouts. When travelling north-west along the B5129 Kelsterton Road towards the Main Development Area, the road approaches a roundabout and from this, access to the Main Development Area is gained via an existing bridge over the Rock Hall Railway Tunnel on the North Wales Main Line railway.

2.2.2 The access road then extends north to a roundabout and along the Applicant's private road network which provides a number of access locations into the Main Development Area. This purpose built road serves the existing Connah's Quay Power Station site and is considered wide enough to allow access by construction traffic, without the need for alteration. An overview of the location of the Proposed Development and the existing road network is provided on **Figure 1**.

2.2.3 An alternative controlled access to the Main Development Area which is considered to be suitable for use by Light Goods Vehicles and cars is available from the B5129 Kelsterton Road via the National Grid 400 kV Connah's Quay Substation site (the Alternative Access to the Main Development Area). The Alternative Access to Main Development Area would not be used routinely on a day to day basis and would only be used in emergencies. This route includes a crossing over the North Wales Main Line railway and under the A548 Chester Road which then connects to the existing Connah's Quay Power Station internal road network, which would provide access towards the Main Development Area. This alternative access has not been assigned any construction traffic as part of the Traffic Assessment (**Appendix 10-A: Transport Assessment** (**EN010166/APP/6.4**)) and therefore, the potential impact of light vehicles routeing to the Main Development Area via this access has not been considered in the Application.

2.2.4 Construction personnel arriving by car will use on-site parking within the proposed Construction Laydown Areas. Where the Construction and Indicative Enhancement Area (C&IEA) is used, it is anticipated that a shuttle bus system would be used to transport workers to the Main Development

Area via the access to the C&IEA. Additionally, as set out in the **CWTP** (**EN010166/APP/6.7**), contractors may decide to establish a park and ride system from location(s) outside of the Order limits to the Main Development Area, such as temporary accommodation or existing parking locations, subject to agreement with the relevant authorities and third-parties.

Construction Compound & Parking

2.2.5 The internal layout arrangements that are proposed for the construction phase include Construction Laydown Areas for laydown and storage of plant and materials, vehicle manoeuvring, car parking and site welfare.

2.2.6 Construction vehicle parking for plant, deliveries and for staff parking will be accommodated within the Main Development Area and so is not anticipated to impact the local highway network.

Proposed CO_2 Connection Corridor

2.2.7 Within the Proposed CO_2 Connection Corridor, a contractor compound and laydown area will be located in proximity to the Flint AGI. The access to the Proposed CO_2 Connection Corridor will be off Allt-Goch Lane via either the permanent access point to the Liverpool Bay CCS Limited's Flint AGI, to be constructed as part of the HyNet CO_2 Pipeline Project, or via the existing field entrance to the field north of the Liverpool Bay CCS Limited's Flint AGI. This access point will be reached from the A548 Chester Road via the A5119 in Flint, and Coed Onn Road, then Allt-Goch Lane north of the access point. It is anticipated that only cars and light vehicles (including plant and equipment) would be required to access the Proposed CO_2 Connection Corridor, with approximately eight two-way daily vehicle movements (four in and four out) expected, based on a peak of 10 workers.

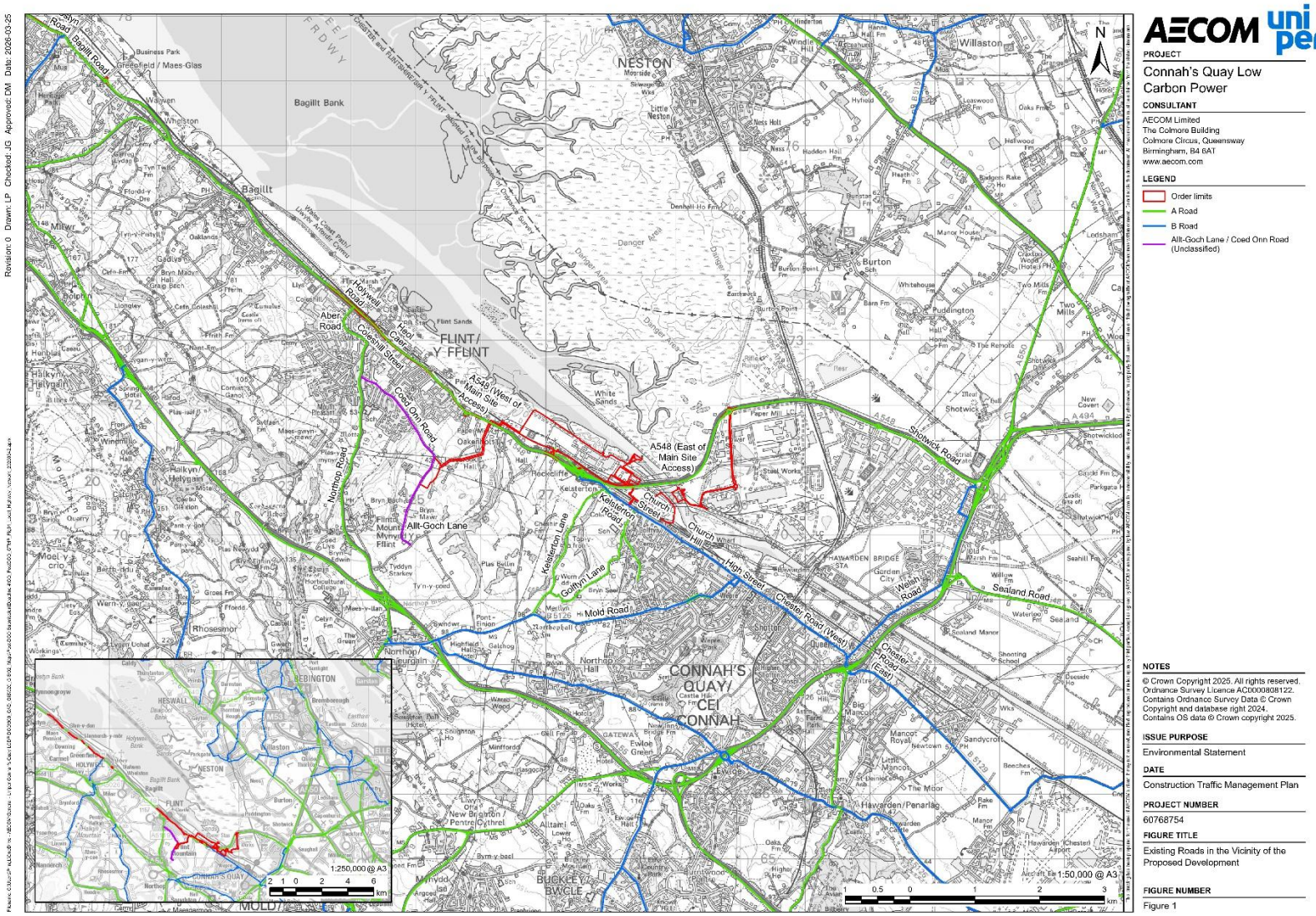
2.2.8 A temporary diversion of FCC Public Right of Way (PRoW) No.66 will be required in order to facilitate construction works within the Proposed CO_2 Connection Corridor. It is anticipated that the diversion will follow a route within the same field, and the duration of the temporary diversion would be limited to the construction period (up to nine months) before being reinstated. No permanent changes to PRoW are proposed. This temporary diversion of FCC PRoW No.66 is considered necessary to ensure the safe separation of public right of way users from any construction works which may be undertaken along the existing alignment of FCC PRoW No.66.

Abnormal Indivisible Loads

2.2.9 A temporary access will be provided directly from the A548 for the duration of the construction period for the delivery of AILs only. This access point will be located at the former junction on the A548 and would connect to the western end of Kelsterton Road. The indicative design of this access is shown on the **Indicative Access Design** (**EN01066/APP/7.20**). This access will be reserved for sole use by AIL delivery vehicles. This AIL access will remove AIL deliveries from the residential section of Kelsterton Road, thus reducing disruption to the nearby properties. To facilitate this arrangement, alterations to the existing A548 central reserve and eastbound verges are required to ensure the necessary turning movements can be achieved. Any departures from standards or Road Safety Audit required for the design of the AIL access will be discussed and agreed with the highway authority at detailed

design stage and reported and confirmed within the detailed CTMP. As part of the detailed CTMP, the 'DfT Regulations – Form of Notice to Police and to Highway and Bridge Authorities' will be completed, where required, to notify the relevant authorities in advance of any AIL movements. These discussions are ongoing.

Figure 1: Existing roads in the vicinity of the Proposed Development



3. Construction Traffic and Routeing

3.1 Introduction

3.1.1 This Section of the **Framework CTMP** sets out the programme and forecast trip generation for the construction of the Proposed Development, as well as routeing and distribution of construction traffic associated with trips to and from the Main Development Area.

3.2 Hours of Work

3.2.1 Typical core construction working hours (08:00 to 18:00 hours Monday to Friday and 08:00 to 13:00 hours Saturday) will avoid construction workers travelling during the network weekday AM (08:00 to 09:00) and PM (17:00 to 18:00) peak periods. The **Framework CEMP** (**EN01066/APP/6.5**) identifies that works could be required outside of these periods and which may require approval by FCC as the relevant local authority, depending on the specific activities being undertaken.

3.3 Construction Programme & Traffic Generation

3.3.1 Forecasts for construction trip generation have been informed by the indicative construction programme outlined in **Chapter 5: Construction Management and Programme** (**EN01066/ APP/6.2.5**) of the **ES**. This includes the anticipated average and peak activity daily totals for HGVs associated with construction deliveries, as well as average and peak activity daily totals for light vehicles, associated with construction workers travelling to and from the Main Development Area.

3.3.2 The Main Development Area will include up to two new integrated power generation and carbon capture Trains with a combined net electrical output capacity of up to a likely maximum of 1,380 MWe. Each Train comprises the assets required within the Main Development Area for the CCGT plant with CCP to operate, including supporting buildings, structures, infrastructure, and staff facilities; collectively, these assets form the Connah's Quay Low Carbon Power Abated Generating Station.

3.3.3 If the Trains were to be constructed in a phased approach, there is forecast to be a daily maximum of approximately 1,000 construction workers during the peak of construction activity. If a simultaneous construction approach is undertaken, whereby both Trains are constructed concurrently, this could result in a daily maximum of approximately 1,600 workers.

3.3.4 **Table 1** sets out the estimated peak daily construction vehicle trip generation for each potential approach (i.e. phased or simultaneous). The simultaneous construction scenario assumes construction, if development consent is granted, could occur up to a likely maximum of five years after the DCO consent is granted.

Table 1: Estimated Peak Daily Construction Vehicle Trip Generation

Construction Scenario	Construction Duration	Peak Construction Year	Daily HGV Movements (Two-Way)	Daily Light Vehicle Movements (Two-Way)	Total Daily Vehicle Movements (Two-Way)
Phased approach (Trains 1 & 2 separate)	2026 to 2030 (Train 1) & 2031-2035 (Train 2)	2027 (month 18)	200	816	1,016
Simultaneous approach (Trains 1 & 2 concurrent) – 5 Years Post-Consent	2031 to 2036	2034 (month 36)	240	1,374	1,614

3.3.5 **Table 1** indicates that during the peak time of construction (approximately 18 months into the construction programme), if a phased approach was adopted there could be a typical daily maximum of around 1,016 vehicle movements to / from the Main Development Area comprising 200 HGV movements and 816 light vehicle movements. If a simultaneous approach is adopted there could be a typical daily maximum of around 1,614 vehicle movements to / from the Main Development Area comprising 240 HGV movements and 1,374 light vehicle movements. Light vehicle movements would be associated with the transport of construction workers to / from the Main Development Area. HGV movements would be spread over a full working day.

3.3.6 In order to ensure a worst-case assessment, the analysis of the construction phase has been undertaken based on a simultaneous approach, with construction assumed to commence at the latest likely possible date, if development consent is granted, this being towards the end of 2031. In this scenario, the peak construction activity of HGVs and light vehicles (i.e. total vehicles) has been forecast to occur in month 36, during 2034.

3.3.7 To support the assessment of road traffic noise, the final CTMP(s) will provide updated forecast trip generation and an updated assessment of road traffic noise for the relevant stage of the Proposed Development. Should the updated assessment identify that significant effects would arise at residential properties on Kelsterton Road, additional mitigation would be implemented. This would include:

- Provision of noise monitoring at selected locations to be agreed with FCC; and
- Provision of additional glazing and/or sound insulation would be offered to properties where updated road traffic noise assessments identify, as a result of the Proposed Development:
  - a predicted change in road traffic noise levels compared to baseline levels of greater than 3~~5~~ dB;
  - total predicted free-field noise level that is above 63 dB LAeq,16hr; and
  - sound levels greater than ~~5~~3 dB above the existing ambient sound levels, that would likely occur for a duration exceeding:
    - 10 or more days in any 15 consecutive days; or
    - a total number of days exceeding 40 in any six consecutive months.

