



Marine Scotland
via email:ms.marinelicensing@gov.scot

Our Ref: 70032892_MS191218nt

19 December 2018

Dear Sir/Madam,

**Marine Licence Application for Construction Projects:
Former Bowling Terminal, Bowling, West Dunbartonshire - Installation of Sheet Pile Wall &
River Wall Repair**

On Behalf of our client, Esso Petroleum Company, Limited (Esso), please find attached the completed Marine Scotland Licence Application (V1.0). We seek to pay the license fee via BACS transfer and request that you provide an invoice against which the payment may be made. Please quote the reference: 70032892_DT8, on the invoice so that the payment may be matched. Based on Table 1. General Licensable Activities it is understood that, given an expected works value of >£2million<£5million, the license fee will be £4,565.

The license application requests a suitably scaled extract from an Ordnance Survey Map (1:2,500 scale). This is presented as Figure 70032892_600, however, we note that at this scale it is too large to illustrate the site and extent of SSSI/SPA and RAMSAR, thus the extract provided covers the area of planned works and adjacent boundaries of SSSI/SPA and RAMSAR; I trust that this is acceptable. The site location is illustrated within Drawing 101.

This application is being made in advance of works proposed site works, which form part of a large scale remediation project. The sheet pile wall is currently at a design stage, however, detailed method statements are to be produced by the contractor undertaking the works. This documentation will be issued to Marine Scotland once the final design is determined.

The tender documents specify that vibro piling will be employed; this technique produces a noise of continuous rather than impulsive character; therefore in response to Q 8. Noise Monitoring we have answered no. Noise monitoring will, however, be undertaken during the works. For your information, in discussions with Scottish Natural Heritage it has been agreed that an Ecological Clerk of Works, with an appreciation for marine mammals, will watch for such animals during any period of noisy works adjacent to or within the River Clyde. In the event that marine mammals are observed, works will be suspended until the animal has moved away.

As requested we provide copy of the Screening Opinion (Environmental Review) and note that WDC has previously confirmed that no EIA is required.

We trust that the, foregoing, attached application and supporting documents meet with your approval – should you require any further information, please do not hesitate to contact me.



Yours faithfully
Redacted

Redacted
Associate Director

Redacted

Encl.

Application Form

Figures

- Drawing 101 – Site location
- Figure 70032892_601 – Proposed Sheet Pile Wall
- Figure 70032892_602 - Wall Repair Drawing
- Figure 70032892_603a - Proposed Drainage
- Figure 70032892_603b – Proposed Drainage
- Figure 70032892_604 – Drainage Standard Details
- Figure 70032892_600 – OS Map Extract with Proposed Construction Works & Key Features

Site Photographs

12. Consultation

13. Screening Opinion (Environmental Review)



APPLICATION FORM

Marine Licence Application for Construction Projects

Version 1.0

Marine (Scotland) Act 2010

Acronyms

Please note the following acronyms referred to in this application form:

BPEO	Best Practicable Environmental Option
EIA	Environmental Impact Assessment
ES	Environmental Statement
MHWS	Mean High Water Springs
MMO	Marine Mammal Observer
MPA	Marine Protected Area
MS-LOT	Marine Scotland – Licensing Operations Team
PAM	Passive Acoustic Monitoring
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WGS84	World Geodetic System 1984

Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

1. Applicant Details

The person making the application who will be named as the licensee.

2. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

3. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

4. Application Type

Indicate if the application is for a new construction site or an existing construction site. Provide the existing or previous consent/licence number and expiry date if applicable.

5. Project Details

- (a) Give a brief description of the project (e.g. construction of a new sea outfall).
- (b) Provide the total area of proposed works in square metres.
- (c) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (d) Provide the proposed completion date of the project.
- (e) Provide the cost of the works seawards of the tidal limit of MHWS. This estimate should only cover

work taking place below the tidal level of MHWS and must take into consideration the cost of materials, labour fees etc.

- (f) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the proposed project. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84. In a few cases, (e.g. laying of long pipelines) it may only be practicable to supply co-ordinates for the start and end points.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide photographs of the project location and submit these with your application. Please also provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

Sewer outfalls, discharge pipes for industrial waste etc. The size and description of the pipe must be shown on the longitudinal sections and also details of its supports, foundations, methods of jointing and details of any tidal flaps.

Bridges over tidal waters: An elevation with longitudinal and cross-sections of the bridge to a suitable scale must show the dimensions of the spans and width of piers, etc. above and below MHWS and the maximum and minimum heights of the undersides of the superstructures above MHWS. The headroom above MHWS and the width of span of the nearest bridges, if any, above and below the site must be stated.

Tunnels under tidal waters: The longitudinal section of the tunnel must show the distances between the bed of the river or estuary and the top of the tunnels. Cross-sections must show the internal and external dimensions of the tunnel and particulars of construction. When a proposed future dredging level is known this must also be shown on all sections.

Overhead cables: Catenary must be supplied in addition to the site plan showing the minimum clearance of the cable at MHWS and the electrical clearance allowed.

- (g) Indicate if the project is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (h) Provide a full method statement, including schedule of works and the ultimate fate of the structure.
- (i) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g. designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website:

<http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Any application for beach replenishment works must be cross checked as to whether the proposed site is a designated bathing water site. If so, all physical works should ideally be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from <http://apps.sepa.org.uk/bathingwaters/>.

Where there are potential impacts from the works, please provide details of proposed mitigation, such as use of MMOs or PAM, in response to potential impacts.

6. Deposits and/or Removals

- (a) Complete the table to indicate all permanent substances or objects to be deposited and/or removed from below MHWS. If you propose using types of substances or objects for which a specific box is not provided in the table, please describe the nature of such substances or objects in the box marked "other".
- (b) Please indicate the method of delivery of any substance(s) or object(s) to be placed below MHWS.
- (c) Where the proposed work involves salt marsh feeding, beach replenishment or land reclamation the description of the substances or objects must include details of its chemical quality. Where the substances or objects have not been chemically analysed, MS-LOT may request representative samples for analysis or require the applicant to arrange for analyses to be undertaken before the marine licence application can be determined.
- (d) If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (Latitude and Longitude WGS84) must be added to the form, and the period of time the site will be used must be provided. If granting a licence, MS-LOT will include on the document details of any area that has been approved as a temporary deposit site.

7. Disposal of Dredged Substance(s) or Object(s) at Sea

- (a) If you are proposing to dispose of any excess substance(s) or object(s) arising from the project at sea, a separate marine licence will be required (see Dredging and Sea Disposal application form). The granting of a marine licence for construction projects does not imply that a marine licence for sea disposal will also be granted as different assessment criteria are used to determine each type of application. If a separate application is being submitted for dredging and sea disposal then this must be accompanied with a BPEO report.
- (b) Provide the quantity of dredged substance(s) or object(s) for sea disposal in wet tonnes.

8. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

9. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

10. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

11. Pre-Application Consultation

Certain activities will be subject to public pre-application consultation. Activities affected will be large projects with the potential for significant impacts on the environment, local communities and other legitimate uses of the sea. The new requirement will allow those local communities, environmental groups and other interested parties to comment on a proposed development in its early stages – before an application for a marine licence is submitted. Further information can be obtained from: <http://www.scotland.gov.uk/Resource/0043/00439649.pdf>

If applicable, please provide your pre-application consultation report with your application.

12. Consultation (other than carried out under pre-application consultation)

Provide details of all bodies consulted and give details of any consents issued including date of issue.

13. Environmental Assessment

- (a) Under the Marine Works Environmental Impact Assessment (EIA) Regulations 2007, there may be a requirement for certain projects to undergo an EIA and produce an ES. If EIA is required, MS-LOT will not determine a marine licence application until the EIA consent decision in respect of the marine licence application has been reached. Please confirm if the project falls under Annex I or II of Directive 85/337/EEC: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0092&from=EN> in relation to the Marine Works (EIA) Regulations 2007.

Marine licence applications for proposals which fall under the regulations will not be accepted unless a screening opinion has been issued in relation to this.

- (b) Please indicate if an EIA has been undertaken and whether it was for the marine licence application to which this application relates or for any other EIA regulator (e.g local authority). Please attach any previous ES to the application.

MS-LOT will not determine a marine licence application until the EIA consent decision in respect of any regulated activity associated with the marine licence application has been reached.

14. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, marine/harbour construction works, dredging and sea disposal etc). If this is the case, provide reference/licence number for the related marine projects.

Marine Licence Application for Construction Projects

Version 1.0

Marine (Scotland) Act 2010

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act.

Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

- (a) for reasons of national security; YES ☐ NO ☒
- (b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES ☐ NO ☒

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature

Redacted

Date

19/12/18

Name in BLOCK LETTERS

Redacted

Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- Completed and signed application form ☒
- Project Drawings ☒
- Maps/Charts ☒
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority) ☐
- Method Statement ☐
- Photographs of the location of the project ☒
- Additional information e.g. consultation correspondence (if applicable) ☒
- Noise Registry – Initial Registration Form (if applicable) ☐
- Pre-application Report (if applicable) ☐
- Environmental Statement (if applicable) ☒
- Payment (if paying by cheque) ☐

1. Applicant Details

Title: Redacted Initials: Redacted Surname: Redacted

Trading Title (if appropriate): **Esso Petroleum Co Ltd**

Address: ExxonMobil House, Ermyn Way, Leatherhead, KT22 8UX

Name of contact (if different):

Telephone No. (inc. dialing code): Redacted

Email: Redacted

Statutory Harbour Authority? YES ☐ NO ☒

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

2. Agent Details (if any)

Title: Redacted Initials: Redacted Surname: Redacted

Trading Title (if appropriate): **WSP**

Address: 1, Capital Quarter, Tyndall Street, Cardiff

Name of contact (if different):

Telephone No. (inc. dialing code): Redacted

Email: Redacted

3. Payment

Enclosed Cheque ☐ Invoice ☒

Contact and address to send invoice to: Redacted

Applicant ☐ Agent ☒ Other ☐

If **OTHER**, please provide contact details:

Title: Redacted Initials: Redacted Surname: Redacted

Address: 1 Capital Quarter, Tyndall St, Cardiff, CF10 4BZ

Email: Redacted

4. Application Type

Is this application for a new construction site or an existing construction site:

New Site ☒ Existing Site ☐

If an **EXISTING SITE**, please provide the consent/licence number and expiry date:

Consent/Licence Number	Expiry Date

5. Project Details

(a) Brief description of the project (e.g. construction of a new sea outfall):

Existing sea wall repairs to sections of deterioration, connection of new drainage system to existing outfall and, to facilitate remediation works, installation of replacement sheet pile wall including piling and temporary works within the foreshore

(b) Total area of the proposed works (in square metres):

4500 m²

(c) Proposed start date (**Target duration for determination of a marine licence application is 14 weeks**):

01/04/2019

(d) Proposed completion date:

27/09/2019

(e) Cost of the works seawards of the tidal limit of MHWS:

£2,200,000.

