



Aberdeen Harbour Expansion Project

Construction Environmental Management Document

AHEP-DRA-APP-0001 Rev 8
22 October 2019

DRAGADOS

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Construction Traffic Management Plan

Revision Log

Minor updates to formatting have been made throughout the document. The main/significant changes are listed in the table below.

Revision Number	Date	Location of Revision	Revision Details
Rev 6	16/05/2018	Front of Document	Document updated to Rev 6 and date updated
		Section 6.1.2	Addition of Works Completed Section
		Table 6.1 Table 6.2 Table 6.3	Tables updated to remove individuals names. Phone numbers in Table 6.2 updated and now include mobile numbers.
		Section 6.2.3, Table 6.4	Mobile numbers added to the table for out of hours/ Emergency contact
		Section 6.2.4, Table 6.5	Update of Northsound phone number. Addition of Kelda Water Services contact details.
		Section 6.3.2: HGV Access Routes	Update of text to include details on charity donation when there is non-compliance.
		Section 6.3.2: Aberdeen Harbour to Nigg Bay Delivery of Stone	Update of figures in 2018 and addition of text.
		Section 6.4	Update of compound layout drawings. Text updated throughout section that refers to a requirement for Traffic marshals at compound entrance/ exits. When required, traffic marshals will be on hand, however, the majority of vehicles movements are monitored and controlled by security personnel.
		Section 6.4.2	Update of bullet text to reflect changes to southern compound
		Section 6.4.3	Text updated to reflect changes to northern compound layout and usage
		Section 6.4.4	Text updated to reflect changes to central compound layout and usage. Including additional access and exit points.
		Section 6.4.6	Update of Site parking text to reflect the provision of site parking.
		Section 6.5.2	HGV Windscreen markers section updated as the location of the markers is on the side of the cabs (where most visible) not on the windscreen. As well, text has been updated to clarify that one-off delivery vehicles to site are not required to display a marker.
		Section 6.5.3	Removal of text regarding double yellow lines as clearway is signed.
		Section 6.5.4, Table 6.6	Table updated to remove individuals names.
		Section 6.5.6	Update of text
		Section 6.6.2	Text about Traffic marshals removed from this section in lines with update as described above in Section 6.4
		Section 6.7.4	Update of text
		Section 6.8	Update of Morrison's/ SITA Recycling Plant as it is now open as of October 2017. Addition of Kincardine Offshore Wind Farm
		Appendices	Update of drawings
Rev 7		Front of document	Document updated to rev 7 and date updated

	16/10/ 2019	Section 6.1.2	Updated works completed section for 2019
		Section 6.8	AWPR removed from list of additional projects due to completion and full opening in February 2019.
Rev 8	22/10/ 2019	Throughout the document	Removed names of personnel Updated contact numbers Replaced Hatton traffic management with ACC Replace Kelda water services with Scottish water

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6 Construction Traffic Management Plan

6.1 Introduction

6.1.1 Construction Traffic Management Plan

The purpose of this document is to establish a set of procedures capable of meeting contractual and statutory requirements with respect to the management of construction traffic. These procedures are presented in the form of a Construction Traffic Management Plan (CTMP) and are designed to reduce the potential impact of construction activities on the surrounding traffic and transportation networks.

6.1.2 Works Completed to Date

The Temporary Traffic Management Schemes discussed in this plan have now been implemented within the project site and surrounding area. This includes:

- Road closure (Greyhope Road);
- Temporary Speed limit restriction on Coast Road;
- Implementation of a freeway zone on St Fitticks Road (excluding yellow lining);
- Erection of temporary traffic management signage; and
- As detailed in Section 6.7.2, a condition survey was completed with ACC to record the potential effect of construction traffic on the public highway network.
- Traffic management processes have been implemented into each of the construction compounds, this includes pedestrian walkways, one-way traffic flow systems, speed signs and dedicated parking spaces with reverse parking implemented.
- The diverted coastal path and cycle route have been constructed and are now fully operational and open to the public, with appropriate directional signs in place.
- Construction of the realignment of St Fitticks/Coast Road, Greyhope Road and Harbour Entrance was started in mid-2019 and is scheduled for completion in early 2020.

6.1.3 Roles, Responsibilities and Cross-Referencing

Table 6.1 details the responsibility of selected project staff with regards to construction traffic management.

Table 6.1 Roles and Responsibility Table

Job Title	Responsibilities
Traffic Safety and Control Officer	Manage local permits/consents with Aberdeen City Council (ACC);

Job Title	Responsibilities
	Monitor traffic flows Monitor the correct use of agreed traffic routes Recording and logging all incidents. Liaising with stakeholders and emergency services on road and traffic matters Monitoring Temporary Traffic Management Schemes Monitoring traffic management equipment Health and safety obligations Managing site access requirements In the event of an accident, erecting replacement signs, cones, bollards and lights without delay.
Traffic Safety and Control Deputy	Assist the Traffic Safety and Control Officer
Traffic Management Sub Contractor	Supply and install warning signs on approach to the development; Management and installation of temporary speed limit signs; Coning management; 2-way traffic sign management; Management of road closures within the project site boundary; and Diversion route management and installation.

6.1.3.1 Cross-Referencing

This plan should be read in conjunction with the following CEMPs:

- Construction Method Statement; and
- Pollution Prevention Plan.

6.1.4 CTMP Revisions and Document Updates

This CTMP is a ‘live’ document. It will be reviewed every month throughout all stages of the construction process and in accordance with any changes to the construction works. This CTMP will be updated with all agreed changes and all revisions and edits logged using the example register shown at the front of this chapter.

6.1.5 Construction Programme

A full description of the construction programme can be found in the Construction Method Statement (CMS), Chapter 3 of the Construction Environmental Management Document (CEMD).

6.2 Personnel and Contact Information

6.2.1 Traffic Safety and Control Officer

Dragados have appointed a Traffic Safety and Control Officer (TSCO) for the duration of the works. The TSCO is responsible for all traffic safety and control operations during the construction works and shall liaise with the appointed construction traffic sub-contractor and all relevant authorities and other stakeholders as required. In the event of any construction traffic issues, please contact the appointed TSCO.

Table 6.2 provides the contact information for the appointed TSCO.

Table 6.2: Appointed TSCO Contact Details

Name	Contact Details
TSCO	01224 063628/ 07881036759
TSCO deputy	01224 063600/ 0 7979240938

The responsibilities of the TSCO, and of any nominated deputies shall include, but will not necessarily be limited to, the following:

- Manage local permits/consents with Aberdeen City Council (ACC);
- Monitoring, with the assistance of sufficient mobile personnel, the flow of traffic within the area throughout the duration of all construction activities;
- Monitor the correct use of the Coast Road and all other agreed traffic routes for the duration of the construction phase including the restrictions through Torry and Cove;
- Recording and logging all incidents. An ‘incident’ is defined as a shed load, vehicle breakdown, vehicle abandonment, or traffic accident, whether or not the latter involves personal injury;
- Liaising with ACC, Doonies Farm and Emergency services on matters that affect, or are likely to affect, traffic flow through the surrounding local road network;
- Monitoring of all Temporary Traffic Management Schemes associated with the Works;
- Ensuring that all traffic management equipment is in place and in full working order at all times;
- Enforcement of all relevant health and safety obligations;
- Enforcement of site access requirements; and
- In the event of an accident, erecting replacement signs, cones, bollards and lights without delay.

6.2.2 Appointed Traffic Management Sub Contractor

Dragados will appoint a specialised traffic management sub-contractor, prior to the commencement of the construction works. They will complete the majority of construction traffic activities on site and will communicate directly with the appointed TSCO.

Table 6.3 shows the contact details for the Traffic Management Sub Contractor.

Table 6.3: Appointed Traffic Management Sub Contractor

Name	Contact Details
Aberdeen City Council	07825533549

The appointed Traffic Management sub-contractor are responsible for managing the following aspects of the CTMP:

- Supply and install warning signs on approach to the development
- Management and installation of temporary speed limit signs
- Coning management
- 2-way traffic sign management
- Management of road closures within the project site boundary
- Diversion route management and installation

The TSCO will be responsible for ensuring that the appointed sub-contractor correctly operate and manage all of their duties with regards to construction traffic measures.

6.2.3 Emergency Contact Details

In the event of an accident occurring in or adjacent to the site, the TSCO or an approved deputy shall immediately contact the emergency services as appropriate. Additional information regarding the response procedure in the event of an emergency can be found in the Dragados Health & Safety Plan.

Table 6.4 summarises all emergency contact details.

Table 6.4: Emergency Contact Details

Organisation / Personnel	Emergency Contact Number	Non-emergency Number
Police Scotland (15 Victoria Road Aberdeen)	999	(101)
Scottish Ambulance Service	999	(01224 812200)
Scottish Fire & Rescue Service	999	(01224 696666)
Construction (site-based) - Project Director	07785409434	01224 063572

Organisation / Personnel	Emergency Contact Number	Non-emergency Number
Construction (site-based) - Health and Safety Manager	07884235900	01224 063611
Coastguard	999	01224 592334

In the event of an emergency, both on and off-site, the TSCO, Construction Health and Safety Officer and Project Director must be informed immediately. The TSCO will assist any emergency services on site as required with regards to moving through the site and moving site equipment and personnel to allow uninterrupted access.

6.2.4 Additional Contact Details

The following contacts should be informed of changes to traffic plans that could result in an impact to other road users. It is the responsibility of the TSCO, in conjunction with the Dragados Community Engagement Team, to ensure that details of traffic changes are provided to the contacts in Table 6.5.

Table 6.5: Additional Contact Details

Company/Contact	Phone No.
Dragados Community Liaison Manager	01224 063586
Aberdeen City Council Media Team/ Karen Allen	01224 522 099
Northsound 1& 2 Radio Stations	01224 400969 Reception
Original 106 Radio Station	01224 294 860 - Newsroom
BBC Scotland - Aberdeen Broadcasting House	01224 625 233- Telephone
Roadworks Co-ordination, Aberdeen City Council (Kevin Abercrombie)	01224 523 886
ITS Team, Aberdeen City Council (Neale Burrows)	01224 538 048
Scottish Water	01224 897 816

6.3 Construction Vehicle Routing

The site is to be well signposted at all times throughout the project with all relevant restrictions shown in advance through the appointed sub-contractor's traffic plan. This plan should include the installation of semi-permanent traffic signs installed on poles and provision of a dedicated customer enquiries telephone number.

The routes in the following sections outline the agreed formal access routes to / from the construction site for different vehicle types. These routes are illustrated in Figure 6.1.

6.3.1 Existing Road Network

The construction site is accessed from the south by Coast Road which crosses a live railway line via a bridge which has a 6.6m wide carriageway. Due to the limited carriageway width, along with the acute 45 degree corners on both the north and

south approach roads, the bridge operates on a signalised ‘shuttle’ basis. While this bridge has no identified weight restriction, Network Rail have confirmed that it can accommodate construction traffic up to 44 tonnes. HGVs currently use this route. The bridge is illustrated in Photograph 6.1 and Photograph 6.2.



Photograph 6.1: Coast Road Railway Bridge (aerial)



Photograph 6.2: Coast Road Railway Bridge, typical HGV movement

The site is also currently accessed from the north-west via St. Fittick’s Road which provides connections to Aberdeen City Centre, passing through the residential area of Torry. The function of this road means that on-street parking, bus stops, shops with road-side frontage and a range of traffic calming measures are common along its length. While it is possible to accommodate vehicles such as cars and light goods vehicles (LGVs), it is not appropriate for construction-related HGV movements, although it is currently used by non-AHEP HGV traffic.

Throughout the duration of the project a section of Greyhope Road will be closed, restricting vehicle movement along the route. This closure is discussed in more detail in Section 6.5.

