

# Data Review

*Prepared for*

States of Guernsey

DOCUMENT REF: 684723-CH2-SOC-00-RP-0001

SOG DOCUMENT REF: GHSP-1A-DI-CH2-D1-003



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# Document History

**Reference Number:** 684723-CH2-SOC-00-RP-0001

**SoG Reference Number:** GHSP-1A-DI-CH2-D1-003

**Client Name:** States of Guernsey

This document has been issued and amended as follows:

Version	Date	Description	Created By	Verified By	Approved By
A	04 Feb 2017	Draft for SoG Comment	[REDACTED]	[REDACTED]	[REDACTED]
1	17 Feb 2017	Final	[REDACTED]	[REDACTED]	[REDACTED]

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# Acronyms and Abbreviations

SOG	States of Guernsey
SOC	Strategic Outline Case (also known as Programme Business Case)
OBC	Outline Business Case
FBC	Full Business Case
IDP	Island Development Plan
SLUP	Strategic Land Use Plan
GHSP	Guernsey Hydrocarbon Supply Programme
LOLO	Load On Load Off
SPM	Single Point Mooring
QRA	Quantified Risk Assessment
HFO	Heavy Fuel Oil
SOP	Strategic Outline Programme
ITT	Invitation to Tender



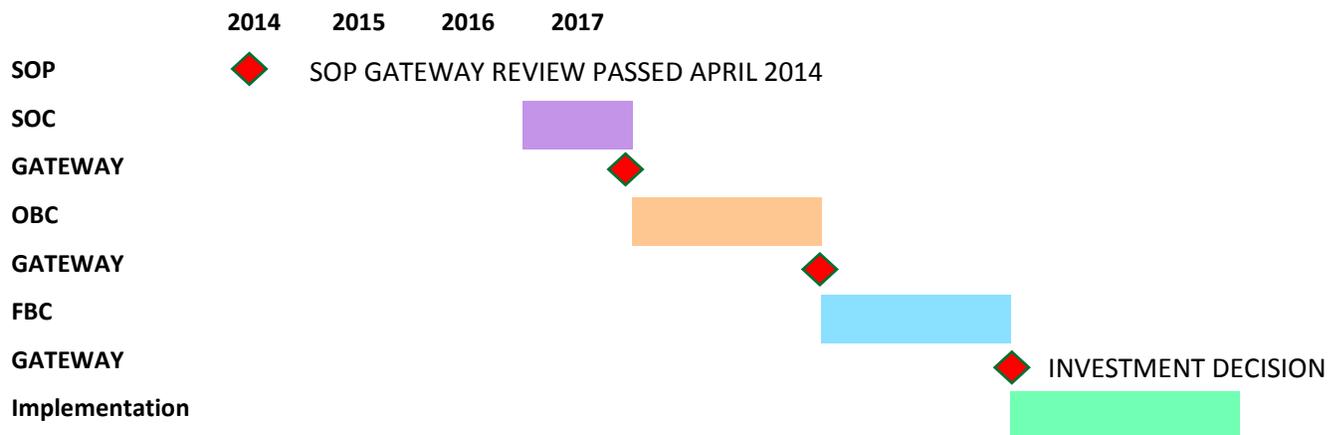
# Purpose

The purpose of this report is to summarise the data currently available to the GHSP and its suitability as input data. The report also considers where there may be gaps in that data. The document considers both publically available data and information provided by the States of Guernsey (SoG) for this programme.

The Guernsey Hydrocarbon Supply Programme will follow the Managing Successful Programmes method progressing through the following stages and associated gateway reviews:

- SOP Strategic Outline Programme / Gateway Review  
*Level of design – a longlist of options developed at high level*
- SOC Strategic Outline Case (also known as Programme Business Case) / Gateway Review  
*Level of design – a selected option including the location of any new facilities (e.g. pipelines, harbours, storage tanks etc) and basic description of the works such that a +/- 40% cost estimate can be obtained.*
- OBC Outline Business Case / Gateway Review  
*Level of design – preferred option from SOC phase developed to sufficient detail that a +/- 15% cost estimate can be obtained and that a tender package can be issued against which contractors could provide a lump sum estimate.*
- FBC Full Business Case  
*Level of design – 90% design complete and lump sum bids obtained from contractors.*
- Investment Decision Gateway Review
- Implementation
- Realise Benefits

The stages are indicated below. It should be noted that the durations of OBC, FBC, Implementation are unknown at this stage and are dependent on the outcome of the SOC stage.



