



FLOOD RISK MANAGEMENT (SCOTLAND) ACT 2009

Grangemouth Flood Protection Scheme

Objection of Forth Ports Limited

Written Statement

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1. INTRODUCTION

- 1.1 This written statement has been prepared in relation to the forthcoming hearing on the Grangemouth Flood Protection Scheme (**the Scheme**) and sets out the case that will be presented by Forth Ports Limited (**Forth Ports**).
- 1.2 This written statement should be read in conjunction with the Consultation Response Objection submitted by Forth Ports on 14th June 2024 (**the Objection**), which is attached at **Appendix 1**.
- 1.3 A plan showing the various parts of Forth Ports' Port of Grangemouth (**the Port**) referred to in this written statement is attached at **Appendix 2**.
- 1.4 A list of the documents mentioned in the Objection and in this written statement that Forth Ports intends to refer to at the hearing is contained in **Appendix 4**.

2. SUMMARY OF OBJECTION

- 2.1 Forth Ports' position on Falkirk Council's (**the Council**) proposed Scheme remains as summarised in the Objection.
- 2.2 Forth Ports objects to the Scheme as currently proposed on the basis it is inconsistent with legislative requirements and national policy and would directly impede the management, operation, development and expansion of the Port and delivery of the Forth Green Freeport (**FGF**).
- 2.3 The Objection set out each principal issue arising from the Scheme as currently proposed, and the solutions required to rectify those issues and deliver a more effective and resilient flood protection scheme. These can be summarised as follows:
 - 2.3.1 The route of the flood protection wall (the **FPW**) east of the lock gate will not protect the land from flooding that is required for the Energy Park (**Key Issue 1**). Details of the Energy Park are set out in section 5.2 of the Objection¹. Forth Ports proposes that the FPW is re-aligned to follow the shoreline, ensuring the Energy Park land benefits from flood protection, and that a demountable FPW is used to ensure continued access to the Grange Burn land lying to the east of Grange Burn via the current and any replacement bridge over Grange Burn, so that the Energy Park can be developed and access to the Grange Burn land retained.² Further detail is provided in section 5 of the Objection.
 - 2.3.2 The alignment of the FPW to the north of North Shore Road has the potential to interfere with or obstruct Port activity, namely the transport of wide-loads and abnormal indivisible loads (**AILs**) (**Key Issue 2**). Forth Ports proposes that the FPW is re-aligned and set back as far as possible from the existing operational Port road. Further detail is provided in section 6 of the Objection.
 - 2.3.3 The route of the FPW to the western edge of the Port will not protect Port development land from flooding. This land has been designated as part of the Grangemouth Tax Site within the FGF and will be sterilised without flood protection (**Key Issue 3**). Forth Ports proposes that the FPW is re-aligned to follow the shoreline, ensuring that the land benefits from flood protection and the FGF designation and associated development to be located here can be enabled. Alternatively, the current route and the preferred shoreline route must both be secured, with the current route constructed only where no development proposals have been identified before construction of this part of the FPW is due to commence and,

¹ The Energy Park is proposed to utilise land lying to the east of the developed Port, both west of Grange Burn (termed 'the Energy Park land' in this statement) and east of Grange Burn (termed the 'Grange Burn land' in this statement).

² The SEPA Flood Maps used to inform the need for the Scheme show that the Energy Park land is at a high risk of flooding. The Grange Burn land to the east of Grange Burn is at a much lower risk of flooding. This is reflected in Forth Ports' different requests in relation to these areas. The request is simply that the Scheme does not sterilise the Grange Burn land but instead is designed in recognition that access to it can only be taken via a bridge across Grange Burn.

despite best efforts, there remains a funding shortfall making the preferred shoreline route impossible. Further detail is provided in section 7 of the Objection.

2.3.4 The design of the Port's Lock Gate and its reliability are critical to the operation of the Port and the Scheme, and it must be of a high standard to meet the requirements for both Port and flood protection use (**Key Issue 4**). Forth Ports proposes that the detailed design of the Lock Gate and factors going to its resilience, including choice of contractor and construction methodology, must be agreed with Forth Ports to ensure continued and reliable Port access and operation. Further detail is provided in section 8 of Objection.

2.3.5 The construction of the Scheme within and around the Port, and the ongoing operation and maintenance activity for the Scheme, have the potential to interfere with the operation of the Port (**Key Issue 5**). Forth Ports requires an agreement to manage the detail of how the Scheme will interact with the Port, ensuring impacts are minimised and to be consulted by the Council when approving any control documents that will affect the management of the Scheme within and around the Port. Forth Ports must have regard to its duties under the Ports and Marine Facilities Safety Code which includes a duty to ensure safe and efficient marine operations. It is therefore critical that Forth Ports and the Council come to an agreement on how construction of the Scheme will interact with the Port. Further detail is provided in section 9 of the Objection.