6.3.2 Vehicle Routing Management

LGV Access Routes

Light goods vehicles and private cars are permitted to access the site without restriction. If travelling from the south, access through Altens Industrial Estate, Hareness Road and Coast Road should be followed. If travelling from the north or Aberdeen City Centre then the following route should be followed, as illustrated in Figure 6.1:

1. Cross the A956 road bridge over the River Dee and take the first exit from the Roundabout onto South Esplanade West
2. Follow South Esplanade west until its junction with Victoria Road under traffic signal
3. Turn right at the traffic signals and follow Victoria Road in a south easterly direction

The above access route for LGVs and cars has been discussed and agreed with all relevant regulatory bodies.

HGV Access Routes

In accordance with the conditions agreed in the Environmental Statement (ES), all HGVs must approach the site in accordance with the routing details outlined below and as illustrated in Figure 6.1.

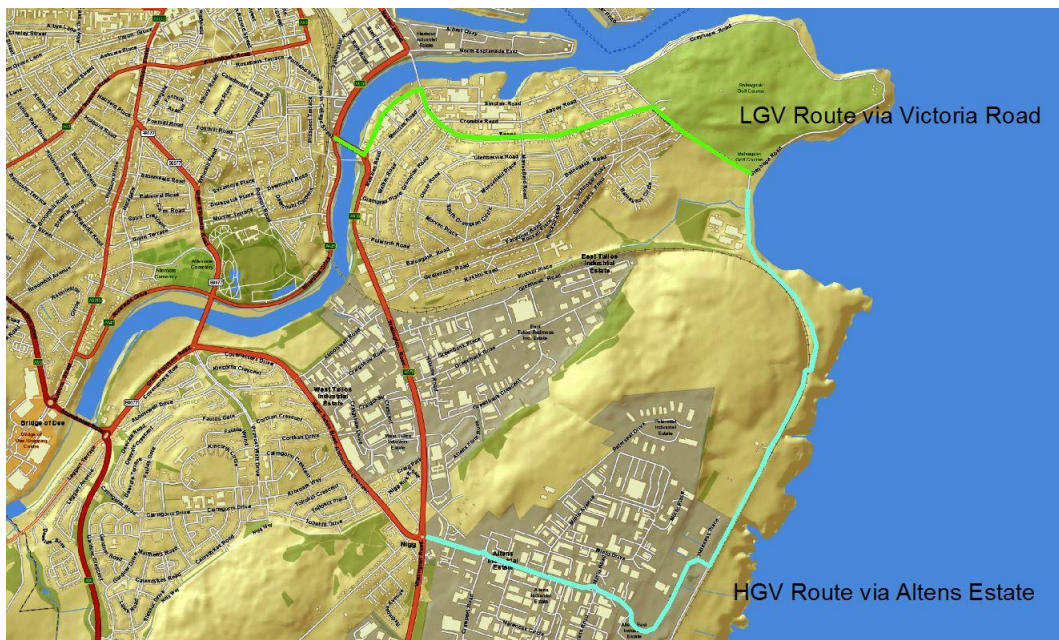


Figure 6.1: Agreed LGV and HGV traffic routes

This access route has been agreed and documented with regulatory bodies and must be adhered to at all times.

Under no circumstances will any HGV approach the site by any other route unless fully authorised by the TSCO, Construction Manager and ACC.

Based on the above, the designated route for all construction HGV trips will be as follows:

1. Travel east through the Altens Industrial Estate on Hareness Road from the A956
2. Continue east leaving 2no. roundabouts at their second exits
3. At the priority junction between Hareness and Coast Road, turn north (left)
4. Follow Coast Road in a northerly direction passing over the signal controlled Railway Bridge. Note this structure has a weight limit of 44 tonnes (refer to Photograph 6.1: Coast Road Railway Bridge)

No construction HGVs are permitted to approach the construction site through Torry or Cove. The appointed TCSO and the appointed construction traffic sub-contractor are responsible for ensuring that this construction traffic routing requirement is adhered to at all times. Full routing details should be provided to all personnel, subcontractors and delivery companies. A declaration to follow these instructions will be included and signed in the driver's log. This includes copies of the drawings presented within Appendix B.

In the event that a vehicle is observed using an un-approved route, and this is reported to Dragados in a timely manner, £500 will be deducted from the next payment due to the contractor. This money will be used to fund good causes in the local community.

Aberdeen Harbour to Nigg Bay - Delivery of Stone

The delivery of stone for the breakwater construction is permitted 24 hours a day, 7 days a week, with 52,000t delivered to the existing Aberdeen Harbour and transported to AHEP during 2017 and 150,000t delivered between February 2018 and August 2018. There is 31,000t planned for delivery by April 2019. An additional 166,700t will be delivered from Leiths Quarry at Blackhills.

All HGVs transporting rock are required to follow the traffic access route from Blaikies Quay to Nigg Bay as outlined in Figure 6.2. This route requires all HGVs transporting rock to travel via the harbour weighbridge before entering public roads to ensure that they are not overloaded and are permitted on the public highway.

Deliveries of stone and/ or concrete aggregates that may come from additional locations will also be required to follow the traffic access routes through Altens Industrial Estate as outlined in Section 6.3.2.

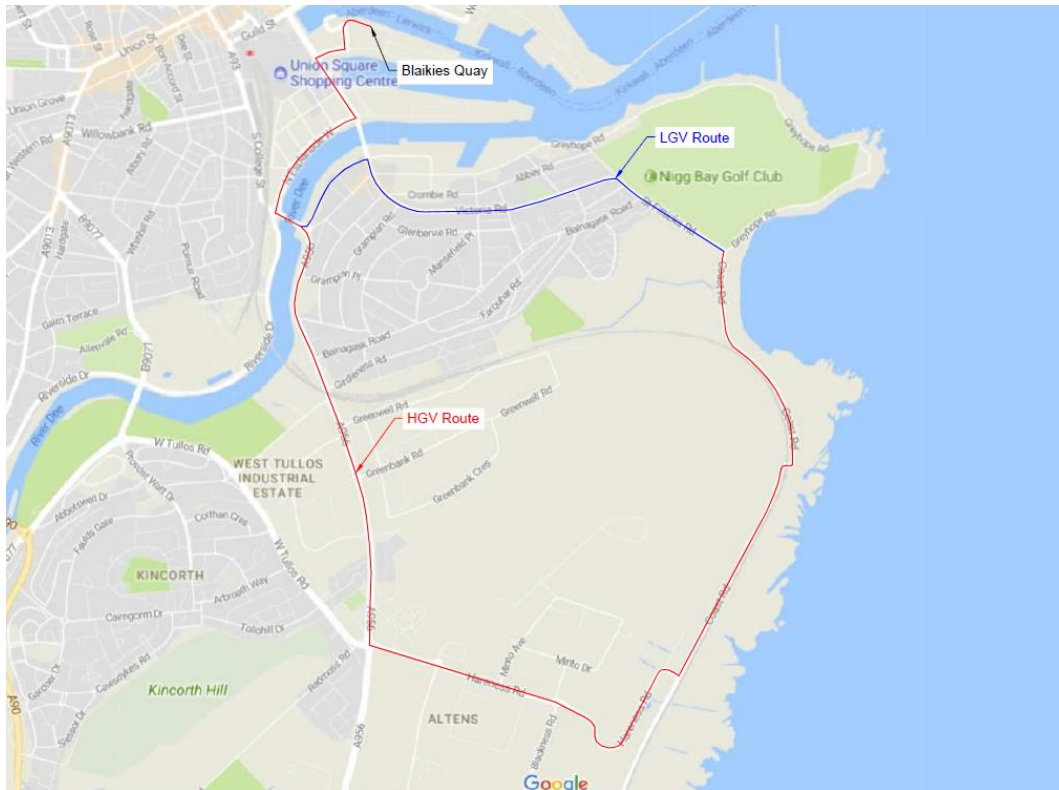


Figure 6.2: Delivery of stone access route

All deliveries of stone to the site are required to adhere to the traffic management procedures as outlined in Section 6.5.

HGVs Leaving Nigg Bay

Figure 6.3 presents the traffic island installed at the Greyhope Road/St Fitticks junction that will prevent HGV movement from the harbour expansion towards Torry once the harbour is operational.

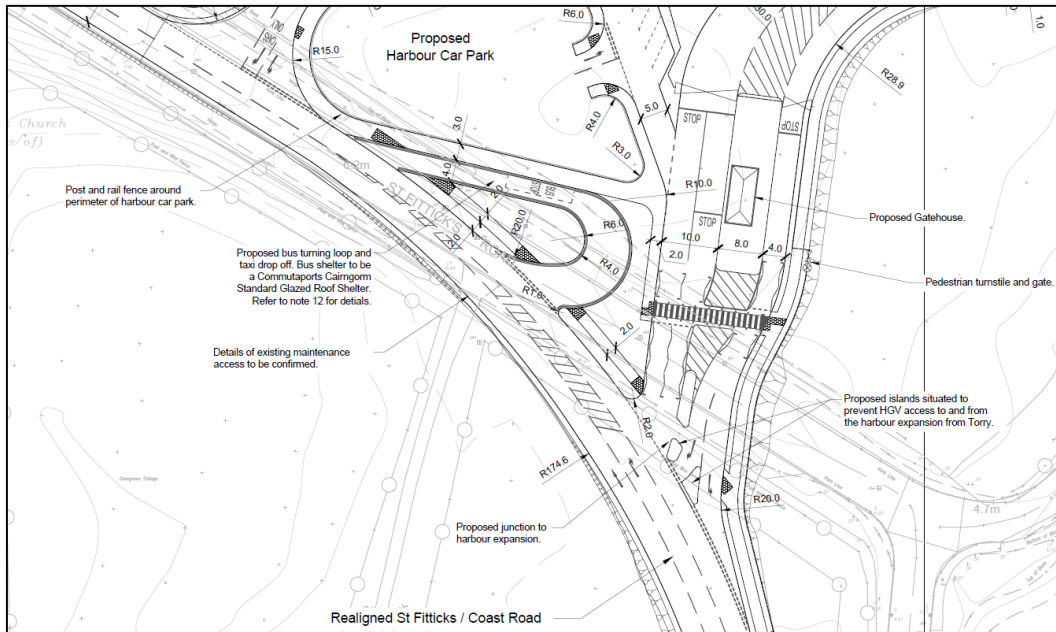


Figure 6.3 Road Layout drawing highlighting the proposed traffic islands

The appointed construction traffic sub-contractor is responsible for establishing all necessary traffic management measures to accommodate construction traffic using Coast Road and agreeing measures with the transportation officers of ACC.

The traffic management signage scheme includes signage on St Fitticks' Road that must be adhered to at all times alerting project HGVs that travelling through Torry is not permitted.

Appendix B contains the permitted access routes for all HGV construction trips when accessing or egressing the site Compounds.

6.4 Contractor Compound Traffic Management

6.4.1 Compound Locations

There are three construction Compounds each receiving different levels of HGV traffic and material deliveries. The TSCO is responsible for liaising with the Construction Manager and any other relevant individuals to identify which HGV's will be accessing the different Compounds.

A brief description of each Compound can be found below:

6.4.2 Southern Compound

The Southern Compound (Figure 6.4) is located to the south of Nigg Bay and is bounded by the Coast Road to the west and the coastal slope to the north and east. The Compound will be used primarily for the fabrication and storage of accropodes.