The current stage of the project is SOC. This document summarises the data available at the outset of the SOC stage and its suitability as input data to achieve the SOC objective. The SOC objective / final deliverable is a recommendation of a preferred solution to meet the programme vision.

Programme Vision:

A safe and secure hydrocarbon supply delivering socio-economic value to Guernsey.

This report also identifies where data/information is not suitable and/or where there are gaps in the data/information that may affect the successful delivery of the SOC objective.

Recommendations are included for addressing areas of insufficient data and for further studies / future data requirements to progress beyond the SOC stage and through the OBC stage.

To align with the supply chain components the data review is split into the five components of the supply hydrocarbons supply chain:

- Refining - from the refinery to the point at which the product leaves the refinery property limit (e.g. port limit in the case of shipping, road network in the case of road transport etc).
- Transport – from port limit to port limit in the case of shipping or landfall points at either end of a pipeline.
- Uploading – from port limit (or landfall point in the case of a pipeline) until the product enters the tanks
- Storage – storage facilities
- Distribution – from the storage facilities to the end user (i.e. power station, petrol stations, airport etc)

# Summary of Data

## 2.1 Data Provided by SoG

SoG have provided a significant amount of data/information relevant to the hydrocarbons supply chain. As previously noted the data/information is a combination of SoG Policy documents and records from SoG archives relating to infrastructure projects / studies. The following sections of this report summarise the data/information provided.

### 2.1.1 SoG Billet D'Etat

It should be noted that Billet D'Etat are publically available on the States of Guernsey website ([www.gov.gg](http://www.gov.gg)). The SoG programme team have provided links to Billet D'Etat relevant to the supply of hydrocarbons to the island and/or those relevant to the future forecasting of demand and associated infrastructure planning. The Billet D'Etat are policy documents. The hydrocarbons programme must be developed in accordance with the requirements of the current documents. The following table summarises the Billet D'Etat provided:

Table 1. Billet D'Etat

Year	Billet D'Etat Number	Description / Sections
1993	XIII	Harbour of St Sampsons – Land Reclamation and Development of Deep Water Berths p.605
1988	XX	Harbour of St Sampsons – Land Reclamation and Development of Deep Water Oil and Gas Tanker Berths p.802
1999	XV	Land Reclamation and redevelopment of deep water berths p.692 (Attachment: Marine Operations Review, 1998)
2005	XX	Electricity Generation Investment Options for Guernsey, p. 2452.
2008	VIII & Resolutions	Energy Policy, p. 748
2009	IV	Security Of Fuel Supplies And Purchase Of Tankships
2012	III & Resolutions	Energy Policy Plan, p. 107
2013	XV	Coastal Defence Flood Studies p.1187
2014	XII & Resolutions/Amendment	Guernsey Electricity Supply - Future Strategy, p. 1199
2015	XXI & Resolutions	The Organisation of the States Affairs

In 2016 the States Review Committee recommended a series of changes to the organisation of States' affairs, which were accepted by the States of Deliberation. The resulting changes to Guernsey's Machinery of Government were implemented in May 2016.

In November 2016 the SoG Policy & Resources Plan Phase 1 was issued which set high level objectives and aspirations for Guernsey.

Phase 2 of the Policy & Resources Plan is under development and will see the six Principal Committees draw up their Committee policy plans, setting out the actions they intend to pursue over the short and medium term to fulfil the objectives agreed in phase one. This is due to be debated at the States Debates in June 2017.

## 2.1.2 SoG Island Development Plan

The Island Development Plan (IDP) was published in November 2016. The IDP was prepared by the SoG *Development & Planning Authority*. The IDP sets out the land planning policies for the whole island in a single document. IDP is publically available on the SOG website.

The IDP includes six main purposes (Source: IDP, 2016, Section 1.2.1):

- i. Manage the physical environment so as to facilitate the delivery of the States of Guernsey Strategic Objectives that require the use of land as set out in the Strategic Land Use Plan (SLUP).
- ii. To ensure that development is carried out in such a way as to appropriately balance the social, economic and environmental objectives of the States of Guernsey.
- iii. To provide the policy framework for the determination of planning applications.
- iv. To encourage suitable development on appropriate sites.
- v. To conserve and enhance the best of Guernsey's physical environment.
- vi. To help guide public and private investment in relation to land planning.

