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## Capital Delivery Programme

Transport Statement<br>St Mary's Hub Compound

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## 1. Introduction

### 1.1. Background

1.1.1. Pell Frischmann (PF) has been appointed by Trant Engineering Limited (TEL) to provide transport and highways consultancy services to support the proposed wastewater capital improvement project for the Isles of Scilly covering St Mary's, St Martins, St Agnes, Bryher and Tresco. The Local Planning Authority and Highway Authority is The Council of the Isles of Scilly.
1.1.2. The improvement project will consist of a series of future planning applications to enable TEL to upgrade, modernise and provide new South West Water (SWW) assets across the archipelago. It is anticipated that the improvement project will cover a four year period and that each application will, in terms of transport, identify the forecast number of vehicle movements accessing each planning application site.
1.1.3. This report has been prepared to support a planning application for the development of the St Mary's welfare / storage hub compound which is to consist of a contractor's storage facility, on site vehicle parking, cabin-type overnight accommodation, communal welfare facilities and lighting to support safe movement around the site in the hours of darkness. This will provide the compound from which the wastewater capital improvement project can be delivered.
1.1.4. The requirement to use the compound for both the storage of materials and as temporary accommodation is as a result of tourism pressures on local accommodation particularly within the summer months.
1.1.5. The proposed compound development will be located at the Parting Carn site previously used as a compound by both Lagan Construction and Kier in association with historic airport and harbour improvement works. An extract of the proposed site layout is included in Figure 1.1 with the full layout plan included in Appendix A.

Figure 1.1: Proposed welfare compound


[^0]1.1.6. This transport report details the development proposals, in terms of site location, access, vehicle trip generation and vehicle routing. This report also outlines the traffic management measures to be implemented during the compound's construction to minimise disruption and maintain road safety for pedestrians and other road users in the vicinity of the development site.

### 1.2. Planning History

1.2.1. The proposed development site has previously been used as a temporary compound in association with improvement works at the Isles of Scilly Airport and St Mary's Harbour. To provide context a summary of the previous planning permissions for the use of the site as a construction compound and temporary residential accommodation is explained as follows.
1.2.2. Planning application $\mathbf{P} / \mathbf{1 4 / 0 0 4}$ - Temporary use of agricultural land for use as a mobile batching plant and construction compound together with temporary residential accommodation for works associated with the upgrade of St Mary's Airport.
1.2.3. The Proposed Development comprised an area for the processing of asphalt and concrete using a mobile asphalt batching plant and a mobile concrete batching plant. Space was also provided for construction material storage, as well as accommodation, welfare and office facilities and car parking.
1.2.4. Use of the site by Lagan Construction, was deemed the most environmentally friendly and low impact option for the concrete batching facility.
1.2.5. Planning application $\mathrm{P} / 14 / 057$ - Temporary change of use of agricultural land for temporary concrete batching plant and storage for works associated with the St Mary's Harbour improvement works in Hugh Town.
1.2.6. The proposed compound development seeks to utilise a portion of the Parting Carn agricultural land used in the above, successful, planning applications and will adopt a similar approach in terms of the proposed access strategy. The site will be used for the storage of materials and for staff welfare facilities / accommodation. Unlike the previous applications, activities such as concrete batching will not be undertaken within the compound.

### 1.3. Report structure

1.3.1. Following this introductory chapter, this report is structured as follows:
$>$ Section 2: Development overview;
$>$ Section 3: Construction traffic routing;
$>$ Section 4: Vehicular access arrangements;
$>$ Section 5: Construction traffic management measures;
$>$ Section 6: Implementing and monitoring; and,
> Section 7: Summary \& Conclusion.

## 2. Development Overview

### 2.1. Introduction

2.1.1. This chapter of the report describes the site location, the development proposals, transport arrangements and anticipated vehicular trip generation.

### 2.2. Site location

2.2.1. The proposed development site is located on land south of the A3110 Parting Carn Lane (Easting 091752 / Northing 010777) and north of runway 14 at the Isles of Scilly Airport. The site has an area of approximately 0.6 hectares and is bound to the east, west and south by hedgerows, traditional stonefaced hedgebanks, and agricultural land.
2.2.2. The land is owned by the Duchy of Cornwall and when not in use in support of development it provides land for the grazing and rearing of livestock. The location of the site in the context of St Mary's Island, key transport infrastructure and public highways is identified on Figure 2.1.