3.4 Routeing of Construction Traffic

Heavy Vehicles

3.4.1 The forecast distribution of HGV construction traffic onto the local highway network has been informed by likely routing arrangements to / from the Strategic Road Network. As the exact location of where the construction raw materials would be sourced from is currently unknown at this time, it has been assumed that HGVs would be routed so that they avoid more sensitive residential locations. For the purposes of assessment, it has also been

assumed that they would travel to and from the Main Development Area via the A548. The anticipated assignment of peak two-way daily HGV traffic generated onto the local highway network is shown in **Table 2** (based on simultaneous construction approach).

Table 2: Summary Construction Traffic Distribution (HGV)

Link	Proportion of Trips	Daily Two-Way Traffic
1. Kelsterton Road	100%	240
2. A548 (West of Main Development Area Access)	0%	0
3. A548 (East of Main Development Area Access)	100%	240
4. B5129	0%	0
5. Kelsterton Lane	0%	0
6. Allt Goch Lane	0%	0
7. Golftyn Lane	0%	0
8. Mold Road	0%	0

Light Vehicles

3.4.2 The distribution of development traffic associated with the construction staff travelling to and from the Main Development Area has been based on analysis of the 2021 Census 'Journey to Work' data. The analysis has been undertaken for both the 'Flintshire 004' and '007' Middle Super Output Areas (MSOAs), which include the extent of the highway network local to the Proposed Development. Light vehicle trips have been assumed to be distributed across the local network taking account of the 2021 Census origin / destination MSOA and route choice, as determined from online journey planner tools. The assignment of peak two-way daily light vehicle traffic across the local highway network is shown in **Table 3** (based on simultaneous construction approach).

Table 3: Summary Construction Traffic Distribution (Light Vehicles)

Link	Proportion of Trips	Daily Two-Way Traffic
1. Kelsterton Road	100%	1,375
2. A548 (West of Main Development Area Access)	35%	478
3. A548 (East of Main Development Area Access)	21%	290
4. B5129	44%	607
5. Kelsterton Lane	34%	472
6. Allt Goch Lane*	0%	8

Link	Proportion of Trips	Daily Two-Way Traffic
7. Golftyn Lane	0%	0
8. Mold Road	0%	0

*8 two-way vehicle trips allocated to Allt Goch Lane associated with the Proposed CO_2 Connection Corridor.

3.4.3 All (100%) of light vehicle traffic has been assigned to Kelsterton Road as the final link between the Main Development Area and the wider highway network. Prior to reaching Kelsterton Road, 56% of light vehicle traffic is forecast to arrive from the A548 (35% from the west and 21% from the east), with the remaining 44% anticipated to route directly onto Kelsterton Road from the B5129, to the east of the Main Development Area. Of this remaining 44%, 34% of light vehicle trips are anticipated to use Kelsterton Lane, prior to reaching the B5129. The remaining 10% of light vehicle trips are forecast to originate from the B5129 only, attributed to local commuting trips from Connah's Quay, Shotton and beyond to the east of the Main Development Area.

3.4.4 The Alternative Access to the Main Development Area would not be used by any construction traffic unless in the event of an emergency.

3.4.5 The recommended routes for HGV construction traffic to the Main Development Area, are shown on **Figure 2**.

Figure 2: Construction Traffic Routeing

Abnormal Indivisible Loads

3.4.6 Some larger components required for the construction of the Proposed Development would be delivered to the Main Development Area as Abnormal Indivisible Loads. Potential route options for AIL deliveries to the Main Development Area which have so far been considered are described in the "*AIL Route Feasibility Cautious Assessment Report*" (dated 15 November 2024) included in document **Appendix A** of this report. The size of the AIL delivery vehicle used in **Appendix A** is detailed in Section 5.6 of **Chapter 5: Construction Management and Programme** (**EN010166/APP/6.2.5**) and is based on a maximum component size of approximately 6 m wide by 6 m high by 30 m long.

Routing Options

3.4.7 The AIL route options are:

- Route 1 – from the Port of Mostyn via the A548;
- Route 2 – from Connah's Quay North via the Corus Jetty, Tata Steel premises, British Steel Road and A548;
- Route 3 – from Ellesmere Port via M53 westbound (from M53 J8 to M53 J5), A41, A550, A548; and
- Route 4 – from Ellesmere Port via M53 eastbound (from J53 J8 to M53 J10), A5117, A494, A548.

3.4.8 The Port of Mostyn and Connah's Quay North delivery points are located within FCC's administrative area, and Ellesmere Port (and the Manchester Ship Canal) is located within the Cheshire West and Chester Council administrative area. The Highway Authorities affected by these route options are FCC, National Highways, Cheshire West and Chester Council and the North and Mid Wales Trunk Road Agent.

3.4.9 It is anticipated that, in total, up to 30 two-way (60 in total) AIL movements would be required during the construction period for each train of the Proposed Development. However, the exact number and size / weight of AILs will be determined at detailed design stage and will be based on specific construction methodologies that will be confirmed during this stage. Further technical assessments by specialist AIL transport contractors will be required at this stage and will be confirmed in the final CTMP(s).

3.4.10 For the AIL route options from the Port of Mostyn and Connah's Quay North, the extent of accommodation works to facilitate the transport and passage of AILs via these routes have been included within the Order limits. The extents of any potential accommodation works are shown on the **Streets, Access and Rights of Way Plans** (**EN010166/APP/2.6**) and extent of traffic provisions are shown on the **Traffic Regulation Measures Plans** (**EN010166/APP/2.7**). The majority of the AIL routes will use the Strategic Road Network, thereby limiting impacts on local roads. Additional details of the proposed accommodation works will be submitted to the relevant highway authority and approved prior to the commencement of any works within the Construction and Operation Area. No provision has been made in the Order limits for accommodation works or traffic regulation measures on the routes from the Ellesmere Port to the east of the A548 roundabout at the

junction with British Steel Road. This is on the basis that AILs from Ellesmere Port would be restricted to loads of up to 6 m wide, 5 m high, and 30 m in length to reflect the constraints which have been identified.

Route Constraints

3.4.11 During the detailed design process, the appointed Principal Contractor(s) and Specialist AIL transport contractor will establish the confirmed component size, weight and associated permitting required for the selected AIL delivery route. This principle will apply to whichever AIL route is selected.

Weight limits

3.4.12 Weight limits for the A548 are to be confirmed by FCC. For other AIL delivery routes, the allowable weight limits and bridge inspection and assessment requirements for the affected roads will need to be established through engagement with National Highways, North and Mid Wales Trunk Agent or Cheshire West and Chester Council, where applicable.

Height Constraints

3.4.13 A number of height constraints have been identified on the potential AIL delivery routes that will be considered further during the detailed design stage once details of loads are confirmed:

- overbridges (such as the arched Bagillt Overbridge on Route 1, and those on Route 3 between M53 Junctions 5 and 8);
- gantries (such as those on Route 3 between M53 Junctions 5 and 8);
- telecommunication wires;
- overhead power lines. The safe and available clearance heights to the overhead power lines will be agreed with the appropriate power company; and
- tree canopies and vegetation (such as those over the A548, west of Greenfield).

Width Constraints

3.4.14 In addition, the following width constraints for the selected AIL delivery routes that will be considered further during the detailed design stage are as follows:

- overbridges (such as the arched Bagillt Overbridge on Route 1);
- lane widths restricted by traffic islands (such Route 1 on the eastbound approach to the A548 Chester Road Roundabout, and the eastbound A548 approach to the signalised A5026 Bagillt Road Junction, on Route 1, or for bollards on the A5117, on Route 4, to prevent overtaking);
- raised roundabout central island (such as Route 1 on the A548 Chester Road Roundabout);
- street furniture or street lighting columns (e.g. in the footways, cycleways or verges within the AIL delivery vehicle swept path on Route 1 at the Bagillt Road Roundabout);

- vegetation (in the verge within the AIL delivery vehicle swept path on Route 1);
- security access gatehouse (e.g. the entry and exit lanes for the Tata Steel security gatehouse on Route 2);
- gates and fencing (e.g. on Route 1 for the railway level crossing to the A548 at the exit to the Port of Mostyn); and
- walls (e.g. on Route 1 at the A548 level crossing exit from the Port of Mostyn).

Railway Infrastructure

3.4.15 The AIL delivery routes from Ellesmere Port and the Port of Mostyn have railway level crossings. The Ellesmere Port level crossing is ungated and is controlled by flashing level crossing signs. The main egress route from the Port of Mostyn for AILs is via the Network Rail 'Port level crossing', which crosses over the Holyhead mainline. This is located towards the south-west side of the Post of Mostyn estate, which, via gates, offers direct access to the A548. Network Rail requires as much notice as possible of movement dates in order that access can be arranged within their existing track blockages/possessions. Network Rail has indicated that they would require the Applicant to enter into a Basic Asset Protection Agreement (BAPA) to enable all matters associated with the use of the level crossing to be agreed, which would be managed by Network Rail's regional team in the North West. A summary of engagement with Network Rail is included in the **Network Rail Statement of Common Ground** (**EN010166/APP/8.6**).

3.5 Construction Phase Road Safety

3.5.1 The national standards for Road Safety Audits (RSA) in Design Manual for Roads & Bridges (DMRB) GG 119 (Ref 2) and Institution of Highways & Transportation (IHT) guidelines suggest that an RSA is not generally required for an application for temporary traffic management schemes unless there are exceptional changes to the layout and operation of roads that would affect the network for a considerable period of time. On the basis that the new junction on the A548 would be in place for a period of greater than 6 months, a RSA is required for this junction.

3.5.2 HD 19/15 (superseded by DMRB GG 119 (Ref 2) states that the publication "*Safety at Street Works and Road Works A Code of Practice*" (Ref 3) and Chapter 8 of the Traffic Signs Manual (Ref 4) contains the necessary guidance to facilitate the safe planning and implementation of temporary traffic management activities. When implemented through the detailed CTMP(s), the recommendations outlined within this Framework CTMP will comply with the procedures set out within these documents (or any superseding guidance in force when the detailed CTMP(s) are prepared), in order to ensure the proper guidance and statutory requirements are met during construction.

3.5.3 The type of access and egress proposed for the typical daily construction activities (i.e. excluding AIL deliveries) forecast to be associated with them is not likely to be classed as exceptional, therefore not requiring an RSA to be carried out. The management measures described in this **Framework CTMP** to be put in place through the implementation of detailed CTMP(s) by the

Principal Contractor(s) will help ensure that all vehicles, pedestrians and cyclists traveling to and from the Main Development Area or those who are users of the local highway network are appropriately accommodated and can continue to share the public highway in as safe a manner as possible for the duration of the construction period for the Proposed Development.

4. Construction Management Measures

4.1 Introduction

4.1.1 This Section of the **Framework CTMP** outlines the measures to be implemented during construction to mitigate the impacts of the traffic associated with the construction of the Proposed Development. These measures have been split into six categories; namely:

- management of impact on residents;
- vehicle manoeuvres and management;
- highway conditions;
- sustainability;
- site deliveries; and
- waste management.

4.2 Management Measures

Management of Impact on Residents

4.2.1 The Principal Contractor(s) will ensure that the impact on local residents is considered prior to the start of construction and will be minimised (wherever possible) throughout the duration of the construction period for the Proposed Development. The measures that will be employed to ensure this objective is met include:

- communications such as letters and notices to those residential and business properties that are within close proximity of the Construction and Operation Area. This will provide the headline information likely to be of concern to local residents and businesses and the appropriate points of contact within the construction team;
- liaising with residents and ensuring that all issues are logged and acknowledged. Any issues will be investigated, and efficient and appropriate action taken;
- the construction works will be undertaken during approved hours, as specified in the detailed CTMP(s) and by FCC;
- installation of measures and practices that ensure all residents are safe through separation of the construction site and communal areas;
- clear signage to inform regular and new users of the local highway that there are construction activities taking place;
- measures to ensure that the enjoyment of vehicular and pedestrian access for residents is maintained;
- physical management measures to ensure that activity within the Construction and Operation Area does not result in damage to the highway or deposit of site material;

- providing access for emergency services in the event of an emergency situation; and
- any parking restrictions required during the movement of AILs. Where parking is currently permitted on the AIL delivery routes, temporary parking restrictions will be put in place in coordination with the relevant highway authority to prevent obstruction for the safe passage of AILs. Advanced notices and other public communications will be provided in these circumstances. Arrangements may need to be put in place with the police for the removal of any non-compliant vehicles which could obstruct AIL deliveries.