The SLUP includes a map of Guernsey outlining land uses and designations throughout the Island.

## 2.1.3 Digimap Guernsey

Digimap Guernsey specialises in creating mapping solution and providing digital maps of Guernsey, Alderney, Sark and Herm. Following discussions with Digimap in early January 2017 it is understood that Digimap are able to provide the following information:

- i. Georeferenced (to Guernsey local grid) mapping tiles for use in AutoCAD © or other drawing software
- ii. Georeferenced (to Guernsey local grid) aerial photography
- iii. Georeferenced (to Guernsey local grid) topography
- iv. Historical mapping
- v. Road designations
- vi. Location of electricity services/utilities
- vii. Water / sewage / communications / gas utilities (sourced from utilities companies)

This information can only be used under licence. The Hydrocarbon Programme will annually purchase a licence that allows use of the data by all suppliers and subcontractors to the programme.

## 2.1.4 Current Infrastructure Projects

### 2.1.4.1 Infrastructure Project for Implementation of the Solid Waste Strategy

SoG are currently developing a major infrastructure project for the management of solid waste. The proposed site for the new infrastructure is the southern end of the Longue Hougue reclamation on the eastern seaboard.

SoG have provided a general arrangement drawing of the proposed site and infrastructure showing its location on the Longue Hougue reclamation site.

### 2.1.4.2 Inert Waste Project

SoG are currently evaluating potential sites for the disposal of inert waste. Inert waste is currently used for the Longue Hougue reclamation however, this site is nearing capacity and hence a new site is required.

SoG have provided an extract from the ITT for the EIA scoping study for the shortlisted sites which are all on the eastern seaboard:

- i. Black Rock
- ii. Longue Hougue South
- iii. East of St Peter Port Harbour

### 2.1.4.3 Flood Defence

SoG have commissioned studies to assess the extent of flooding for a number of scenarios assuming the current flood defences. These studies have concluded that a rolling programme of flood defence infrastructure implementation is required over the coming decades. A Billet D'Etat detailing these flood defence studies was presented to the States in 2013.

## 2.1.5 Recently Completed Infrastructure Projects

### 2.1.5.1 Belle Greve Sea Outfall Replacement Project

In 2015 Guernsey Water completed the construction of two new sea outfalls in Belle Greve Bay to the south of Longue Hougue.

SoG have provided as constructed information from Guernsey Water which includes general arrangement information for the sea outfalls, a nearshore ground investigation and localised bathymetric survey data.

## 2.1.6 Ground Investigation Information

A number of ground investigation reports have been provided and are presented in the table below:

**Table 2. Ground Investigation Reports**

Year	Description	Originator
1985	St Peter Port Harbour Site Investigation for Proposed Harbour Development (Report Reference D85223) Berths 5 & 6 Borehole Location Plan (Drawing Reference D85223.1)	OSIRIS Seaway
1998	Site Investigation For Pumping Station and Fire Main (Report Reference 1748)	Frederick Sherrell
2010	Site Investigation for Berth 5 Reconstruction (Report Reference F15737/F01)	Norwest Holst
2014	Site Investigation for Belle Greve Sea Outfall Replacement Project (Boreholes Logs – Job Number 1405)	Geomarine

## 2.1.7 Previous Port Planning Studies

The function and location of St Peter Port Harbour and St Sampson Harbour have been the subject of a number of studies commissioned by SoG. Proposal for the development of deepwater berths at St

Sampson were presented to the States in 1993 and have been revisited in 1998, 2001, 2010 and 2013. The data / information provided by SoG in relation to these studies is presented in the table below:

**Table 3. Previous Port Planning Studies**

<b>Year</b>	<b>Description</b>	<b>Originator</b>
1991	Port Development at St Sampson Guernsey, Feasibility Study (Report Reference EX2099)	HR Wallingford
1993	Harbour of St Sampson Land Reclamation and Development of Deep Water Berths	Billet D'Etat XIII, SoG
1998	Marine Operations Review	Board of Administration, SoG
2001	Hydraulic Model Studies of a Proposed Harbour Development (Report Reference EX4184)	HR Wallingford
2010	Future Harbour Requirements Study (Report Reference: DRSSPP/FHRS)	Halcrow Group Limited
2013	Guernsey Ports Master Plan (No Report Reference)	Moffatt and Nichol

The previously completed port planning studies have been considered options for either the development of St Sampson or St Peter Port or both for differing uses. The options presented vary significantly in scale and investment requirement. Some of the proposals for St Peter Port Harbour have been implemented in recent years, since 2011. Options for the redevelopment of St Sampson have not progressed beyond the feasibility study stage.