Figure 2.1: Site location in relation to public highways


Source: © OpenStreetMap contributors with Pell Frischmann annotations

### 2.3. Development schedule

2.3.1. Planning permission is being sought for the temporary use of the Site as a welfare hub / material storage compound in support of the SWW wastewater capital improvement projects for the Isles of Scilly.
2.3.2. The requirement to use the compound as a welfare hub is as a result of tourism pressure on local accommodation leading to a lack of off-site holiday lets being available to site workers once the development is operational.
2.3.3. To enable efficient construction activities in association with the future improvement projects material storage will be required within the compound. This will help to reduce the impact of inclement weather limiting the ability to transfer materials from the mainland via ship whilst also ensuring that materials for future developments can be brought to the archipelago during good weather and stored securely until use of them is required.
2.3.4. The layout of the St Mary's Hub Compound is identified on Figure 1.1. The compound is separated in to three internal areas with each delineated by seeded topsoil berms. The site layout disaggregated by area is as follows:

Parking and laydown
> $6 \times$ car parking spaces;
> Laydown area; and,
> Vehicle turning area.
Offices and amenities
> Material storage area;
> Generator;
$>$ Offices;
> Meeting room;
> Recreation room;
$>$ Canteen;
> Drying room; and,
> Toilet / sceptic tank.
Habitation
> $10 \times$ cabin-type sleep units ( 20 berths) to be in place by summer 2024; and,
$\rightarrow 10 \times$ additional cabin-type sleep units (20 berths) to be in place by summer 2025.
2.3.5. In addition to the on-site provisions, the compound will be provided with sufficient lighting to enable safe movement around the site in the hours of darkness.
2.3.6. Access to the site is to be via Parting Carn Lane (the A3110) and through the existing field access in the north-west corner of the compound.

### 2.4. Construction vehicles

2.4.1. Based on the information provided by TEL, the following vehicles will be used to transport materials and staff to / from the compound during its construction.
>13t excavator driven to site from Porthloo Slip with an escort vehicle;
> 9t tipper truck driven to site from Porthloo Slip with an escort vehicle;
> 9.5 m Flatbed delivery vehicle to site from St Mary's Harbour and Porthloo Slip; and,
$>$ Minibus to site initially from Porthloo Slip and subsequently between site and St Mary's town centre.
2.4.2. It should be noted that both the excavator and tipper truck will be used for on site activities only during the construction of the compound.

### 2.5. Transport arrangements

## Mobilisation

2.5.1. Plant and materials will be shipped to the island by sea from Penzance. Two appropriate landing locations have been identified - St Mary's Harbour and Porthloo Slip.
2.5.2. Based upon current shipping operations deliveries to the Harbour will be undertaken on Tuesdays and Saturdays and deliveries to Porthloo Slip will be undertaken on Mondays and Fridays.
2.5.3. Approximately 35 crossings will be made from the mainland to the island.

St Mary's Harbour
2.5.4. St Mary's Isles of Scilly Terminal will receive, construction materials, the prefabricated cabins and approximately $50 \%$ of the aggregates directly from Penzance. The aggregates are to be shipped in heavy duty bulk bags for transfer to the 9.5 m delivery vehicle upon arrival at St Mary's Island.
2.5.5. Up to 25 prefabricated cabins will be transferred to the compound from the harbour as part of the development: Maximum cabin dimensions are as follows:
$>$ Prefabricated cabins: 2.44 m width, 6.1 m length, and 2.59 m height. This is expected to be the largest load transported to / from the site.
2.5.6. It is anticipated that the majority of vehicles travelling to / from the harbour will route along The Quay. However, due to width restrictions along The Quay it will be necessary to transfer the prefabricated cabins from the initial delivery vehicle to a second delivery vehicle waiting on Town Beach in proximity of Mermaid Slip. At low tide the cabins will be craned from the initial transportation vehicle to a second vehicle waiting on the beach. From this point the cabins will be transported a short distance (approximately 100 m ) to Hugh Street via Atlantic Slip, re-joining the proposed construction vehicle route between the site and the harbour - the construction vehicle route is described in more detail in Section 3.

## Porthloo Slip

2.5.7. Porthloo Slip will receive plant / construction vehicles and approximately $50 \%$ of the aggregates. The aggregates are to be shipped in heavy duty bulk bags on the 9.5 m delivery vehicle. It is anticipated that landing craft will transport loads directly from Penzance to the Slip. Following the offloading of the landing craft it is anticipated that all construction vehicles will drive to the site via a 1.3 km (approximate) route. It has been confirmed by TEL that the excavator vehicle will have rubber pad tracks suitable for road use. Both the excavator and tipper truck will be accompanied by a support vehicle that will act as a safety check, alerting other road users to the presence of the oncoming vehicle, whilst also confirming that the plant can safely navigate the route. Plant equipment will be conveyed to the site by a flatbed delivery vehicle unless the plant equipment is suitable to be driven on the highway.
2.5.8. In addition to the plant equipment, two minibuses will be delivered to the island to assist in the transportation of site workers between the compound and off-site locations such as accommodation. When first accessing the site the minibuses will bring on trailers, the lighting equipment that will be used to illuminate the compound.