Vehicle Manoeuvers and Management

Traffic Management

4.2.2 The traffic management regime will adopt, as a minimum, the principle of segregating people and plant with dedicated temporary walking access for construction staff to work areas and dedicated vehicular traffic routes. Safe systems of work will be issued for all construction phases including traffic management plans for each construction phase where the access changes.

4.2.3 Subject to further technical assessment by specialist AIL transport contractors, it may become necessary to implement road closures to undertake accommodation works on the AIL delivery route to facilitate transport and/or passage of AILs. Rolling closures may also be required on the AIL delivery routes when AILs are in transit. Such details will be confirmed within the final CTMP(s).

4.2.4 At the A548 AIL access, a proprietary removable barrier system suitable for a high-speed dual carriageway will be installed in the A548 central reserve at the location of the original central reserve crossover at the proposed temporary junction location. In order to prevent misuse of this junction by unauthorised vehicles, this barrier will remain closed until the junction is needed for an AIL delivery. Traffic management measures will also be needed in the A548 eastbound verge to prevent unauthorised use of the temporary access outside the times of AIL deliveries. Potential solutions include a proprietary removable barrier, similar to that in the central reserve, or closely spaced removable bollards across the mouth of the access. Such measures will be agreed with FCC and detailed in the final CTMP(s).

4.2.5 The traffic management regime will seek to minimise the traffic delays for significant events and for seasonal traffic in the area and will be coordinated with any adjacent roadworks or other traffic management arrangements.

Speed Limits

4.2.6 All delivery drivers will be expected to abide by local speed limits. Internally, within the Main Development Area, C&IEA and the Access to C&IEA, a site speed limit will be established and enforced at a maximum of 15 mph, with signage indicating such and all persons made aware of this requirement at the site induction. Temporary lower speed limits could be set for higher risk areas.

4.2.7 Permanent speed limits for the AIL delivery routes will remain as existing. Any temporary speed limits that are needed to undertake the construction and reinstatement of the direct AIL access off the A548, any accommodation works on the AIL delivery routes or traffic regulation measures to facilitate the movement of AIL delivery vehicles, would be put in place.

Banksperson

4.2.8 During the construction phase, dedicated bankspeople may be required to manage the efficient and safe manoeuvring of HGV vehicles. In particular, bankspeople may be utilised during peak delivery times, to ensure HGV stacking occurs within the internal site and does not impact the local highway network in the form of Kelsterton Road or Allt Goch Lane. Bankspeople could then be used to co-ordinate the release of HGVs to / from access points to the Construction and Operation Area. Where practicable, site construction traffic will adopt a one-way system to minimising reversing. Where reversing is unavoidable, suitably qualified bankspeople would be employed to assist and oversee the manoeuvre.

Site Briefings

4.2.9 All delivery agents will report immediately to the gatehouse, whilst operatives and visitors to the premises would report to the site office. This would be communicated to all works contractors at a pre-start meeting. All operatives and visitors will be briefed by site staff on matters such as emergency procedures, assembly points, first aid and site rules. It is the responsibility of the Site Manager to ensure all drivers of vehicles delivering to the construction compound are aware of the relevant details contained within this **Framework CTMP**.

4.2.10 Key site personnel contact details (including emergency out of hours contact number); an explanation of the Main Development Area activities; details of the construction traffic route; details of the working hours restrictions; details of the walking routes in and around the Construction and Operation Area; and an estimated programme of works must be displayed in the site supervisor's office and publicly viewable at the entrances to the Construction and Operation Area.

Road Closures

4.2.11 Carriageway and lane restrictions will be used to create safe working space. Full closures may be required on various occasions for specific operations such as alterations to the A548 highway to facilitate the movement of AILs, or full or mobile closures may be necessary for the passage of AILs on the A548 or other routes from the Ellesmere Port, for example.

4.2.12 Depending on the AIL delivery route that is adopted, it may be necessary to co-ordinate the road closures with other considerations, such as the need to co-ordinate with Network Rail for AIL deliveries passing through the Port of Mostyn.

Footway / Cycleways

4.2.13 The detailed AIL study to be undertaken by the appointed specialist AIL transport contractor will identify locations where the AIL could impact on exiting footways and cycleways. These will need to be clear of any

obstructions during AIL transfer, and bankspeople may need to be on hand to prevent pedestrian access during the passage of the AIL delivery vehicle. The National Cycle Network (NCN) Route 5 crosses the location of the proposed AIL access. At this location this is a shared cyclist and pedestrian route. For the safety of the cyclists and pedestrians, this section would be closed at the time of the AIL deliveries. During these times, temporary barriers would be installed, and banksperson would be on hand to ensure that cyclists do not cross the route taken by AIL vehicles.

Bus Stops

4.2.14 There are bus stops on the A548 on both the eastbound and westbound carriageways near the proposed location of the A548 AIL access. The Principal Contractor(s) and specialist AIL transport contractors will engage with bus operator(s) in advance of the AIL deliveries from the Port of Mostyn because the A458 eastbound bus stop may have to be temporarily closed for the safety of the bus operatives and passengers during the AIL delivery. The specialist AIL transport contractor will undertake an assessment as to whether any other bus stops on the AIL routes will need to be temporarily closed at the time of AIL deliveries. Advanced notices will be posted, and public announcements will be made in advance of any disruption to bus services.

Strategic Diversion Routes

4.2.15 Strategic diversions may be required during AIL deliveries or during the construction of any accommodation works or the A548 direct AIL access. Strategic route diversions will be discussed and agreed with the relevant highway authority in advance of any road closures, where necessary. Diversion routes will be signed using scheme specific signing, and the Principal Contractor(s) or traffic management contractor may liaise with satellite navigation system providers to enable satellite navigation systems also recognise the approved routes. The closures and strategic diversions will be signed well in advance of the works on routes agreed with the relevant highway authorities to allow road users to make early decisions on route choices.

Signage

4.2.16 Advance-warning road traffic signage, in accordance with the Traffic Signs Manual (Chapter 8) (Ref 4), will be erected to ensure all drivers approaching the Construction and Operation Area are aware of the construction access points. A site operative will carry out daily visual inspections of signage and complete a weekly record of checks including the inspection of the integrity of perimeter fencing, fencing signs and barriers as appropriate.

Highway Conditions

Highway Condition Survey

4.2.17 Prior to the commencement of construction activities, a condition survey will be undertaken of the proposed routes for construction within the vicinity of the Proposed Development. The Principal Contractor(s) will regularly inspect these routes including carriageways, kerbs and any footways and maintain a log of any damage caused by construction activities. This log would contain

suitable information to identify the scale and location of the damage so that it can be reported to the relevant highway authority. The Principal Contractor(s) will arrange for the repairs to be carried out to the appropriate standards and within an agreed time frame, where damage to the roadway is attributed to traffic related to the Proposed Development.

Dust and Noise Suppression

4.2.18 The Principal Contractor(s) will take reasonable steps to minimise noise and suppress dust, dirt and debris generated by the Proposed Development, working to the relevant British Standards and best working practices. This will include on site containment measures in addition to cleansing external to the site. Where these measures apply to construction activities, these are detailed in the **Framework CEMP** (**EN010166/APP/6.5**).

Wheel Washing

4.2.19 The potential for the introduction of wheel washing facilities will be considered in more detail closer to the commencement of the construction period. These will be located in proximity to access / egress locations at the Main Development Area. These will intercept site vehicles and ensure that they are cleaned prior to entering the local highway network (Kelsterton Road and the A548), on an area of hard standing concrete. Jet washing wheels would be carried out by a traffic marshal or contracted workers.

Road Sweeping

4.2.20 Construction vehicle movements will be monitored daily to make sure no spoils are transferred onto any adjacent public highway areas. If any spoils do make it onto the highway, then this will be immediately cleaned up. Measures will be put in place to ensure that mud and detritus is not swept into highway gullies. The Site Manager will have contact details available for road cleaning Contractors (and displayed in site office), if necessary.

Sustainability

4.2.21 Construction workers associated with the Proposed Development will be encouraged to travel by sustainable means where feasible. The nearest facilities are the 'Rockliffe Lane' (approx. 1.3 km walking distance), 'Cemetery Gates' (approx. 1.8 km walking distance) and 'Kelsterton Lane' (approx. 1.6 km walking distance) bus stops located on the A548 and B5129. Services 10A and 11 are available from these stops and provide for journeys between Flint, Chester and Rhyl. Additional shuttle services D1, D2 and D3 operate between Flint, Connah's Quay and Deeside Industrial Park, providing an hourly service from stops further away from the Main Development Area, to the south-east in Connah's Quay. These services run at a high frequency throughout the core hours of the weekday, providing a realistic and convenient public transport option between the Main Development Area and the local area.

4.2.22 The nearest railway stations to the Main Development Area are located to the north-west in Flint (approximately 4.3 km walking distance via the A548 / NCN 5) and to the south-east in Shotton (approximately 4.1 km walking distance via the B5129). Overall, there is a good provision of rail services from both stations to key destinations, both locally and regionally. Services

begin early in the morning and finish late at night, ensuring a provision to suit a wide range of travel times.

4.2.23 It is anticipated that a shuttle system will be used to transport workers to the Main Development Area via the access to the C&IEA. Car and van sharing should also be encouraged by the Principal Contractor(s). Additionally, contractors may establish a park and ride system from location(s) outside of the Order limits to the Main Development Area, such as temporary accommodation or existing parking locations, subject to agreement with the relevant authorities and third parties.

4.2.24 Further detail relating to the promotion of sustainable travel for construction workers is included within the **Framework CWTP** (**EN010166/APP/6.7**).

4.2.25 Prior to construction of the Proposed Development, the undertaker would consider opportunities for zero / low emission construction / plant vehicles. This will include investigation of potential opportunities for alternative fuels in the required vehicles to reduce the impact of road haulage during the construction phase.

Site Deliveries

4.2.26 The Construction Laydown Areas shown on **Figure 5-3: Construction Areas** (**EN010166/APP/6.3**) of the **ES** will predominantly contain the offices and welfare cabins for the Principal Contractor's workforce and parking facilities. These areas will also provide a secure location for the delivery and storage of plant, equipment and materials. The site supervisor will endeavour to ensure deliveries to the compound are received during off peak hours.

4.2.27 FCC Highways department, National Highways, Cheshire West and Chester Council or North and Mid Wales Trunk Road Agent will be notified in advance during the time and date(s) of major plant deliveries / AIL depending on the AIL route options chosen from the land side delivery point. If any movements require a special order due to their size / weight, the specialist AIL transport contractor will provide the relevant highway authority with sufficient notice. The AIL movements must be planned and authorised in accordance with the relevant highway authority's system, forms and requirements.

4.2.28 Due to the layout and dimensions of Kelsterton Road and its junction with the A548, and to potentially reduce disruption to residential receptors of Kelsterton Road, it is proposed that a direct connection between the A548 and the western end of Kelsterton Road near the existing site entrance roundabout would be used by AIL only. The indicative design of this access is shown on the Indicative Access Design in **EN010166/APP/7.20.**

4.2.29 It is proposed that this temporary junction arrangement would be in place for the duration of AIL deliveries for the construction period (for either phased or simultaneous construction) and would be used by AIL only. A suitable traffic management system will be installed to ensure that this is enforced during construction (such as through the use of substantial temporary removable barriers in the verge A548 east bound verge and central reserve or gates for safety and security) and that the location of the temporary junction will be restored to its current condition following the end of AIL deliveries.

4.2.30 Further technical assessment by specialist AIL transport contractors will be undertaken, post DCO consent. If such further technical assessments, including swept path analysis, demonstrate that minor works such as tree pruning or removal of street furniture are required outside of the identified Order limits, it is expected that any such works would be minor and limited in scope and would be secured if necessary by powers outside of the DCO (e.g. Electronic Service Delivery for Abnormal Loads (ESDAL)) subject to consultation with the relevant highway authority.

Waste Management

4.2.31 A **Framework Site Waste Management Plan** (**SWMP**) is included as an Appendix to the **Framework Construction Environmental Management Plan** (**EN010166/APP/6.5**). The Principal Contractor will be required to prepare a detailed SWMP in readiness for the construction phase.

4.2.32 The SWMP will describe how materials will be managed efficiently and disposed of appropriately and legally during the construction of the Proposed Development, explaining how the re-use and recycling of materials would be maximised. The Principal Contractor(s) will:

- ensure that the requirements of the SWMP are included in sub-contracts;
- arrange suitable site induction, information and training of personnel to ensure that the plan is implemented;
- take all reasonable steps to prevent unauthorised disposal of the waste by others; and
- update the plan as the works progress to reflect the actual handling of waste.

