



Appendix 15.13

Draft Operational Phase Travel Plan

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1.0 Introduction

1.1 Introduction

- 1.1.0.1 This Draft Operational Phase Travel Plan has been prepared on behalf of the Tidal Lagoon Swansea Bay plc (TLSB) as part of the supporting documentation for the environmental impact assessment for its tidal lagoon generating station project (Project).
- 1.1.0.2 It is envisaged that this Draft Operational Phase Travel Plan will provide a framework from which a more detailed Operational Phase Travel Plan will be prepared and submitted for approval prior to commencement of operation of the Project.
- 1.1.0.3 The Project involves the construction and operation of a tidal energy lagoon located in Swansea Bay. The tidal Lagoon will generate renewable energy in the form of electricity using the large tidal range in the Bay. The Lagoon will have a rated capacity of 240 MW, or enough electricity to supply approximately 121,000 homes.
- 1.1.0.4 The tidal Lagoon will be built by forming a 9.5km long U-shaped seawall running from the Port of Swansea out to sea before curving back to re-join land adjacent to Swansea University Bay Campus (SUBC). Access to the Project, and supporting onshore facilities at the two landfall locations, will be from Fabian Way.
- 1.1.0.5 In addition to generating electricity, the Project also aims to provide visitor facilities and other amenities including art, education, mariculture and sporting and recreational facilities. The seawall is expected to be open to the public during daylight hours for walking, running, cycling, etc., although access will be controlled in extreme weather.
- 1.1.0.6 A Travel Plan can bring a range of benefits, not only to the community but to staff and visitors to the Lagoon. Benefits include a healthier, more productive workforce, cost savings to staff, reduced demand for on-site parking and less congestion locally.

2.0 Planning Policy

2.1 Planning Policy Wales

- 2.1.0.1 Edition 5 of Planning Policy Wales (PPW) was published in November 2012. It sets out the land use planning policies of the Welsh Government emphasising its commitment to sustainable development in the planning system so that it can play an appropriate role in moving towards sustainability.
- 2.1.0.2 Chapter 4 of PPW (Planning for Sustainability) affirms the Welsh Government's objectives regarding sustainable development and the need of Local Development Plans to reflect the policy goals of the Wales Spatial Plan and provide a framework to stimulate, guide and manage change towards sustainability.
- 2.1.0.3 Chapter 8 (Transport) of PPW confirms the Welsh Government's commitment to sustainability identifying one of its key aims *'to extend choice in transport and secure accessibility in a way which supports sustainable development and helps to tackle the causes of climate change by encouraging a more effective and efficient transport system, with greater use of the more sustainable and healthy forms of travel, and minimising the need to travel'*.

2.2 Technical Advice Note 18

- 2.2.0.1 Technical Advice Note 18 (TAN 18) was published in March 2007 in support of PPW. The document sets out the Welsh Government's objectives on planning with regard to transport issues. TAN 18 acknowledges that *'by guiding the location of new development, reducing the need to travel, and promoting transport choices which are less polluting, land-use planning can contribute to long term environmental improvement.'*
- 2.2.0.2 TAN 18 states that in order to meet sustainable development policy objectives, local authorities should be:
- Promoting resource and travel efficient settlement patterns;
 - Ensuring new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need for travel and fostering social inclusion; and
 - Encouraging the location of development near other related uses to encourage multi-purpose trips.

2.3 Wales Transport Strategy

- 2.3.0.1 The Wales Transport Strategy: One Wales - Connecting the Nation was published in May 2008 and is a key document to developing an effective transport strategy for Wales. The document outlines how the transport policy approach is more responsive in its delivery of the Welsh Government's wider policy agenda, and has attempted to be flexible to reflect different regional circumstances.
- 2.3.0.2 The four main regions in Wales are each represented by one of four regional transport consortia which have been created through partnerships between neighbouring Local

Authorities. CCSC is part of the South West Wales Transport Consortium known as SWWITCH.

- 2.3.0.3 The stated goal of the Transport Strategy is for Wales to promote sustainable transport networks that safeguard the environment while strengthening Wales' economic and social life.

2.4 Walking and Cycling Action Plan for Wales 2009-2013

- 2.4.0.1 The Welsh Government presented a Walking and Cycling Action Plan for Wales in December 2008 setting out its aim to maximise opportunities for walking and cycling and to reduce car use, particularly for short journeys. In addition, it identifies that the provision of walking and cycling facilities is an important element in creating equal opportunities. Its mission statement is '*to encourage more people to walk and cycle more safely and more often*'.

2.5 Regional Transport Plan

- 2.5.0.1 The Regional Transport Plan (RTP) is the result of joint working between the four local authorities (Carmarthenshire, Neath Port Talbot, Swansea and Pembrokeshire) as part of the South West Wales Integrated Transport Consortium known as SWWITCH. It replaces the individual local transport plans previously adopted by the four councils. As well as acting as a bidding document for major transport schemes it has and will continue to shape transport policy in the region for the period 2010-2015 and beyond.
- 2.5.0.2 The plan was adopted by the four councils in summer 2009. It was submitted to the Welsh Government in September 2009 and approved at the end of December 2009.
- 2.5.0.3 SWWITCH has worked with a range of stakeholders to examine a variety of options that could potentially deliver RTP objectives. The RTP explains that no single option would be appropriate across such a diverse region as South West Wales, and advocates a 'mix and match' approach to transport.
- 2.5.0.4 The RTP lists a number of objectives, including the following:
- i. To improve access for all to a wide range of services and facilities including employment and business, education and training, health care, tourism and leisure activities;
 - ii. To improve the sustainability of transport by improving the range and quality of, and awareness about, transport options, including those that improve health and well-being;
 - iii. To implement measures which make a positive contribution to improving air quality and reducing the adverse impact of transport on health and climate change, including reducing carbon emissions;
 - iv. To implement measures which help to reduce the negative impact of transport across the region on the natural and built environment including biodiversity; and
 - v. To improve road safety and personal security in South West Wales.
- 2.5.0.5 The long term strategy set out in the RTP for the Swansea urban area emphasises improved public transport and walking and cycling facilities, including Bus Rapid Transit.