(f) Location:

Section of the sea wall at the former Bowling Fuel terminal, West Dumbartonshire.
The Site is located on the north bank of the River Clyde, approximately 0.3 km to the west of the village of Bowling and 4 km to the south east of Dumbarton. The Site location is shown on Drawing No. 70032892_601.

Latitude and Longitude co-ordinates (WGS84) defining the extent of the project (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude									
5	5	°	5	5	.	8	0	3	'N
5	5	°	5	5	.	7	8	1	'N
5	5	°	5	5	.	8	4	1	'N
		°			.				'N
5	5	°	5	5	.	7	7	3	'N
5	5	°	5	5	.	7	6	4	'N
5	5	°	5	5	.	7	5	4	'N
		°			.				'N
5	5	°	5	5	.	7	6	0	'N
		°			.				'N

Longitude										
0	0	4	°	3	0	.	9	4	5	'W
0	0	4	°	3	0	.	5	7	9	'W
0	0	4	°	3	0	.	4	7	3	'W
			°			.				'W
0	0	4	°	3	0	.	4	0	8	'W
0	0	4	°	3	0	.	4	1	3	'W
0	0	4	°	3	0	.	2	6	8	'W
			°			.				'W
0	0	4	°	3	0	.	0	8	7	'W
			°			.				'W

(g) Is the project located within the jurisdiction of a statutory harbour authority?

YES ☐ NO ☒

If **YES**, please specify statutory harbour authority:

(h) Method statement including schedule of work (continue on separate sheet if necessary):

Activity 1: Repair of sections of the existing sea wall. A survey has identified areas of deterioration (Figure: 70032892_602).

Activity 2: Connection of new drainage system to existing outfall (Figures: 70032892_603a & 603b), Proposed drainage construction is illustrated on Figure: 70032892-604).

Activity 3: Installation of a section (circa 173m) of new sheet pile wall on the seaward side of the existing sea wall (Figure: 70032892_601), which will facilitate remediation of material behind the wall and form a new section of river wall on completion of the remediation Works. The wall will be constructed as close to the existing wall as reasonably possible. The fenders and ironworks will be removed prior to the piling. The void behind the new sheet pile wall will be filled with suitable concrete and the ends tied into the existing river wall structure. Remediation will then progress by dismantling of the existing river wall structure to remove the relieving platform to 3.7m below ground level and to depths of 6.5m below ground level to remove impacted ground. Clean material will then be backfilled up to existing ground levels. A pedestrian guard rail shall be provided upon completion of backfilling behind the wall.

The foregoing are design drawings which the remediation contractor (or specialist sub contractor) will employ to finalise design and produce suitably developed method statements.

(i) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

During piling of replacement sheet pile wall, there is a potential for short term release of hydrocarbon sheens. Use of booms to limit the extent and contain any sheening. Other activities considered to provide betterment rather than impact.

The river wall piling works are to be undertaken during the summer months to avoid impacts to wintering redshanks (as discussed and agreed with SNH), with visual screen installed prior to the planned works to mitigate potential visual disturbance.

A watching brief will be undertaken in relation to noise impacts to marine mammals, if such animals are observed in proximity to the site piling works in the River Clyde are to be suspended until they have moved away.

6. Deposits and/or Removals

(a) **Permanent** substance(s) or object(s) to be deposited and/or removed from below MHWS (continue on a separate sheet if necessary):

Type of Deposit/Removal	Deposits		Removals	
	Description	Quantity & Dimensions (metric)	Description	Quantity & Dimensions (metric)
Steel/Iron	Activity 3: New sheet pile wall installation is yet to be designed. Currently estimated to be 173m in length.	1 No.		No.
		Dimensions 173m long x 17.5m deep (subject to depth)		Dimensions
		Weight (kg/tonnes)		Weight (kg/tonnes)
Timber		No.		No.
		Dimensions		Dimensions
		Weight (kg/tonnes)		Weight (kg/tonnes)
Concrete	Activity 1: Investigations to be completed by remediation contractor to determine quantity+dimensions for repair of the existing sea wall Activity 3: New sheet pile wall installation is yet to be designed.Void between existing and new sheet pile to be filled.	No.	Activity 3: The existing river wall to be broken out to approximately 0.3mAOD. The quantity+dimension to be removed will depend on the sheet pile wall design.	No.
		Dimensions		Dimensions
		Weight (kg/tonnes)		Weight (kg/tonnes)
Plastic/Synthetic		m ²		m ²
Clay (< 0.004 mm)		Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Silt ($0.004 \leq \text{Silt} < 0.063$ mm)		Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Sand ($0.063 \leq \text{Sand} < 2.0$ mm)		Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Gravel ($2.00 \leq \text{Gravel} < 64.0$ mm)		Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Cobbles ($64.0 \leq \text{Cobbles} < 256.0$ mm)		Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Boulders (≥ 256.0 mm)	Activity 2: involves emplacement of rock armour in localised areas - (volume/weight to be determined by remediation contractor design).	Volume (m ³)		Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)

Pipe	Activity 2: Design of drainage to be confirmed following survey of invert levels and assessment of existing outfalls by Remediation Contractor	Length (m)		Length (m)
		External Diameter (cm/m)		External Diameter (cm/m)
Other (please describe below):				

(b) Method of delivery of substance(s) or object(s):

It is anticipated materials will be delivered via road vehicles; steel/pipework/blocks etc. will be delivered to site via a range of road vehicles predominantly road trailers, flatbed, Hiab. Aggregate will be delivered via tipper wagons with concrete supplied via mixing wagons.

(c) For work involving salt marsh feeding, beach replenishment or land reclamation please provide the following information relating to the substance(s) or object(s) to be deposited:

Quantity (tonnes):

	tonnes
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Nature of substance(s) or object(s) (e.g. sand, silt, gravel etc.):

--

Source (if sea dredged state location of origin)

--

Particle size:

--

Have the substance(s) or object(s) been chemically analysed?
If YES, please include the analysis data with your application

YES ☐ NO ☒

(d) **Temporary** substance(s) or object(s) to be deposited below MHWS (continue on a separate sheet if necessary):

Type of Deposit	Description	Quantity & Dimensions (metric)
Steel/Iron	Quantity+dimension subject to the design of the temporary works by the Remediation Contractor.	No.
		Dimensions
		Weight (kg/tonnes)
Timber		No.
		Dimensions
		Weight (kg/tonnes)

Concrete	Quantity+dimension subject to the design of the temporary works by the Remediation Contractor.	No.
		Dimensions
		Weight (kg/tonnes)
Plastic/Synthetic		m ²
Clay (< 0.004 mm)		Volume (m ³)
		Weight (kg/tonnes)
Silt ($0.004 \leq \text{Silt} < 0.063$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Sand ($0.063 \leq \text{Sand} < 2.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Gravel ($2.00 \leq \text{Gravel} < 64.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Cobbles ($64.0 \leq \text{Cobbles} < 256.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Boulders (≥ 256.0 mm)		Volume (m ³)
		Weight (kg/tonnes)
Pipe		Length (m)
		External Diameter (cm/m)
Other (please describe below):		

7. Disposal of Dredged Substance(s) or Object(s) at Sea

- (a) Do you intend to apply for a marine licence for sea disposal of dredged substance(s) or object(s) as part of the project?

YES ☐ NO ☒

If **YES**, please specify nature of substance(s) or object(s) (e.g sand, gravel, silt, clay, rock etc.):

- (b) Quantity of substance(s) or object(s) (wet tonnes):

wet tonnes

A separate marine licence application will be required to be submitted for sea disposal.

8. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project?

YES ☐ NO ☒

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	N/A
Use of Acoustic Deterrent Devices	N/A
Piling	N/A
Other (please describe below):	
	N/A

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at:
<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

9. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

No

10. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan?

YES ☒ NO ☐

If **YES**, provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered:

GEN12, GEN13 and GEN14: A Construction Environmental Management Plan will be prepared by the Remediation Contractor which will set out a monitoring plan for emissions to air, noise and vibration and mitigation measures to avoid significant adverse effects on the environment. The Remediation Contractor shall implement measures to minimise the risk to the water environment.

GEN7: Visual disturbance screens will be erected prior to the works commencing to minimise impact on the redshanks of the Inner Clyde Special Protection Area

GEN1: The principal objective of the remediation works is to meet planning requirements for a future generic commercial end-use at existing Site levels. To ensure a balanced and proportional approach to delivering this objective, Esso's Green & Sustainable Remediation principles have been used as a key component of the basis for action, and the SuRF-UK Indicator Set for Sustainable Remediation Assessment referenced to ensure the remediation approach is aligned with sustainability best practice in the UK. National and local Scottish Policy documents and SEPA technical guidance have also been referred to, to enhance geographical and project relevance.

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

11. Pre-Application Consultation

Is the application subject to pre-application consultation, under The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013?

YES ☐ NO ☒

If **YES**, please indicate the date of the public notice for the pre-application consultation event and the type of consultation event held (a copy of the public notice must be supplied with this application):

Event Type	Date

12. Consultation

List all bodies you have consulted and provide copies of correspondence:

Consultation has been undertaken with the following bodies:
 Scottish Natural Heritage (email correspondence to Redacted attached)
 Scottish Natural Heritage & WDC-Planning (Site meeting 27th November 2018- Minutes attached).
 As part of the agreement of the site remediation strategy SEPA (Redacted & WDC- Environmental Protection (Redacted have been routinely consulted.

13. Environmental Assessment

(a) Does the project fall under Annex I or II of the EIA Directive?

Annex I ☐Annex II Neither ☐

If **ANNEX I or ANNEX II**, please provide the screening opinion issued to you in relation to the project.