### 2.1.8 Metocean / Geophysical / Bathymetric Surveys

A number of metocean / geophysical and bathymetric surveys / studies have been completed as part of SoG studies and / or infrastructure projects. These have been provided by SoG and are presented in the table below.

**Table 4. Previous Metocean / Geophysical / Bathymetric Surveys**

<b>Year</b>	<b>Description</b>	<b>Originator</b>
1989	Belle Greve Bay Hydro Geophysical Investigation (Report Reference D88148)	OSIRIS Seaway Limited
XXX	Wave Recording 20/10/1988 – 01/05/1990 (Report Reference EX2149)	HR Wallingford
2014	Belle Greve Sea Outfall Replacement Project - As Constructed Records (Drawings PB2865-AB-111 Rev AB2, 201 Rev AB2, 202 Rev AB3)	Van Oord
2011	Appendix A: MIKE21 Wave Modelling (Report Reference 9W2890)	Royal Haskoning

### 2.1.9 Guernsey Harbours Information

Guernsey Harbours have provided information relating to:

- i. Anchorages
- ii. Berth usage (St Sampson)
- iii. Accident / incident records (St Sampson)

## 2.2 Publically Available Information

### 2.2.1 Geological

The British Geological Survey (BGS) publish geological maps for Guernsey:

BGS Sheet 49°N-04°W Solid Geology

BGS Sheet 49°N-04°W Sea bed sediments and quaternary geology

### 2.2.2 Admiralty Charts

The Admiralty publish Admiralty Charts for Guernsey:

- i. Admiralty Chart 2669 The Channel Islands and Adjacent Coast of France
- ii. Admiralty Chart 3654 Guernsey Herm and Sark
- iii. Admiralty Chart 807 Guernsey and Herm

### 2.2.3 Weather

Wind records for Guernsey are published on the Guernsey Metoffice website (<http://www.metoffice.gov.gg/statsFrame.htm>). The following are provided:

- i. Percentage frequencies of wind direction and speed (year 2015)
- ii. Percentage frequencies of wind direction and speed (30 year average)

## 2.3 Forecast Demand Study

As part of the SOC a hydrocarbons forecast demand study has been prepared. As part of the development of the demand forecast a series of meetings were held with stakeholders in the week 12/12/2016 – 16/12/2016. A significant amount of information was provided by stakeholders during and after these meetings and this is presented in a separate report:

684723-PWC-SOC-00-RP-0001 / GHSP-1A-D1-PWC-D1-004 (SoG Document Reference)

## 2.4 Other Hydrocarbon Supply Studies

Two studies by Consultancy Solutions provide information on the hydrocarbon supply chain from refinery through to forecourts on Guernsey.

- Security of Supply: Imports of Liquefied Petroleum Gas (Consultancy Solutions, 2008)
- Petroleum Products Supply Chain Report (James Milne, 2013)

A study was carried out to look at the potential to import hydrocarbons to Jersey and on to Guernsey

- Economic Feasibility of supplying hydrocarbon fuels to Jersey by pipeline, A draft report to States of Jersey, Poyry, 10 January 2007

Guernsey Gas has noted a further study regarding a gas pipeline direct to Guernsey, but to date a copy of this has not been obtained.

## 2.5 Health and Safety Information

A report by the Health and Safety Laboratory (HSL) provides information on the assessment of the development protection zones around the fuel storage tanks in St Sampson

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“Assessment of Major Hazards at Two Fuel Terminals on Guernsey, MH/14/192, HSL, January 2015”

Guernsey Gas provided a copy of its commercial risk register for information and to support the development of a risk register for the programme.

## 2.6 Summary of Data

The full list of information/data provided is presented in Appendix A.