4.2.33 Within three months of completion of site works for each discrete element of the Proposed Development, the Principal Contractor(s) will reconcile the planned handling of waste against actual activities and provide an explanation of any differences to the relevant planning authority.

5. Consultation

5.1 Planned Liaison and Communications

5.1.1 A formal process of liaison and communications between all relevant parties (appointed Principal Contractor(s), FCC, National Highways, Cheshire West and Chester Council, North and Mid Wales Trunk Road Agent, and Royal Mail) via a Local Liaison Committee, will:

- enable effective engagement with key stakeholders such as the emergency services, bus operators, road users and local residents and communities;
- provide advance communication of traffic management work and AIL deliveries, with updates during the work as appropriate;
- assist with incident management;
- make all parties aware of the results of monitoring of the detailed CTMP(s);
- provide a route by which any complaints can be communicated and dealt with;
- provide a route through which transport related issues can be identified and dealt with; and
- ensure collaboration with developers of nearby major developments, including advance communication and engagement on significant traffic management works such as road closures and diversions.

5.1.2 A Local Liaison Committee will be set up prior to the commencement of construction. Details of the functions and membership of the Committee will be set out in the final CTMP(s).

5.1.3 It is proposed that a short written report is prepared by the Principal Contractor(s) on a six monthly basis and circulated to all key stakeholders. Any comments generated by the report would be circulated to all key stakeholders and a meeting may be held if required.

6. Contact List

6.1.1 This Section of the **Framework CTMP** sets out a template list which should be populated with the contact details of the undertaker, main developer, contractor and sub-contractors, once confirmed as part of the detailed CTMP(s). The template list is provided below in **Table 4.**

Table 4: Contact List

Contact	Details
Client	Name:
	Organisation:
	Contact Number:
	Contact Email:
Principal Contractor	Name:
	Organisation:
	Contact Number:
	Contact Email:
Contracts Manager	Name:
	Organisation:
	Contact Number:
	Contact Email:
Site Manager	Name:
	Organisation:
	Contact Number:
	Contact Email:
Contractor	Name:
	Organisation:
	Contact Number:
	Contact Email:
Out of Hours Contact	Name:
	Organisation:
	Contact Number:
	Contact Email:

Appendices

Appendix A - AIL Route Feasibility Cautions Assessment

A.1.1. An AIL route option study dated November 2024 to inform any cautions which may impact the viability of AIL route options and where potential interventions or accommodation works may be required.

Connah's Quay

AIL Route Feasibility
Cautions Assessment

Uniper

15 November 2024

Delivering a better world

This report presents a survey of a larger area which was considered for the Scheme during the application and assessment process. As such there are areas surveyed and presented in this report which are no longer within the Order limits. This does not impact on the conclusions of this report.

Table of Contents

Figures

1. Introduction

1.1 Purpose of Report

This report has been prepared on behalf of Uniper in support of the proposed Connah's Quay Combined Cycle Gas Turbine (CCGT) with Carbon Capture and Storage (CCS) Project at the site of the existing Connah's Quay power station.

The following report includes an AIL route options study to inform any cautions which may impact the viability of AIL route options from the point of land side delivery to the site. This will help inform the anticipated size of potential deliveries and where potential interventions / cautions are requires as part of any delivery routes proposed.

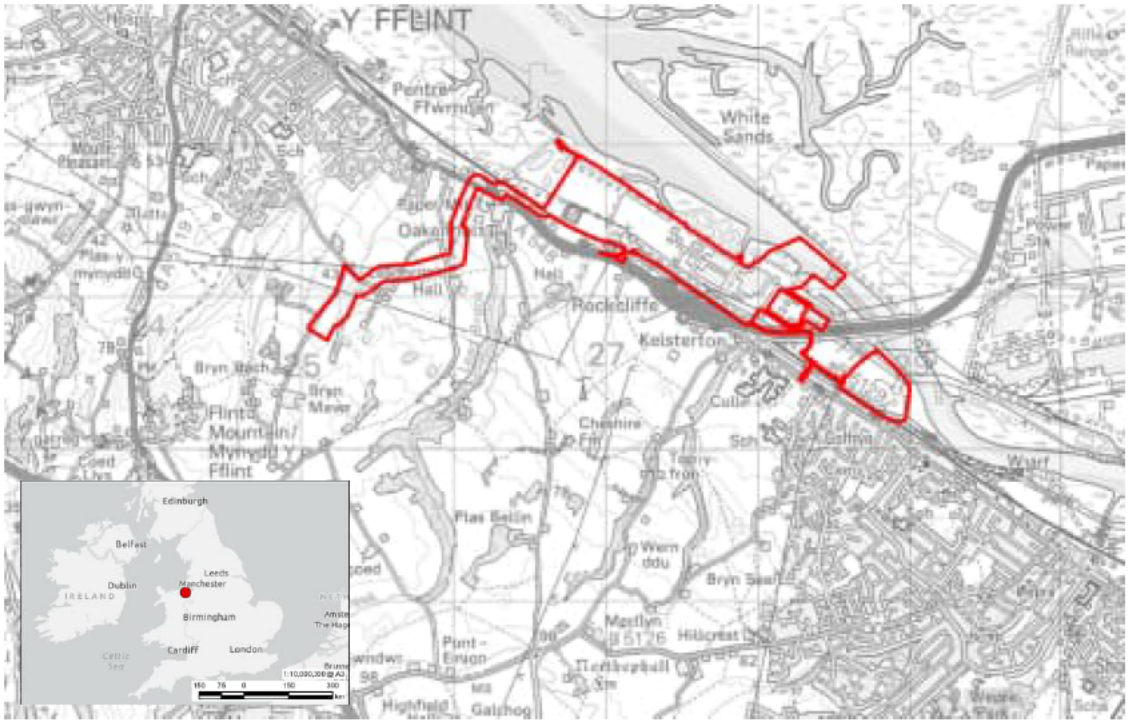
A detailed AIL study will be required by the appointed AIL subcontractor. This should consider further details on confirmed component size, weight and associated permitting with the selected AIL delivery route.

This report excludes any commentary on the internal site layout AIL delivery routes.

1.2 Site Location

The Connah's Quay site is located in Flintshire, North Wales, south of the Dee Estuary. The current indicative boundary for the Proposed Development is shown below.

Figure 1.1 | Site Location.



1.3 Scope

The propsoed scope includes a further detailed assessment of the primary AIL routes options from the land side delivery point at the Port of Mostyn and the land side delivery location at Connah's Quay North into the Uniper Site at Connah's Quay. The study also reviews AIL delivery route options from a potential land side delivery location at the Port of Ellesmere. Further details on the scope are summaries below under the three main activities:

- **AIL Route | Port of Mostyn**. This included a review of the AIL route from the Port of Mostyn and to consider potential areas for accommodations/ cautions associated with the delivery routes. This would include a review of the preliminary dimensions at key constraints identified as part of this review.
- **AIL Route | Connah's Quay North.** This included a review of the AIL route from Connah's Quay North (Corus Jetty) and to consider potential areas for accommodations/ cautions associated with the delivery routes. This would include a review of the preliminary dimensions at key constraints identified as part of this review. This also includes a review on the primary and secondary AIL delivery route options internal to the Tata Steel Site.
- **AIL Route | Port of Ellesmere.** This included a high-level review of potential AIL route options from the Port of Ellesmere to the Connah's Quay site. This was to assess a further delivery option should it be required at a future date for smaller AIL deliveries.

A plan illustrating the land side delivery locations can be found in Figure 1.2 below.

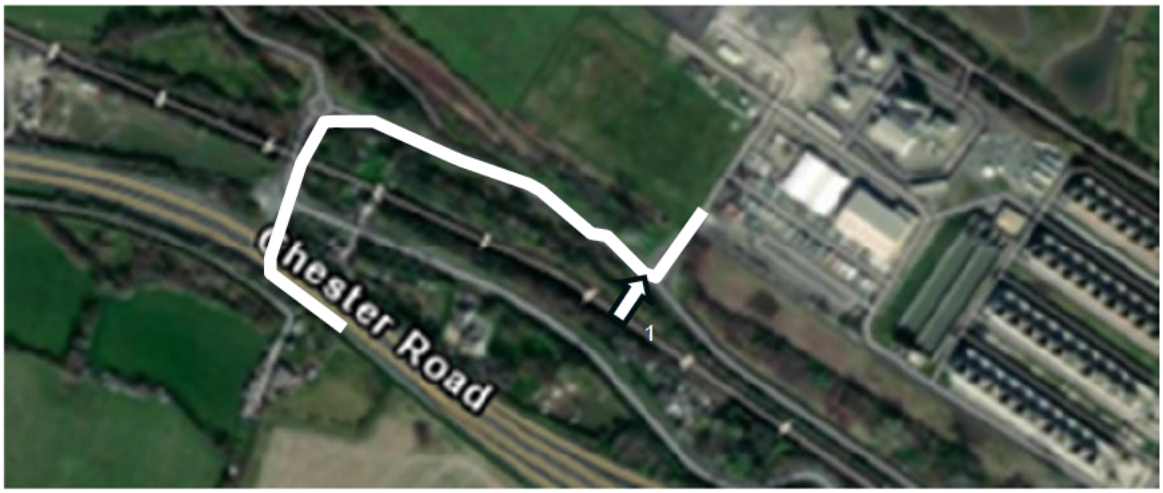
Figure 1.2 | AIL Land Side Delivery Site Locations

2. AIL Route Options

2.1 Point Off Access

Access into the site is to be provided via the A548/ Chester Road. Refer Figure 2.1 below.

Figure 2.1 | AIL Delivery Route into Site.



A preliminary swept path analysis was completed to confirm the likely land take and associated accommodations which may be required to gain access into the site from either the west or east of the site. A copy of the swept path can be found in Appendix A. This reviewed a component site of approximately 6m by 6m square by 30m long.

Temporary amendments to the public highway will be required to form a suitable AIL delivery route into the site from the A548. These works will depend on the size of the AIL and the form and specification of the delivery vehicle(s) and trailer.

It is anticipated that the following accommodations may be required to provide suitable access from the A548 into the site.

- Removal of the road restraint from the central reservation. It would be anticipated that temporary / removable traffic restraint systems are provided out with the AIL delivery timings.
- Removal of the road restraint system from the north carriageway adjacent to Kelsterton Road. It would be anticipated that temporary / removable traffic restraint systems are provided out with the AIL delivery timings.
- Construction of carriageway section linking the A548 and Kelsterton Road. This may require some adjustments to the horizontal alignment to recognise and facilitate the potential weight distribution of the AIL delivery on the road construction.

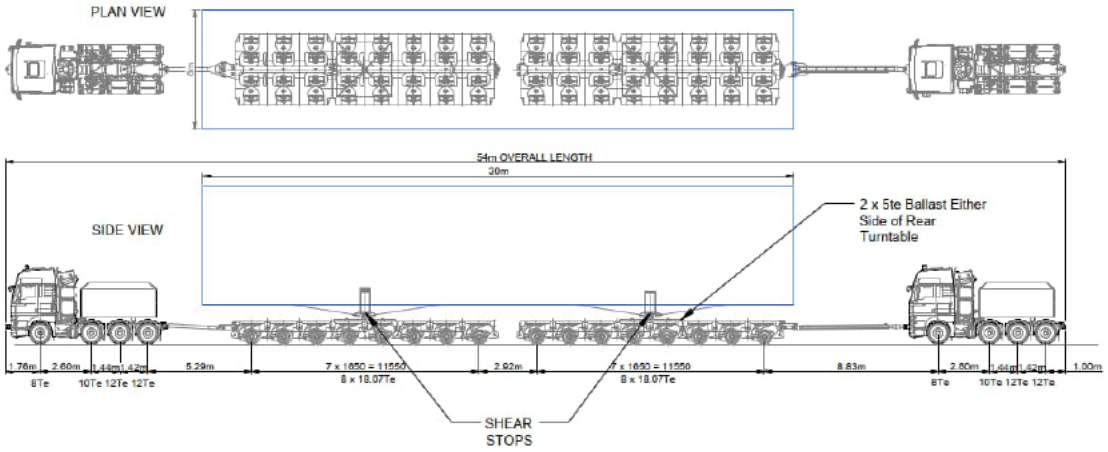
The nature and extent of the accommodations will require to be discussed and agreed with Flintshire County Council. It is anticipated that appropriate permitting will be required in order to take position of the carriageway during the AIL transfer. Temporary traffic regulation orders may also be required to manage speed limits etc during the works.