The Compound will include:

- Office and welfare cabins (total plan area 15m x 15m);

- Laboratory for concrete testing with a plan area of 15m x 15m;
- Concrete batching plant: with associated storage
- Fabrication shed: a temporary structure 115m x 23m within which the accropodes will be fabricated;
- Pre-stock area: a 30m x 90m used during the curing cycle of the accropodes; and
- Accropodes storage area: the remaining areas of the Compound will be levelled for storage of completed accropodes prior to placing in the breakwaters.

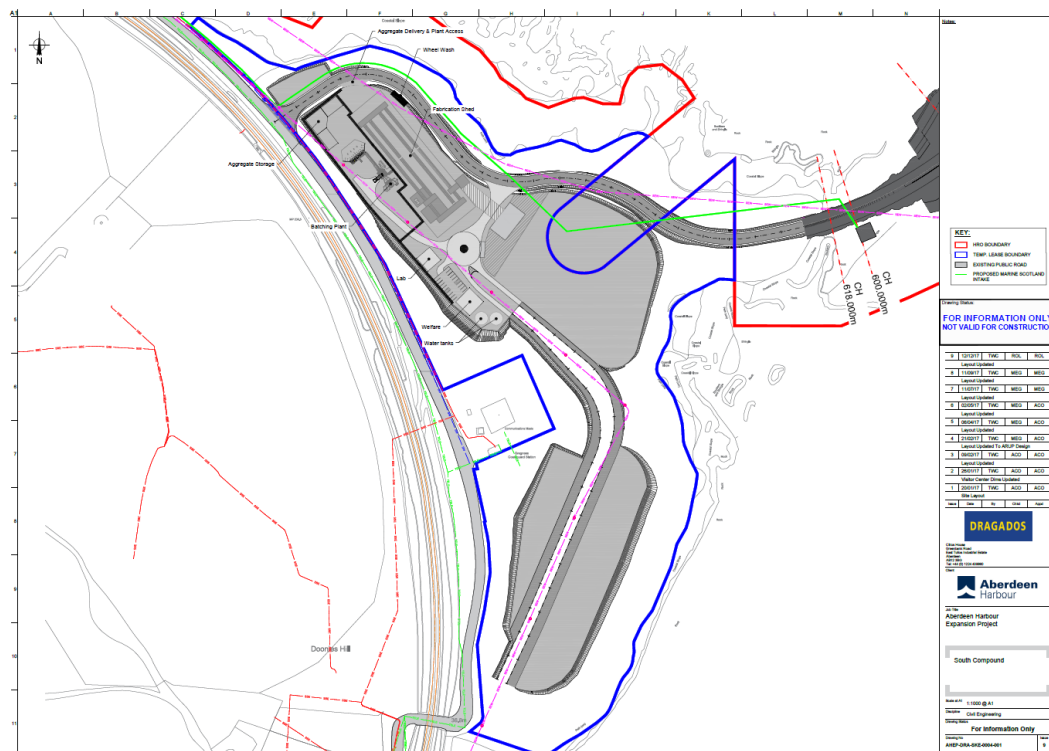


Figure 6.4: Southern Compound Site Layout

Access and exit to the Southern Compound is along the Coast Road at different locations. These points will be managed by security personnel to ensure controlled movement into the site.

6.4.3 Northern Compound

The Northern Compound (Figure 6.5) is located at Walker Park and is fully enclosed by the existing stone wall. It will be accessed from Greyhope Road to the south. The Compound will comprise:

- A temporary visitors centre
- Storage area
- A closed section of Greyhope Road is being used for the north compound storage area access with a traffic control system with barriers.

Greyhope Bay

Bainagask Golf Course

Visitor Center

Visitor Center Access

CH 540 000m

CH 600 000m

CH 500 000m

NORTH QUAY

KEY:

- MHC BOUNDARY
- TEMP LEASE BOUNDARY
- GRASSLAND BOUNDARY
- EXISTING PUBLIC ROAD
- NORTH-BREINWATER ACCESS

**FOR INFORMATION ONLY
NOT VALID FOR CONSTRUCTION**

DRAGADOS

Aberdeen Harbour

Aberdeen Harbour Expansion Project

North Compound

Scale 1:1000 @ A1

Drawn by: [Name]

Checked by: [Name]

Issued For Information

ANEP-004-002-001

Figure 6.5: Northern Compound Site Layout

The Central Compound (Figure 6.6) is split into two parts, separated by St Fittick's Road.

To the north, an area of approximately 8500m² will be used for welfare facilities, project offices, car park and plant storage. The majority of the site will have an asphalt surface.

To the south of St Fitticks Road, an area of approximately 26,800m² is used for topsoil and accropode storage.

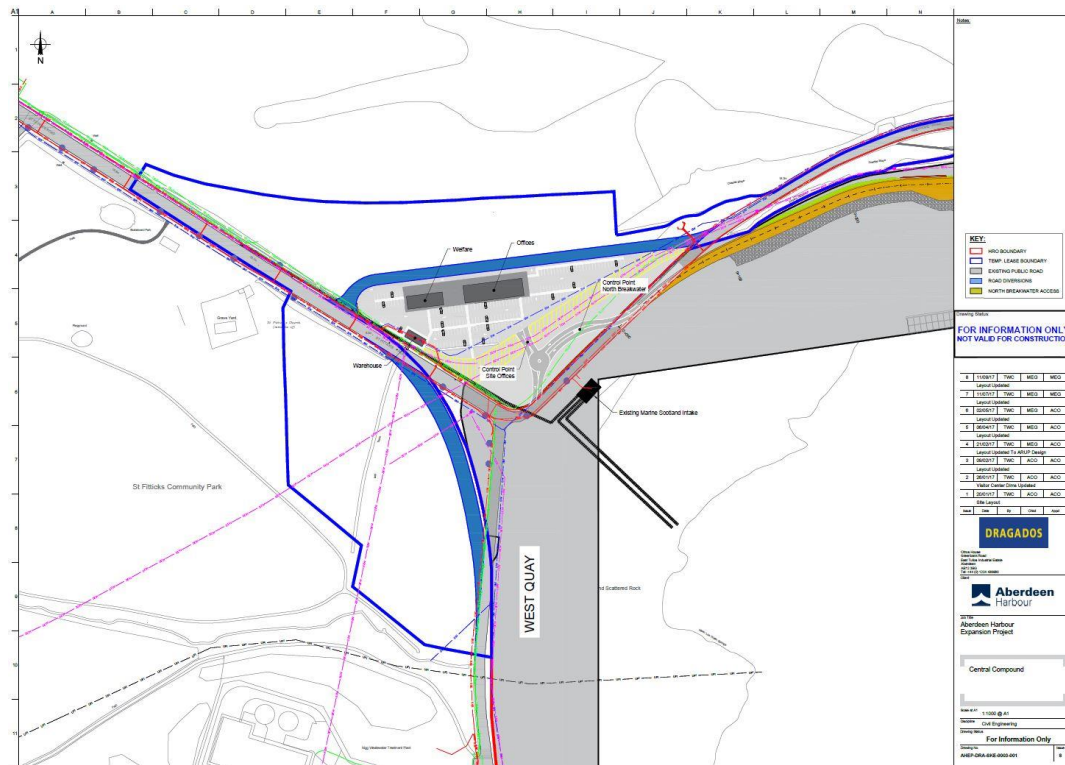


Figure 6.6: Central Compound Site Layout

There are two access / exit points to the Central Compound.. These points will be managed by security personnel or a card control system to ensure controlled movement into the site.

6.4.5 Compound Management and Site Vehicle Operations

Throughout the duration of the works, the following key principles will be established within the compound sites:

- A clearly identified staff pedestrian route through the construction site, segregated with fencing and / or white lining;
- No loud radios or engine idling after 18.00;
- All HGVs to have white noise reverse warnings;
- Clear parking instructions and zoning for staff and visitor cars, with reverse parking implemented;
- Clear material segregation and signage for material storage points within the site;
- A lorry 'stop over' area will be provided within each site with signage erected to direct HGV traffic to the location;
- 'Give Way' signs will be erected for traffic leaving the site;
- All site access will allow all vehicles to enter the site in a forward gear. In the unlikely event that reversing is required, a competent banksman will be in attendance at all times;

- A temporary speed limit of 15mph will be implemented for all vehicles travelling within any of the construction sites for the duration of the construction works;
- The site will be laid out to provide marshalling areas for vehicles, such that off-site holding areas will not be required;
- Deliveries will be scheduled with the main suppliers to ensure that overnight parking takes places in organised areas; and
- Construction vehicles will avoid travelling in convoys on public roads.

Access to the Northern Compound is via Greyhope Road. Access to the Southern and Central Compound is via either the Coast Road or Greyhope Road.

The TSCO and Construction Manager will be responsible for ensuring all deliveries to and from the site are managed effectively, reducing traffic volumes and unnecessary disruption to the operation of the existing road and transportation networks. Reviews of the site Compound traffic measures will be carried out every two months and adjustments to the existing measures will be implemented into the plan.

6.4.6 Site Parking

Construction staff using private vehicles to travel to the site will park their vehicles in designated construction site car parks in the three Compounds described above. Parking of vehicles being used for construction purposes is not permitted on public roads.

The Compounds have the following number of designated car parking spaces

- Northern Compound (Visitor Centre Parking);
- Southern Compound (17 spaces); and
- Central Compound (130 spaces).

Construction staff using private vehicles to travel to the site will park their vehicles in designated site car parks and not on public roads within a two mile radius of the site.

Parking of vehicles being used for construction purposes is not permitted on public roads to minimise disruptions to traffic and local residents

6.4.7 Deliveries to Site

Deliveries for most materials will occur 24 hours a day but will be organised to avoid 'peak road activity' times between 08.00-09.30 and 16.00-17.30. Deliveries will be scheduled to occur at specific times to maintain the safe and efficient operation of the construction works.

6.5 Traffic Management Procedures

6.5.1 Company Log

A log of organisations travelling to site will be maintained within the project site office and will include a record of agreements with organisations to demonstrate their understanding of the prescribed access routes. It is the responsibility of the TSCO to manage this log and to ensure that the agreed routing agreements are adhered to by all project staff.

If the log is not adhered to, the subcontractor or supplier is in breach of contract, allowing disciplinary action against individual drivers. The log to be used is included in Appendix A.

6.5.2 HGV Markers

Principal HGV contractors that are associated with the project will be provided with a marker and unique number that must be displayed on their vehicles. This will indicate which HGVs are associated with AHEP and should therefore comply with the agreed routes, as described in Section 6.3. It is the responsibility of the TSCO to ensure that HGV numbers and markers are distributed to all HGVs and to ensure the HGV drivers are aware that numbers should be visible at all times.

One off deliveries to site will not be required to display HGV Markers. However, these delivery vehicles are still required to adhere to all traffic routes and manoeuvres as outlined in this TMP.

6.5.3 Temporary Traffic Management Schemes

All traffic management works are managed by the appointed construction traffic sub-contractor.

All Temporary Traffic Management Systems (TTMS) will be designed and installed in accordance with the design standards specified in the Environmental Statement Chapter 18: Traffic and Transport as well as the following Department for Transport guidance documents:

- Traffic Signs Manual, Chapter 8 (part 1) road works and temporary situations – design (2009)
- Traffic Signs Manual, Chapter 8 (part 2), road works and temporary situations – operations (2009)

All TTMS should also take cognisance of the 2013 DfT guidelines, ‘Safety at Street Works and Road Works: A Code of Practice’. A risk assessment and method statement is required to be completed for the installation of each TTMS and will consider hazards associated with each scheme and any necessary control measures. It is the responsibility of the TCSO to ensure that all risk assessments and method statements are completed and kept up to date.