(b) Has an EIA been undertaken:

for the marine licence application to which this application relates
for any other EIA regulator (e.g local authority)

YES ☐ NO ☒

YES ☐ NO ☒

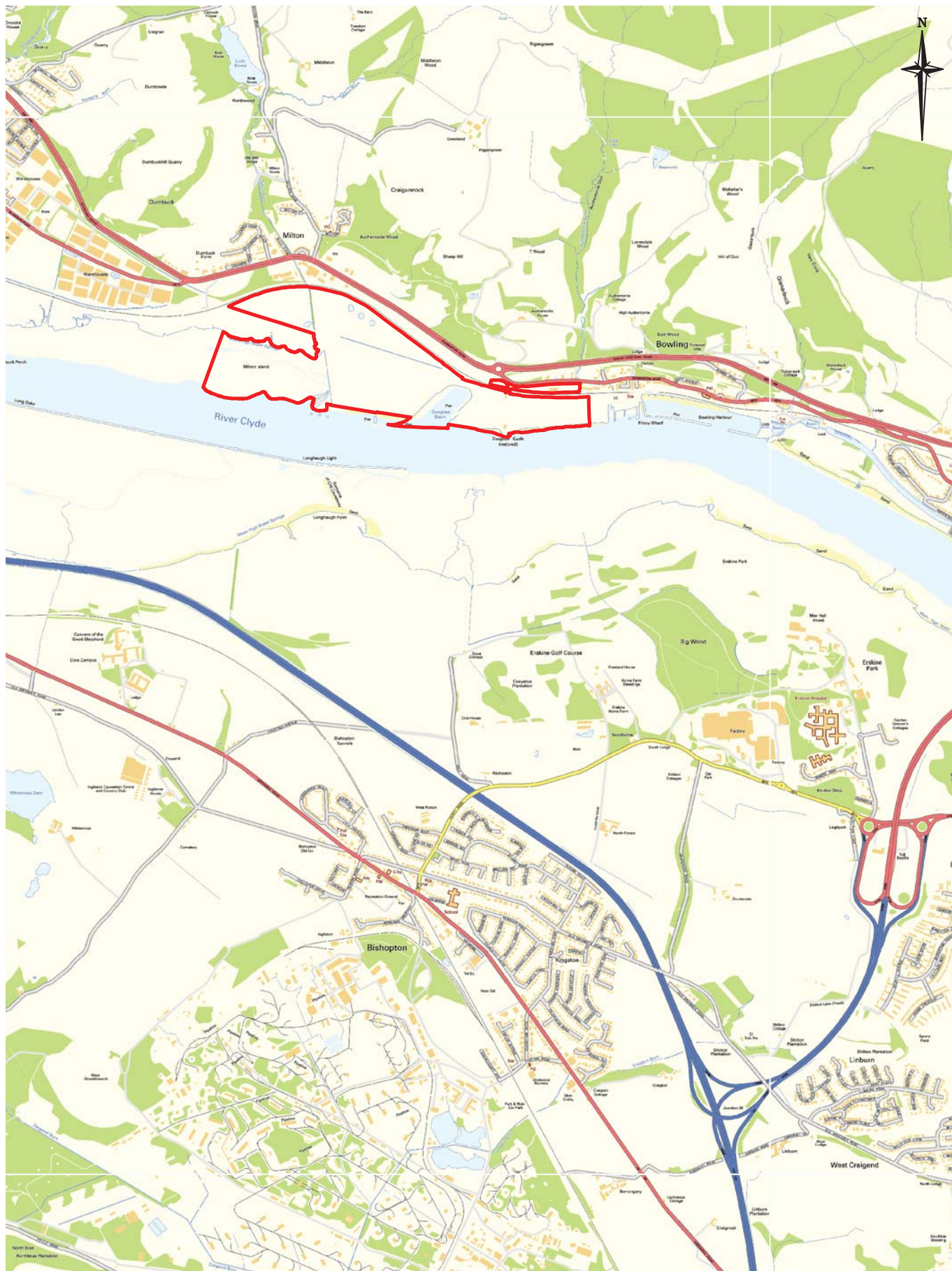
14. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):

--



FIGURES



KEY

— SITE BOUNDARY

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Kings Orchard
1 Queen Street
Bristol BS2 0HQ

Tel: 44-(0)1179-306200

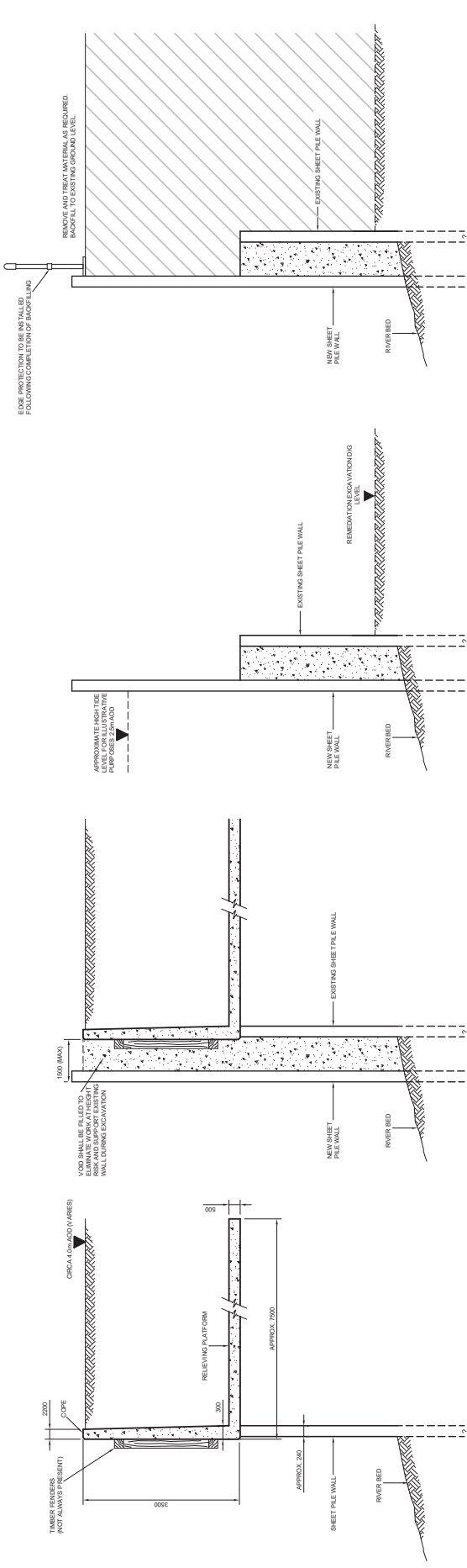
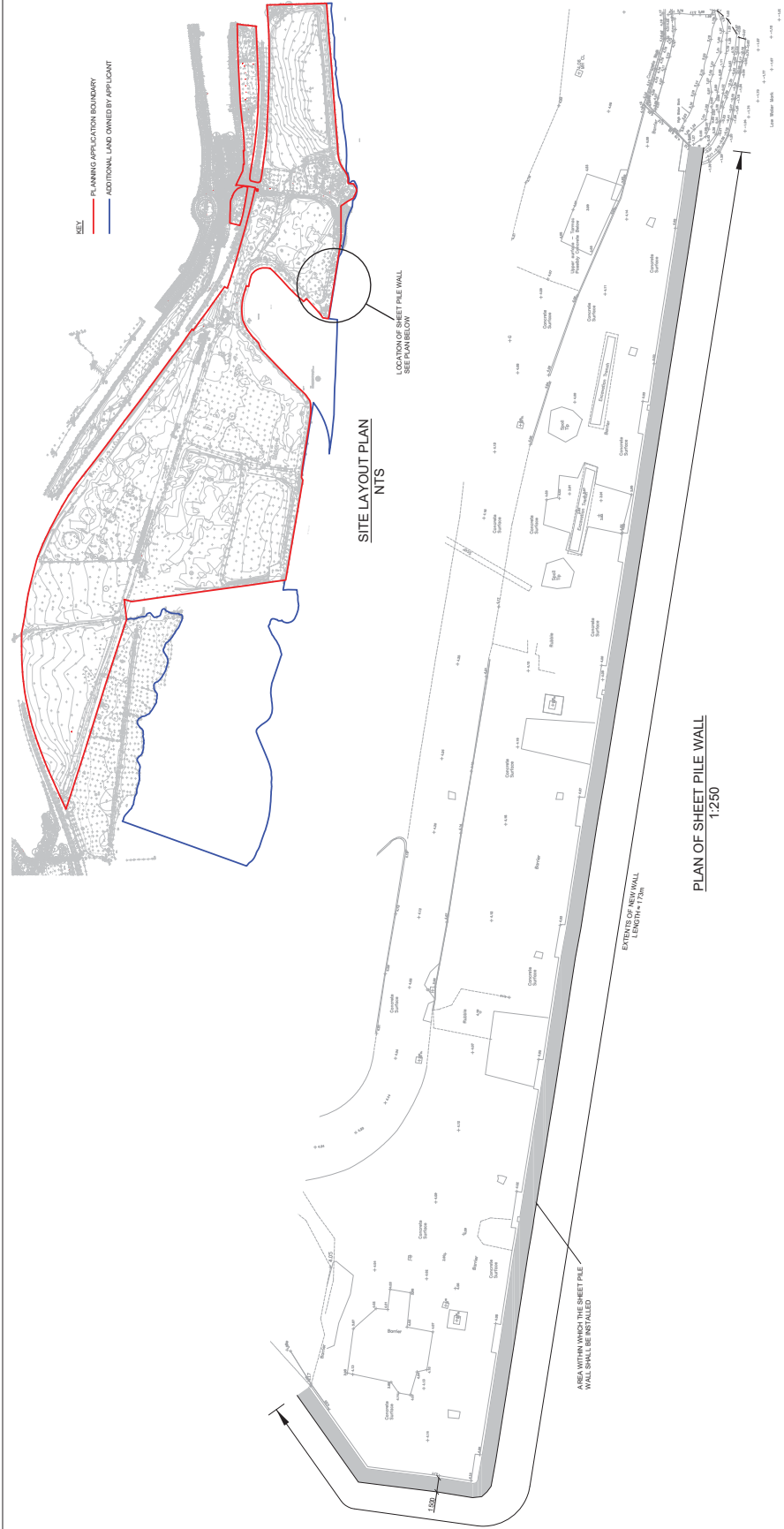
Client/Project:

**ESSO PETROLEUM
COMPANY LIMITED**
FORMER ESSO TERMINAL, BOWLING
Title: **SITE LOCATION PLAN**

Drawn: Re	Checked: R	
Designed: R	Approved: R	
Date: 29/11/2018	Scale: 1:25,000	A4 Sheet:
Project Number:	Drawing Number:	Revision:
70032892	101	A

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NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
2. LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM (MAD).