Access to the site will also cross the existing railway bridge. This bridge has previously been assessed on behalf of Uniper for AIL deliveries and is not specifically overed within the review. The bridge will require further assessment by the appointed AIL delivery specialist as and when load weights and dimensions are confirmed.

2.2 AIL Dimensions

The AIL assessment considered a standard delivery dimension for both the Port of Mostyn and Connah's Quay North. This considered an overall AIL measuring 30m in length and 6m wide. Note that the 6m width also includes any supports and fixing required to secure the AIL.

Figure 2.2 | AIL Delivery Vehicle



The assessment also considered the overall maximum height as 6m. This height includes both the trailer and AIL load.

A series of swept path drawings are provided to inform the cautions assessment at locations which are potentially constrained. These are illustrative of the road position of the trailers and the illustrate the anticipated associated over-sail from the load being transferred. Further assessment of the route will be required by the appointed AIL specialist contractor.

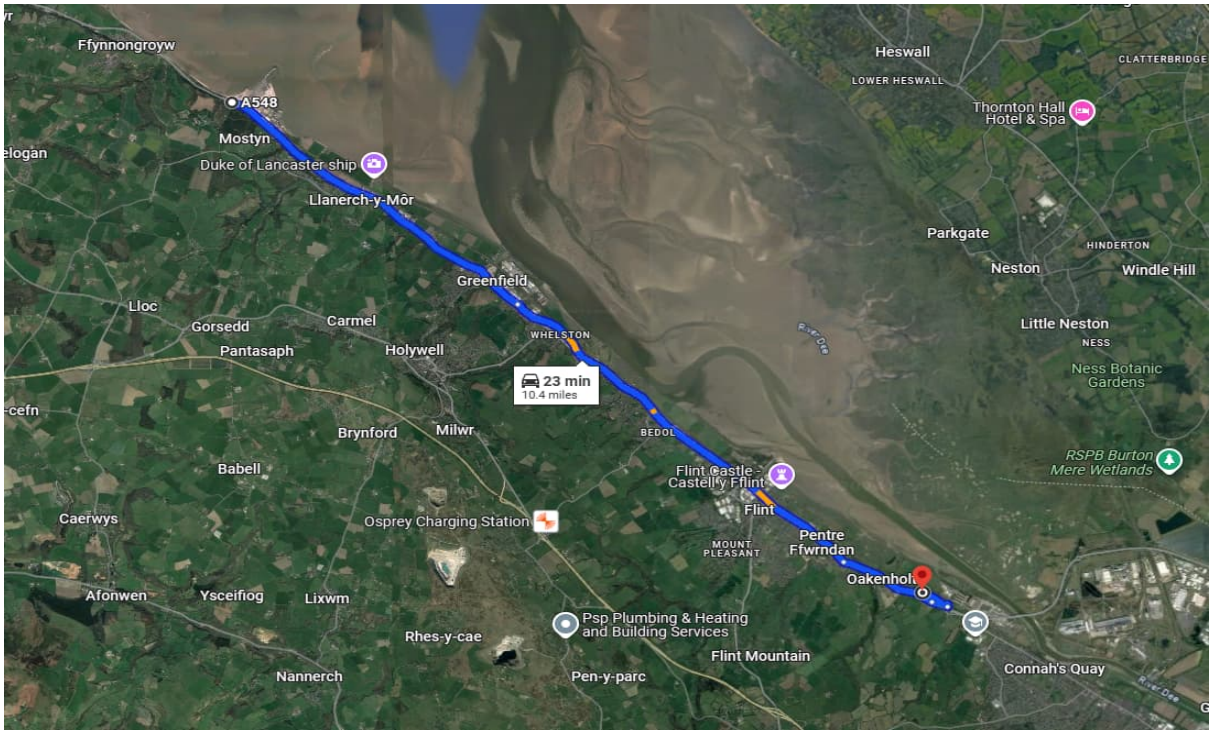
Comment is provided where they may be options for alternative AIL deliveries sizes.

3. Port of Mostyn

3.1 AIL Route

It is anticipated that the AIL could be delivered to the Port of Mostyn (NGR SJ 29102 70617) and transferred to the site via the A548. This route is approximately 10.4miles between the point of land side deliver to the site. Refer figure 2.3 below which provides an overview of the delivery route.

Figure 3.1 | AIL Route from Mostyn Point



The port facilities and associated storage space appear to be sufficient to allow the temporary housing of the AIL delivery once delivered to port. This may give flexibility to manage the transfer of the AILs to the site.

3.2 Site Egress

AILS from Mostyn would likely access the A548 Mostyn Road via an at grade 'Port Level crossing' over the railway. The existing road access is limited in terms of available geometry. A swept path analysis was completed to assess the likely land take overrun required to exit the site. A copy of the swept path overview can be found in Appendix B.

The swept path analysis suggests that the existing level crossing may be adequate to house the transporter unit and trainer. However, the over-sail associated with the delivery will likely necessitate some local adjustments.

Local improvement to the gated access will be required. The gate within site compound (Port of Mostyn side) measures approximately 4.2m width from post to post. The gate & fencing compromises of a metal structure only, therefore it should be a straightforward process for local improvement to accommodate wide loads of 6x6m. The nature of any modifications will require to be agreed with the rail operator Network Rail.

The gate off the A548 appears sufficient in terms of available width. Refer Figure 3.2 below. However, this should be validated through detailed survey to confirm.

Figure 3.2 | Mostyn point, Site Gate at Egress Location onto A548

Figure 3.3 | Mostyn point, Egress Location onto A548

The junction offers good width, although the geometry for a turning radius of the AIL could be tight for a 30m long wagon. A crabbing motion of the trailer would have to be adopted so that the AIL can manoeuvre. The AIL will likely over-sail the southern footway. This zone would require to be clear of any obstruction during AIL transfer. This may require to be controlled through permit.

There are also a number of overhead public utilities including power and telecoms. There is also an existing lighting standard and post box. The lighting standard may also need to be temporarily removed or relocated.

The telecommunications and overhead cables are approximately 9-12m tall. Temporary earthing of the trailer of disconnection of the power may be required. This would be subject to further detailed discussion with the statutory undertakers and asset owners.

3.3 Vegetation Management

Figure 3.4 | Overlapping Canopies, (A548) Greenfield.

On the approach route to the village of Greenfield there is approximately a 100m section of overlapping vegetation. The branches and associated tree canopy are relatively low and extend above the carriageway. It is anticipated that some form of trimming and cropping will be required within the highway zone/ maintenance boundary to facilitate the safe transfer of the larger AIL deliveries.

Please note, there are other locations that may require minor vegetation clearance. These would be localised to areas.

3.4 Bagillit Overbridge

The A548 to Connah's Quay includes a Grade II listed semicircular historical overbridge at Bagillt Road. No other overbridges are present along this route.

A series of measurements were completed to establish the approximate opening through the existing structure. Please note dimensions are approximate and were measured with a laser pointer.

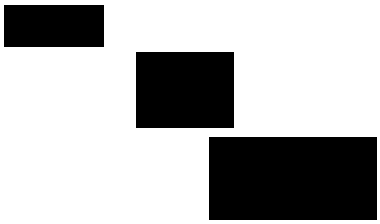


Figure 3.5 | Grade II overbridge

The approximate recorded dimensions are as follows.

A, Bridge wall to wall width = 10.4m

B, Pavement level to bridge beam = 6.2m

C, Carriageway to top of bridge arch = 10.4m

D. Carriageway width, kerb to kerb = 6.7m

The bridge represents a constraint to the delivery route and will require carful transfer through the structure. However, it is considered that the approximate dimensions can accommodate the AIL delivery dimensions noted in Section 2.2.

3.5 Tir Glas Roundabout

The carriageway width (NGR SJ 20210 77009) appears suitable for entry to the roundabout. This measures approximately 8.2m wide. The exit arm to the A548 measures 7.2m wide. However, the splitter island includes street furniture which may restrict the AIL delivery route and ability to over-sail if needed. Minor accommodations are anticipated to remove signage and street lighting at the exit location.

A copy of the swept path review is included in Appendix C.

3.6 A5026 Controlled Crossing

Figure 3.6 | Controlled crossing/Junction, Orion Service

The site route inspection identified that the junction connecting the A548 to the Orian Service Station (NGR SJ 21194 76104) included a controlled crossing with a splitter island. The kerb-to-kerb width is approximately 4m wide from both lanes to the central island kerb. The traffic lights column is offset about 750m from the kerb in the 1.5m island. Accommodations will be required to allow the AIL to traverse the junction.

The traffic signals, signs & traffic management bollards will have to be demounted to allow the AIL to straddle the central island/both lanes so that it can cross the junction and head on towards Flint. The traffic signals and bollard appear to be fitted with NAL sockets to allow easy demount and mounting.

3.7 Flint (incorporating Conservation Area)

Figure 3.7 | Flint

The site route inspection identified a number of anticipated constraints through the Town of Flint.

The carriageway width through flint is generally in the region of 5.5m. Accommodations will be required to facilitate the movement of the AIL through Flint. A number of these accommodations are located within the Flint conservation area.

Figure 3.8 | Flint Conservation Area (denoted in blue)

It is anticipated that various street furniture features such as street lighting to the central reservation, traffic signals, columns & bollards, signposts & signs will likely need to be removed to facilitate the movement of the AIL through Flint.

A bespoke pedestrian barrier is located directly adjacent to the carriageway within Flint. The nature and style of the guardrail, and the location within a conservation village, suggests that this should be retained and any AIL should recognise this feature as a constraint. As such, there will be a requirement to lower the feature lighting columns within the central reservation.

It would be recommended that any fixtures which require to be removed are fitted with NAL type sockets, where possible, to allow ease of demounting and mounting. It would be recommended that these accommodations are implemented early should this be selected as an AIL route.

There are also a large number of overhead utilities within Flint, and along the route more generally. The majority are telecommunication posts which are approximately 9-12m tall. It is anticipated that there will be adequate clearance for the majority to allow a 6m high to traverse below.

3.8 Chester Road Roundabout

Figure 3.9 | Chester Road roundabout

On the approach to the roundabout the carriageway narrows to the point of the start of the central island & then it opens towards the roundabout entry. The lane width at this location is 4m, from left channel to central island kerb. Due to the AIL load width and associate swept path the street furniture will have to be removed to accommodate the AIL transfer. A copy of the swept path assessment can be found in Appendix D.

It is anticipated that bollards, street lighting and some signage will need to be removed. The majority of these features should be replaced with products and signage which can be easily demounted and mounted.

The roundabout includes a raised central island. Some accommodations will likely be required to manage the transfer of the AIL. This depends on a number of considerations associated with the delivery. Depending on the required clearance and the associated swept path there may be a requirement to:

- Lower the central island if needed.
- Widen section of the carriageway at the inside radius to improve access.

Alternative is to traverse the roundabout in the alternative direction to limit accommodations.

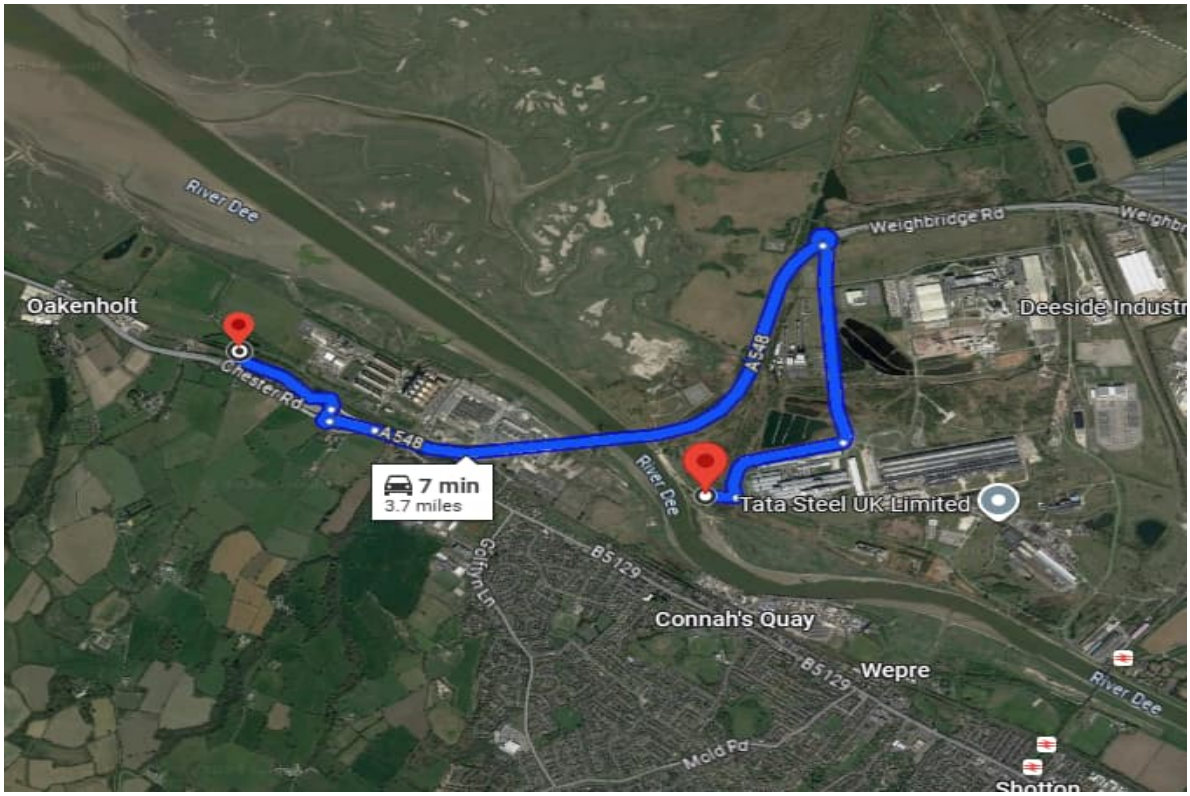
4. Connah’s Quay North [Corus Jetty]

4.1 AIL Route

It is anticipated that the AIL could be delivered to the Corus Jetty (NGR SJ 29068 70653) and transferred to the site via the A548. This route is approximately 3.7miles between the point of land side deliver to the site.