## Operation

2.5.9. It is anticipated that the delivery of aggregates and construction materials to both landing locations will begin in week 1 of the proposed construction programme. Plant is to largely be transported to site in weeks 5 and 6 . The importing of cabins will take place from week 7 to 10 of the programme following the reprofiling and setting out of the site.

## Decommissioning

2.5.10. During the eventual decommissioning of the Hub Compound the movement of materials and plant are anticipated to follow the procedures undertaken during the mobilisation phase albeit in reverse.

### 2.6. Compound Construction traffic

2.6.1. The likely development construction programme for the compound covers a 10 week period from January 2024 to March 2024.
2.6.2. The predicted number of vehicle trips, and construction staff numbers, has been provided by TEL based on experience at similar sites.
2.6.3. There will be $3-4$ construction staff on site daily carrying out compound construction. As staff will be staying in off-site accommodation on St Mary's island during construction of the compound it is proposed that they will be transferred to / from site via minibus.
2.6.4. It is proposed that staff will arrive at the site by 07:30 with construction activities beginning at 08:00this avoiding travel during the typical AM peak period. With daily construction work to conclude at 18:00 it is anticipated that site workers will be transferred from the site to their accommodation between 18:00-18:30 this also falling outside the typical PM peak period.
2.6.5. Table 2-1 provides the anticipated project programme as well as a summary of the anticipated vehicle movements associated with the delivery of materials and plant to the compound during its construction. The table also identifies the anticipated number of minbus movements transport staff between the site and their accommodation.
2.6.6. It should be noted that both the project programme and daily vehicle movements may be subject to some variation as a result of weather conditions that may affect the transfer of good / materials from the mainland.
able 2-1: Anticipated construction programme and vehicular movement (two-way)

2.6.7. It can be seen from Table 2-1 that over the course of the construction period there are expected to be 111 vehicles attending the site, from the shore or town centre to the compound. This equates to a total of 222 two-way vehicle movements dispersed over a 10 week period.
2.6.8. It can also be seen from the table that the maximum predicted number of two-way trips in any one week is 24 vehicles and that it is anticipated that the development could generate up to 6 vehicle movements (two-way) per day.
2.6.9. It is anticipated that the arrival / departure profile of the compound construction vehicles attending the site will be dispersed across the day, avoiding peak commuter periods. When disaggregated across the 10 hour daily operational period this equates to one vehicle movement approximately every 1.5 hours.
2.6.10. As identified above the trip generation is based on a 10 week programme. However, should the programme be condensed the impact on the local highway will be over a shorter period. If, due to unforeseen circumstances, the programme required extension, the Principal Contractor will discuss this with the Local Highway Authority. If a change is required this will be put in writing to the Local Highway Authority for their approval.

## 3. Construction traffic routing

### 3.1. Introduction

3.1.1. This Chapter of the report describes the proposed traffic routing during the construction phase of the development and considers personal injury collision (PIC) data along the proposed construction vehicle routes.

### 3.2. Transportation to the island

3.2.1. Transportation of plant, prefabricated cabins, aggregates and construction materials to St Mary's will be via ships originating from Penzance Harbour. As previously identified two landing locations have been identified - the St Mary's Isles of Scilly Terminal and Porthloo Slip.

### 3.3. Construction vehicle access routes

3.3.1. Figure 3.1 identifies the proposed construction vehicle route strategy for the proposed development from both St Mary's Harbour and Porthloo Slip.

Figure 3.1: Construction vehicle route strategy


Source: © OpenStreetMap contributors with Pell Frischmann annotations
Route from St Mary's Harbour to site
3.3.2. The most accessible route between the harbour and the site for aggregate and material delivery is approximately 2 km in length. The vehicular access route, both inbound and outbound, and as confirmed by TEL follows a combination of the following roads:
> The Quay;
> A3111, The Bank (one-way system);
> A3111, Hugh Street;
> A3111, The Parade;
> A3111, Lower Strand;
> A3111, Higher Strand;
> A3111, Carn Thomas;
> A3111, Telegraph Road;
> A3111, Pump Road; and,
> A3110, Parting Carn Lane.
3.3.3. The width of the carriageway along the route, beyond The Quay, varies with the narrowest identified location being 2.5 m wide between the Galley Takeaway and The Bourdeaux Shop on The Parade. The width between buildings is approximately 4.3 m .
3.3.4. The current state of footway repair in this location indicates that footway cross over by vehicles has historically occurred. Whilst it is expected that delivery vehicles, which are to be no greater than 2.5 m wide, will stay within the limits of the carriageway, banksman or a support vehicle will be used in this location to enhance pedestrian safety, during scheduled deliveries.
3.3.5. The majority of the route between the harbour and the site is of a width that could accommodate twoway traffic. However, over a number of sections on-street parking narrows roads to one-way operation. Additionally, there is a section of Telegraph Road, approximately 250 m in length, along which a support vehicle will be required to travel in advance of the delivery vehicle as the high level route analysis (see section 3.4) confirms that the road width will not accommodate two-way traffic. A similar situation occurs approximately 140 m west of the site access where the road narrows to approximately 4 m .