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CLIENT
ESSO PETROLEUM COMPANY LIMITED

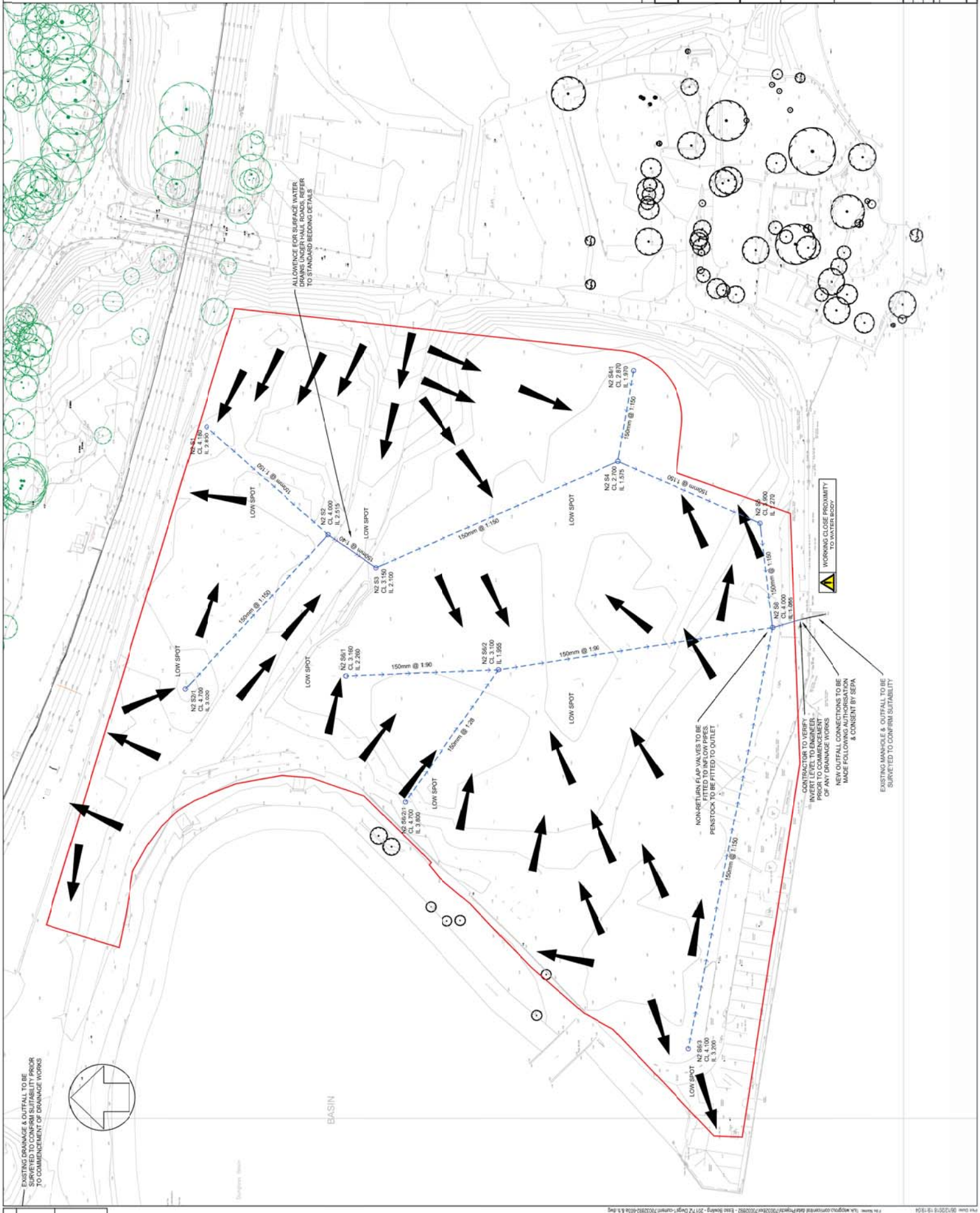
STAGE PROJECT
BOWLING TERMINAL

TITLE
PROPOSED SHEET PILE WALL CENTREFIELD SEA WALL

Redacted

70032892 | 601

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PROPOSED DRAINAGE KEY

- FILTER DRAINS
- SURFACE WATER DRAINAGE
- EXISTING DRAINAGE
- EXISTING SW ROUTING
- GROUND REMEDIATION AREAS REFER TO WSP DRAWINGS

1. DO NOT SCALE FROM THIS DRAWING. USE PROVIDED DIMENSIONS ONLY.

2. ALL LEVELS ARE IN METRES ABOVE DATUM (AOD).

3. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.

4. DRAWING TO BE READ IN CONJUNCTION WITH GROUND REMEDIATION DRAWINGS.

5. DRAINAGE SHOWN IS INDICATIVE AND IS SUBJECT TO CONFIRMATION OF INVERT LEVELS OF EXISTING OUTFALL CONNECTIONS.

6. THE USE OF EXISTING DRAINAGE IS SUBJECT TO THEIR SURVEY WHICH SHOULD BE SUBMITTED TO THE SCOTTISH ENVIRONMENTAL ENGINEER FOR CONFIRMATION OF SUITABILITY.

7. THE CONNECTION OF DRAINAGE TO EXISTING OUTFALLS IS SUBJECT TO THE CONSENT & AUTHORISATION OF THE SCOTTISH ENVIRONMENT PROTECTION AGENCY (SEPA).

WSP

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Tel: 011 222 222 222
www.wsp.co.uk

ESSO PETROLEUM COMPANY LIMITED

FORMER ESSO TERMINAL BOWLING

PROPOSED DRAINAGE (SHEET 2 OF 2)

Redacted

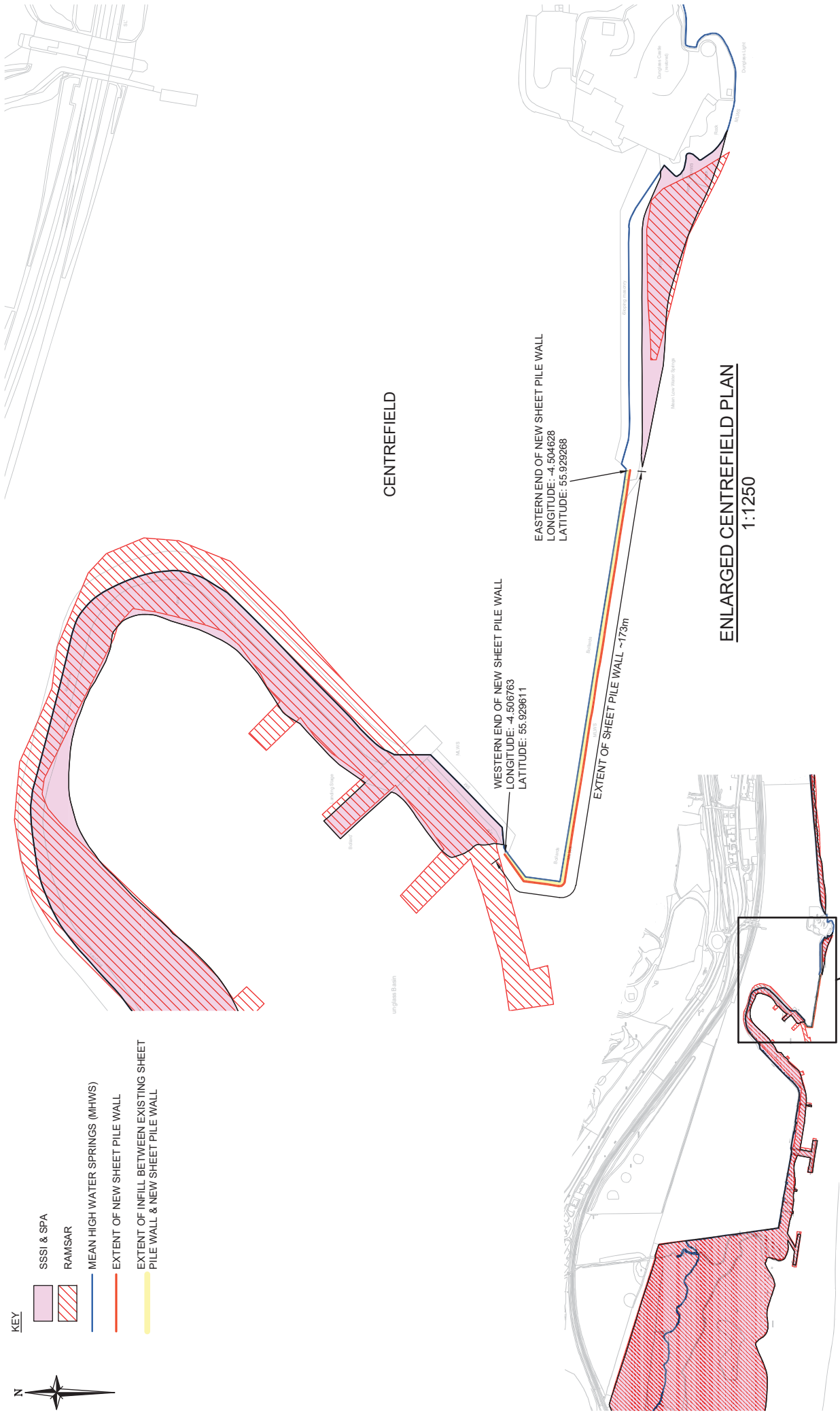
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Project Number	
Drawn	



- KEY**
- SSSI & SPA
 - RAMSAR
 - MEAN HIGH WATER SPRINGS (MHWS)
 - EXTENT OF NEW SHEET PILE WALL
 - EXTENT OF INFILL BETWEEN EXISTING SHEET PILE WALL & NEW SHEET PILE WALL



**SITE LAYOUT
NTS**

SEE ENLARGED
CENTREFIELD PLAN

Rev	Date	Description	By	Chk	App	Notes
-----	------	-------------	----	-----	-----	-------

Title						
MAP EXTRACT WITH PROPOSED CONSTRUCTION WORKS & KEY FEATURES						
Client						
ESSO PETROLEUM COMPANY LIMITED BOWLING TERMINAL						
Project						
70032892						
Drawing Number						
600						
Revision						
t						
Date						
Designed						
Drawn						





SITE PHOTOGRAPHS



1) Sheet pile wall viewed towards East (Dunglass Castle)



2) Sheet pile wall viewed towards west



3) Eastern end of sheet pile wall



4) Western end of sheet pile wall



5) Western corner of sheet pile wall extending into inlet



CONSULTATION

From: Redacted
Sent: 08 November 2018 19:22
To: Redacted
Subject: Exxon site, Bowling - Timing of Piling work

Hi Redacted

I mentioned that I'd get back to you separately about our thoughts on piling work within the period when redshank are overwintering in the Inner Clyde SPA. I noted that you mentioned the proposal is to install piling using vibratory methods and the substrate is soft mud, so the work should be less noisy than some other forms of piling. You could also start the work nearest to the basin first, as survey work (Applied Ecology, July 2017) has shown that the redshank use this area, so if you were still working when the redshank were present you would be further from them.