# Suitability of Data

This section of the report the suitability of data to achieve the SOC (also known as Programme Business Case ) is discussed. Each of the five elements of the hydrocarbon supply chain are considered separately.

## 3.1 Refinery

The data/information provided, in particular the “Petroleum Products Supply Chain Report (James Milne, 2013) details the current refineries that supply the current importers of hydrocarbon products.

During the week 12/12/2016 – 16/12/2016 meetings were held with the current importers of hydrocarbons products. During these meetings further details of the refineries used by the importers was collated.

At this stage the data/information provided in relation to refineries is sufficient to commence the SOC phase. Further engagement with the current importers of hydrocarbons and the refineries is planned during the SOC phase as part of the development of scheme options.

If the preferred option requires a significant deviation away from the present suppliers then further work will be required during the SOC phase to investigate the feasibility of sourcing the fuels from other suppliers.

## 3.2 Transport

The data/information provided includes details of the current method of transport of hydrocarbons products to Guernsey. In summary hydrocarbon products are shipped to Guernsey and typically uploaded at St Sampson Harbour with a small volume imported through St Peter Port Harbour. During week 12/12/2016 – 16/12/2016 information relating to the specific vessels used for the import of hydrocarbon products was collated from the current importers.

Details of studies relating to the construction of pipelines for the import of hydrocarbon product have been provided by Guernsey Gas. In addition studies completed for a pipeline to import hydrocarbon products to Jersey from mainland Europe are publically available on the States of Jersey website.

The feasibility of pipelines to Guernsey was discussed with Guernsey Pilots during the stakeholder meetings. In particular, the nearshore conditions and associated locations for pipe landfall. These are recorded in the meeting record.

Further engagement with the stakeholders in the transport component of the hydrocarbon supply chain is planned during the SOC phase of the programme as part of the development of scheme options. The stakeholder engagement may include discussion with Jamesco, James Fisher Everard, Whitakers, B-Gas, Condor and LOLO operators.

At this stage the data/information provided in relation to transport is sufficient to commence the SOC phase.

If the preferred option involves a significantly different mode of transport of the products from the current means (e.g. transport by pipeline or isocontainers) further studies / information may be required during the SOC phase to prove the feasibility of the concept.

### 3.3 Upload

At this stage the future method of the transport of hydrocarbon products to Guernsey to meet the programme objectives is unknown i.e. will products be transported via vessel or pipeline. Given that Guernsey is an island all methods of import will need to consider the marine environment. As part of the stakeholder meetings (12/12/2016 – 16/12/2016) Guernsey Pilots were consulted on the feasibility of the construction of import infrastructure around the coast of Guernsey. The following infrastructure types were discussed:

- i. Fixed Jetty
- ii. Single Point Mooring (SPM)
- iii. Pipeline (Land Fall)

The meeting record summarises the discussions which includes the identification of potential locations around the Guernsey coast for infrastructure. The identification of locations was based on the navigation of vessels to locations and/or the conditions for the landing of a pipeline. The coastline of Guernsey was zoned to represent differing conditions. The table below details the coastal zoning and potential locations for differing infrastructure types. The coastal zones are presented in Appendix B.

Table 5. Summary of Potential Locations for SPM, Fixed Jetty, Pipeline (landfall)

Coastal Zone (See Figure 1)	Fixed Jetty	SPM	Pipeline (landfall)
1			X
2			
3	X	X	
4	X	X	X
5		X	
6		X	
7		X	X
8			
9			

Based on the meeting with Guernsey Pilots and the selection of coastal zones for consideration in the development of scheme options for the upload facility the data available in each of the zones has been reviewed and its suitability to achieve SOC and OBC objectives evaluated. To meet the SOC objective concept level engineering will be required. As input to the concept level engineering activity the information/data relating to the following will be required:

- i. Spatial Data (bathymetry/ topography)
- ii. Ground conditions (geophysical, geotechnical)
- iii. Metocean (winds, waves, tides, currents)

For each of the coastal zones to be considered for the development of upload facilities the information/data available and its suitability of has been evaluated. The following table summarises the information/data available.