## Route from Porthloo Slip to site

3.3.6. The most accessible route between Porthloo Slip and the site for aggregate, material and plant delivery is approximately 1.2 km in length. The vehicular access route, both inbound and outbound, and as confirmed by TEL follows a combination of the following roads:
> Porthloo Lane;
> A3111 Pump Road; and,
> A3110 Parting Carn Lane.
3.3.7. The width of the roads along the identified route, particularly along sections of Porthloo Lane and on Parting Carn Lane (as previously identified) vary, with some sections narrowed such that two-way operation is interrupted. Accounting for this, a support vehicle will accompany the deliveries, traveling in advance of the delivery vehicle to warn on-coming traffic of the obstruction ahead.

### 3.4. Vehicle access route tracking

3.4.1. The Principal Contractor will require the appointed haulage company to carry out a detailed route review prior to the construction phase beginning to ensure that appropriately sized vehicles are used and, that appropriate measures are in place in instances where vehicles would impact street furniture / highway safety. To assist with this exercise vehicle tracking of the proposed vehicular access routes has been undertaken on ordnance survey mapping ${ }^{1}$, in combination with google satellite imagery, using

[^1]the most onerous vehicles currently considered as being required to access the site. Drawing 107780-PEF-500-D.DR-H-001 included in Appendix B provides an overview of the route tracking and identities a series of drawings and key locations in more detail (see Appendix B).
3.4.2. The suite of drawings in Appendix B identify sections of the delivery routes where satellite imagery suggests on-street parking occurs and may need to be managed during deliveries, locations that may require the presence of Bankman, route sections where a support vehicle may be required and sections of road where roads may narrow to one-way operation.
3.4.3. Where the haulage company route review identifies locations in which a 2.5 m wide load prevents safe two-way operation of the highway the Principal Contractor will liaise with the authorities and stakeholders to agree appropriate mitigation.
3.4.4. Prior to construction TEL will provide confirmation to the Council of the Isles of Scilly of the measures to be implemented to temporarily manage traffic during delivery of loads to the site.

### 3.5. Personal injury collision data

3.5.1. In order to determine if there are known highway safety issues along the proposed construction vehicle access routes a collision analysis has been undertaken. Collision data has been obtained from the publicly available Crashmap database which utilises official data published by the Department for Transport as submitted to them by police forces. The available data covers the period of 2017-2021 inclusive.
3.5.2. The collision study area, which includes all proposed construction vehicle routes, along with collision locations is identified on Figure 3.2.

Figure 3.2: Collision location


Source: © OpenStreetMap contributors with Pell Frischmann annotations
completed on the ground. The contractor responsible for the movement of vehicles and materials will need to be satisfied that the route is adequate to accommodate the relevant vehicle and that where interventions / management are required that this is agreed with the isles of Scilly council prior to the movement of construction vehicles or any construction work commencing.
3.5.3. It can be seen that a single collision has been recorded along the proposed construction vehicle routes to the site, this being on Parting Carn Lane approximately 130 m west of the site access.
3.5.4. The collision occurred in 2019 and was categorised as serious. Collision records confirm that it was a single vehicle incident involving a motorcycle travelling west along Parting Carn Lane. The motorcycle was hit on its nearside whilst travelling ahead along the right-hand bend.
3.5.5. Based on the findings of this analysis it is considered that there are no known deficiencies in the composition of the highway along the proposed construction vehicle routes. However, delivery vehicle drivers will be made aware that there was a collision in this location within the past 5 years and that they should travel with due care and attention along the full length of the construction routes.

## 4. Vehicular access arrangements

### 4.1. Introduction

4.1.1. This Section of the report describes the proposed access arrangements for the site considering both the Parting Carn Lane (A3110) / Access Road junction and the internal vehicular access arrangements.

### 4.2. Access

4.2.1. Access to the site is to be via Parting Carn Lane (the A3110) and through the existing field access in the north-west corner of the development parcel.
4.2.2. Photographs of the existing site access arrangements are provided in Figure 4.1 and Figure 4.2.