The easiest way to mitigate impacts on the SPA from this type of work, particularly where screening would be impractical to use between the works and the SPA, is to undertake the works when the redshank are not using the site. This is generally from May-August (inclusive). However, you have asked if there is any scope to work into the wintering period at the end of next year. While I would encourage you to plan for finishing this work by the end of August, if you went over this by a few weeks it would not be a major issue, but the more you enter into the wintering period the more impact you are likely to have on the redshank. As day-length gets shorter, and redshank spend much of the daylight hours foraging, disturbance during this time will increase energy expenditure and will reduce their feeding time, which has an impact on their survival. I would also ask that any need to extend works a 'few weeks' past August does not extend past mid-October, but please try to start works so you can finish the piling before the end of August.

Regards

Redacted

F Operations Officer – Strathclyde & Ayrshire

Scottish Natural Heritage | Cadzow Court | 3 Wellhall Road | Hamilton | ML3 9BG | Redacted
Dualchas Nàdair na h-Alba | Cùirt Cadzow | 3 Rathad Wellhall | Hamilton | ML3 9BG
nature.scot – *Connecting People and Nature in Scotland* - [@nature_scot](https://twitter.com/nature_scot)

Please note that my email address has changed to Redacted

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MEETING NOTES

DATE	27 November 2018
VENUE	Site Meeting and walkover 10:00 – 13:00
MEETING TITLE	Bowling Remediation, Former Bowling Terminal.
CONTRACT NO	70032892
PURPOSE	Bowling – Stakeholder visit - to discuss upcoming remediation, and potential addition of a permanent sheet pile wall.
ATTENDEES	<p>Redacted – WDC Development Control (By phone for summary at end of meeting)</p> <p>Redacted – SNH operations officer</p> <p>Redacted - SNH</p> <p>Redacted – Esso</p> <p>Redacted – WSP Remediation designer</p> <p>Redacted – WSP Ecologist</p>
APOLOGIES	<p>Redacted was unable to join due personal reasons.</p> <p>Redacted, Marine Scotland, Licensing casework manager sent his apologies – feedback provided to TG.</p>

<i>Agenda Item No.</i>	<i>Matters Arising</i>	<i>Action</i>
1	<p>Introductions & safety</p> <p>R introduced the safety requirements on site after inductions by WSP.</p> <p>Confirmed the objectives of the meeting were to provide an overview of works and mitigations planned to ensure no adverse effect confirmation on integrity of the ecologically designated sites.</p>	
2	<p>Proposed works</p> <p>Esso Team provided a summary of the works, discussed:</p> <ul style="list-style-type: none"> ➤ remediation process and temporary piling works (<i>piling works inside the site to stop excavations collapsing</i>) which remains unchanged under the current planning application submitted Jan 2019; and, ➤ a proposed amendment to the planning application, with works to change design to a permanent pile wall on the Southern boundary on part of CFD. 	
	<p>PPE was issued for the site walkover</p> <p>Site walkover to put the works into context, extent of new CFD piled River wall, otter resting sites, minor repair works and surface water outfall locations. Noted emergency boat access point on WFD.</p>	

Agenda Item No.	Matters Arising	Action
	<p>SNH asked about a construction of the visual disturbance fencing itself and access to foreshore by workers through gaps in the fence</p> <ul style="list-style-type: none"> ➤ Visual disturbance fencing to be constructed at beginning of works along the whole of the site with buffer left 50m from Milton Island. ➤ Confirmed that access to the foreshore would be for minor works that would be short term. 	
	<p>Agreed actions confirmed as follows: -</p> <ol style="list-style-type: none"> 1. Largest concern is timing and delay of the works for both SNH and Esso. If programme slips, no-one wants the new CFD River wall installation works to slip beyond mid October. Agreed to expedite planning requirements quickly to enable modified existing planning application to progress smoothly. 2. Visual disturbance fencing to be constructed outside redshank wintering season (Mid-April to Mid Sept). 3. HRA to be amended and issued ASAP to include: <ol style="list-style-type: none"> a. All mitigation amendments for the permanent piled wall. b. Re-written stage 2 assessments for new legislation based on 'no adverse effects' post mitigation. No longer 'significant effects' and replace with no 'adverse effects'. c. Add 150m contour to drawing for redshank disturbance zone. Change in advice June 2018. 4. Mitigation measures identified within the HRA to be incorporated into the OCEMP 5. OCEMP to be amended and issued ASAP to include: <ol style="list-style-type: none"> a. Reflect all measures from the HRA & Otter Survey Report into the OCEMP. b. For marine mammal observations in respect of the new CFD piled wall – SNH confirmed this role can be undertaken by an ECOW with appreciation of marine mammals. Non- percussive rigs included in documents. c. Ecological clerk of works in respect of redshanks / other nationally important wildfowl to be on site during the short term minor repair to rock armour, fencing and outfall works to advise when works can take place (i.e. redshanks / wildfowl not showing signs of disturbance, can easily relocate, or have moved off or are not present. d. Resting sites for otters. <ol style="list-style-type: none"> i. New survey for natal holts prior to works already included in documents ii. European protected species licence will be required for working within 30m of resting sites with works that have the potential to cause disturbance. Licence to be taken by WSP. Not critical to have in place before planning permission approval – sufficient to be included as 'will be obtained' within the OCEMP. 6 weeks to turn around by SNH. 	<p>All</p> <p>b - WSP Re action / Esso</p> <p>c - WSP R action / Esso</p> <p>d - WSP R action / Esso</p> <p>a - WSP R action / Esso</p> <p>b - WSP R action / Esso</p> <p>c - WSP R action / Esso</p> <p>d(ii) - WSP Re ction / Esso</p>

Agenda Item No.	Matters Arising	Action
	e. Bat roosting sites – already included ECOW in documents to check for bat roosts in trees within 30m of works.	
	<p>Round robin summary by phone with WDC Planning Lead Redacted NS summarised the field walkover and conclusions that were drawn, and amendments needed, Redacted summarised for SNH, and R summarised what WDC planning would require and reminded team that Redacted to be in all communications as Case Officer, include R as senior contact:</p> <ul style="list-style-type: none"> a. SNH principal concern is on timing for process for planning to be completed (i.e. allow works in summer months rather than affecting wintering redshanks). b. SNH / Esso / WDC aligned on requirements to be placed in documents c. Initial e mail to planning showing modified planning proposals (where and what for permanent piling), changes and list of documents (i.e. request permanent piling be formally included as part of the works). Show ownership change (Esso acquisition of sliver of land to enable new CFD piled river wall) on boundary plans for . Note new owners' details and correspondence completed. Final documents to be completed ASAP. d. PC confirmed that WDC planning see no residual 'ecological / environmental' issues: <ul style="list-style-type: none"> i. need confirmation of alignment with Marine Scotland, ii. if all steps completed quickly and document submitted as soon as possible, then amended application could achieve committee in February 2019. <p>PC confirmed that though the change to new CFD River wall poses no concern, there are still two objections that require resolution:</p> <ul style="list-style-type: none"> a. SEPA flood objection to be removed. WSP awaiting SEPA response. WSP to send new piling drawings to SEPA flood dept and copied to R & Re b. R queried airport requirement for a bird management plan for developments in the safeguarding circular with WDC. Although WSP were previously advised this does not require intervention – R advised R to send objection response regarding the lack of development types in the planning application ASAP, direct to the airport contact and copied to Redacted 	<p>c - WSP R action / Esso</p> <p>d (i)- WSP R action / Esso</p> <p>d (ii)- WSP Re ction / Esso</p> <p>a - WSP R action / Esso</p> <p>b - WSP R action / Esso</p>
	<p>Although Marine Scotland were unable to attend, they kindly advised Esso by email. Summary notes of the contact so far:</p> <p>Discussion of the works, and preliminary plans suggests no EIA would be required under The Marine Works EIA (Scotland) Regulations 2017 (specifically for works below low tide under different regulations), however this discussion needs formal resolution, and to close Marine Scotland advise :</p> <ul style="list-style-type: none"> a. The new wall could be considered an EIA under schedule 2, 10(m) of The Marine Works EIA (Scotland) Regulations 2017 and you should submit a screening request to obtain formal advice from Marine Scotland on this. 	<p>a - WSP R action / Esso</p>

<i>Agenda Item No.</i>	<i>Matters Arising</i>	<i>Action</i>
	<p>b. the total surface area of these works fall under [sic. below] the 1000m2 threshold, and as such would not be considered a prescribed class of activity under the Pre-application consultation regulations</p> <p>c. timelines would be sped up if Esso submitted a marine licence application along with your screening request</p>	c - WSP NS action / Esso
	Teleconference to confirm dispatch of documents on Friday 30 Nov WSP ESSO WDC SNH MS	WSP NT action
	<p>Internal Notes for WSP:</p> <p>R to pass Re latest information on remedial strategy, piled drawings, HRA and OCEMP & Re to propose works for European protected species licence to Esso.</p>	WSP GC & NT action
3	AOB	
	None	

DISTRIBUTION: Attendees, Esso (Redacted) WSP (Redacted) SNH Redacted WDC Planning Re da
& Marine Scotland (Re)
Copies to: Project file



SCREENING OPINION (ENVIRONMENTAL REVIEW)



ESSO Petroleum Company Limited

ENVIRONMENTAL REVIEW

Proposed Works to the River Clyde Boundary Wall at the Former ESSO Fuel Distribution Terminal, Bowling



ESSO Petroleum Company Limited

ENVIRONMENTAL REVIEW

Proposed Works to the River Clyde Boundary Wall at the Former ESSO Fuel Distribution Terminal, Bowling

RESTRICTED

PROJECT NO. 70032892

DATE: DECEMBER 2018

WSP

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RESTRICTED



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Issued			
Date	14/12/2018			
Prepared by	Redacted			
Signature	Redacted			
Checked by	Redacted			
Signature	Redacted			
Authorised by	Redacted			
Signature				
Project number	70032892			
Report number	001			
File reference	70032892			

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1 INTRODUCTION

1.1 PROJECT BACKGROUND

In January 2018, Esso submitted a Planning Application (Planning Reference DC18/13) to West Dunbartonshire Council for 'the voluntary remediation of part of the former Bowling Fuel Distribution Terminal'. Full details of the application can be accessed using the following link <https://www.west-dunbarton.gov.uk/uniform/dcdisplayfull.asp?vUPRN=DC18%2F013&vPassword=&View1=View>. The location of the proposed works is part of a former fuel distribution terminal which was decommissioned in the 1990's. The Bowling site extends to approximately 63 hectares in totality comprises:

- 41 hectares terrestrial
- 22 hectares a combination of the foreshore of the River Clyde and Milton Island.