For each TTMS a specific Traffic Management Plan is required, including drawings that provide the detailed equipment requirements (i.e. cones, temporary signage,

temporary traffic lights, etc.). Appendix A contains the proforma which is to be completed for individual Traffic Management schemes. Further key items that must be addressed within each Traffic Management Plan are as follows:

- Temporary vehicular, pedestrian and cycle diversions shall be provided where relevant
- Consultation with any relevant public transport operators regarding traffic management schemes will take place through a Traffic Management Working Group (TMWG) forum (refer to Section 7.4)
- Bus routes affected by the works will be described in the specific Traffic Management Plan
- Private accesses affected by the TTMS shall be maintained unless otherwise agreed in writing with the owner / occupier and Dragados

Signage Schemes

To ensure that the TTMS are followed effectively by all staff, a series of signs are required to be placed at various points around the site to inform users of the TTMS being implemented. It is the responsibility of the TCSO and the appointed sub-contractor to ensure that all signage plans are completed and maintained throughout the duration of the TTMS.

All signage scheme drawings for each TTMS are recorded and stored in Appendix B. These schemes are to be implemented during the early stages of the Enabling Works.

The signs will be maintained through the Contract and the need for additional signage will be kept under review by the TCSO. The TCSO is responsible for ensuring these layouts must be adhered to and maintained throughout the duration of works.

Speed Limit Reductions

In accordance with the agreed conditions in the Environmental Statement (ES) Appendix 18-A, speed limit reductions are to be implemented along Coast Road between the site and the Hareness Road junction. A temporary speed limit of 40 mph is to be imposed on the Coast Road south of the railway bridge, and 30mph north of the railway bridge to St Fitticks Church. A 20mph speed limit is in place through Traffic Management.

All speed limit reductions will be implemented through the promotion of Temporary Traffic Regulation Orders (TTRO) that Dragados must apply for at least 30 days prior to the dated implementation. It is the responsibility of the TCSO and Dragados to ensure that all TRROs are implemented correctly. The guidelines for implementing a TTRO can be found on the Transport Scotland website: <http://www.transport.gov.scot/road-and-traffic-orders>

If future speed limit reductions are required, it is the responsibility of the TCSO and the appointed traffic management sub-contractors to identify and agree with officers of ACC those areas where speed limit reductions are required. The TCSO

and appointed sub-contractor will then be responsible for the preparation and submission of all TTROs to ACC for their consideration.

Figure 6.7 shows the temporary speed reduction layouts which have been developed as a mitigation measure and described in the Environmental Statement (ES). Additional limit restrictions must also be shown in the same layout format and stored in Appendix B. These layouts must be adhered to throughout the entire duration of the project.

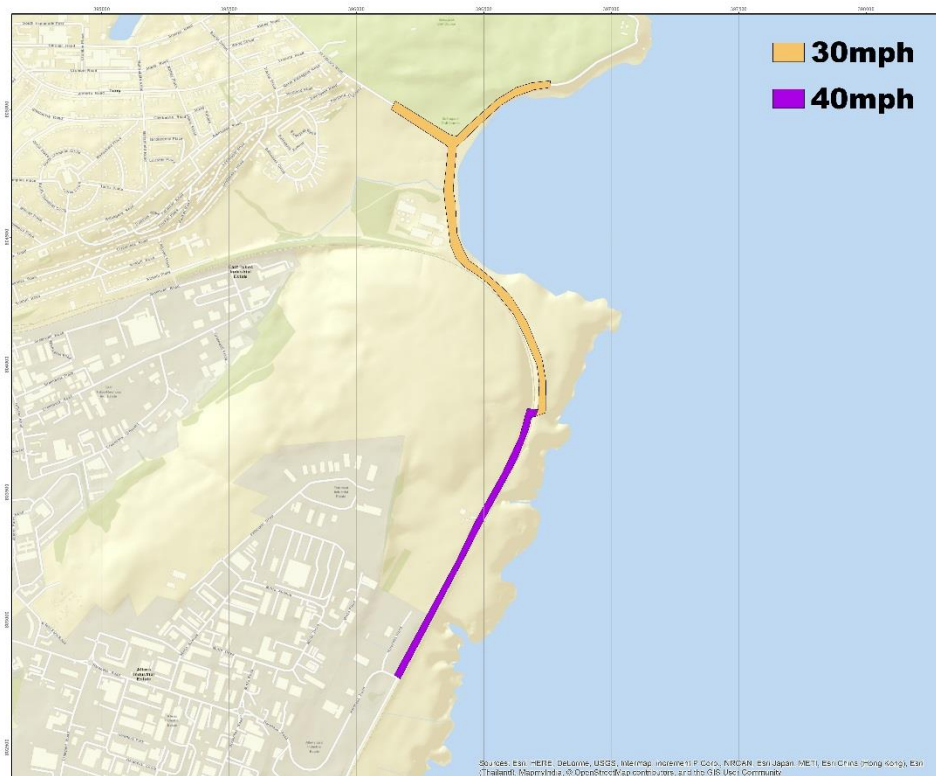


Figure 6.7: Temporary Speed Reduction Scheme(s)

Road Closures

A temporary closure of Greyhope Road during the construction phase for a distance of approximately 1km will be implemented between Coast Road and the track to the Valve House access track. This is to allow large construction vehicles within the site to access the northern breakwater and the temporary working area at Walker Park (refer to Appendix B).

The closure will begin at the junction between Greyhope Road and St Fittick's Road and will continue along Greyhope Road until approximately 20 m prior to the Valve House access track. A layout of the closure can be seen in Figure 6.8.

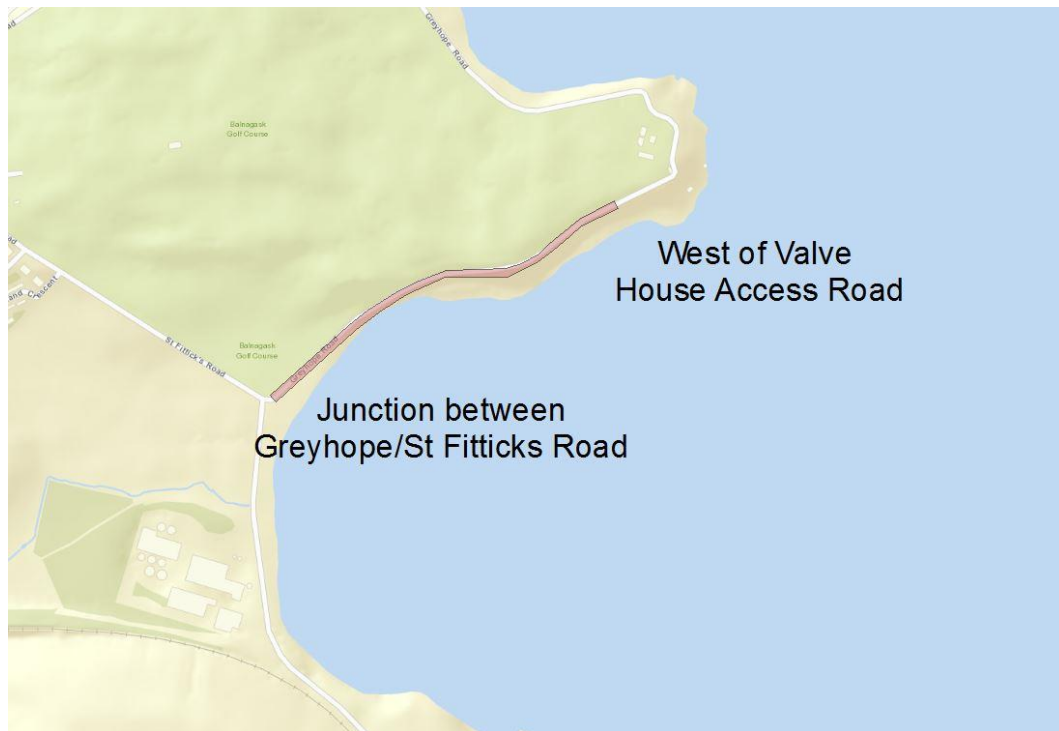


Figure 6.8: Greyhope Road Closure Locations

Throughout the course of the construction, access to the residential properties at Girdleness headland will be retained along the northern section of Greyhope Road. Signage on this route will inform drivers of the temporary road closure ahead. Signage will also inform drivers that the RSPB Dolphinwatch group is still operating in the Torry Battery car park (during the summer months) and drivers wishing to visit Dolphinwatch must do so by driving from the north side of Greyhope Road.

The TSCO and appointed sub-contractor will apply for all TTROs which are required for the temporary closure of specific roads and will prepare any proposal for the temporary closure of any road not already agreed with ACC. The TSCO is responsible for ensuring that any closures will comply with requirements from ACC and have appropriate legal status via the promotion of a TTRO. Potential future road closures must also follow this procedure if required.

Established Clearway

Throughout the duration of the construction phase of the project, a traffic clearway will be established between the Coast Road railway bridge and the Torry St. Fittick's Church ruin. While the clearway is operational, no vehicles are permitted to stop along the route, including vehicles loading / unloading or waiting. Such restrictions will be the subject of a TTRO. Figure 6.9 illustrates the extent of the proposed clearway, however, specific details of the length of road over which the clearway will be implemented will be contained within the TTRO. The area covered by the clearway will be signed.

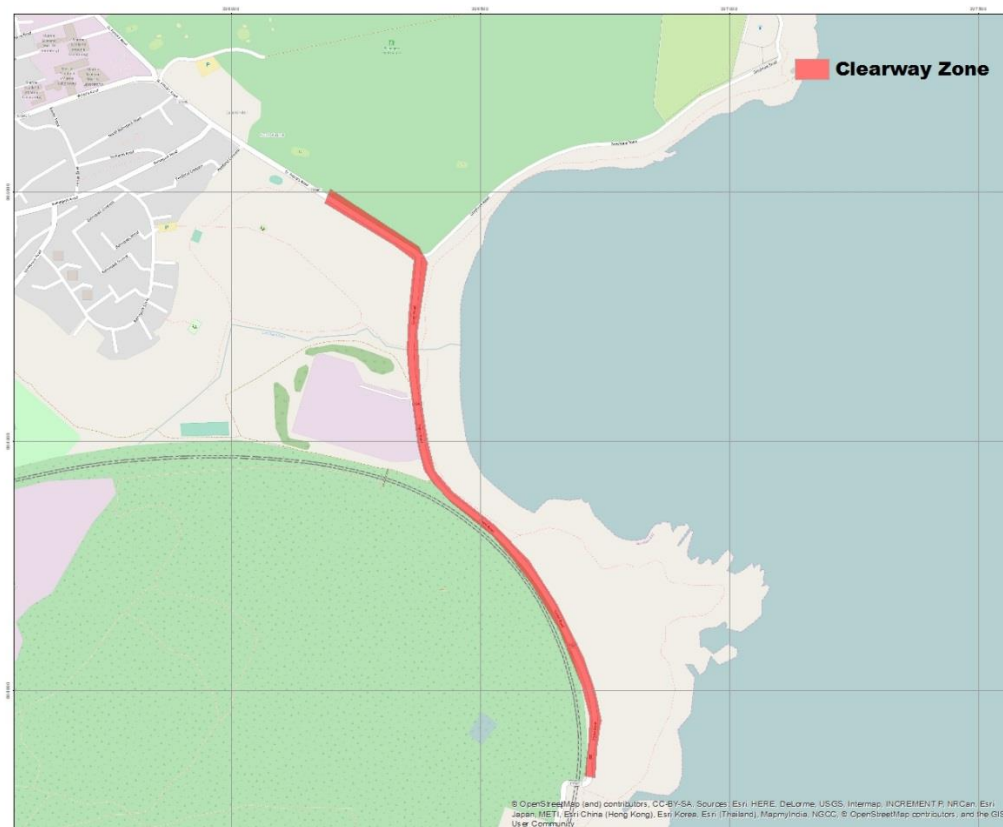


Figure 6.9: Extent of Clearway along Coast Road and St. Fittick's Road

It is the responsibility of the TSCO to ensure that the drivers of all construction vehicles are aware of the restrictions imposed by the clearway. Enforcement of the TTRO under which the clearway will be implemented will be the responsibility of Police Scotland.