The AIL delivery will need to traverse through the existing Tata site to access the A548. Two route options internal to the Tata Steel site were initially reviewed. However, through discussion with Tata Steel during the site appraisal it is understood that ongoing development internal to the Deeside Industrial Estate negates the secondary route option. Refer figure 4.1 below which provides an overview of the anticipated delivery route.

Figure 4.1 | AIL Route from Connah’s Quay North



4.2 Corus Jetty

It is anticipated that the AIL can be delivered to the exiting Corus Jetty. This Jetty has been used for previous AIL deliveries.

A series of images are included below which capture the current appearance of the jetty. There are limitations associated with the existing structure which require to be considered and managed as part of the offload process.

Figure 4.2 | Corus Jetty

The jetty length is approximately 180m long but in poor condition. Refer Figure 4.2 above. Throughout its length they're several defects with the wooden plinths, from rot/cracking, broken joints and localised fire damage in the centre of the jetty.

Previous AIL deliveries utilised the existing concrete fenders to the west of the jetty. The AIL load was then transferred above the Jetty to avoid any load transfer and reliance on this structure.

Offload for this AIL delivery could be achieved by Roll on roll off (RoRo) or by heavy lift.

The RoRo would require the AIL load to be bridge over the existing jetty. A plan showing the likely berthing layout at this location to allow the AIL delivery can be found in Appendix E.

Any heavy lift would need to recognise the transmission lines located directly above the Jetty which may prohibit this option. There is an outhouse to the left of the transmission lines, so space may be limited for a crane. If the crane and lifting is deemed to be a feasible option, street lighting columns will also need to be taken down at the jetty location as these pose as a collision risk.

A structural assessment of the jetty will likely be required and determine if any remedial repairs or reinforcement may still be needed. This will be subject to further review by the specialist AIL delivery contractor and the anticipated loading of the AIL.

Figure 4.3 | Corus Jetty Land Side Egress Zone

Figure 4.3 illustrates the available hardstanding land side of the jetty. Minor accommodations may be required to remove any lighting standards that may impact the vehicle swept path over-sail.

4.3 Tata Steel Road Network

Figure 4.4 | Tata Steel Internal Road Networks

The figure above shows the extents of carriageway at key locations from the Corus Quay jetty to the main circulatry road network within the Tata Steel site. Through the compound the road widths are wide & roughly remain a constant at 7.8m approximate, they also offer big radi on bends so therefore AILs manouveres should be fairly straightforward for a 30m long haulage. There is one instant where the haulage would have to navigate a T-junction. The bell mouth opening is wide at approximately 30m. Meaning that there is sufficient space for the AIL to crab as it turns onto the road network from the jetty access road if needs be.

4.4 Transmission Lines

Transmission lines over the highway and internal road network present a potential constraint to the AIL delivery.

In total the AIL will need to cross under transmission lines six times on its route to site. This excludes the crossings internal to the site. There are three crossings within TATA steel compound and three further crossings on its route along the A548.

The transmissions lines across the River Dee estuary and the jetty location offer good height/clearance.

It is recommended that all crossing locations are surveyed to confirm safe clearance heights with the transmission line operator to define the safe and available clearance.

4.5 Tata Steel Gate House / Access Gate

Figure 4.5 | Tata Steel Gate House Exit Lane

The figure above shows the current arrangment for the TATA steel exit lane. There is a small central island with guard rail that splits two lanes, both lanes measure 4.2m kerb to kerb.

To accommodate AIL it is anticipated that guardrails, barriers, signs & columns will have to be removed to egress the site.

Figure 4.6 | Tata Steel Gate House Exit Lane

Alteratively if disconnecting the barriers & electric connections is not preferabl or agreeable to Tata Steel, the AIL could potrentially use the entry lanes to the site if sections of the VRS & posts are disconnedted & removed. The entry lanes offer greater width due to there not being a central island that splits the lanes.

A plan showing the alterative AIL egrees route can be found in Appendix F.

4.6 Flintshire Bridge

The route to the site would include a crossing to the Flintshire Bridge. The bridge has a current highways rating HA+45HB. A final check will be required for the AIL vehicle crossing the bridge.

Agreement to the crossing will require to be obtained from the bridge asset owner. This will likely dictate the available width, height and loading of any crossings. This should be confirmed after appointment of specialist contractor.

There will be 3 separate locations that the AILs will be passing under transmissions lines along the A548, one on approach to the bridge crossing & two along the bridge crossing.

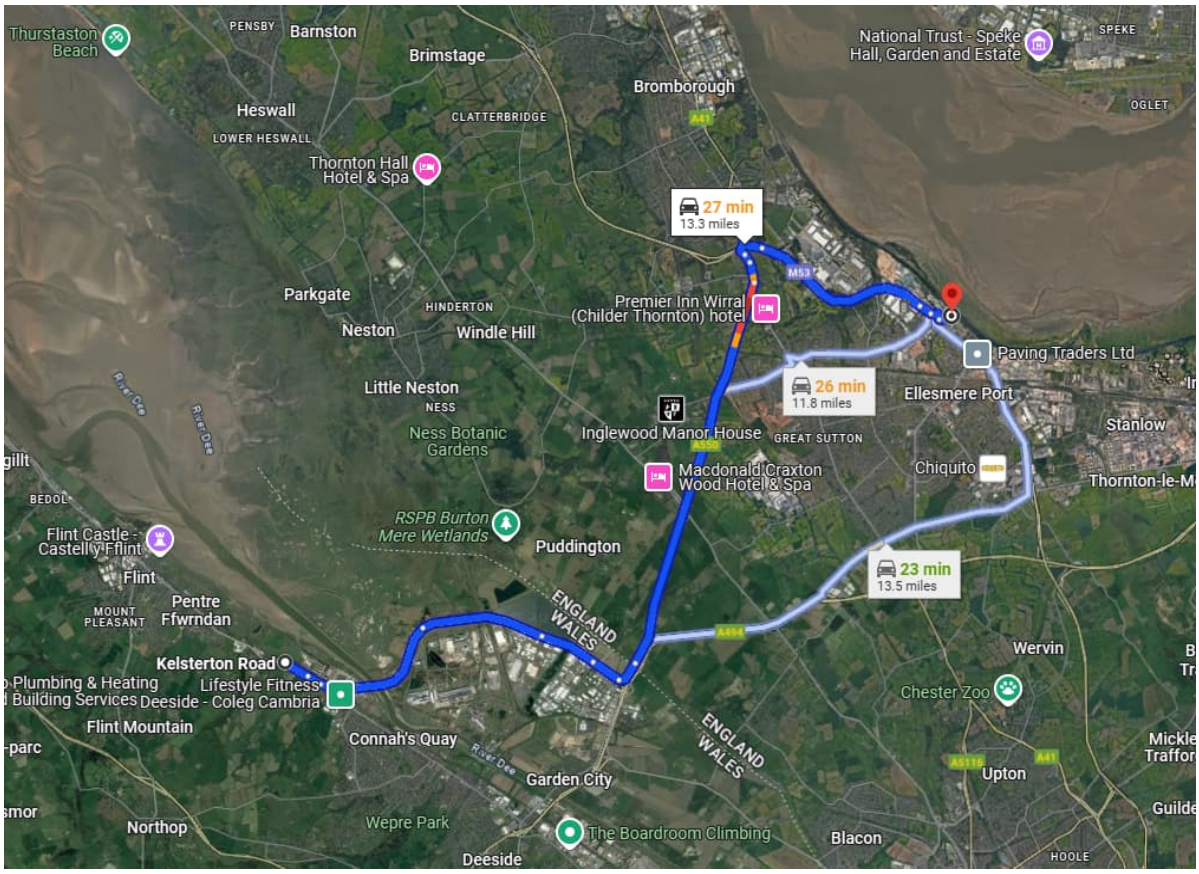
4.7 AIL Dimensions

The option to utilise the Corus Jetty may permit the transfer of different sizes of AIL. This could be explored in further detail should the component dimension and wight of the AIL be confirmed.

5. Ellesmere Port

A site route review was undertaken to determine options for the AIL delivery from Ellesmere Port to the site. The routes noted below were driven to assess the viability of AIL delivery.

Figure 5.1 | AIL Route from Ellesmere port (Aggregate industries)



This assessment assume that AIL deliveries could be delivered land site at the aggregate industries jetty shown in figure 5.2 below.

Port and land side Ownership availability to utilise the jetty and access the internal road network would require clarification to confirm viability for both the jetty location and along the selected route.

The existing site also includes an internal rail network. AILs would need to pass over the internal rail track network to access the public highway.

Figure 5.2 | Location of Ellesmere Port

Two routes from Ellesmere Port have been identified in the study, both routes will start by joining the M53 J8 at the existing grade separated junction. The two routes reviewed exit onto either the A550 exiting the M53 at J5 or the A5117 at J10. Both routes subsequently pass through a mixture of residential & business areas.

There are several constraints that have been identified with both routes these are as follows.

- Overhead gantries & Traffic signs
- Overhead Structures
- Power & Telecommunications
- Roundabouts
- Traffic signals & signs
- Tree canopies.

Both routes appear less feasible for AIL deliveries when considered against the Port of Mostyn and the Corus Jetty.

6. Findings and Conclusions

Both the AIL route from the Port of Mostyn and the Corus Jetty appear viable options for AIL deliveries to the site.

The AIL delivery options were assessed against an overall height including trailer of 6.0m, an overall delivery width of 6.0m including supports and a delivery length housed on the trailer of 30m.

There also appears to be scope for alternative AIL dimensions to be transferred. This would be subject to further detail on weight, height, width and length and would require input from AIL specialist.

Cautions/ Accommodations will be required to transfer the AIL to the site from both locations. There do not appear unreasonable in nature and include:

- Minor highway adjustments.
- Management of vegetation along the highway structure
- Removal of street furniture including the likes of traffic signals, street lighting etc.

Some of the accommodations can be implemented in advance of the AIL delivery to aid the easy transfer to the site.

The route from the Port of Mostyn will require a greater number of accommodations. However, the port facilities and associated storage space to temporarily house the AIL may give greater flexibility to manage the transfer of the AILs to the site. However, the delivery route is longer than the Corus Jetty Option.

If required, alternative routes may be available for Ellesmere Port. However, this route will not accommodate the same dimensions of AIL.

7. Further Works

AIL Delivery Dimension & Component Size. This report has assessed the likely anticipated accommodations to transport an AIL with the overall height including trailer of 6.0m, an overall delivery width of 6.0m including supports and a delivery length housed on the trailer of 30m from two land side delivery locations. Details of the component height, width, length and weight should be confirmed once known to allow a detailed assessment by AIL specialist.

Transmission Lines. It is recommended that all crossing locations are surveyed to confirm safe clearance heights with the transmission line operator to define the safe and available clearance.