The application relates to the voluntary remediation of the remaining areas of the Bowling site where residual hydrocarbon impact is present from historical operations. The remediation is proposed in anticipation of the future sale of the Bowling site to West Dunbartonshire Council to make the whole site suitable for generic commercial end use (and is conditional upon achieving the sale). The scope of remediation is based upon the findings of detailed human health and Water Environmental Risk Assessments and discussions with the Scottish Environmental Protection Agency & West Dunbartonshire Council.

As part of technical work to finalise the scope of the remediation activities, it has been determined that removal of hydrocarbon impacts on the land side of the site would be best facilitated by the installation of a short section of sheet pile wall immediately adjacent to the seaward side of the existing river wall (please see Section 2.2 below for full details of the Proposed Works). The area of the sea wall installation is hereafter referred to as 'the Site'.

West Dunbartonshire Council wish to purchase the property from Esso. The subsequent purchaser of the property (or its developer) will be entirely responsible for all consents, permits, studies, engineering works and the infrastructure / construction required for its futures proposals for the Bowling site. An entirely different planning application is scheduled to be submitted for the future redevelopment of the Bowling site. Esso's planning application is restricted to remediation works which will leave the Bowling site at an appropriate standard for generic commercial end use, at nominally existing land levels, and is NOT related to any future redevelopment of the Bowling site.

1.2 SCOPE OF REPORT

The report considers the proposal in the context of The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (The EIA Regulations) with reference to other potential environmental licences and has been prepared to support the request for a screening opinion from the Regulator. A description of the proposed works and site setting are summarised in Section 2 of this report. Section 3 considers the EIA Regulations in the context of our proposal, and other possible environmental related licence requirements. Section 4 provides a summary review (by topic area) on the potential effects of the development on the environment, the potential for significant effects on the environment and mitigation to be applied. A conclusion is then provided in Section 5 with a summary of our overall position to the significance of any potential environmental effects and proposed mitigation measures.

2 SITE SETTING AND PROPOSED DEVELOPMENT

2.1 LOCATION OF SITE

The main remediation is planned within the former Bowling Fuel Distribution Terminal. In terms of the location within West Dunbartonshire a Site Location Plan has been prepared (see Drawing No. 70032892101A). The site of the proposed installation of sheet pile work (which is the subject of this screening request) is along the southern boundary of the part of the Bowling site known as Centrefield. The construction footprint of the new sheet pile wall will be upon partly Esso owned and partly Crown Estates owned land. Esso have secured a contract to purchase the small piece of land required from Crown Estates. The location of the proposed works is identified on Drawing No. 70032892_601 Proposed Sheet Pile Wall Centrefield Sea Wall.

The area surrounding the site¹ where the proposed installation of sheet pile will be undertaken is the remainder of the former terminal (to the North) and the River Clyde (to the South).

The area surrounding the wider Bowling site comprises:

- transport infrastructure (the A82 road, and the rail line to Hellensburgh to the North);
- vacant land (Scotts Yard to the East); and,
- mudflats to the West

The nearest residential properties to the area where the proposed installation of sheet pile work will take place are the Littlemill Apartments located approximately 380m to the northeast; beyond the railway line.

The proposed sheet pile work also falls within the wider intertidal zone of the Clyde estuary which contains the following environmental designations:

- Inner Clyde Site of Special Scientific Interest (SSSI);
- Special Protection Area (SPA); and
- Ramsar

2.2 PROPOSED WORKS IN RIVER CLYDE

The proposed work steps are shown on Drawing No. 70032892_601 Proposed Sheet Pile Wall Centrefield Sea Wall and will step up to a maximum of 1.5m over the existing wall into the river bed. This area does not 'dry out' out low tide and thus no foreshore is exposed. The 170m long piling section is part of the remediation works, and is required to enable the removal of the existing relieving platform, including the removal of potential impacts behind and below the existing wall structure. Once excavations are complete, the area will be backfilled with clean treated materials back to existing topographical levels. The sheet pile wall installed will replace the existing and be finished to existing topographical levels, parts of the former pile wall will remain in-situ behind the new.

¹ 'The Site' refers to the sheet pile area only, and does not include the wider Bowling site.



In terms of the size of the proposed works, the area does not exceed 1 hectare and are expected to be predominantly land based in order to avoid impacts on the marine environment. There will be no impact piling as the works will be utilizing non- vibratory piling rigs.

3 ENVIRONMENTAL LICENCES

3.1 MARINE LICENCE REQUIREMENTS

A Marine Licence from the Scottish Ministers is required if organisations intend on carrying out certain acts in the Scottish marine area (i.e. below the mean high-water springs mark). These acts can include:

- The deposit of substances or objects into the sea or onto the sea bed;
- The removal of substances or objects from the sea bed;
- Construction, alteration and improvement works;
- Dredging; and
- The deposit or use of explosives.

The proposed works would result in construction works within the marine environment, and would thereby require a Marine Licence to be submitted to Scottish Ministers.

3.2 ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS

The primary legislation relating to potential environmental impact of development projects is split between works above and below Mean High Water Springs and is implemented by the relevant Local Authority and Marine Scotland respectively:

- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017; and
- The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

For projects which fall within Schedule 1 of these Regulations the developments are automatically considered an EIA Project. If the works fall within Schedule 2 they may be considered as an EIA Project if they are likely to have significant effects on the environment by virtue of factors such as their nature, size and location. Schedules 1 and 2 within both of the above pieces of legislation are the same. We have reviewed the development proposals against the Schedules and have provided below our opinion on the applicability of the individual paragraphs to the works proposed.

It is worth noting the main section of remediation works was previously screened in May 2017 against The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011. West Dunbartonshire Council issued a Screening Opinion under ref. PAN16/006 that confirmed EIA was not required. The Council have recently confirmed the proposed works (the installation of the sheet pile wall) does not change their original position.

Schedule 1

The only Paragraph that could have been considered applicable to the development is Paragraph 8 (2) below:

‘Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes’.

However, in this instance, the site is not a trading port and does not form a pier (or a ferry pier), therefore the development is not considered to be Schedule 1 development.

Schedule 2

Schedule 2 works mean works, other than exempt works, of a description set out in column 1 of Schedule 2 where;

- (a) Any part of the works is to be carried out in a sensitive area; or
- (b) Any applicable threshold or criterion in the corresponding part of column 2 of that table is respectively exceeded or met in relation to the works.

There are a number of sensitive areas within close proximity to the Site, however no development works will impinge into these areas, which satisfied criterion (a) above.

In terms of criterion (b) as noted above, there are two paragraphs within Schedule 2 (Paragraphs 10 (g), and (m)) which could be construed as being applicable to the development, these are defined in Table 1 below (in italics) along with the relevant thresholds. Paragraph 14 of Schedule 2 has been included for completeness. Our opinion is also provided therein.

Table 1

Para	Description of Development	Applicable thresholds / Criteria	Opinion
Infrastructure Projects			
10(g)	<i>Construction of harbours and port installations, including fishing harbours (unless included in Schedule 1)</i>	The area of works exceeds 1 hectare	The size of the proposed would fall under 1 hectare in overall area.
10(m)	<i>Costal work to combat erosion and maritime works capable of altering the coast though the construction, for example, of dykes, moles, jetties and other sea defence works excluding the maintenance and reconstruction of such works</i>	All development / All works	Whilst the development works take place within the river environs, the works do not include any features noted in the description and would be of a small-scale nature which would not alter the coast through its construction. The low-key development would not result in any additional impacts over and above the existing situation. The works are proposed for remediation purposes only.
14.	<i>Any change to or extension of development of a description mentioned in schedule 1 (other than a change or extension falling within paragraph 24 of schedule 1) where that</i>	The thresholds and criteria in Column 2 of the paragraph of Schedule 2 as indicated applied to the development as changed or extended are met or	The thresholds as listed under Column 2 of Schedule 2 are not met or exceeded, and therefore would not be a Schedule 2 development.

Para	Description of Development	Applicable thresholds / Criteria	Opinion
	Infrastructure Projects		
	<i>development is already authorised, executed or in the process of being executed.</i>	exceeded and in such a case the change or extension may have significant adverse effects on the environment.	Consequently, the proposal would not have significant adverse effect on the environment.

Summary

As identified above, the proposed works would fall below the threshold for consideration as a Schedule 2 development, thereby removing any further assessment under the EIA Regulations.

4 POTENTIAL ENVIRONMENTAL EFFECTS

Within Table 2 below, we have provided an opinion (by topic area) on the potential effects of the development on the environment, mitigation that could be applied (where relevant) and the potential for significant effects on the environment.

Table 2

Topic Area	Potential impact	Potentially Significant Effect	Potential Mitigation (if required)	Additional assessments or work required?	Significant effects following Mitigation?
Water Environment	Impacts on the riverbed from disturbance	No. The riverbed is subject to dredging and prop wash. The proposed works would be insignificant due to the relatively small area it will impact. Furthermore, the works will be installed from the land side, on a stable pre-existing support with no piling equipment being installed on the river bed.	None Required	None- <i>Note that by good practice - a Contractors Method Statement would be applied to these works regardless.</i>	No.
Water Environment	Marine Environment Contamination	Unlikely. Previous study did not identify NAPL within near surface sediments at locations proximal to the existing river wall.	Contractors to produce method statement to protect the water environment during construction activities by design of operations and use of booms within the River in case of unplanned release.	Method Statement from Contractors agreed as part of Marine Scotland's licensing regime.	No.
Ecology (Marine Mammals)	Construction activity	Possibly.	Ecological clerk of works to watch for marine mammals during any noisy works – if marine mammals observed works cease any noisy works until animal has moved away. General caution and awareness of presence of wildlife by Contractor. Water environment protection is considered the key	SNH have confirmed the potential for them to be occasionally present and therefore ecological clerk will be present – no other survey required.	No.