Temporary Traffic Lighting

Temporary traffic lights will be established at the entrance/exit points of the Southern Compound site for vehicles moving onto Coast Road during times of significant traffic activity.

It is the responsibility of the TSCO to ensure that these traffic lights are used during appropriate periods of significant activity and all vehicles use the temporary traffic lights correctly.

It is crucial that appropriate signage is erected on the approach to all temporary traffic lights to warn drivers of potential queues and / or the need to stop. Such signage will be erected in accordance with all relevant Department for Transport guidance documents, as outlined in Section 6.5.

The temporary traffic lights will be located to ensure that they are visible to drivers within sufficient stopping distances. Furthermore, the warning signage will work in conjunction with the proposed temporary speed limits which will be in place along Coast Road throughout the construction period.

Banned Manoeuvres

The following vehicle manoeuvres are banned on public roads by all construction vehicles:

- Three- Point Turns; and
- U- Turns.

Any construction vehicles wishing to complete these manoeuvres must do so within the construction compound sites. HGV vehicles are also prohibited from turning on to St Fittick's Road.

6.5.4 Abnormal Vehicle Requirements

Construction traffic movements will include deliveries which may, depending on their characteristics, be classified as an abnormal load. They can be delivered by road or potentially by sea to the existing harbour and transported to site.

In accordance with Police Scotland guidelines, an 'abnormal' load is a vehicle that meets any of the following criteria:

- A weight of more than 44,000kg gross weight;
- An axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle;
- A width of more than 2.9m; and
- A rigid length of more than 18.65m, or an overall length of more than 25.9m.

Permission for the transport of abnormal loads is required from the ACC Roadworks Co-ordination team prior to the loads being transported on the public road network. Furthermore, Police Scotland are required to be notified of these movements, but permission is not required from this organisation. Contact details for both organisations are outlined in Table 6.6.

Table 6.6: Abnormal Loads Contact Details

Organisation	Requirements	Contact Details
Roadworks Co-ordination team, Aberdeen City Council	Permission	01224 523886
Abnormal Loads Administration Team, Police Scotland	Notification	AbnormalLoadsScotland@scotland.pnn.police.uk 01592 418859

The limited weight restriction of 44 tonnes on the Coast Road Rail Bridge must not be exceeded by vehicles travelling this route. In the event of a load that exceeds this weight and / or length being transported, special permission to use the northern route must be obtained by the TSCO.

It is the responsibility of the TSCO to ensure that the movement of abnormal loads are managed correctly.

Under the New Roads and Street Works Acts (NRSWA) 1991, Symology notices are required to notify statutory undertakers of road works or closures. It is the responsibility of the TSCO and their appointed deputy to ensure that all notices are issued correctly.

6.5.5 Railway Interface and Consent Procedure

In event of alterations to roads or paths which will impact with railway infrastructure, the TSCO will consult with Network Rail and obtain any consents necessary for the works to be undertaken. This will also apply should line access be required.

6.5.6 Mud and Dust Control Procedures

Mud and Wheel Cleaning Facilities

In accordance with the Scottish Environment Protection Agency (SEPA) guidelines discussed in the Pollution Prevention Plan, a wheel cleaning facility will be established in all three site Compounds. At present, a wheel cleaning facility is not present at the Northern Compound in Walker Park as it is not required. A wheel cleaning facility will be provided when/ if required.

These facilities will be located at a site access / egress junction in each Compound site. A temporary wheel cleaning facility will also be available during the enabling works.

Works and vehicle paths within the site should be arranged to minimise the potential for soil to be picked up by vehicle wheels.

The TCSO is responsible for maintaining the operation of the wheel cleaning facilities and will inspect the equipment on a weekly basis.

Dust Control

In accordance with the Pollution Prevention Plan, specific controls relating to the avoidance of dust for vehicles entering and leaving the site will be monitored by the TSCO and will include the following measures:

- Maintenance of all haul roads and hard standing site areas by regular brushing and water spraying;
- All vehicles carrying soil and other dusty materials to be fully sheeted;
- Enforcement of site speed limits;
- A daily sweeping regime of the main access road within the site and along Coast Road and St Fittick's Road during the construction period will be established and managed by the TSCO; and
- To minimise the likelihood of ice forming on the road surface, water spraying during periods of cold weather will not be permitted.

6.6 Pedestrian and Cycling Routes

6.6.1 Aberdeen City Council Core Path

All staff must be cognisant of cyclists, pedestrians and other vulnerable road users when planning, programming, undertaking and monitoring all construction works.

Construction traffic will not be routed along St Fittick's Road through the residential areas of Torry and Balnagask, which are part of Core Path no. 104.

6.6.2 Temporary Routing

The route of the existing coastal and cycle path will be altered during the construction phase. These adjustments will result in a continuous coastal footpath and cycle path throughout the duration of the construction phase. The alternative route during the construction period is shown in Figure 6.10.

Signage alerting construction staff of the cycle path will be erected around the project site.

The coastal and cycle path will be rerouted within the verge on the east side of Coast Road adjacent to the site. A 2m wide footway will be constructed with the surfacing to be agreed with ACC.

The TSCO and appointed traffic sub-contractor will manage the route of the coastal and cycle path to ensure that safe passage is available throughout the course of the construction phase. Over the duration of the project the route will vary around the Coast Road/St Fittick's Road/Greyhope Road junction to ensure pedestrian/cyclist amenity and safety as site access works progress.

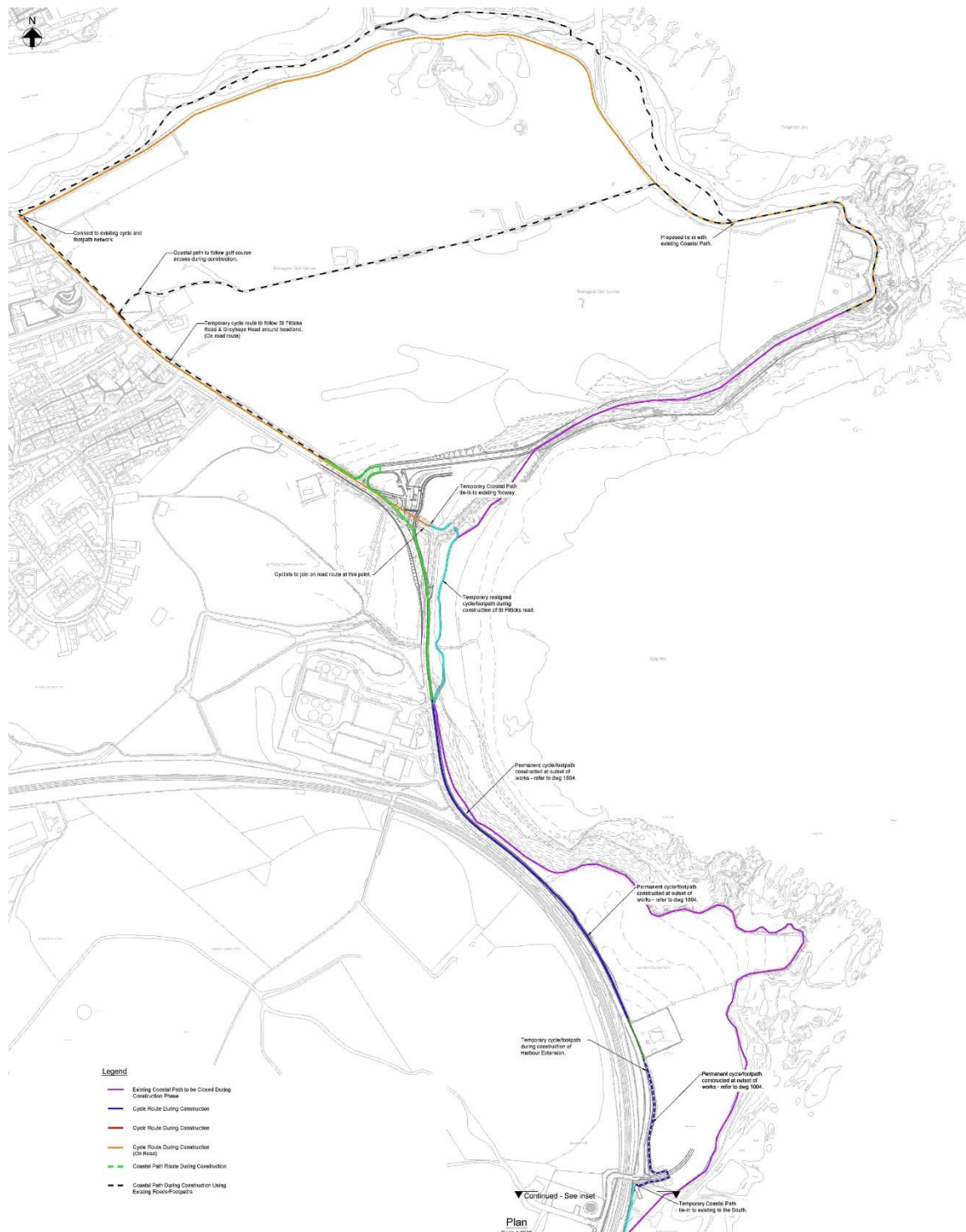


Figure 6.10: Proposed Coastal Path Temporary Alignment Source: Arup

6.7 Monitoring Strategy

6.7.1 Overview

As part of the ongoing process for ensuring that any impacts on the operation of the surrounding transportation networks due to construction traffic are minimised, a

CTMP monitoring strategy will be established between Dragados and ACC. The named TSCO will be responsible for managing all monitoring activities and associated reporting. Traffic updates and concerns are communicated directly to ACC, AHB and any other necessary parties. Refer to Section 6.7.4 for more details.

6.7.2 Construction Traffic Inspection

In accordance with the Planning Permission in Principle (PPiP), a condition survey will be completed before and after the construction phase on the Coast Road to observe the effect of construction traffic on the public highway network, and at any agreed intervals in between. The Section 69 Agreement between ACC and Aberdeen Harbour Board has identified that the survey encompasses the Coast Road between Hareness Road and Nigg Bay. Sections of Greyhope Road may also be incorporated.

The methodology and, where appropriate, the frequency of the condition surveys will be undertaken in accordance with the Section 69 Agreement and any subsequent discussions and agreements with ACC. Any questions or complaints received regarding construction traffic will be logged, investigated and resolved using the environmental plan external complaints policy. It will be the responsibility of the TSCO to monitor the construction traffic surveys, manage the complaints and, where relevant, delegate specific tasks to other suitably qualified and experienced contractor staff.

Contact numbers for members of the public to register complaints will be on signage placed around the project site, on the AHEP and AHB websites, provided within the quarterly project newsletter and available when the project team regularly attend the Cove & Altens and Torry Community Council meetings.

6.7.3 Plan Review

The contents of this CTMP will be reviewed every two months by the TSCO and updated when appropriate. The CTMP register, as contained within Appendix A, must be updated by the TSCO to reflect any changes and revisions to this document.

6.7.4 Traffic Management Updates

Traffic management is discussed at weekly meetings between Dragados and Aberdeen Harbour Board, with any updates or concerns discussed directly with ACC on a regular basis. Dragados meet with Scottish Water on a regular basis where traffic management issues are discussed when necessary. At this time, a Traffic Management Working Group is not considered necessary as effective lines of communication are already in place with the relevant parties.