- 2.5.0.6 In relation to the Fabian Way corridor, the RTP states that *'new development sites and corridors, such as Fabian Way will be planned so that they can be effectively served by public transport and walking and cycling facilities. All these measures will be supported by intensive use of smarter choices measures, including comprehensive personalised travel planning'*.

2.6 City and County of Swansea Unitary Development Plan

- 2.6.0.1 The CCSC Unitary Development Plan (CCSC, 2008) was adopted in November 2008. The UDP sets out a range of policies and proposals relating to future development, and deals with the use and conservation of land and buildings within the City & County up to 2016. The UDP is based firmly on sustainable planning principles. This is reflected in its spatial strategy and overall approach to the pattern, form and distribution of new development.
- 2.6.0.2 Chapter 5 of the UDP relates to Improving Accessibility, and includes the following policies.
- 2.6.0.3 Policy AS1 - New development associated with housing, employment, shopping, leisure and service provision should be located in areas that are currently highly accessible by a range of transport modes, in particular public transport, walking and cycling, or in areas where a good level of such provision can realistically be achieved.
- 2.6.0.4 Policy AS2 - New developments should be designed to:
- I. Promote the use of public transport and facilitate sustainable travel choices,
 - II. Provide suitable facilities and an attractive environment for pedestrians, cyclists and other non-motorised modes of transport,
 - III. Allow for the safe, efficient and non-intrusive movement of vehicles, and
 - IV. Comply with the principles of accessibility for all.
- 2.6.0.5 Policy AS5 - Development proposals will be required to consider the access requirements for pedestrians and cyclists and, where necessary, provide appropriate facilities and/or infrastructure to encourage their use.
- 2.6.0.6 Policy AS6 - Parking provision to serve development will be assessed against adopted maximum parking standards to ensure that proposed schemes provide appropriate levels of parking for private cars and service vehicles. Account will also need to be taken of the need to provide facilities for the parking of motorcycles and cycles.

2.7 Neath Port Talbot County Borough Council Unitary Development Plan

- 2.7.0.1 The NPTCBC Unitary Development Plan (NPTCBC, 2008) was adopted in March 2008. The purpose of the document is to guide development, conservation and the use of land within the County Borough for the fifteen years up to mid 2016.
- 2.7.0.2 The following policies relate to transport:
- 2.7.0.3 Policy 12- Improvements to the transport system will concentrate on:
- i. improving accessibility and highway safety and reducing congestion, pollution and disturbance generated by traffic;

- ii. encouraging travel by public transport, cycling and walking as alternatives to the car; and
- iii. encouraging the movement of freight by rail and sea as alternatives to road.

2.7.0.4 Policy 13- The location and design of development should contribute to more sustainable communities through reducing dependency on the motorcar and encouraging the use of public transport, cycling and walking.

2.7.0.5 Policy 14- Proposals will be resisted which would be likely to cause unacceptable adverse impact in terms of:

- I. traffic generation and highway safety;
- II. poor accessibility by public transport, cycling and walking including people with disabilities; and
- III. preventing the use or re-use of docks, harbours, wharfs or routes of railway lines.

2.8 Fabian Way Corridor Transport Study

2.8.0.1 The Fabian Way Corridor, from the River Tawe to the M4, has numerous sites for future development including employment, residential and leisure uses. The area has been identified as a sub-regional focus for economic growth with several major regeneration schemes ongoing e.g. SA1, Coed Darcy and Swansea University Bay Campus.

2.8.0.2 The Welsh Assembly Government (WAG) commissioned Arup to undertake a strategic assessment of the transportation options for the Fabian Way Corridor. The study commenced in November 2008 with the Main Report issued in January 2010. The overall aim of the study was to develop a transport strategy to support the regeneration of the corridor.

2.8.0.3 Client steering group meetings including officers from CCSC and NPTCBC, stakeholder consultation with workshops and a community Newsletter were included as part of the process.

2.8.0.4 The Preferred Strategy incorporates highway, rail, Public Transport, walking and cycling, canal, Intelligent Transport Systems, demand management and a Strategic Travel Plan. Proposed targets for mode splits and a provisional programme for implementation are also included. The Preferred Transport Strategy has been approved in principle by both CCSC and NPTCBC.

2.8.0.5 Measures for the delivery of the Strategy from 2010 to 2029 include:

- i. Short term - Bus only bridge over River Tawe, segregated busway, transport hub at Swansea University site;
- ii. Short, Medium and Long Term - Walking and cycling route improvements, improvement to bus services, reduction of speed limits;
- iii. Medium Term - Capacity improvements at Tawe Bridges, improvement to Park & Ride, upgraded pedestrian/cycle bridge; and
- iv. Long term - Additional Park & Ride north of Amazon, new grade separated junction at Baldwin's Bridge.

3.0 Objectives of the Travel Plan

3.1 Principal Objectives

- 3.1.0.1 This Plan demonstrates the commitment of TLSB to take all reasonable steps to minimise the impact of travel on the environment by reducing the level of unnecessary travel, and encouraging those who have to travel to do so in a more environmentally friendly way.
- 3.1.0.2 The aim of the Travel Plan is to promote greener, cleaner travel choices, reducing reliance on the private car. The Travel Plan is aimed at employee journeys to and from work and also considers travel issues relating to visitors.
- 3.1.0.3 The principal objectives of the Travel Plan are:
- Objective 1 - to increase the role of walking and cycling as transport modes, in support of wider transport, health and social policy objectives.
 - Objective 2 - to develop a safe, convenient, efficient and attractive transport infrastructure which encourages and facilitates the use of walking, cycling and public transport and which minimises reliance on and discourages unnecessary use of private motorised vehicles.
- 3.1.0.4 In accordance with the above objectives, this Travel Plan will seek to:
- i. Reduce the overall need to travel, particularly during peak periods;
 - ii. Promote awareness of transport issues and the impact of traffic on the local environment;
 - iii. Show a commitment to improving traffic conditions within the local area;
 - iv. Influence the level of private car journeys to and from the site in order to reduce air pollution and the consumption of fossil fuels;
 - v. Reduce the number of single occupancy car trips to and from the site;
 - vi. Increase the proportion of journeys to and from the site by sustainable modes of transport such as walking, cycling, public transport and car sharing; and
 - vii. Promote walking and cycling as a health benefit to staff.
- 3.1.0.5 Through changes in travel habits this Travel Plan will provide benefits for:
- I. Individuals - through improved health, reduced stress and potential cost savings;
 - II. The Business - through healthier and more motivated staff, reduced congestion and improved access to the site for employees and visitors; and
 - III. The Environment - through improved air quality with less noise, dirt and fumes, as well as by reducing the impact of other national and global environmental problems such as photochemical smog and global warming.