Topic Area	Potential impact	Potentially Significant Effect	Potential Mitigation (if required)	Additional assessments or work required?	Significant effects following Mitigation?
			mitigation for ecology in the area.		
Ecology (Redshanks)	Construction activity	Possibly.	Protected species, therefore works will be completed outside of the redshank overwintering period or through agreement with SNH.	An ecological inspection would likely be required and recommended. A pre-construction bird survey would be required if the works commence during the breeding season.	No.
Ecology (Otters)	Construction activity	Possibly.	Visible Screening as per Otter report and in accordance with recommendations set out within Otter Report.	Likely – Pre-construction survey 3-6 months prior to commencement of works.	No.
Marine Ecology (underwater noise)	Underwater noise impact on fish or marine mammals	Not expected given specific location of the proposed works and distance to water.	N/A.	No.	No.
Airborne Noise	Piling noise and other construction noise	Possibly although temporary.	The works are relatively small in scale however liaison with local community regarding timing of works would be good practice and piling activities should be carried out in normal working hours. Minimise duration of works as far as possible.		Temporary effects possible. No long term significant change.
Landscape	Re-configuration of site boundary / River wall	Not expected.	Works are fairly limited in size generally and not readily discernible at distance.	No. Not expected.	No.
Archaeology and Cultural Heritage	Associated piling works	Not expected.	Not considered necessary, however a watching brief by a suitably qualified person / firm could be proposed if required.	No. Not expected	No.
Designated Sites	Negative effects of protected area	No	None required.	No	No.

Environmental Controls

In order to facilitate the proposed remediation works, we will be utilizing double oil booms and silt booms to prevent unintentional releases to the River Clyde. The area does not dry out at Low water Springs. Additional oil absorbent pads would be deployed and replaced should any unintentional releases occur.

Duration of Works

Whilst the proposed piling works are in close proximity to a SSSI, SPA and Ramsar, as shown in Figure 1 – Sensitive Areas Illustrating Noise Contour Plots (Worst Case) from Piling Activity, all works fall outside of any sensitive area. Discussions with Scottish Natural Heritage have led to the advice that piling would be preferred during the summer months to avoid impacts on Wintering Redshanks. A watching brief will be undertaken in relation to noise impacts on marine mammals. As such, the piling works are to be curtailed when marine mammals are in the River Clyde and recommenced when they have moved away from the area.

Continued consultation

A site visit discussing the proposed works has already been held with Scottish Natural Heritage who confirm the acceptability of the works, surveys and mitigations proposed:

- A Habitat Regulations Assessment Stage 2 – Appropriate Assessment has been completed which confirms no adverse impact is expected on the Ecology from the proposed works.
- A Pre-Construction Environmental Management Plan has been prepared that takes into consideration the various mitigations required to properly execute the works.

Further Controls

The above mitigation measures could also be controlled through the marine licence and/or planning permission (as appropriate), to be finalised by the remediation contractor.

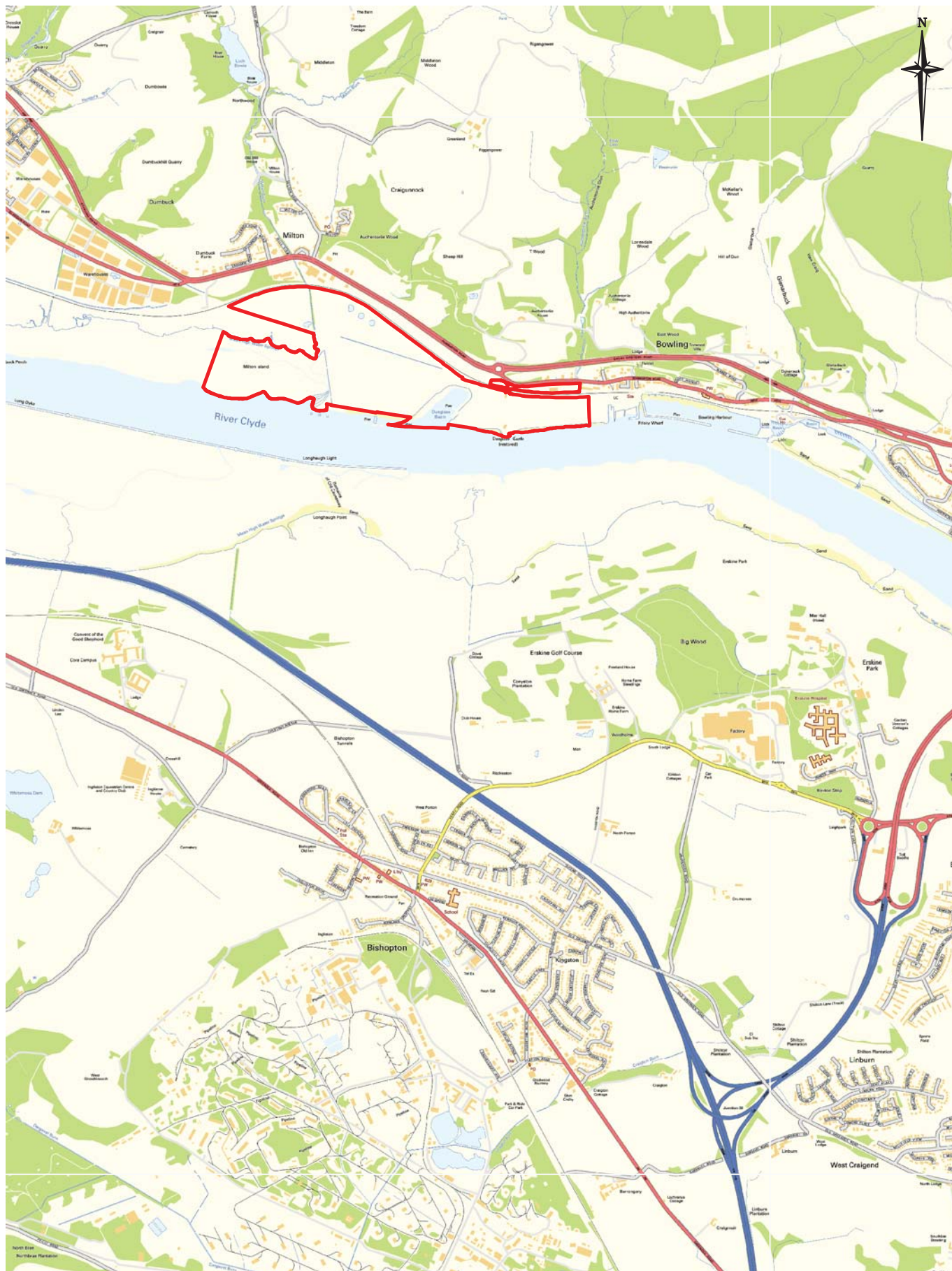
5 SUMMARY OF OPINION

In the above environmental review, we have noted the proposed works do not fall within the definition of Schedule 2 development as no part of works takes place within a sensitive area and scale of works do not exceed the criteria set out at paragraph(s) 10(g)(m) of Schedule 2 of the EIA Regulations. In any event we have considered the potential for the development to result in significant effects on the environment with, and without, mitigation in place (as summarised in Table 2). Given the relatively small scale of the development, its location, the method of construction and the availability of fairly standard construction mitigation, we do not consider this project to result in significant adverse effects on the environment provided relevant mitigation measures are adopted.

We have included a draft Construction Environmental Management Plan (CEMP), which takes into account the relevant mitigation measures to be prepared for the development. The CEMP is a working document and will be completed in agreement with Marine Scotland.

6 APPENDICES

Drawing No. 70032892 101A SITE LOCATION PLAN



KEY

— SITE BOUNDARY

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1 Queen Street
Bristol BS2 0HQ