6.8 Additional Projects

All construction and transportation staff should be aware of the following projects which may also cause additional activity on the road networks that will be used when travelling to the project:

- Kincardine Offshore Wind Farm; and
- Morrison's/SITA UK Recycling Plant (opened October 2017).

It is the responsibility of the TSCO to ensure that all relevant staff are aware of the projects and the significant impacts they may have on project traffic routes.

Appendix A

Registers

A1 TTMS Register

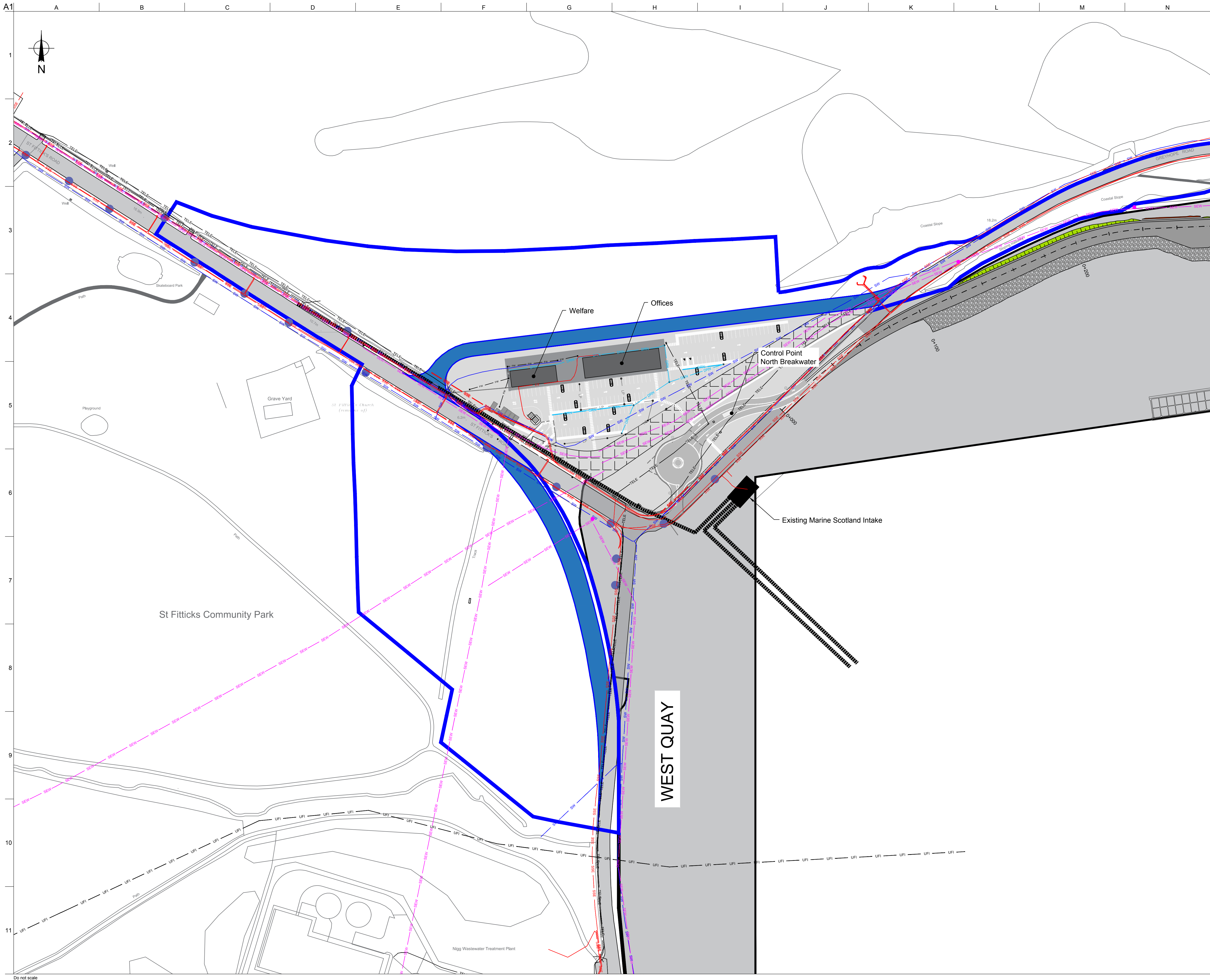
[illegible]

[illegible]

Appendix B

Technical Drawings

B1 Compound Layouts



Notes:

KEY:

HRO BOUNDARY

TEMP. LEASE BOUNDARY

EXISTING PUBLIC ROAD

ROAD DIVERSIONS

NORTH BREAKWATER ACCESS

Drawing Status:

FOR INFORMATION ONLY

NOT VALID FOR CONSTRUCTION

13	04/05/18	TWC	CW	CW
Layout Updated				
12	13/02/18	TWC	ROL	ROL
Layout Updated				
11	12/12/17	TWC	ROL	ROL
Layout Updated				
10	20/11/17	CW	MEG	MEG
Layout Updated				
9	01/11/17	TWC	MEG	MEG
Layout Updated				
8	11/09/17	TWC	MEG	MEG
Layout Updated				
7	11/07/17	TWC	MEG	MEG
Layout Updated				
6	02/05/17	TWC	MEG	ACO
Layout Updated				
5	06/04/17	TWC	MEG	ACO
Layout Updated				
4	21/02/17	TWC	MEG	ACO
Layout Updated To ARUP Design				
3	09/02/17	TWC	ACO	ACO
Layout Updated				
2	26/01/17	TWC	ACO	ACO
Visitor Center Dims Updated				
1	20/01/17	TWC	ACO	ACO
Site Layout				
Issue	Date	By	Chkd	Appd

DRAGADOS

AHEP Project Office
St Fitticks Road
Nigg BayAberdeen
AB11 8TN
Tel: +44 (0) 1224 439980

Client

Aberdeen Harbour

Job Title

Aberdeen Harbour Expansion Project

Central Compound

Scale at A1

1:1000 @ A1

Discipline

Civil Engineering

Drawing Status

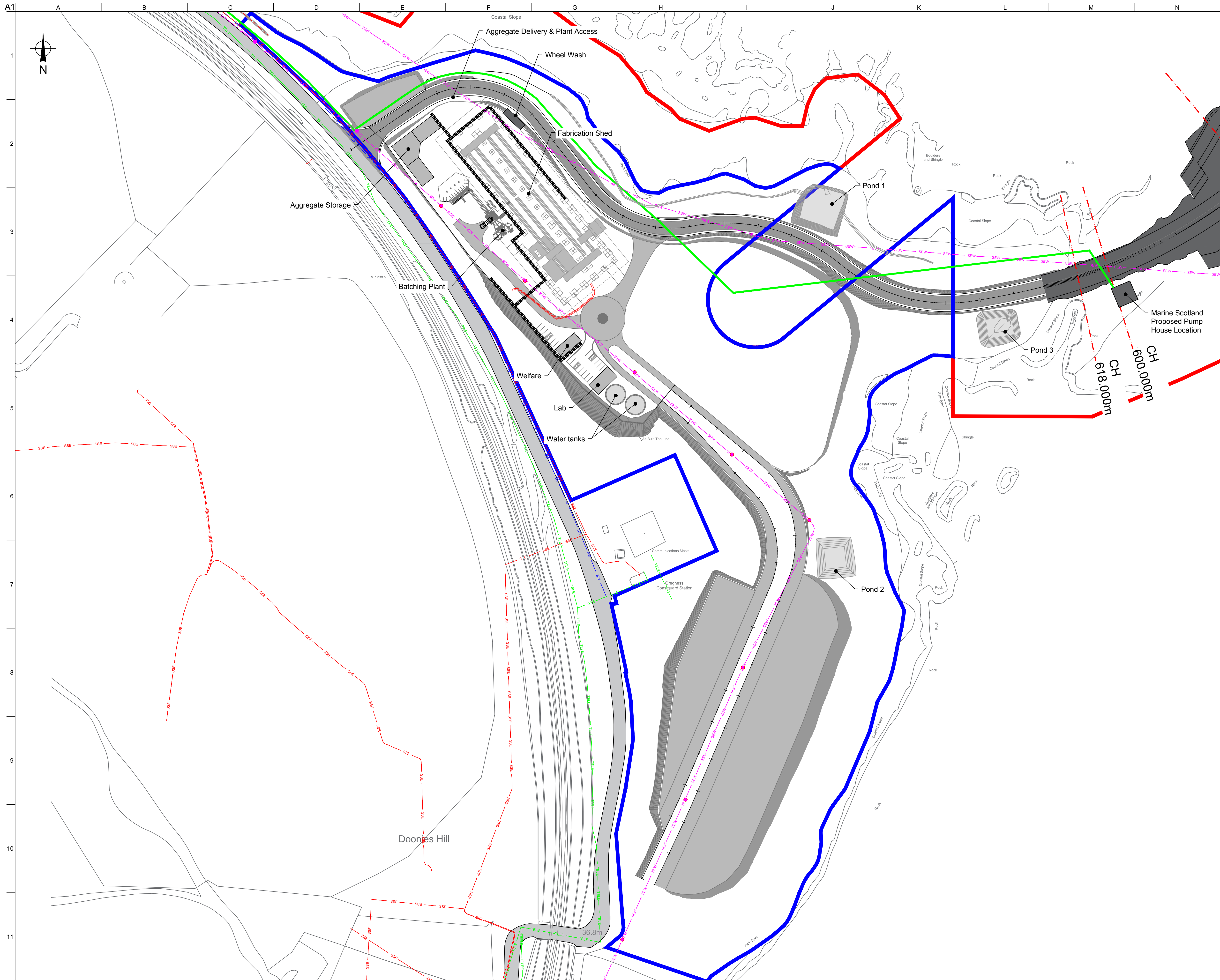
For Information Only

Drawing No

AHEP-DRA-SKE-0003-001

Issue

13



Notes:

KEY:

- HRO BOUNDARY
- TEMP. LEASE BOUNDARY
- EXISTING PUBLIC ROAD
- PROPOSED MARINE SCOTLAND INTAKE

Drawing Status:

FOR INFORMATION ONLY
NOT VALID FOR CONSTRUCTION

11	04/05/18	TWC	CW	CW
Layout Updated				
10	09/02/18	CW	ROL	ROL
Pond Locations Added				
9	12/12/17	TWC	ROL	ROL
Layout Updated				
8	11/09/17	TWC	MEG	MEG
Layout Updated				
7	11/07/17	TWC	MEG	MEG
Layout Updated				
6	02/05/17	TWC	MEG	ACO
Layout Updated				
5	06/04/17	TWC	MEG	ACO
Layout Updated				
4	21/02/17	TWC	MEG	ACO
Layout Updated To ARUP Design				
3	09/02/17	TWC	ACO	ACO
Layout Updated				
2	26/01/17	TWC	ACO	ACO
Visitor Center Dims Updated				
1	20/01/17	TWC	ACO	ACO
Site Layout				
Issue	Date	By	Chkd	Appd

DRAGADOS

Citrus House
Greenbank Road
East Tullos Industrial Estate
Aberdeen
AB12 3BG
Tel: +44 (0) 1224 439980
Client