4.0 Development Proposal

4.1 Introduction

- 4.1.0.1 TLSB is proposing to construct and operate a tidal energy lagoon, located in Swansea Bay, South Wales (Figure 4.1). The tidal Lagoon will generate renewable energy in the form of electricity using the large tidal range (the difference between high and low water) which is a distinguishing feature of the Bay. The Project will have a rated capacity of 240 Megawatts (MW), generating 400GWh net annual output. This is enough electricity for approximately 121,000 homes: more than Swansea's annual domestic electricity use (109k households); around 70% of Swansea Bay's annual domestic electricity use (Swansea, Neath & Port Talbot, 173k households); or approximately 9% of Wales' annual domestic electricity use (based on 1,369k households).

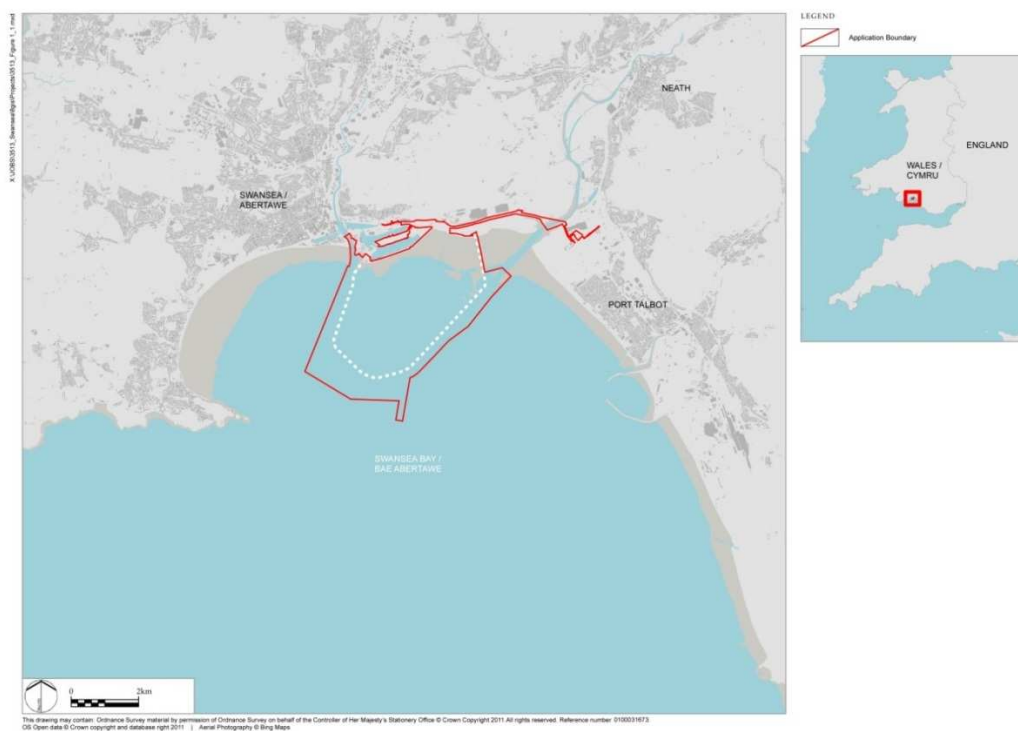


Figure 4.1: Location of Project

- 4.1.0.2 In addition to generating electricity, the Project also aims to provide visitor facilities and other amenities including art, education, mariculture and sporting/recreational facilities. The seawall is expected to be open to the public during daylight hours for walking, running, cycling etc, though access will be controlled in extreme weather.

4.2 Overview of the Project

- 4.2.0.1 The Project is situated in Swansea Bay, adjacent to the Port of Swansea, approximately 2.2 km southeast of Swansea City Centre. The Project as a whole spans the administrative areas of the City and County of Swansea Council (CCSC) and Neath Port Talbot County Borough Council (NPTCBC). The main onshore development lies within the Port area, immediately south of Fabian Way (A483) which is the main trunk road from Junction 42 of the M4 into Swansea.

- 4.2.0.2 The onshore development area (Figure 4.2) provides an indication of where the structures associated with the Project will be located. Immediately west of the site, adjacent to the boundary, is the mouth of the River Tawe and to the east of the site, is the River Neath.
- 4.2.0.3 Figure 4.2 provides an indication of the Project and the wider extent to the mouth of the River Neath related to the cable and grid connection at Baglan Bay substation.