Appendix A Access to Site

A.1 Site Entrance from A548

EFEFEFE

KELSTERTON ROAD

A548

TREE

TREE

TREE

TREE

TREE

TREE

TREE

TREE

EXISTING SAFETY BARRIER WILL REQUIRE BEING TEMPORARY REMOVED TO ALLOW TRUCK TO PASS THROUGH

VEGETATION CLEARANCE MAY BE REQUIRED

EXISTING SAFETY BARRIER WILL REQUIRE BEING TEMPORARY REMOVED TO ALLOW TRUCK TO PASS THROUGH

A548

PLAN VIEW

53.810m OVERALL LENGTH

SIDE VIEW

2 x 5te Ballast Either Side of Rear Turntable

8te 10te 12te 12te 8 x 18.07te 8 x 18.07te 8te 10te 12te 12te

SHEAR STOPS

0 6.25 12.5 m

1:250

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Notes

1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. DO NOT SCALE FROM DRAWING, USE WRITTEN DIMENSIONS ONLY.

LEGEND:

- VEHICLE WHEEL TRACK
- VEHICLE BODY OUTLINE
- EXISTING TREES/ HEDGES/ VEGETATION

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Sheet Title

ACCESS ROAD OFF A548 - KELSTERTON ROAD

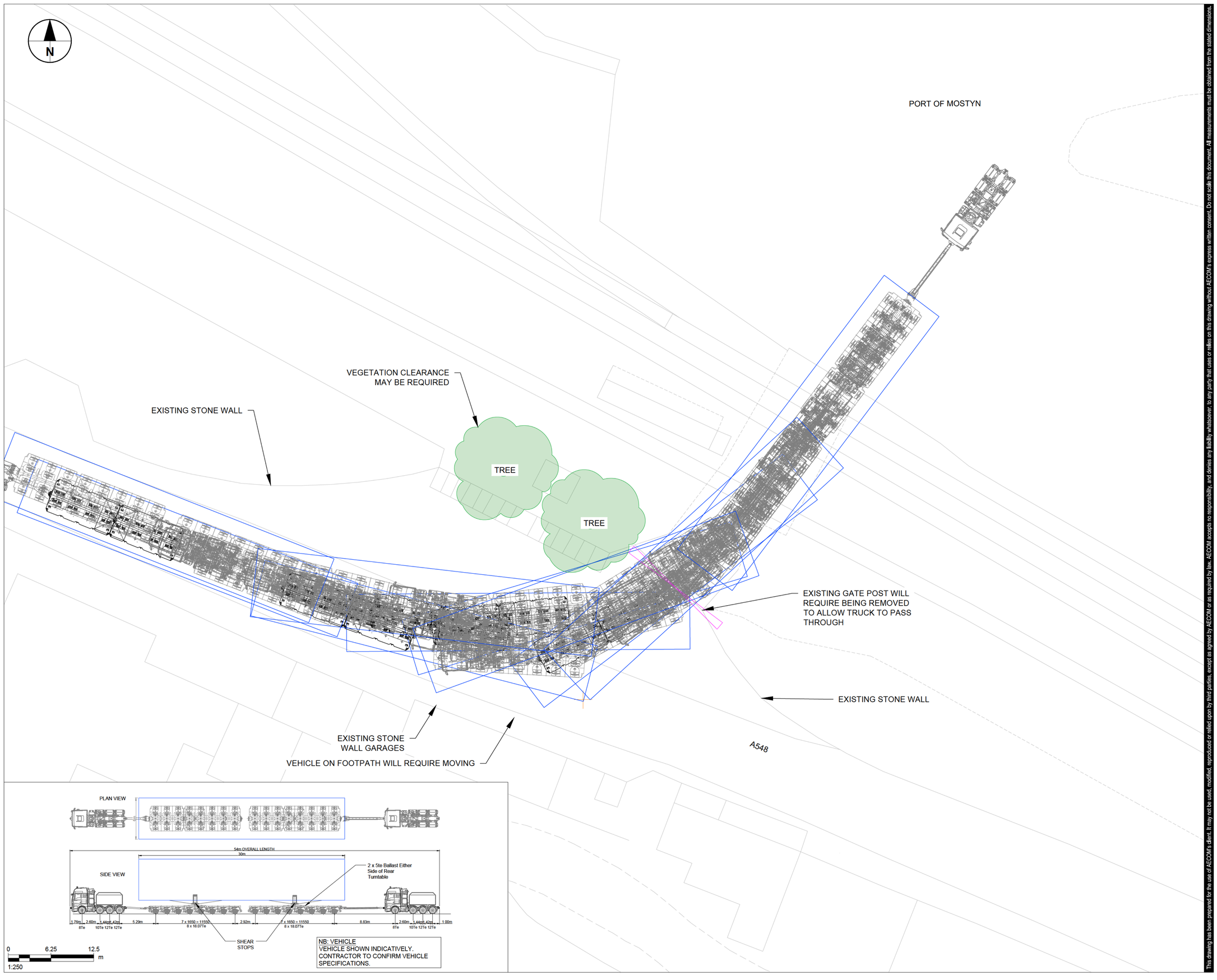
Sheet Number

60695973-ACM-XX-00-DR-CE-0002

Scale: 1:200 @ A1 **Rev:** P01

Appendix B Port of Mostyn

B.1 Egress Route from Port of Mostyn



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- VEHICLE BODY OUTLINE
- EXISTING RAILWAY CROSSING GATE
- EXISTING TREES/ HEDGES/ VEGETATION

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Sheet Title

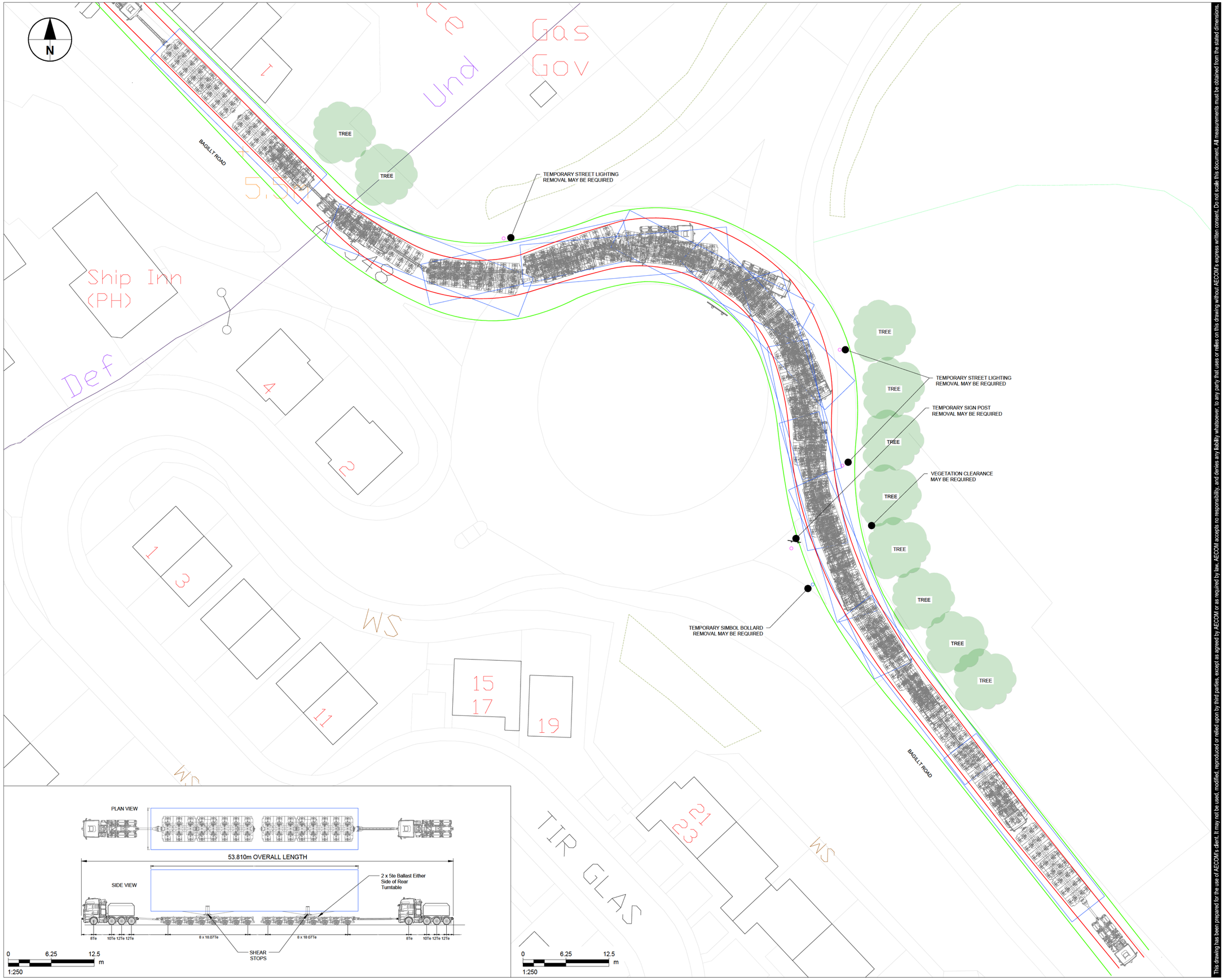
ACCESS ROAD TO A548

Sheet Number

60695973-ACM-XX-00-DR-CE-0001

Scale: AS SHOWN @ A1 **Rev:** P01

Appendix C Tir Glas Roundabout



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- EXISTING STREET LIGHTING
- EXISTING SIMBOL BOLLARD
- EXISTING ROAD SIGN

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Sheet Title

EXISTING ROUNDABOUT ON BAGILLT ROAD

Sheet Number

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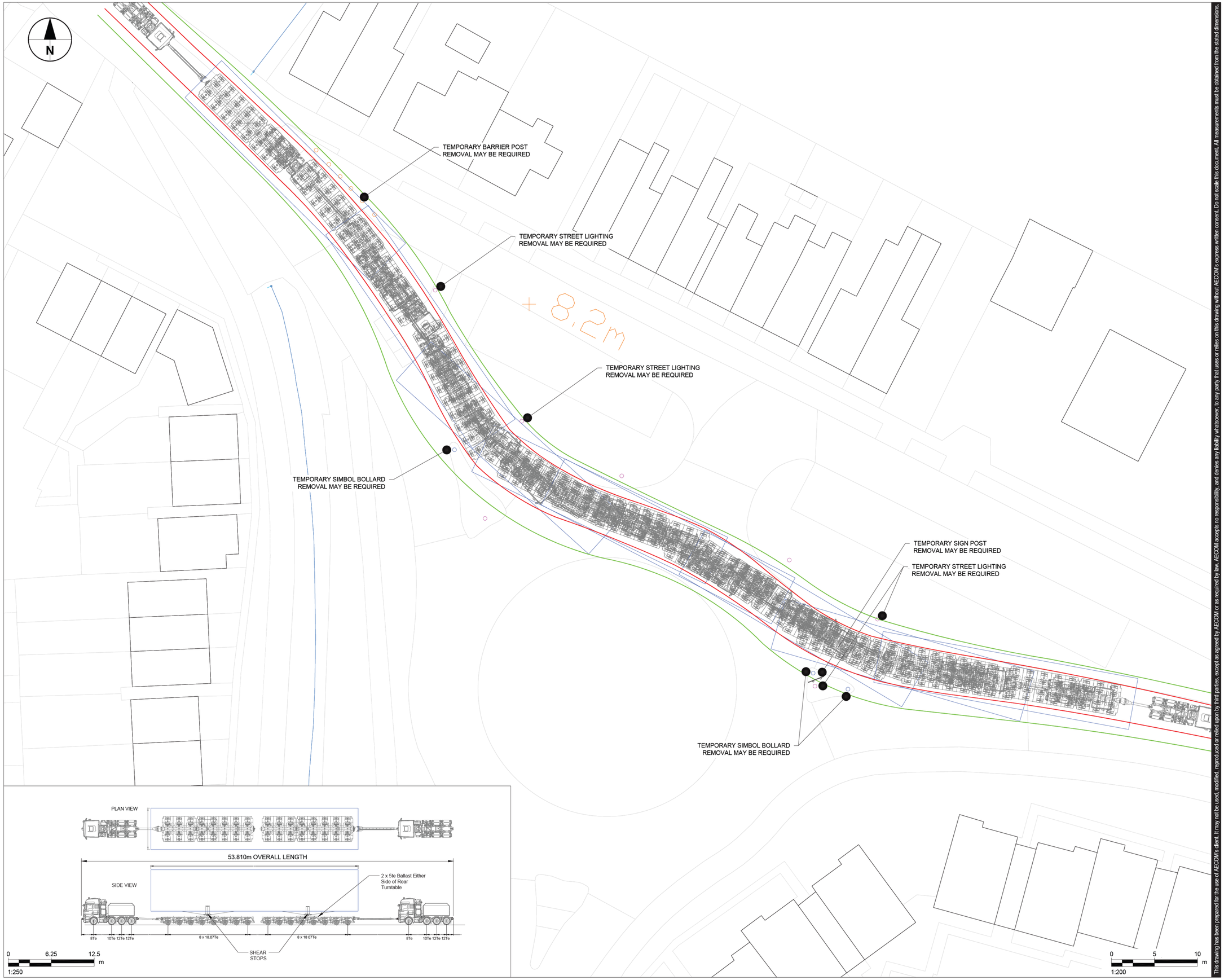
Scale: 1:250 @ A1 **Rev:** P01