Table 6. Data/Information Available by Coastal Zone

Coastal Zone (See Figure 1)	Spatial: Bathymetry/Topography	Ground Investigation	Geology Maps	Metoccean
1	*		^	~
2	*		^	~
3	*	2010 Belle Greve Bay Bathymetry survey	^	Previous Studies by HRWallingford – wave recordings 1988 to 1990 Modelling of deep water berth ~
4	*	2010 Belle Greve Bay Bathymetry survey with boreholes	^	~
5	*	2010 Belle Greve Bay Bathymetry survey with boreholes	^	~
6	*	Boreholes at Berth 5 & 6 St Peter Port	^	~
7	*		^	~
8	*		^	~
9	*		^	~

\* Admiralty Charts (publically available) and Digimap (SoG Licence) data available for entire coast  
^ British Geological Maps (publically available)  
~ Appendix A: MIKE21 Wave Modelling (Report Reference 9W2890)

From the above table it is noted that the only information/data available in Zones 1-2 and 7-9 is publically available information. This information is high level information which can be used to inform the development of options during the SOC phase. Within other zones specific information is available from studies prepared for other uses.

There have been QRA carried out for the existing upload facilities by their owners/operators. It is understood from Guernsey HSE that these QRAs demonstrate that hazards on these sites are being managed. These QRAs have been shared with Guernsey HSE, but have not been made available to the GHSP at this time, due to their sensitive nature.

The information available at this stage of the programme is suitable to prepare concept level engineering to assess options. Cost estimates prepared to accompany the options will require appropriate optimism bias/contingency to reflect the level of detail.

The information/data available is not suitable for continuation through the OBC stage of the programme and recommendations for further studies are presented in later sections of this report.

## 3.4 Storage

Hydrocarbons are currently stored in facilities near St Sampsons Harbour. There is sufficient information on the tanks and surrounding infrastructure to assess their suitability to remain part of the hydrocarbon supply chain.

We understand that in addition to the HSL Assessment of Major Hazards at Two Terminals in Guernsey in 2015, which was used as the basis for the Development protection zones in the Island Development Plan, there have also been QRA carried out for the existing facilities by their owners/operators. It is understood from Guernsey HSE that these QRAs demonstrate that hazards on these sites are being managed. These QRAs have been shared with Guernsey HSE, but have not been made available to the GHSP at this time, due to their sensitive nature.

Should alternative storage facilities be proposed as part of the preferred scheme at a new site further health, safety and environmental assessments will be required to confirm feasibility of the proposed site.

## 3.5 Distribution

The current distribution of hydrocarbons from the storage tanks to the end users is either done by road tankers or by pipeline (in the case of HFO to the power station). The information relating to these practices are well defined and suitable for both the SOC and OBC.

Should the storage facilities change location, a high level assessment is required to ensure that the proposed distribution system is adequate (e.g. is the road network adequate to carry the required size and number of road tankers).

# Recommendations for Further Studies

The purpose of this study was to highlight any gaps in the currently available data that would impact on the successful delivery of Phase 1 (SOC) and Phase 2 (OBC) of the programme. In general the following conclusions can be made:

- There is currently a good level of information relating to the current practices for importing and distributing hydrocarbons on the Island which is adequate for assessing the current state and future needs.
- The current demand for hydrocarbons is understood as well as the current policies that may affect the demand in the near future. The future demand forecasts will be based on these current policies.
- During the Phase 1 (SOC) studies, high level concept designs will be prepared. For most of the options currently envisaged there is sufficient information to be able to develop a +/- 40% cost estimate. Some potential **exceptions** to this are:
  - Where dredging is a major component of the cost and dependent on accurate knowledge of the geotechnical conditions at the site.
  - Where the risk of contaminated ground conditions could lead to significant cost increases which would impact on the feasibility of the option.
  - Where the benefits to 3<sup>rd</sup> parties outside the hydrocarbon supply chain are required to support the business case (e.g. benefits of improved flood protection, increased revenue due to multi-users of the facilities such as cruise ships, cement and aggregate vessels etc)
  - Where land ownership rights are uncertain and potential cost implications or time delays may impact the feasibility of the option.
- In general the currently available site information will not be of sufficient detail to commence the Phase 2 design of any proposed facilities unless they are at sites where previous studies have been carried out. Therefore it is likely that the following site investigation work will be required:
  - Land and marine geotechnical site investigations
  - Bathymetric and topographic surveys
  - Environmental surveys
  - Metocean surveys (wave and current measurements etc)