Figure 4.1: Existing site access (facing into site from the east)


Source: Pell Frischmann

Figure 4.2: Existing site access (facing out of site to the east)


Source: © Google Earth contributors with Pell Frischmann annotations
4.2.3. In order to provide the compound minor modifications are proposed to the access which consists of surfacing the track and discrete portions of the bellmouth verge with compacted Type 1 material. This will accommodate the swept path of the largest vehicle anticipated to access the site which would otherwise overrun the verge.
4.2.4. The layout of the proposed site access is identified on Drawing 107780-PEF-XX-500-D.DR.H. 0014 included in Appendix C. An extract of the access arrangement is provided in Figure 4.3 below.

Figure 4.3: Proposed site access arrangement


Source: Pell Frischmann Drawing 107780-PEF-XX-500-D.DR.H. 00014
4.2.5. The access will operate as a right in left out arrangement with all other movements for construction. This will be conveyed to all site users during site safety briefings and when engaging sub-contractors delivering materials and plant. All deliveries will arrive from the west, driving straight through the existing access which runs parallel to the A3110 for approximately 30 m before turning 90 degrees to follow the proposed internal road alignment. Following the unloading of materials / personnel returning vehicles will leave the access to the west.
4.2.6. When previously in operation as a construction compound the site generated HGV movements associated with the upgrades to the harbour and the airport, and as such the access has historically proven capable of accommodating vehicles required to serve construction activities.
4.2.7. In order to confirm that the access is suitable for use by goods vehicles during construction / operation, vehicle swept path analysis has been undertaken. Vehicle tracking of the site access has been undertaken utilising a 9.5 m delivery vehicle and a 10.2 m tipper, the largest vehicle anticipated to access the site. In relation to the tipper truck it should be noted that this vehicle is only anticipated to enter / exit the site once during the compound construction period. Drawings 107780-PEF-XX-500-D.DR-H-012 and 107780-PEF-XX-500-D.DR-H-013 included in Appendix D confirm that these vehicles can enter and exit the site in a forward gear.
4.2.8. In terms of controlling access to the site; drivers, contractors and visitors arriving at the access will require induction after which they will be subject to the requirements of the on-site Traffic Management Plans (TMP) produced by the Principal Contractor.

### 4.3. Site access visibility

4.3.1. There are no posted speed limits on Parting Carn Lane and as such it is understood that the national speed limit applies (60mph). Notwithstanding the above, and as is the case for the majority of the island, the opportunity to travel at the national speed limit is constrained by road widths / alignments and the collision history in Section 3.5 indicates that drivers travelling at speeds appropriate to the prevailing conditions.
4.3.2. Due to the alignment of the access relative to the A 3110 , junction visibility to the right is restricted by a stone-faced hedge and vegetation within the verge. Whilst the volume of vehicular and pedestrian traffic using the road is not anticipated to be great, and the access strategy proposed has previously be accepted by the Local Highway Authority, a visibility analysis at the access has been undertaken to confirm what splays are achievable.
4.3.3. Drawing 107780-PEF-XX-500-D.DR.H. 00014 included in Appendix C provides a visibility splay analysis at the site access utilising the parameters provided in Manual for Streets. The drawing confirms that visibility of up to approximately 118 m can be achieved to the west, equating to vehicle speeds of approximately 43 mph , and that a splay of 13 m measured to the road edge can be achieved to the right. This equating to vehicle speeds of approximately 12 mph . However, it is important to note that the majority of vehicles exiting the site during the compound's construction will be the 9.5 m delivery vehicle which has an elevated cabin placing the drivers eye height above the wall. The approximate height of the wall is in the order of 1.5 m and the delivery vehicle drivers eye height is anticipated to be in the order of 2 m . This providing delivery drivers with a view of the road to the east that would allow them to see approaching vehicles from a distance of approximately 30 m .
4.3.4. Accounting for the restricted visibility, and as was accepted within previous applications for the site, it is proposed to erect a convex mirror so that drivers emerging from the site are provided with a view of vehicles approaching from their right. The indicative location of the mirror is also identified on Drawing 107780-PEF-XX-500-D.DR.H.00014. In order to ensure that the effectiveness of the mirror is maintained it will be checked first thing every morning by a member of the workforce to ensure that it is clean and is correctly aligned. In addition, signs warning of the site access will be erected and maintained either side of the access during construction of the compound.
4.3.5. Some discrete foliage management along the verge to the east of the access has been undertaken to maximise visibility to the right when exiting the compound. This is identified in Figure 4.4.

Figure 4.4: Existing site access following discrete vegetation management


Source: © Google Earth contributors with Pell Frischmann annotations
4.3.6. In addition to use of a mirror and warning signs, a Banksman will be required to control traffic entering / exiting the site to manage vehicles and pedestrian using Parting Carn Lane during deliveries.