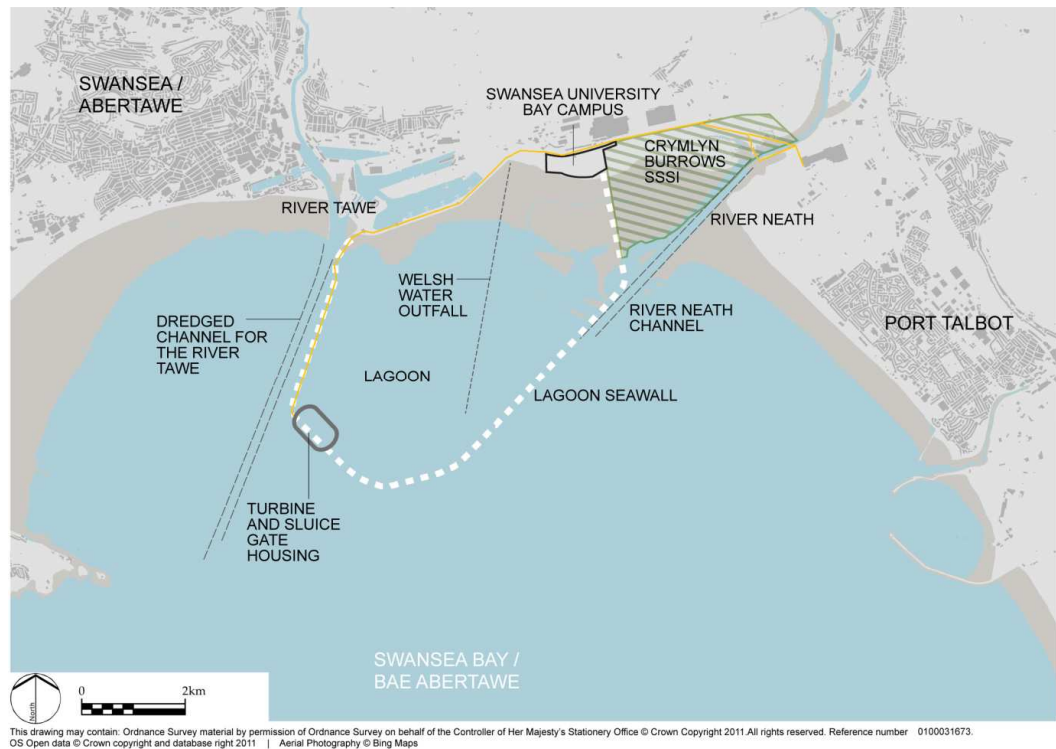


Figure 4.2: The Project

- 4.2.0.4 The Lagoon will enclose part of Swansea Bay, from the eastern side of the River Tawe (western landfall) to the eastern edge of the new Swansea University Bay Campus (SUBC) (eastern landfall). The new seawalls that impound the Lagoon will extend approximately 1.5km directly offshore from the campus, adjacent to Crymlyn Burrows SSSI. The seawalls will then extend in a southwest direction along the western boundary of the training wall of the River Neath Channel. A turbine and sluice gate housing will be located in the south west of the Lagoon, at an oblique angle to the dredged channel of the River Tawe. At this location an operation and maintenance, and visitor, facility will be located. The seawall will then extend north towards Swansea Port, close to the mouth of the River Tawe parallel but off set by 100m to the dredged channel for the River Tawe. In total, this will form an approximately 9.5km-long, U-shaped, seawall which will encompass approximately 11.5km² of the seabed, foreshore and intertidal area of Swansea Bay.

4.3 Access

- 4.3.0.1 Vehicle access for both the construction and operational phase of the Project will be via the Fabian Way/Langdon Road/Park & Ride junction. At the roundabout to the south of this junction, traffic will turn east along Langdon Road. From the eastern end of Langdon Road a new road to link to the south side of the Port and Queens Dock will be

provided, and a new coastal access road extending to the western landfall of the Lagoon, as shown in Figure 4.3 below. From Langdon Road the route will turn south and then east, running parallel to and immediately north of the existing port access road, up to the boundary of the Dwr Cymru Welsh Water Waste Water Treatment Works (WWTW). From here, the existing Port road will be moved south and the Lagoon access road will continue past the entrance to the WWTW. At a distance of approximately 50m east of the entrance to the WWTW the Lagoon access road will turn south, cross the Port access road, and extend west along the south of Queen's Dock. A new port security entrance will be created with the existing security hut relocated to the west of the proposed Lagoon access road. Access to the Port will remain from Baldwin's Bridge junction.