In order to maintain the proposed schedule of completing the SOC phase by February 2018 and the OBC phase by February 2019 the following key activities should be performed:

- At least three months **prior to** the SOC decision date (i.e. in November 2017), an assessment of any outstanding feasibility issues relating to the preferred option should be identified (see examples of potential unresolved feasibility issues in bullet point three above).
- Additional studies to resolve these feasibility issues should be carried out prior to the SOC decision date where possible. These might include:
  - a study to quantify the potential additional 3<sup>rd</sup> party benefits of the preferred option (e.g. cruise ships, coastal flooding improvements etc).

- a basic site investigation study to look for signs of contaminated material or unexploded ordnance.
  - a basic marine survey to identify the extent of rock in areas likely to require dredging
  - a study of the feasibility of obtaining the required land ownership and potential costs of doing so.
- If any of the potential fatal flaws have not been resolved prior to the SOC decision it is may be necessary to carry a second option forward into Phase 2 (OBC) until such time that all feasibility options have been addressed.
- In addition to the above it is recommended that three months **prior to** the SOC decision date (i.e. November 2017) that preliminary tender packages are assembled for the likely site investigation works. This will allow the various site investigation contractors to be pre-qualified prior to the SOC decision. This is a critical activity to ensure the timely delivery of the programme as the receipt of the site investigation information is required for both the engineering design and the environmental approvals which are both on the overall critical path.

# Appendix A



CH2M FOLDER ID	Document Title	Refinery	Transport	Upload	Storage	Distribution
0001	Marine Operations Review - 1998			X		
0002	Billet XX 2005					
0003	Billet VIII 2008					
0004	Billet III 2012					
0005	Billet XII 2014			X		
0006	Billet XXI 2015					
0007	Air Sea Freight Data Commerce and Employment					
0008	Energy Policy Report					
0009	Future Harbour Requirements Study (2010)					
0010	Guernsey Tomorrow					
0011	2010 Info from Kosangas_Rubis		X			
0012	LPG Risk Assessment (Guernsey HSE)				X	
0013	Guernsey Ports Master Plan (Moff&Nicholl)			X	X	
0014	Guernsey Harbour Business Plan 2014 - 2023			X	X	
0015	Padhi_HSE Land Use Planning Doc 2009				X	
0016	Photos from Harbour Master (PGill)					
0017	Bellegreve Bay Hydro Geophys Investigation (1989)			X		
0018	Previous Studies by HRWallingford			X		
0019	SPPH SI for Harbour Development (1985)			X		
0020	SSH SI for Pumping Station and Fire Main (1998)			X		
0021	SPPH SI Berth 5 Reconstruction (2010)			X		
0022	HSL report on Fuel Tanks				X	
0023	Guernsey Facts and Figures 2005 - 2015					
0024	Guernsey Strategic Monitoring Report 2011 - 2015					
0025	Regional Environmental Assessment Renewable Energy					
0026	Petroleum Products Supply Chain Report (James Milne 20013)		X	X	X	
0027	1993 Billet St Sampson Development			X	X	
0028	1988 Billet St Sampson Oil Terminal Development			X	X	

CH2M FOLDER ID	Document Title	Refinery	Transport	Upload	Storage	Distribution
0029	Billet IV 2009			X		
0030	Extract from Strategic Land Use Plan 2011				X	
0031	Jersey Hydrocarbon Pipeline Feasibility Study (2007)		X	X	X	
0032	Jersey Energy Trends Report (2011 - 2014)					
0033	Jersey Energy Security and Resilience Report (2013)					
0034	Guernsey Water Long Sea Outfall Data			X		
0035	Civil Contingency Authority Emergency Fuel Plan					
0036	Environment and Infrastructure Vehicle Parc Data					
0037	Policy and Resource Plan (2016)					
0038	Island Development Plan (2016)					
0039	Anchorage Information provided by Guernsey Harbours					
0040	N/A					
0041	Billet XV Vol2 2013					
0042	Longue Hougue Residual Waste GA			X		
0043	Inert Waste Location Options			X		
0045	Guernsey_HSE_Info				X	
0046	Guernsey Waters Potential Marine Facilities Zones			X		

# Appendix B