Aberdeen Harbour

Job Title
Aberdeen Harbour
Expansion Project

South Compound

Scale at A1
1:1000 @ A1

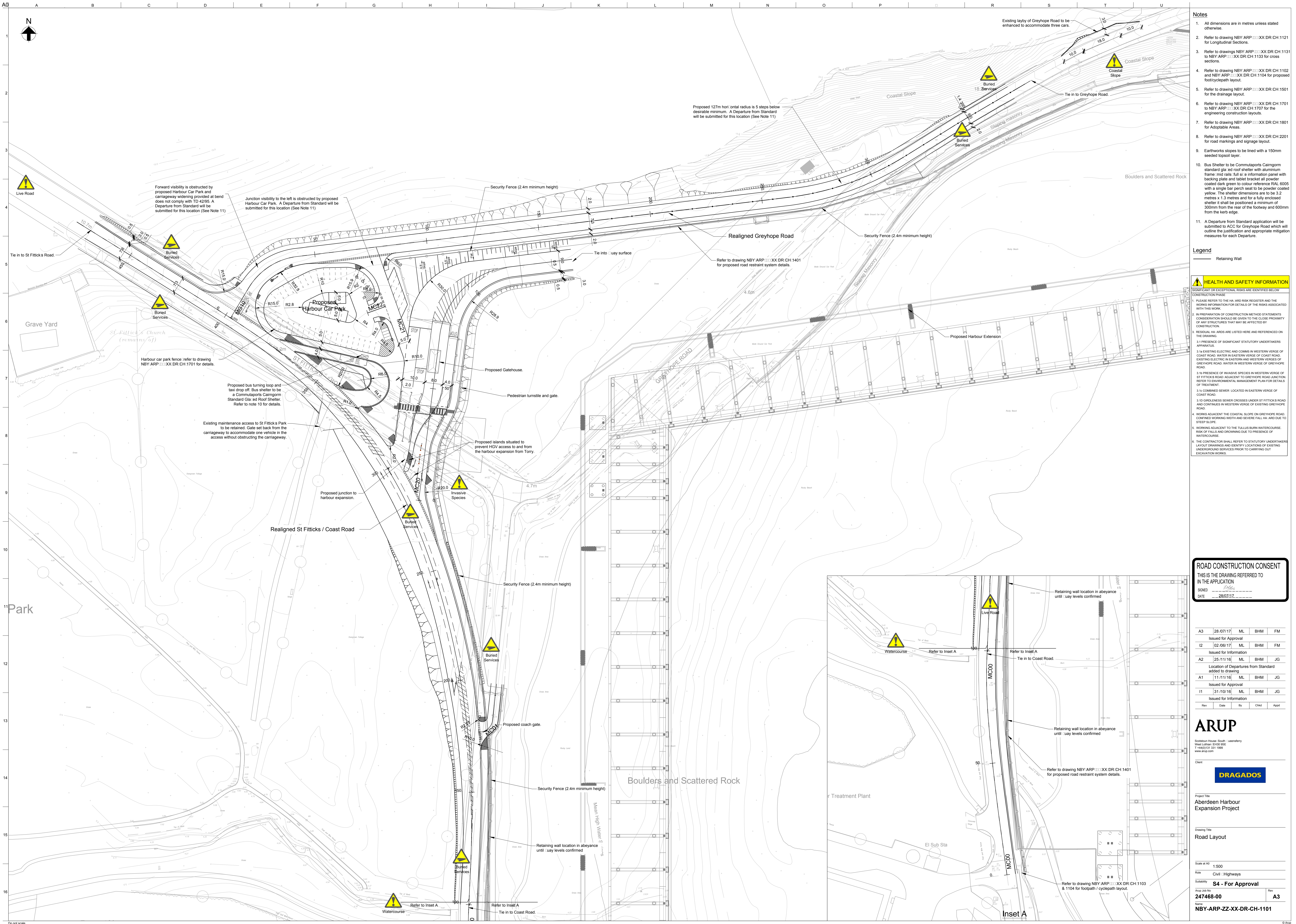
Discipline
Civil Engineering

Drawing Status
For Information Only

Drawing No
AHEP-DRA-SKE-0004-001

Issue
11

B2 Road Layout



- Notes**
- All dimensions are in metres unless stated otherwise.
 - Refer to drawing NBY-ARP-XX-DR-CH-1121 for Longitudinal Sections.
 - Refer to drawings NBY-ARP-XX-DR-CH-1131 to NBY-ARP-XX-DR-CH-1133 for cross sections.
 - Refer to drawing NBY-ARP-XX-DR-CH-1102 and NBY-ARP-XX-DR-CH-1104 for proposed foot/cyclepath layout.
 - Refer to drawing NBY-ARP-XX-DR-CH-1501 for the drainage layout.
 - Refer to drawing NBY-ARP-XX-DR-CH-1701 to NBY-ARP-XX-DR-CH-1707 for the engineering construction layouts.
 - Refer to drawing NBY-ARP-XX-DR-CH-1801 for Adoptable Areas.
 - Refer to drawing NBY-ARP-XX-DR-CH-2201 for road markings and signage layout.
 - Earthworks slopes to be lined with a 150mm seeded topsoil layer.
 - Bus Shelter to be Commutaports Cairngorm standard glass roof shelter with aluminum frame; mid rails; full side information panel with backing plate and tablet bracket all powder coated dark green to colour reference RAL 6005 with a single bar perch seat to be powder coated yellow. The shelter dimensions are to be 3.2 metres x 1.3 metres and for a fully enclosed shelter it shall be positioned a minimum of 300mm from the rear of the footway and 600mm from the kerb edge.
 - A Departure from Standard application will be submitted to ACC for Greyhope Road which will outline the justification and appropriate mitigation measures for each Departure.

Legend

Retaining Wall

HEALTH AND SAFETY INFORMATION

SIGNIFICANT OR EXCEPTIONAL RISKS ARE IDENTIFIED BELOW

CONSTRUCTION PHASE

- PLEASE REFER TO THE HAZARD RISK REGISTER AND THE WORKS INFORMATION FOR DETAILS OF THE RISKS ASSOCIATED WITH THIS WORK.
- IN PREPARATION OF CONSTRUCTION METHOD STATEMENTS CONSIDERATION SHOULD BE GIVEN TO THE CLOSE PROXIMITY OF ANY STRUCTURES THAT MAY BE AFFECTED BY CONSTRUCTION.
- RESIDUAL HAZARDS ARE LISTED HERE AND REFERENCED ON THE DRAWING.
 - PRESIDENCE OF SIGNIFICANT STATUTORY UNDERTAKERS APPARATUS.
 - EXISTING ELECTRIC AND COMMS IN WESTERN VERGE OF COAST ROAD. WATER IN EASTERN VERGE OF COAST ROAD. EXISTING ELECTRIC IN EASTERN AND WESTERN VERGES OF GREYHOPE ROAD. WATER IN WESTERN VERGE OF GREYHOPE ROAD.
 - COMBINED SEWER LOCATED IN EASTERN VERGE OF COAST ROAD.
 - GRIDLINES SEWER CROSSES UNDER ST FITTICKS ROAD AND CONTINUES IN WESTERN VERGE OF EXISTING GREYHOPE ROAD.
 - WORKS ADJACENT TO THE COASTAL SLOPE ON GREYHOPE ROAD. CONFINED WORKING WIDTH AND SEVERE FALL HAZARD DUE TO STEEP SLOPE.
 - WORKING ADJACENT TO THE TULLIS BURR WATERCOURSE. RISK OF FALLS AND DROWNING DUE TO PRESENCE OF WATERCOURSE.
 - THE CONTRACTOR SHALL REFER TO STATUTORY UNDERTAKERS LAYOUT DRAWINGS AND IDENTIFY LOCATIONS OF EXISTING UNDERGROUND SERVICES PRIOR TO CARRYING OUT EXCAVATION WORKS.

ROAD CONSTRUCTION CONSENT

THIS IS THE DRAWING REFERRED TO IN THE APPLICATION

SIGNED _____

DATE 28/07/17

A3	28/07/17	ML	BHM	FM
Issued for Approval				
I2	02/06/17	ML	BHM	FM
Issued for Information				
A2	25/11/16	ML	BHM	JG
Location of Departures from Standard added to drawing				
A1	11/11/16	ML	BHM	JG
Issued for Approval				
I1	31/10/16	ML	BHM	JG
Issued for Information				
Rev	Date	By	Chkd	Appt