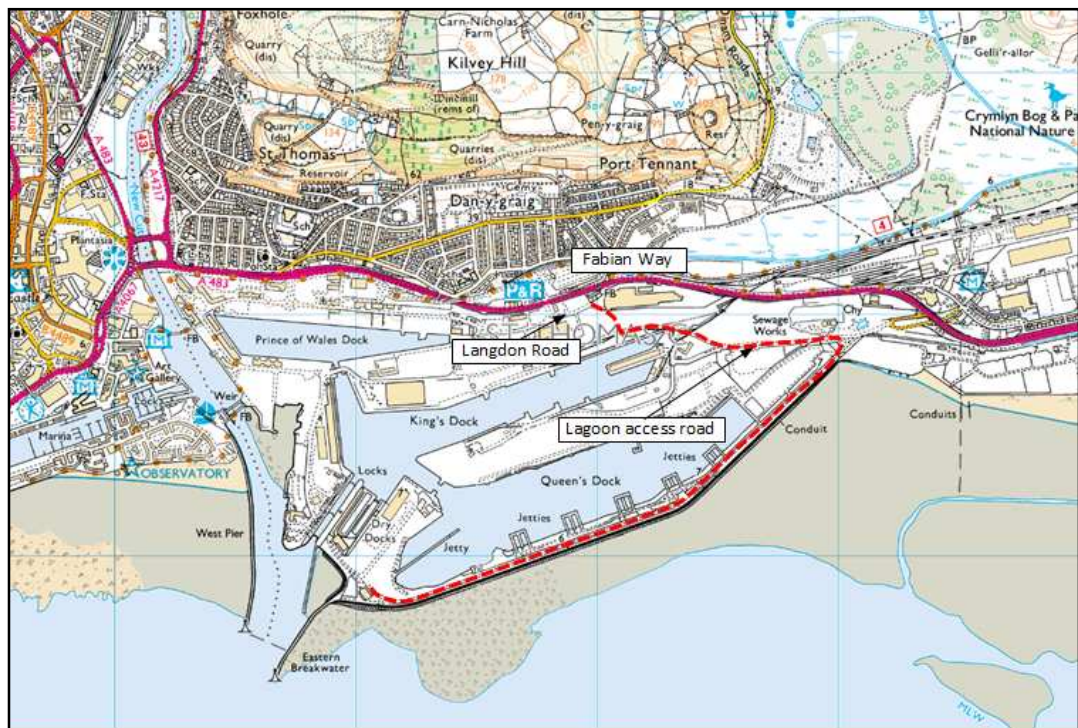


Figure 4.3 Vehicle access

- 4.3.0.2 Once the Lagoon access road has crossed the Port road there will be a drop off point and turning area allowing pedestrians and cyclists to join the footpath and cycleway to the eastern landfall. The Lagoon access road will extend along the south side of Queen's Dock and utilise the alignment of the existing Port road. A new Port road will be constructed immediately north of the Lagoon access road, separated by a secure fence and swale. In this way, existing operations at the Port will not be affected by the development.
- 4.3.0.3 The new Lagoon access road will also include facilities for pedestrians and cyclists along its entire length in the form of a Shared Use Path (SUP). In order to be convenient, attractive and safe to potential users the proposed SUP will be 3m wide, flat and, for the vast majority of its route, segregated from the vehicular carriageway by a 1m wide grass separation strip. A new footpath/cycleway will be created south of Langdon Road to link the existing footpath from SA1 to the start of the Lagoon access road. A small section of the SUP along Langdon Road will not be segregated due to unavoidable land constraints.

- 4.3.0.4 At its southern end, the SUP will link up with the circular shared use path that will run atop the Lagoon seawall. The SUP will also link up with a separate SUP to the east, providing a continuous link for pedestrians and cyclists between the Lagoon visitors centre and the Swansea University Bay Campus (SUBC). The proposed SUP supports a Sustrans aspiration to consider improvements to the National Cycle Network route 4 away from Fabian Way.
- 4.3.0.5 Under the current design the WWTW, which is currently accessed via Baldwin's Crescent and the main entrance to the port, would be accessed via Langdon Road and the Lagoon access road.
- 4.3.0.6 The junction arrangement where the Lagoon access road crosses the existing Port road will be designed to prevent traffic on the Lagoon access road from accessing Fabian Way at Baldwin's Bridge, and also prevent traffic from accessing the Lagoon or Langdon Road via Baldwin's Bridge and the Port road. Signage will also be employed at the entrance to the Lagoon access road/Fabian Way Junction 3 to ensure that extraneous traffic is not attracted. Exceptional loads arising during construction may access the Lagoon site via Junction 4 if necessary.
- 4.3.0.7 The proposed access seeks to ensure that vehicle speeds are minimised by limiting the road width to 5.5m. Speed along the access road will also be regulated through the use of speed signs.
- 4.3.0.8 A temporary construction route will be provided from the new Lagoon access road to the site compound utilising existing carriageway where possible. An emergency vehicle access will also be provided from the new Lagoon access road to the eastern landfall.
- 4.3.0.9 Bus stops will be provided at the western landfall of the lagoon seawall to enable bus service departures and arrivals. The viability of a shuttle bus service between the existing Park & Ride facility on Fabian Way and the Western Landfall will be investigated and may be integrated with the shuttle bus proposed to serve the offshore visitor centre. It is envisaged that the operating hours and frequency of any service found to be viable will be tailored to match demand from visitors.
- 4.3.0.10 Facilities are proposed to support a water shuttle service. This would facilitate a link from the existing pontoon on the west side of the Tawe to a location adjacent to the Lagoon western landfall.

4.4 Parking

- 4.4.0.1 Car parking provision at the western landfall building will be as follows:
 - i. 304 spaces for visitors, including 33 disabled bays
 - ii. 28 spaces for staff, including 5 disabled bays
- 4.4.0.2 Since access to the Offshore Building incorporating the visitor centre will be on foot or by a shuttle bus provided by TLSB, car parking provision at the Offshore Visitor Centre will be as follows:
 - I. 27 spaces for staff, including 3 disabled bays

4.4.0.3 Cycle parking for staff has been based on provision of one space per 10 employees, in line with CCSC parking standards. There is expected to be a total of 73 staff (including Visitor Centre staff and O&M staff), and therefore 8 staff cycle parking spaces will be provided. For visitors a total of 100 cycle parking spaces will be provided. Cycle parking will be distributed across the site as follows:

- i. Offshore building - 12 spaces
- ii. Western arm - 30 spaces
- iii. Western landfall - 56 spaces
- iv. Eastern landfall - 10 spaces.

5.0 Existing Transport Facilities

5.1 Local Highway Network

5.1.0.1 Fabian Way is an arterial road which forms part of the A483, connecting Swansea city centre with the M4 motorway at Junction 42. It is the main route into Swansea from the surrounding area and for traffic from further afield. It is approximately 7.6 km long and cuts through the centre of Crymlyn Burrows in the unitary authority areas of Swansea and Neath Port Talbot. Fabian Way is a dual carriageway for its whole length. The speed limit is 30 mph between Swansea city centre and Port Tennant, after which the speed limit rises to 50 mph until the Jersey Marine roundabout. The road is a standard national speed limit dual carriageway between Jersey Marine and the junction with the M4.

5.1.0.2 Access to the site during the operational phase will be via the Fabian Way/Langdon Road/Park & Ride access signalised junction. This junction provides access to a Park and Ride facility to the north and the former main Port of Swansea entrance to the south.

5.2 Public Transport

5.2.0.1 Bus services operate regularly in the vicinity of the site, with 11 services operating along Fabian Way, Elba Crescent or Baldwin's Crescent. All of these services start from Swansea Bus Station and travel between Swansea and various towns and villages to the east. Service 7 which runs between Swansea Bus Station and Swansea Marina.