Appendix D Chester Road Roundabout



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LEGEND:

- VEHICLE WHEEL TRACK
- VEHICLE BODY OUTLINE
- EXISTING STREET LIGHTING
- EXISTING BARRIER POST
- EXISTING SIMBOL BOLLARD
- EXISTING ROAD SIGN

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EXISTING ROUNDABOUT ON CHESTER ROAD

Sheet Number

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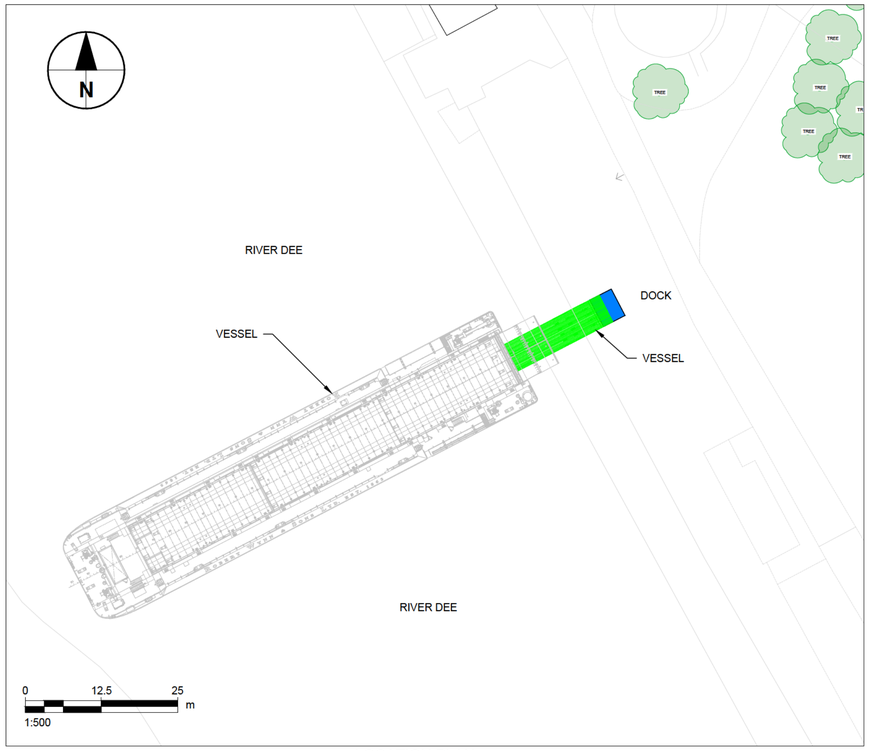
Appendix E Corus Jetty

E.1 Berthing Layout



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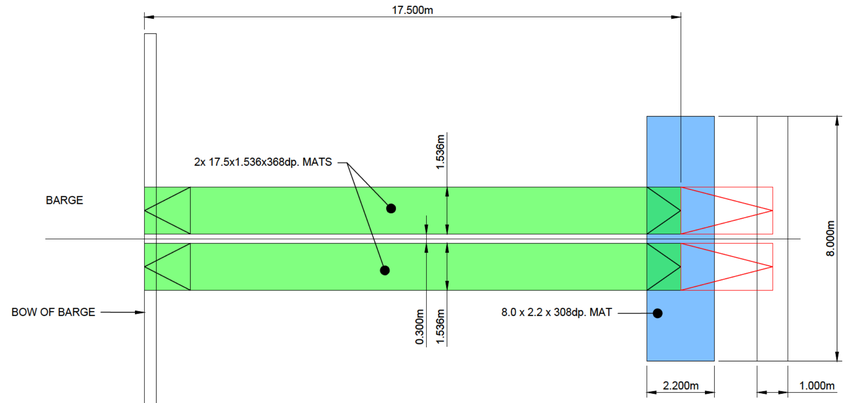

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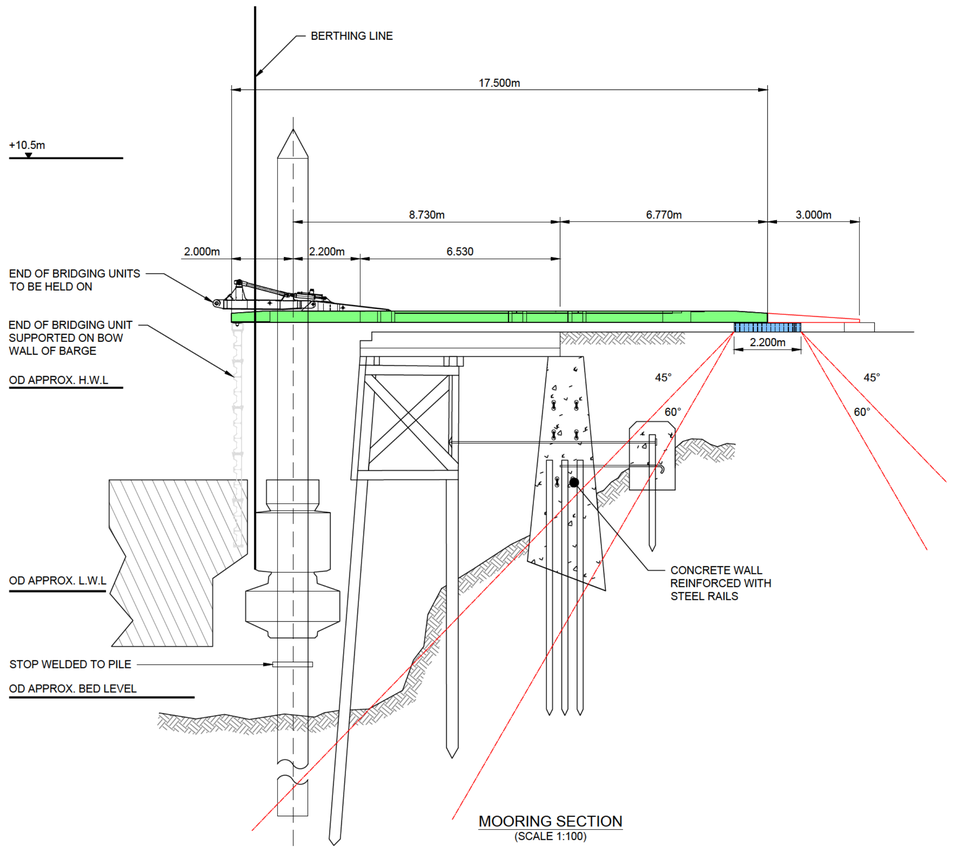

MOORING SECTION
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2. EXISTING STRUCTURE AND RETAINING WALL TAKEN FROM WALLACE EVANS AND PARTNERS INSPECTION REPORT DRAWING 9195.

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MOORING ARRANGEMENT & DETAIL

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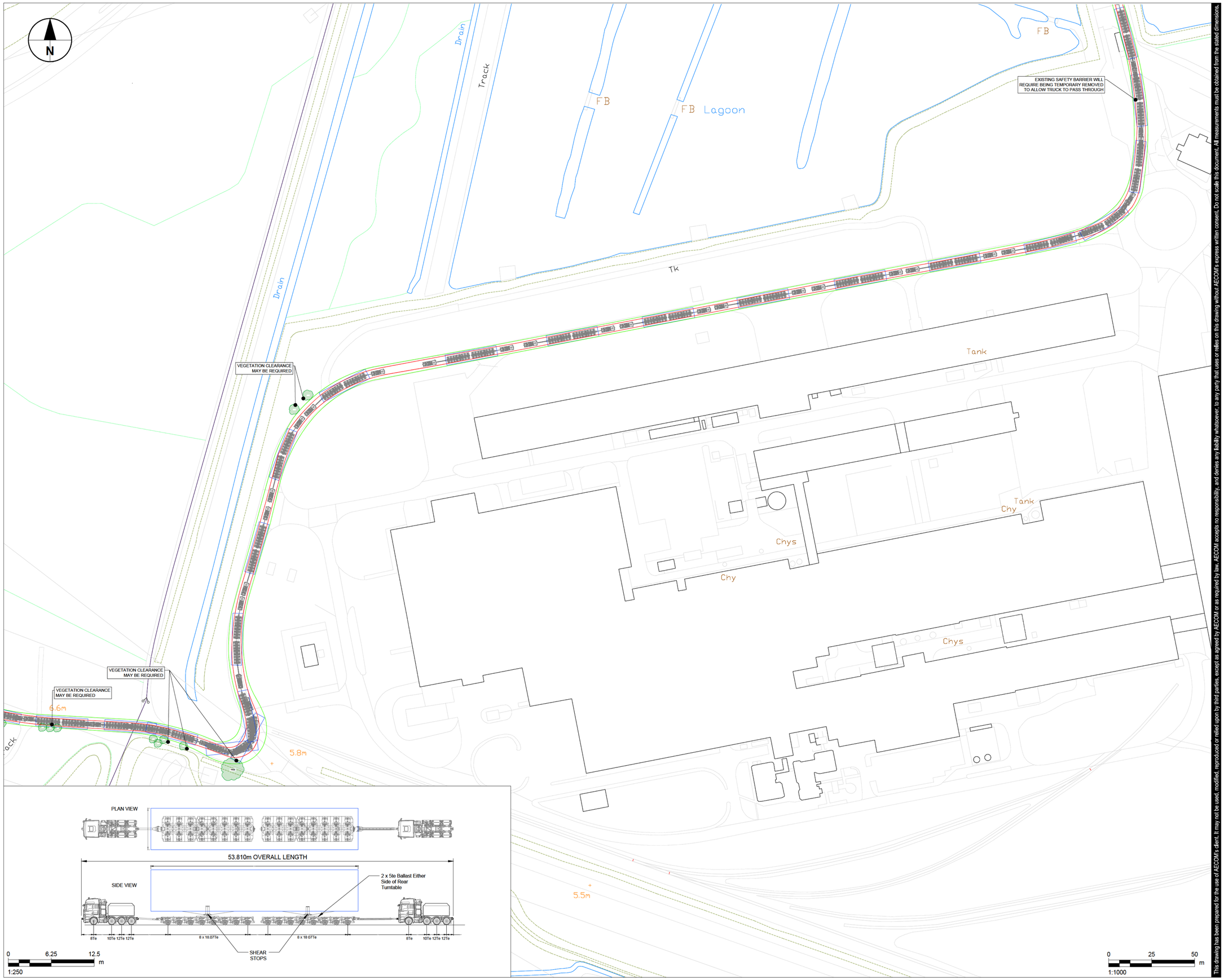
Appendix F Tata Gate House

F.1 Egress Route

Project Management Initials: Designer: DWT Checked: CGY Approved: CGY ISO A1 594mm x 841mm



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ACCESS ROAD TO A548

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Ref 3. Safety at Street Works and Road Works, A Code of Practice (2013). Available at: https://www.gov.uk/government/publications/safety-at-street-works-and-road-works (accessed 28/06/2025)

Ref 4. Traffic Signs Manual (2006). Available at: https://www.gov.uk/government/publications/traffic-signs-manual (accessed 28/06/2025)

Abbreviations

Abbreviation	Term
AIL	Abnormal Indivisible Loads
BAPA	Basic Asset Protection Agreement
C&IEA	Construction and Indicative Enhancement Area
CCGT	Combined Cycle Gas Turbine
CCP	Carbon Capture Plant
CO_2	Carbon Dioxide
CTMP	Construction Traffic Management Plan
CWTP	Construction Workers Travel Plan
DCO	Development Consent Order
DESNZ	Department for Energy Security and Net Zero
DMRB	Design Manual for Roads & Bridges
ESDAL	Electronic Service Delivery for Abnormal Loads
FCC	Flintshire County Council
ha	hectares
HGV	Heavy Goods Vehicles
IHT	Institution of Highways & Transportation
km	kilometres
MSOA	Middle Super Output Areas
NCN	National Cycle Network
NGET	National Grid Electricity Transmission plc
NSIP	Nationally Significant Infrastructure Project
PRoW	Public Right of Way
RSA	Road Safety Audits
SoS	Secretary of State
SWMP	Site Waste Management Plan