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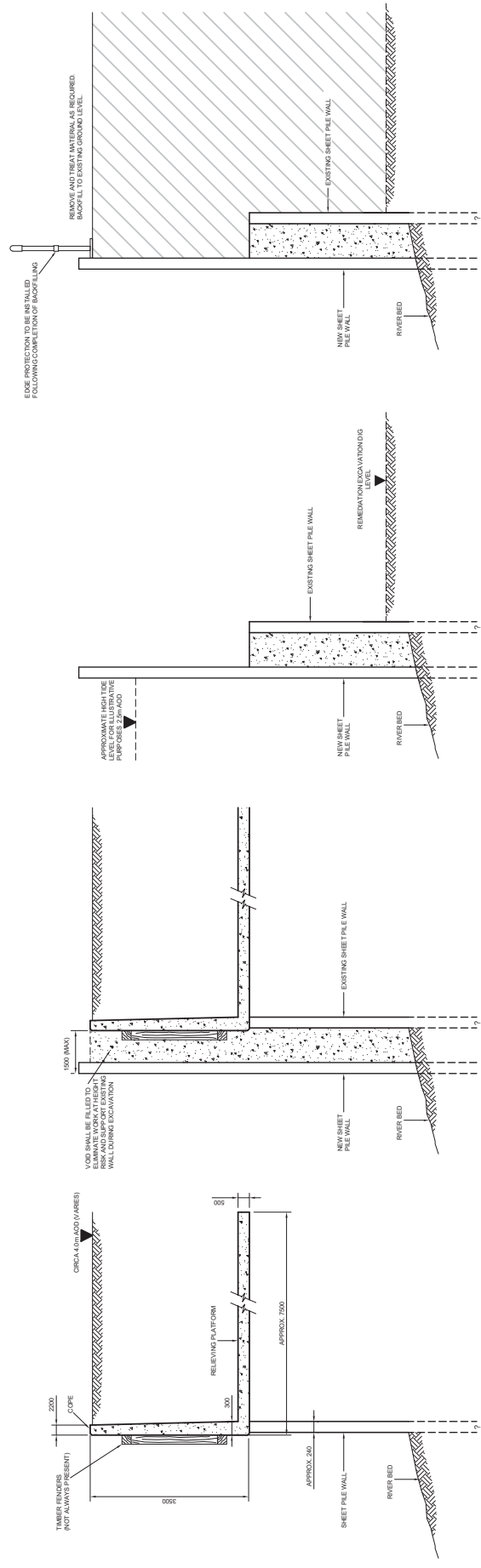
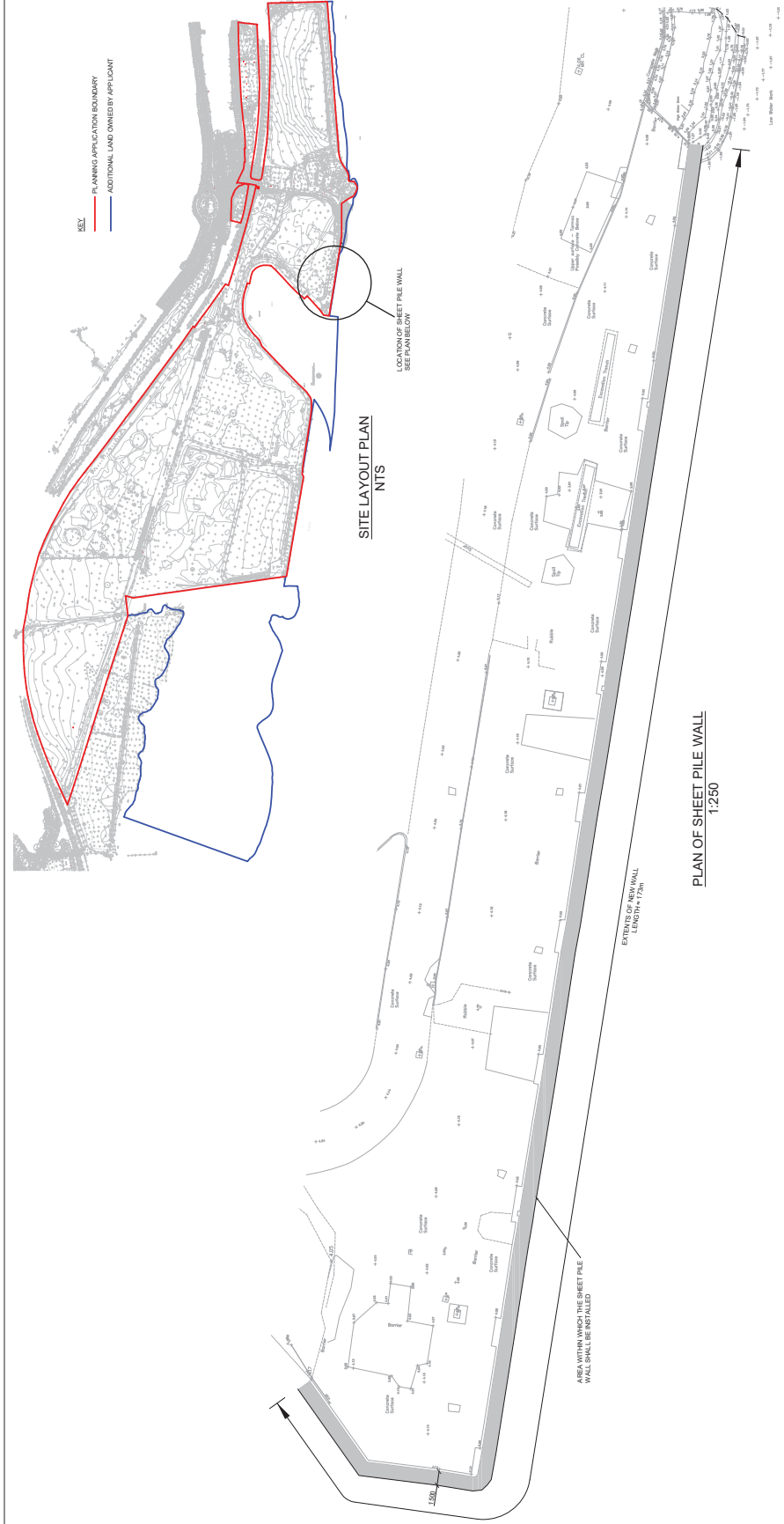
Client/Project:

**ESSO PETROLEUM
COMPANY LIMITED**
FORMER ESSO TERMINAL, BOWLING
Title: **SITE LOCATION PLAN**

Drawn: Re	Checked: R
Designed: R	Approved: R
Date: 29/11/2018	Scale: 1:25,000 A4 Sheet:
Project Number: 70032892	Drawing Number: 101
	Revision: A

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Drawing No. 70032892_601 Proposed Sheet Pile Wall Centrefield Sea Wall




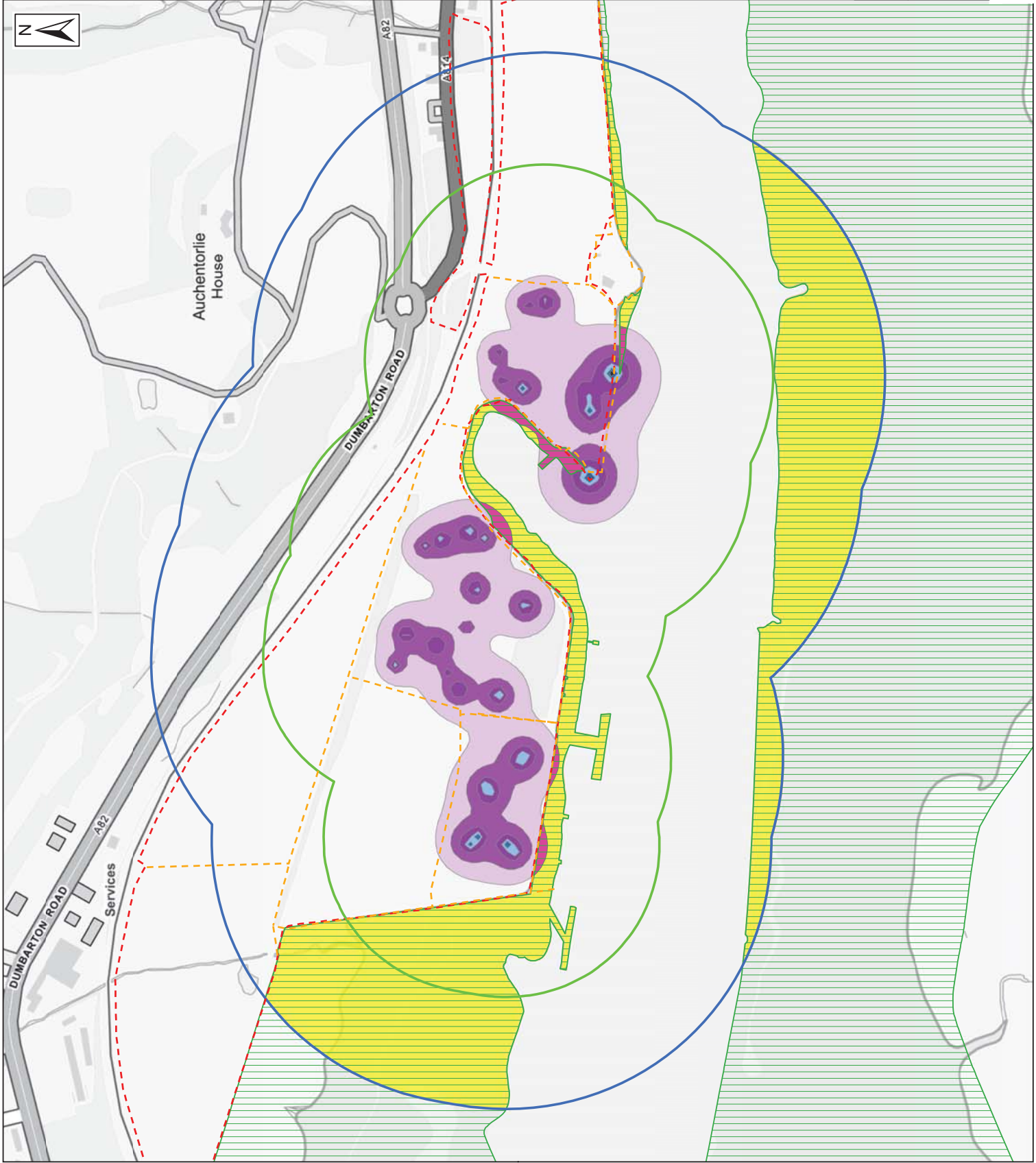
File	Date	Description	Qty	Chg	App
					
<p>3rd Floor, King's Court-1, Queen's Rd, Beirut, 8812044, LBN T: +961 (0)3 306 2020 F: +961 (0)3 306 2029</p>					
<p>Client: ESSO PETROLEUM COMPANY LIMITED</p>					
<p>Blank Project: BOWLING TERMINAL</p>					
<p>Title: PROPOSED SHEET PILE WALL CENTREFIELD SEA WALL</p>					
<p>Scale:</p> <p>Drawn: _____</p> <p>Checked: _____</p> <p>Date: _____</p>	<p>Project Number: 700032892</p>		<p>Record at: 601</p>		
<p>Redacted</p>			<p>Record at: 601</p>		
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Figure 1 – Sensitive Areas & Noise Contour Plot (Worst Case)



Legend

- Site Boundary
- Sub-Division Boundary
- 150m Disturbance Area
- 300m Disturbance Area
- Special Protection Area
- SPA area affected by Noise Model
- SPA area affected by 300m Disturbance Zone
- L_{Aeq,1h}
- > 70 dB
- > 75 dB
- > 80 dB
- > 85 dB
- > 90 dB
- > 95 dB



Project:

Esso Bowling

Title:

Figure 1
Sensitive Areas Illustrating Noise
Contour Plots (Worst Case) from Piling
Activity

Email correspondence from Scottish Natural Heritage

From: Redacted
Sent: 08 November 2018 19:22
To: Redacted
Subject: Exxon site, Bowling - Timing of Piling work

Hi Re

I mentioned that I'd get back to you separately about our thoughts on piling work within the period when redshank are overwintering in the Inner Clyde SPA. I noted that you mentioned the proposal is to install piling using vibratory methods and the substrate is soft mud, so the work should be less noisy than some other forms of piling. You could also start the work nearest to the basin first, as survey work (Applied Ecology, July 2017) has shown that the redshank use this area, so if you were still working when the redshank were present you would be further from them.

The easiest way to mitigate impacts on the SPA from this type of work, particularly where screening would be impractical to use between the works and the SPA, is to undertake the works when the redshank are not using the site. This is generally from May-August (inclusive). However, you have asked if there is any scope to work into the wintering period at the end of next year. While I would encourage you to plan for finishing this work by the end of August, if you went over this by a few weeks it would not be a major issue, but the more you enter into the wintering period the more impact you are likely to have on the redshank. As day-length gets shorter, and redshank spend much of the daylight hours foraging, disturbance during this time will increase energy expenditure and will reduce their feeding time, which has an impact on their survival. I would also ask that any need to extend works a 'few weeks' past August does not extend past mid-October, but please try to start works so you can finish the piling before the end of August.

Regards

Redact

Redacted | **Operations Officer – Strathclyde & Ayrshire**

Scottish Natural Heritage | Cadzow Court | 3 Wellhall Road | Hamilton | ML3 9BG | Redacted
Dualchas Nàdair na h-Alba | Cùirt Cadzow | 3 Rathad Wellhall | Hamilton | ML3 9BG
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