5.2.0.2 The services are summarised in Table 5.1 below.

Table 5.1 Bus services

Service No.	Operator	Route	Frequency		
			M - F	Sa	Su
7	First	City centre - Swansea Marina	Hourly	Hourly	-
44	First	Swansea - SA1 - Grenfell Park	Hourly	Hourly	-
156	SBAC	Swansea – Neath	-	-	6 / day
157	First	Swansea - SA1 - Elba Crescent – Neath	Hourly	Hourly	-
158 / X58	First	Swansea - SA1 - Elba Crescent – Banwen	Hourly	Hourly	Hourly
224	First	Swansea - SA1 - Elba Crescent - Porthcawl	Hourly	Hourly	-
X1	First	Swansea - Elba Crescent - Neath - Port Talbot - Bridgend	2 / hour	2 / hour	-
X3	First	Swansea - Elba Crescent - Port Talbot - Maesteg	Hourly	Hourly	-
X5	First	Swansea - Neath – Glynneath	2 / hour	2 / hour	-
X6	SBAC	Swansea – Neath	Hourly	-	-
X63 / X64	First	Swansea - SA1 - Neath - Ystradgynlais	Hourly	Hourly	-
X75	FC5	Swansea - Neath - Glynneath - Hirwaun - Merthyr Tydfil	4 / day	6 / day	-

- 5.2.0.3 The nearest bus stops to the site are illustrated in Figure 5.1 below. The site can be accessed from bus stops at two locations. The first is on Fabian Way close to the Park & Ride junction, near the junction with Wern Terrace. These stops are approximately 3.7km from the western landfall, via Bevans Row and the new Lagoon access road. There is a pedestrian overbridge crossing Fabian Way providing access to the eastbound stop. The second location is near the SUBC, to the east of Baldwin's Bridge junction. The bus stop near the SUBC is approximately 950m from the perimeter cycle and footpath that will run around the Lagoon, approximately 3.3km from the western landfall, and is presently accessed from Fabian Way via Baldwin's Bridge.
- 5.2.0.4 An average walking speed of approximately 1.4 m/s is generally assumed for pedestrians. This equates to approximately three miles per hour. The western landfall is therefore a 44 minute walk from the bus stops close to Junction 3. From the bus stops near the SUBC site it is an 11 minute walk to the perimeter cycle and footpath, and a 39 minute walk to the Western Landfall.

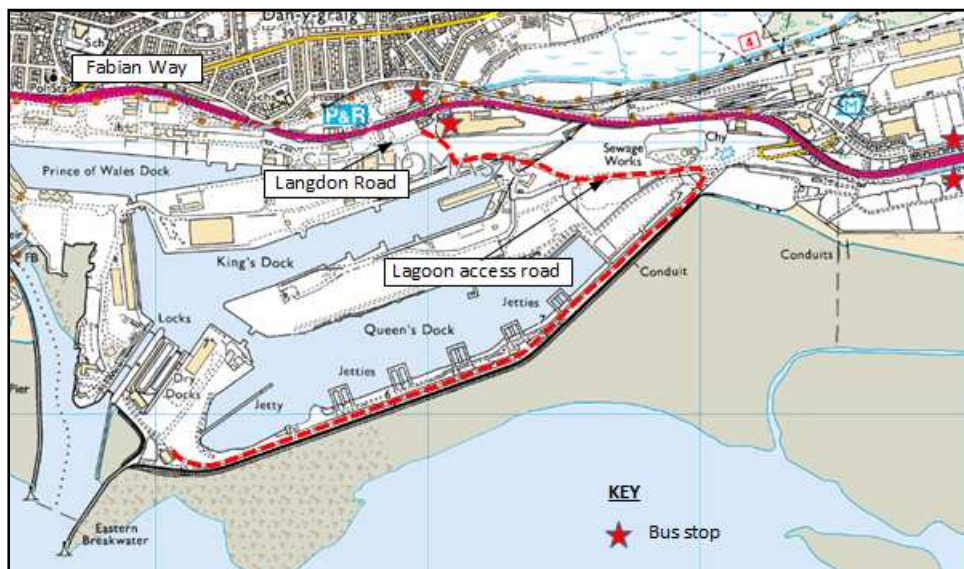


Figure 5.1 Bus stop locations

- 5.2.0.5 A Park & Ride facility is located just to the north of Fabian Way at Junction 3, at the same location as the first bus stop identified above. Service 502, operated by First, runs every 12-15 minutes between 07:00-19:07 on Monday to Saturday between the Park & Ride site and the city centre. The Park & Ride site has 550 parking spaces, including 23 disabled bays, and is open from 06:45-19:30.

5.3 Pedestrian and Cycle Facilities

- 5.3.0.1 There is a cycle path running along the southern side of Fabian Way between Kings Road and the junction with Port Tennant, which forms a section of both National Cycle Network route 4 (NCN 4) and the Swansea to Glyncorrwg Loop. NCN 4 provides links between Swansea, Neath, Briton Ferry, Port Talbot and several local villages.
- 5.3.0.2 To the east of the Port Tennant junction the cycle path continues running adjacent to the southern side of Fabian Way and then crosses to the north via the pedestrian/cycle and bus bridge linking to the Park and Ride facility. The cycle path runs to the north of the Park & Ride site to Wern Terrace. It is then signed along a short section on Wern Terrace to the north side of Fabian Way, where it continues east to Baldwin's Crescent.

- 5.3.0.3 NCN 4 is signed along Baldwin's Crescent and Elba Crescent until re-joining the north side of Fabian Way. It continues east to the Jersey Marine roundabout where it turns north to join Ffordd Amazon.
- 5.3.0.4 To the east of the Baldwin's Bridge junction the footpath on the south side of Fabian Way is wide and is also used as a cycle path. The path narrows as it approaches the westbound offslip at the junction, where there is an uncontrolled crossing point. This wider section is the subject of a cycle link project being promoted by NPTCBC which extends cycle provision off Fabian Way and on to the road that provides access to the Port at the Baldwin's Bridge junction.
- 5.3.0.5 From the Tawe Bridges junction the cycle path runs south alongside King's Road towards Prince of Wales Dock, where it then crosses the river via a pedestrian/cycle bridge using the Wales Coastal Path route over the Trafalgar Bridge and National Route 4 over the Sail Bridge, and on towards South Dock in the Maritime Quarter and Swansea town centre.
- 5.3.0.6 The wider road network of the SA1 development is subject to a Section 38 Agreement and as such the port road network is not presently adopted. The SA1 road network (Langdon Road) extends to meet the proposed site boundary and the Lagoon access road and associated pedestrian and cycle route improvements proposed as part of the Project.