### 4.4. Internal access track

4.4.1. An access track, measuring approximately 140 m in length and between $3.4 \mathrm{~m}-4.0 \mathrm{~m}$ in width will be provided to enable access to the vehicle parking area, laydown area, and for cess pit emptying.
4.4.2. A 'hammerhead' style turning head will be constructed adjacent to the cess pit / laydown area to allow delivery vehicles to manoeuvre within the site such that they are able to exit in a forward gear.
4.4.3. The internal access road is to be widened at a point approximately 30 m east of the junction with Parting Carn Lane to include a vehicle passing place. Drawings 107780-PEF-XX-500-D.DR-H-0012 (see Appendix D) confirms that the 9.5 m delivery vehicle and a transit type minibus can pass in this location. In instances where the tipper truck or vehicles transporting cabins are to enter / exit the site vehicle movements will be managed through delivery scheduling such that passing is not required.
4.4.4. A 1 m wide pedestrian footpath delineated with a fence is to be provided along the western side of the internal access road. Where the footpath approaches the road widening identified above, and when required for vehicle movements, the fence and bollards will moveable.
4.4.5. Figure 4.5 and Figure 4.6 demonstrate use of the passing place by the 9.5 m delivery and minibus.

Figure 4.5: Vehicle tracking of 9.5 m delivery vehicle entering site passing waiting minibus


Source: Drawing No. 107780-PEF-XX-500-D.DR-C-0012

Figure 4.6: Vehicle tracking of 9.5 m delivery vehicle exiting site passing waiting minibus


Source: Drawing No. 107780-PEF-XX-500-D.DR-C-0012
4.4.6. As is currently the case, the width of the access permits one way operation for vehicles attending site and therefore there may be instances where vehicles will be required to wait on Parting Carn Lane for a short period of time whilst the access clears before entering the site. The principal contractor will minimise instances of this through effective delivery scheduling. This is explored in more detail in section 5 of this document. Drawings 107780-PEF-XX-500-D.DR-H-016 in Appendix D shows a Delivery vehicle waiting on Parting Carn Lane for the access road to clear. An extract of the drawing is provided in Figure 4.7.

Figure 4.7: Vehicle tracking of 9.5 m delivery vehicle waiting for the access to clear


Source: Drawing No. 107780-PEF-XX-500-D.DR-C-0016
4.4.7. Drawings 107780-PEF-XX-500-D.DR-H-012 and 107780-PEF-XX-500-D.DR-H-013, included in Appendix D, confirm that the 9.5 m delivery vehicle and tipper truck are able to manoeuvre into the provided turning head and reverse a short distance into the lay down where it can be unloaded prior to exiting in a forward gear. Figure 4.8 and Figure 4.9 demonstrate use of the turning head by the most onerous vehicles likely to access the site.

Figure 4.8: Vehicle tracking of 9.5 m delivery vehicle using turning head


Source: Drawing No. 107780-PEF-XX-500-D.DR-C-0012
Figure 4.9: Vehicle tracking of tipper truck using turning head


Source: Drawing No. 107780-PEF-XX-500-D.DR-C-0013

## 5. Construction traffic management measures

### 5.1. Introduction

5.1.1. This chapter of the report outlines the intended construction traffic management measures that will be introduced to mitigate the impacts resulting from the proposals, specifically during the construction phase.

### 5.2. Construction site signage

5.2.1. Signage to advise road users of the increase in traffic during the compounds 10 week construction period will be posted in the vicinity of the proposed site access and along the A3110 up to and including the A3110 / Telegraph Road priority junction. The location and exact requirement of the signage will be agreed with The Council of Isles of Scilly by the TEL prior to construction activities beginning.

### 5.3. Adherence to designated routes

5.3.1. A copy of the delivery route plan will be given to all suppliers when orders are placed to ensure that drivers are fully briefed on the required route to take. The supplier will be made aware that these routes are to be followed at all times unless agreed otherwise or in the event that a suitable diversion is in place.