ARUP

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DRAGADOS

Project Title
Aberdeen Harbour Expansion Project

Drawing Title
Road Layout

Scale at A3
1:500

Role
Civil - Highways

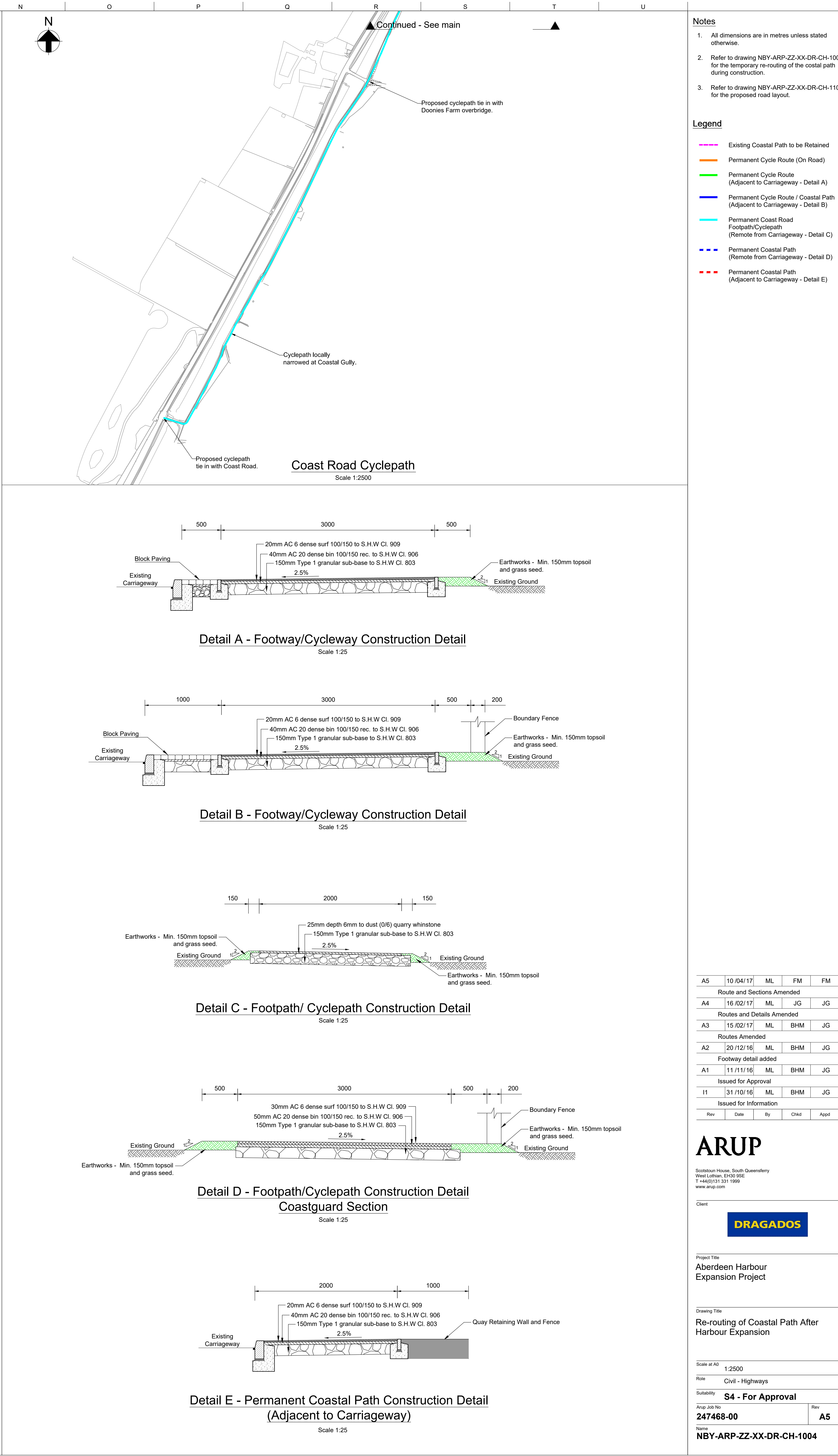
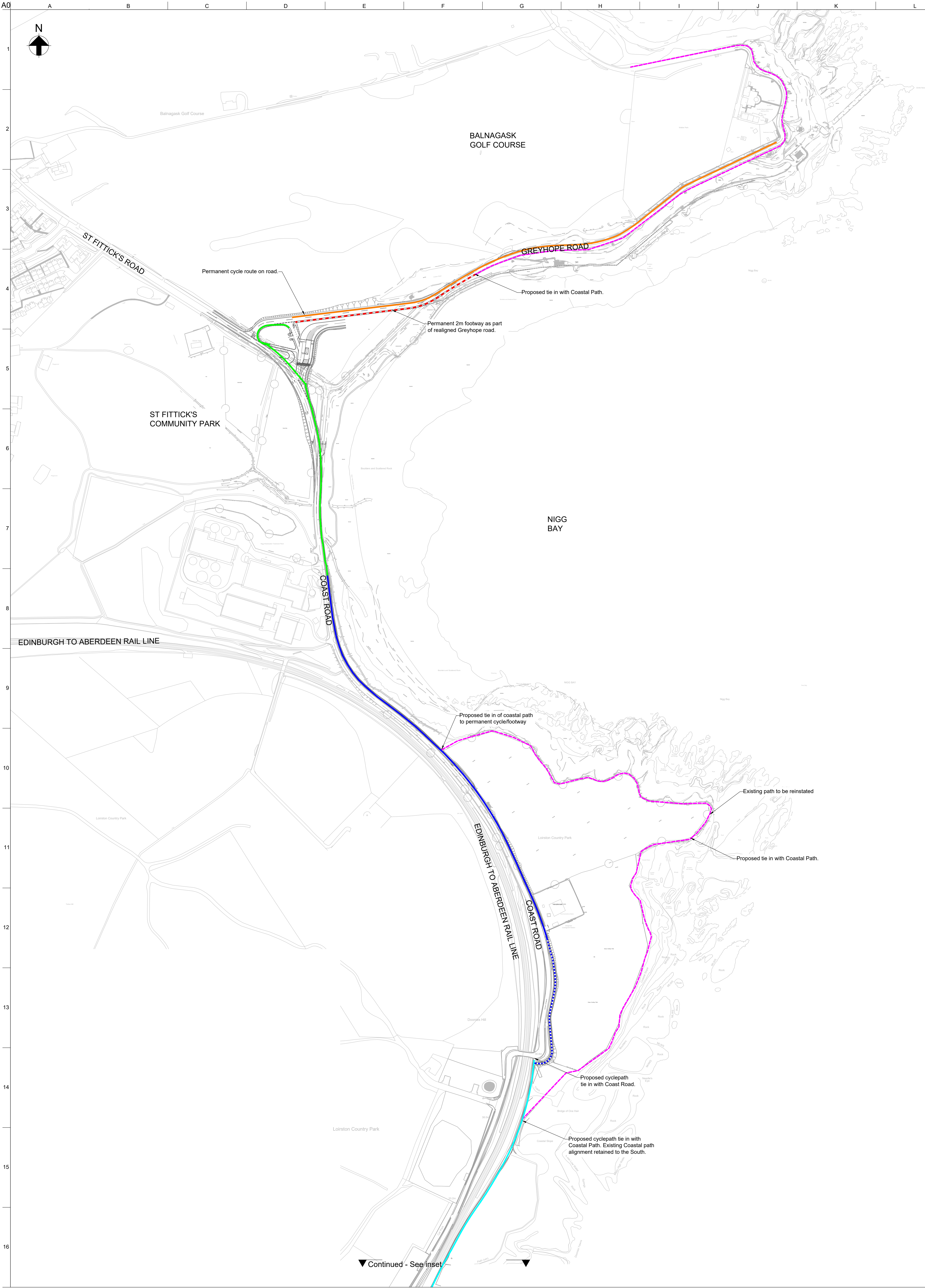
Sustainability
S4 - For Approval

Arup Job No
247468-00

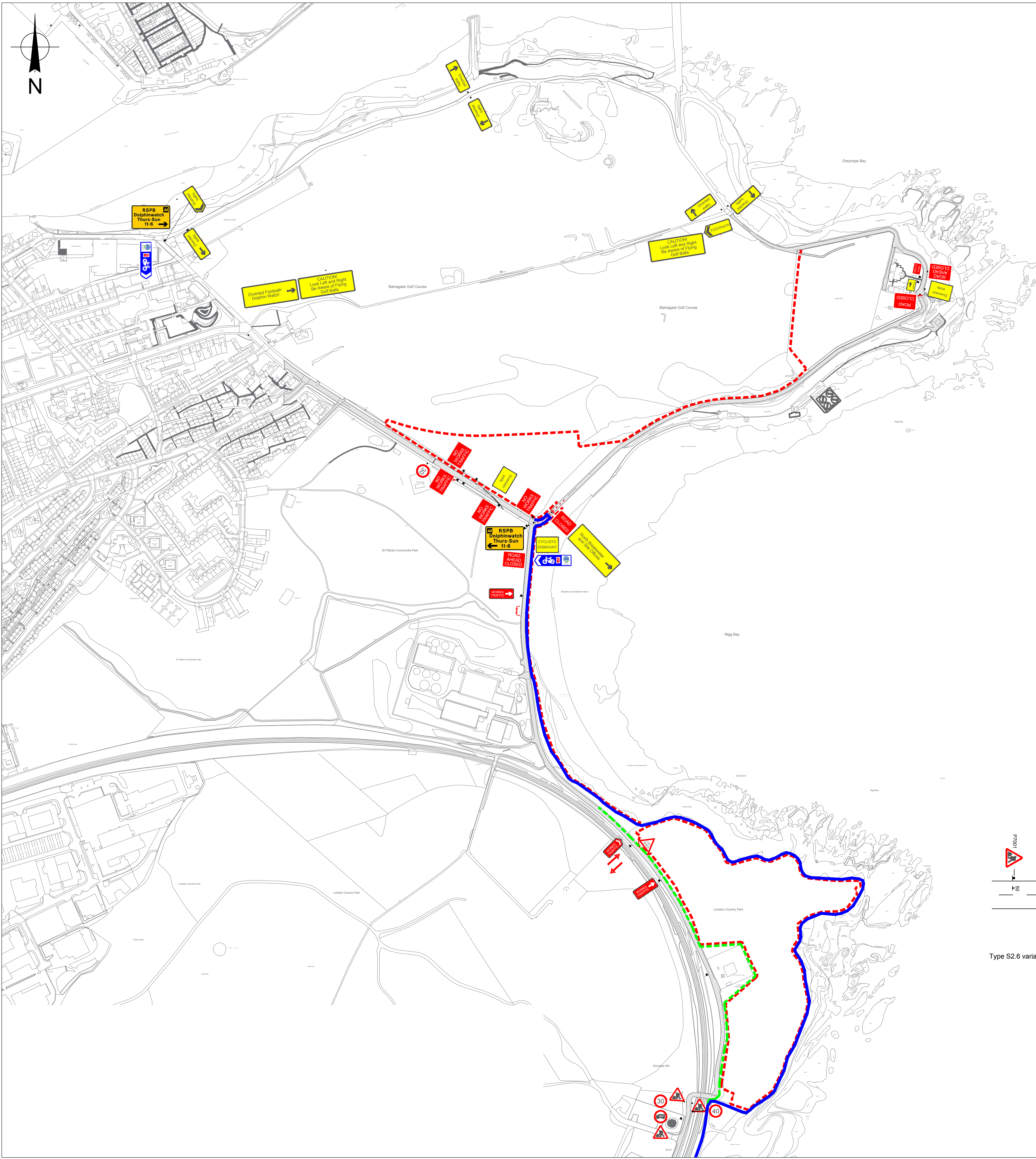
Rev
A3

Notes
NBY-ARP-ZZ-XX-DR-CH-1101





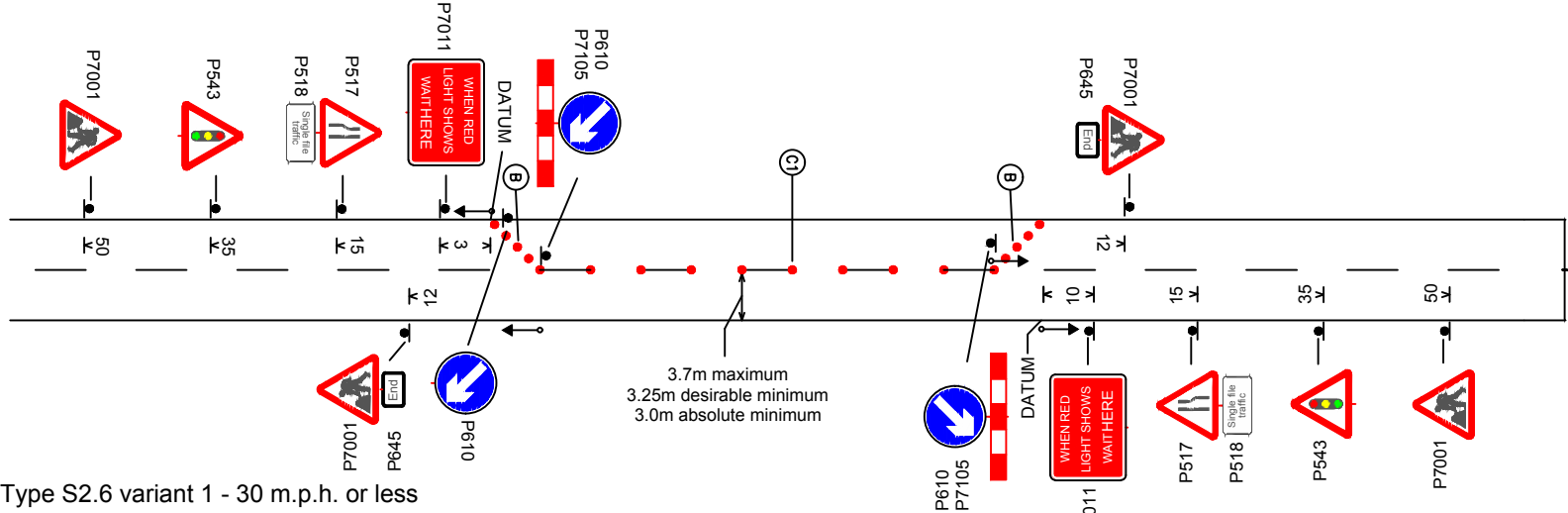
B3 Traffic Signage Schemes



10th April 2017

Temp Cycleway would require TTL's to work within 1.2m of carriageway. (See Schematic Below (max 300m length). This would require two setups on the Southern End and one setup at the North end for the new road tie-in and Cycleway Construction. (North Road only 30mph set up.) South end will require to have permanent lights temporarily switched off.

3-Way lights to be implemented when Block being moved from South Access



NOTES:

KEY:

CYCLE TRACK:

ACCESS POINT:

FENCING (UNDER CONSTRUCTION):

TEMP. CYCLE TRACK (UNDER CONSTRUCTION):

Revision	Date	By	Chkd	Appd
----------	------	----	------	------

DRAGADOS

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Tel: +44 (0) 1224 439980

Client

Aberdeen Harbour

Job Title

Aberdeen Harbour Expansion Project

Construction Phasing Information

Phase 2

Sheet 3 of 5

Scale at A1

Not to scale

Discipline

Civil Engineering

Job No

Drawing Status

Drawing No

Issue