6.0 Delivering the Plan

6.1 Travel Plan Coordinator

- 6.1.0.1 A successful Travel Plan needs commitment from staff at all levels. TLSB will appoint a Travel Plan Coordinator, who will have the authority to implement the Plan with the support of senior management.
- 6.1.0.2 The Travel Plan Coordinator will be responsible for organising, delivering and reporting the detailed aspects of the Travel Plan, including the following:
- i. Securing the commitment and support of senior management and other staff;
 - ii. Promoting the objectives and benefits of the Travel Plan;
 - iii. Creating and maintaining a database of car sharers within the company;
 - iv. Assisting with the establishment of clear, realistic and monitorable targets for the use of alternative modes of travel;
 - v. Monitoring the progress achieved towards the Travel Plan targets;
 - vi. Providing feedback to senior management on the success of the Travel Plan;
 - vii. Acting as the point of contact for information and for exchanging ideas and best practice with other organisations; and
 - viii. Any other transport and travel related issues and concerns that may arise from time to time.
- 6.1.0.3 The Travel Plan Coordinator will meet with representatives of CCSC at least once a year to review progress in achieving the objectives of the Travel Plan and consider actions which may be necessary. If targets are not being met and a need for corrective action is identified, the Travel Plan Coordinator may meet more regularly. Targets will only be modified with prior written agreement of CCSC.

7.0 Travel Plan Initiatives

7.1 Travelling by Car

7.1.0.1 In recognition of the fact that travelling by car is sometimes the only realistic option, particular attention will be given to the encouragement of car sharing. A database of staff willing to car share will be created and employees at the site will be encouraged to submit their names for car sharing. All new employees will be given the opportunity to join the scheme and the database will be reviewed on a regular basis to ensure it is kept up to date. The database will identify individual travel patterns and make the opportunity for car sharing more visible.

7.1.0.2 As part of the national Liftshare network, there is also an established car sharing scheme in the area called Liftshare Wales. The scheme allows individuals to register as a member and provide their journey details on the website for free. This will provide scope for car sharing to take place with individuals employed at other locations.

7.1.0.3 To maximise the potential for car sharing at the proposed development the following measures will be undertaken:

- i. Provide guaranteed and convenient spaces for car sharers (staff and visitors);
- ii. Provide an emergency 'get you home' service in the event of emergency/sickness for staff not travelling to work in their own car;
- iii. Promote Liftshare Wales and provide the website address and details of membership registration to employees;
- iv. Provide practical advice on car sharing;
- v. Promote the potential financial savings that employees will make by sharing their car;
- vi. Provide space on general notice boards for potential car sharers to communicate; and
- vii. Agree clear and realistic targets for car sharing.

7.1.0.4 Car parks will be laid out to provide allocated spaces for staff who participate in the car sharing scheme. These will be conveniently located and will be monitored regularly to ensure compliance with the scheme. The number of spaces set aside for car sharers will be reviewed regularly and additional car share spaces will be allocated in line with demand.

7.2 Public Transport

7.2.0.1 The site can be accessed from bus stops at two locations. The first is on Fabian Way close to the Park & Ride junction, near the junction with Wern Terrace. These stops are approximately 3.7km from the western landfall, via Bevans Row and the new Project access road. There is a pedestrian overbridge crossing Fabian Way providing access to the eastbound stop. A high quality pedestrian route will be provided along the new lagoon access road. Based on a walking speed of 1.4 m/s the western landfall is a 44 minute walk from the bus stops near Wern Terrace.

- 7.2.0.2 The second location is near the SUBC, to the east of Baldwin's Bridge junction. The bus stop near the SUBC is approximately 950m from the perimeter cycle and footpath that will run around the Lagoon, approximately 3.3km from the western landfall, and is presently accessed from Fabian Way via Baldwin's Bridge. From these bus stops it is an 11 minute walk to the perimeter cycle and footpath, and a 39 minute walk to the Western Landfall.
- 7.2.0.3 Facilities are proposed to support a water shuttle service. This would facilitate a link from the existing pontoon on the west side of the Tawe to the Lagoon western landfall. The proposal includes upgrading the existing pontoon onto the existing attachments. Bus service no. 7 provides an hourly service between Swansea Bus Station and Swansea Marina, from Monday to Saturday.
- 7.2.0.4 To encourage the use of public transport the Travel Plan Coordinator will:
- I. Publicise existing local transport services and travel information for staff;
 - II. Provide details for internet access of public transport information and identify sites that have local information;
 - III. Where practicable provide access to real time bus information; and
 - IV. Provide an emergency 'get you home' service in the event of emergency/sickness for staff travelling by public transport.

7.3 Cycling

- 7.3.0.1 As part of the development the following will be provided:
- i. Secure and well lit cycle parking facilities for visitors and staff; and
 - ii. Changing/showering facilities for staff.
- 7.3.0.2 In addition, in order to encourage cycling, the following measures will be considered:
- I. Promote "bike to work" days;
 - II. Publicise the health benefits of cycling; and
 - III. Provide an emergency 'get you home' service in the event of emergency/sickness for staff travelling to work by bicycle.

7.4 Walking

- 7.4.0.1 To encourage walking the following actions will be undertaken:
- i. Publicise the health benefits of walking;
 - ii. Produce maps showing recommended walking routes from local bus stops and nearby residential areas; and
 - iii. Provide an emergency 'get you home' service in the event of emergency/sickness for staff that walk to work.

7.5 Tidal Lagoon Website

7.5.0.1 One of the most important aims of a Travel Plan is to provide information to staff and visitors of the alternatives to using the car on their own to travel to the Lagoon. In order to provide detailed information in an easy to use and accessible format, the Travel Plan Coordinator will be responsible for ensuring that up-to-date travel information is provided on the Tidal Lagoon website, including the following:

- i. Travel Plan news;
- ii. Information on travel initiatives;
- iii. Public transport timetable information and links to public transport ticket ordering websites;
- iv. Details of safe walking and cycling routes to the site;
- v. Portal to the site's car sharing database;
- vi. A link to the Liftshare Wales website;
- vii. Links to local cycling groups; and
- viii. Details of local taxi companies and if appropriate, links to their websites.

7.5.0.2 This information will be available to staff through their computer terminals and, where appropriate, via communal IT facilities located in reception or rest areas. A communal IT facility would offer the opportunity for visitors to obtain information on sustainable travel to the site. There will also be access to this information for the general public via the Lagoon web site so far as appropriate.