### 5.4. Delivery Scheduling

5.4.1. Construction of the compound will take place from Monday to Sunday between $08: 00-18: 00$. Outside of these hours, works at the site shall be limited to emergency works and dust suppression, unless otherwise approved in writing by The Council of the Isles of Scilly. No construction traffic movements will take place on Public Holidays without prior written approval from The Council of the Isles of Scilly.
5.4.2. Should any emergency works be required The Council of the Isles of Scilly will be informed in writing within three working days following their occurrence.
5.4.3. The Principal Contractor will adopt a Delivery Management System (DMS). The system will be used by any company required to make a delivery or collection to / from the site. Wherever possible the contractor will schedule deliveries to avoid the network peaks.
5.4.4. Delivery scheduling will not be limited to receiving material deliveries into the site, but will be fully coordinated with all materials / vehicles leaving site. Hard copies of daily delivery schedules will be displayed at prominent locations e.g. provided at the gate, off-loading points, at hoists and also issued to drivers, forklift drivers and any other materials handling equipment operators, all of whom need to be in constant radio communication with one another.
5.4.5. This system will enable the Principal Contractor to manage the number, rate and frequency of all delivery collections. This will also enable the Principal Contractor to spread out deliveries across the proposed delivery period and manage numbers.
5.4.6. Offloading of construction deliveries will be carried out during the working hours of:
> 08:00 to 18:00 Monday to Sunday excluding network peaks.
5.4.7. All special deliveries e.g. delivery of prefabricated cabins - would be delivered to the site outside peak hours, therefore avoiding any unnecessary closures and minimising disruption to the public highway.
5.4.8. The Principal Contractor will consider various methods and tools to assist in supply chain management, such as:
> Reverse logistics: an enhanced delivery chain which allows for the return of unused goods to the source supplier; and,
> Demand smoothing: organising deliveries to site so that there are fewer peaks and fewer troughs.

### 5.5. Delivery consolidation

5.5.1. To reduce the impact of construction traffic during peak hours the Principal Contractor will implement measures such as consolidation of deliveries e.g. by selecting materials / goods from the same source, thus combining materials into one single delivery, as opposed to a number of vehicles delivering goods from different sources. The contractor will actively seek and investigate ways of consolidating deliveries to reduce the total number of vehicle deliveries to the Site.

### 5.6. Dust management

5.6.1. It is anticipated that the construction activities will generate dust during extended periods of dry weather. This dust will be suppressed by water bowsers damping down site entrance, access track and working areas, on an as required basis.
5.6.2. Materials will be prefabricated and pre-cut off-site where possible to minimise dust from cutting and grinding activities. It has not yet been fully determined how much off-site fabrication will be possible for the proposed development. This will be reviewed in detail post planning.
5.6.3. Other techniques adopted to control dust during the construction phase:
> The wheels and chassis of vehicles shall be cleansed by hand at the point of loading in order to avoid the spread of mud, debris and dust onto the public highway;
> Ensuring that vehicles leaving the site carrying debris or waste are properly covered and not overloaded;
> Cleaning the carriageway near the site entrance as required; and;
> In exceptional circumstances, areas of the access track may be scraped to remove silt build up.

### 5.7. Re-use of material on site

5.7.1. The Principal Contractor will be required to investigate opportunities to minimise waste arising at source and, where such waste generation is unavoidable, to maximise the recycling and reuse potential of materials.

### 5.8. Smart procurement

5.8.1. The Principal Contractor will explore the use of local suppliers wherever possible to minimise the length of journeys associated with deliveries. Opportunities to source multiple materials from the same supplier will also be investigated to minimise the number of vehicles required.

### 5.9. Public information

5.9.1. Information on the movements of construction traffic and the project program will be provided to local residents and stakeholders to inform them of the progress of the project and the potential for any disruption associated with construction vehicle movements.
5.9.2. If required by The Council of the Isles of Scilly, the developer will produce a newsletter for distribution to properties along the most affected sections of the construction routes advising them of construction
traffic movements and the measures to be put in place to ensure the safe and efficient operation of the road network. The requirement of this measure will be discussed and agreed with the council prior to construction.

### 5.10. Wheel Cleaning

5.10.1. A wheel wash station will be implemented on site for use during the construction period. Wet wheel washing facilities often result in vehicles depositing water on to the highway for a notable distance after leaving site. This has the potential to cause additional hazards for road users, particularly in cold weather when there is an increased risk of freezing. In light of this it is proposed to use dry cleaning methods.
5.10.2. Construction vehicles which are required to enter the highway shall be hand cleaned at the on site wheel washing station once they have been unloaded / loaded to remove any material or debris spilled during these activities.
5.10.3. No additional cleaning measures are proposed between the wheel washing facility and the highway. However, a road brush shall be made available should cleansing of the highway be necessary as a consequence of construction operations. These measures shall ensure the requirements of the Highways Act can be met, particularly those relating to soil being deposited or removed from the highway. Should any mud or debris be carried out of the site, a professional road sweeping company will be appointed to keep the carriageway clear.

### 5.11. Road condition survey

5.11.1. A Road Condition Survey (RCS) of the proposed construction route, local to the site, will be undertaken. The RCS will identify points where the carriageway is currently in poor condition. The extent of the road conditions survey is identified on Figure 5.1.

Figure 5.1: Extent of road conditions survey


[^2]
## 6. Implementing and monitoring

### 6.1. Introduction

6.1.1. This Chapter of the report describes the strategy for implementing, monitoring and updating of construction traffic management measures.

### 6.2. Implementing

6.2.1. The Principal Contractor will be responsible for implementing the CTMP and for ensuring that it is kept up to date as the construction progresses. They and their subcontractors will be required to adhere to agreements therein.

### 6.3. Vehicle safety

6.3.1. The Principal Contractor shall ensure that any HGVs associated with site construction shall carry a prominent sign or signs to warn cyclists of the dangers of passing the vehicle on the inside.
6.3.2. Any vehicle more than 3.5 t must have side guards; close proximity sensors, rear cyclist warning signs, and if possible, Frensel lens or CCTV.
6.3.3. The contractor will require that any subcontractors operating vans, lorries or car-derived vans, comply with the safety clauses under which they are contracted. They will be made aware of the CTMP measures and the operational practices to which they should adhere.

### 6.4. Driver licence checks

6.4.1. The Principal Contractor shall ensure its drivers have a driving licence check with the DVLA before starting deliveries and that checks are repeated in line with either the following risk scale, or the contractor's risk scale, provided that the contractor's risk scale has been approved in writing by the authority within the last 12 months:
> $0-3$ points on the driving licence - annual checks;
> 4-8 points on the driving licence - six-monthly checks;
> 9-11 points on the driving licence - quarterly checks; and,
> 12 or more points on the driving licence - monthly checks.

### 6.5. Collision reporting

6.5.1. The Principal Contractor shall provide the authority with an updated collision report on a quarterly basis and within five working days of a written request from the authority.

### 6.6. Monitoring

6.6.1. During the works, monitoring and reviews will be undertaken by the Principal Contractor that will include a general review of site activities and compliance with the plan. If conditions have changed or noncompliance is recorded this should be actioned within an agreed period depending upon the degree of variance.

### 6.7. Reporting

6.7.1. Monitoring reports for each aspect of construction will be produced bi-annually and made available to the local authorities.

### 6.8. Management

6.8.1. The construction traffic operations for the development will be monitored by the Principal Contractor and, if necessary, any further measures or required amendments can be made to the construction access arrangements to address issues that may arise.

## 7. Summary and conclusion

### 7.1. Summary

7.1.1. Pell Frischmann (PF) have been appointed by Trant Engineering Limited (TEL) to provide transport and highways consultancy services to support the proposed wastewater capital improvement project for the Isles of Scilly covering St Mary's, St Martins, St Agnes, Bryher and Tresco.
7.1.2. This transport report details the development proposals, in terms of site location, access, vehicle trip generation, and routing. This report also outlines the possible traffic management measures to be implemented during the construction phase of the compound to minimise disruption and to maintain road safety of pedestrians and other road users in the vicinity of the development site.
7.1.3. The key points highlighted by this CTMP can be summarised as follows:
> Transportation of plant and materials to St Mary's will be via two landing locations and methods: Porthloo Beach or St Mary's Harbour;
> Appropriate vehicular access arrangements are proposed. These are supported by swept path analysis, which demonstrates that the largest vehicle anticipated to access the site, a 10.2 m tipper truck, can successfully manoeuvre through the site access via Parting Carn Lane (the A3110) and through the existing field access in the north-west corner of the development parcel;
> During the construction of the compound, the development is anticipated to generate up to 6 vehicle movements (two-way) per day.
> The proposed vehicle access routes will need to be subject to a review, undertaken by those appointed haulage firms delivering, materials, equipment and plant prior to the construction phase to ensure that appropriately sized vehicles are used;
> There are currently no identified safety issues on the local highway network in the vicinity of the site; and,
> A number of measures are proposed, which are intended to reduce the impacts of the proposals in terms of construction traffic, on the local highway network.

### 7.2. Conclusion

7.2.1. Development on an island setting presents a unique situation that has required careful consideration in terms of material / vehicle transportation during the compound's construction.
7.2.2. This report demonstrates that the proposals can be safely accommodated and managed to ensure that there are no significant impacts on the local highway network.

Appendix A - Site layout plan


Appendix B - Construction routes vehicle swept path analysis






[^0]:    Source: Drawing No. 107780-PEF-XX-500-D.DR-T-0003

[^1]:    ${ }^{1}$ The vehicle route appraisal considered within this repoirt is based on a desktop appraisal only including review of google satellite imagery dated 07.10.2022 and reviewed in October 2023. This provides an appraisal of a single point in time therefore the locations permitting vehicle parking, vehicle loading and the location of potential obstructions to construction traffic (street furniture for example) may extend beyond those identified in this report. Prior to the transporting of materials associated with the construction of the compound and future wastewater capital improvement projects for the isles of Scilly a full review of the haulage route will need to be

[^2]:    Source: © OpenStreetMap contributors with Pell Frischmann annotations