7.6 New Employees

7.6.0.1 All new employees will be made aware of the existence of the Travel Plan, and will be issued with an induction pack on or before the first day of working at the site and will be encouraged to submit their names to the car sharing scheme. The induction pack will include details of the Travel Plan and information on sustainable travel. The Travel Plan Coordinator will be responsible for assembling all the relevant information to be included in the induction packs.

8.0 Monitoring and Review

8.1 Travel Survey - Staff

- 8.1.0.1 One of the prime objectives of a Travel Plan is to set clear and realistic targets. This will be achieved through undertaking a travel survey of all employees no later than three months after occupation. The travel survey will provide the baseline information from which mode share targets can be established.
- 8.1.0.2 Once the results of the travel survey are known the target will be reviewed for the number of employees travelling to work as single occupancy car drivers. In setting the targets a balance will need to be struck between local circumstances, including employee residence locations, public transport accessibility and the achievability of each target. The targets will be set in consultation with CCSC and will be included within future updates of the Travel Plan.
- 8.1.0.3 At this stage an indicative target has been set to ensure that there is a commitment to achieve a reduction in single occupancy car trips over the first five years. This target will be reviewed once the results of the travel survey are known.
- 8.1.0.4 The target has been informed by the mode split information taken from the 2011 Census Journey to Work data for the daytime population in the St Thomas ward in which the site is located.
- 8.1.0.5 Table 8.1 below displays the initial modal split and the target modal split for the Lagoon staff. Over the first five years of occupation the target is to achieve a 10% reduction in single occupancy car trips measured against the initial modal split. To offset the target reduction in single occupancy car trips, the proportions of staff travelling by bus, motorcycle, bicycle, on foot or as car passengers have been increased pro rata.

Table 8.1 Target Mode Split - Employees

Mode of Travel	Initial Mode Split	Target Mode Split
Train	1.2%	1.2%
Bus/minibus/coach	3.0%	4.0%
Taxi	0.0%	0.0%
Car – driver	75.5%	68.0%
Car – passenger	7.3%	9.7%
Motorcycle/scooter/moped	1.3%	1.7%
Bicycle	1.2%	1.6%
On foot	10.1%	13.4%
Other	0.5%	0.5%
TOTAL	100.0%	100.0%

8.2 Travel Survey - Visitors

8.2.0.1 The Travel Plan is also aimed at influencing visitor travel behaviour. In order to establish the mode of travel of visitors to the Lagoon, visitor travel surveys will be undertaken. The form of the visitor travel survey will be agreed with CCSC, but could be undertaken in the following ways:

- i. Sample survey – for example, face to face surveys of a sample of visitors, asking how they travelled to the site, and if they travelled by car whether there is anything that would encourage them to travel by sustainable means in the future;
- ii. Counts – assessing the mode of travel by undertaking counts at strategic locations (e.g. car park entrance, shuttle bus drop off, cycle parking, etc.); and
- iii. Questionnaires – providing visitors with questionnaires to be answered either before leaving or at home and returning by post.

8.2.0.2 Once the results of the visitor travel survey are known a target will be set for the proportion of visitors travelling by car. The targets will be set in consultation with CCSC and will be included within future updates of the Travel Plan.

8.2.0.3 At this stage no target has been set, as it is difficult to estimate the initial mode split with any certainty. For information, the visitor mode split assumed in the Environmental Statement to analyse impacts on the highway network during the operational phase is presented in Table 8.2 below.

Table 8.2 Assumed Mode Split - Visitors

Mode of Travel	Assumed Mode Split
Train	0.0%
Bus/minibus/coach	5.0%
Taxi	0.0%
Car – driver	40.0%
Car – passenger	40.0%
Motorcycle/scooter/moped	0.0%
Bicycle	5.0%
On foot	10.0%
Other	0.0%
TOTAL	100.0%

8.3 Review

8.3.0.1 It is important that the Travel Plan is monitored on a regular basis to ensure that the key objectives are being met and that the Plan evolves to adapt to changing circumstances. At this stage unrealistic targets can be replaced with ones that are more realistic and that encourages rather than discourages those responsible for trying to achieve the targets. The success of the actions contained within the Travel Plan can also be reviewed, and modified as necessary.

- 8.3.0.2 The staff travel survey will be repeated on a regular basis in order to measure the success of the Travel Plan and progress towards targets. The results of the staff travel survey will then be used to modify the targets and actions contained within the Travel Plan to ensure that the Travel Plan is an on-going process. By continually reviewing the plan it will help to develop and improve it and ensure that the measures introduced are consistent with TLSB's requirements.
- 8.3.0.3 TLSB will prepare a report on an annual basis summarising the main findings from the monitoring and identifying the main issues that have arisen during the previous year. The structure of the monitoring report will be agreed with CCSC.

9.0 Action Plan

9.1 Outline Timetable

- 9.1.0.1 A timetable for the ongoing monitoring and review of the Travel Plan has been produced, detailing the key elements of the process and the approximate timescales. This is shown in Table 9.1 below.

Table 9.1 Action Plan Timetable

Action	Timescale
Appoint Travel Plan Coordinator	No later than 3 months prior to opening
Undertake initial staff travel survey	Within 3 months of opening
Produce baseline staff travel information and set target for reduction in single occupancy car drivers.	Within 1 month of completing staff travel survey
Undertake visitor travel survey	During first summer after opening
Finalise Travel Plan and submit to CCSC for approval	Within 6 months of opening
Undertake follow-up travel surveys to measure success of Travel Plan and report findings to CCSC. Review Travel Plan and amend as necessary.	Annually for a period of at least 5 years

- 9.1.0.2 As with all elements of the Travel Plan process, these timescales are not prescriptive, but should be modified according to circumstances to ensure that they allow TLSB to produce a Travel Plan that benefits the company and all associates, and remains relevant throughout.
- 9.1.0.3 The Travel Plan Coordinator will remain in place beyond the monitoring period, in order to continue the promotion and implementation of sustainable travel measures, and ensure that the success of the Travel Plan in changing travel habits is maintained.