2.4 This written statement focuses on the issues and solutions outlined above, as well as on the Habitats Regulations Appraisal (**HRA**) that did not form part of the documents or environmental information made publicly available during the public consultation on the Scheme.

3. **ENGAGEMENT WITH THE COUNCIL**

3.1 Forth Ports has always been willing to continue dialogue with the Council to explore solutions to address its principal issues set out in the Objection, however there has not been progress on discussions since the last meeting between the parties held on 6 November 2024. The Council has not taken a proactive approach to engaging on alternative solutions and entertaining modifications to the Scheme which would address the concerns raised by Forth Ports. Instead, the Council's approach has been process-focused rather than solutions-focused.

3.2 Forth Ports maintains that the importance of an agreement should not be underestimated, and whilst an agreement remains outstanding, the Scheme poses a significant risk to the operation, management and future development of Forth Ports' statutory harbour undertaking and the discharge of its duties under the Ports and Marine Facilities Safety Code.

4. **THE PORT'S ROLE AS A STATUTORY UNDERTAKER**

4.1 Section 58 of the Flood Risk Management (Scotland) Act 2009 (**the 2009 Act**) provides a limit to the Council's general power to manage flood risk, in relation to statutory undertakings. This provides that a local authority may not exercise its power to manage flood risk "in a way which –

(a) damages any works or property belonging to a statutory undertaker, or

(b) interferes with the carrying on of its statutory undertaking, unless the undertaker consents."

4.2 The consent of the statutory undertaker may not be unreasonably withheld, and if there is any question about whether consent has been withheld unreasonably, the Scottish Ministers will make a final determination.

4.3 Forth Ports is a statutory undertaker for the purposes of the 2009 Act by virtue of section 71(e). This includes statutory undertakers within section 214(1) of the Town and Country Planning (Scotland)

Act 1997 which provides for “persons authorised by any enactment to carry on any ... dock, harbour, ...” undertaking.

- 4.4 While section 58 of the 2009 Act is not directly engaged by Schedule 2 to the 2009 Act at the point at which a flood protection scheme is developed and confirmed, section 58 limits the Council’s ability to exercise its powers under section 56 to carry out works for the purpose of flood protection. As such, consent (not unreasonably withheld) from Forth Ports will be necessary for implementation of the Scheme, if and when finally confirmed, in relation to any works which interfere with Forth Ports’ statutory undertaking. It is therefore critical to the success of the Scheme that the Council works closely with Forth Ports on the design of the Scheme to understand its concerns and modifies the Scheme as required to ensure there will be no interference with Forth Ports’ statutory undertaking which would impede Scheme implementation.
- 4.5 Section 65 of the 2009 Act provides that when a flood protection scheme is confirmed the Scottish Ministers must direct that planning permission for the development is deemed to be granted, subject to any such conditions as may be specified in that direction.
- 4.6 In light of section 58, it is critical that Forth Ports is involved with the Council in the development of the proposed conditions for any deemed planning permission, to ensure there is sufficient optionality in the planning permission to address Forth Ports’ concerns on scheme design, as discussed below, and to ensure the conditions appropriately provide for consultation with and/or approval from Forth Ports in relation to the relevant management plans controlling scheme detailed design, implementation and operation, such as any construction management plan or traffic management plans.
- 4.7 Forth Ports would expect to see this level of detail provided now, so that it can be discussed during the hearing, given that any deemed planning permission would follow the Council’s approval of the Scheme.

5. **SCHEME DESIGN**

5.1 **Justification and adequacy of the Scheme, and alignment with policy**

- 5.1.1 The Scheme’s design will place the land that will be used for the Energy Park, as well as other Port development land within the Grangemouth Tax Site, outside of the protection of the Scheme, sterilising its development, use and economic value (Key Issues 1 and 3). This is justified by the Council on the basis that it needs to be consistent in its approach to undeveloped land. Despite the intended lifespan of the Scheme being more than 100 years, this approach does not account for the long-term nature of major infrastructure development, including ports, and the importance of these sites regionally and nationally. As a consequence, it takes no account of direct, indirect and up and downstream effects in this regard.
- 5.1.2 The significance of the land to the Government’s sustainability policies is set out in detail in section 2 of the Objection. This highlights the Port’s role in the Scottish Cluster and Grangemouth Investment Zone, which are designated as National Development 15 - Industrial Green Transition Zones (**IGTZ**) under the National Planning Framework 4 (**NPF4**), and the ‘Just Transition’.
- 5.1.3 The Port also sits within the FGF, and large areas of the Port have been designated as a “special tax site” called the Grangemouth Tax Site.³ On 26 November 2025, the Chancellor of the Exchequer confirmed that the FGF had received final UK Government approval of

³ The special tax sites are characterised as under-developed sites where Freeport designation can generate additional productivity from land that is vacant or derelict.

the Full Business Case (**FBC**) following approval from the Scottish Government in October 2025⁴. The key objectives of the FGF are to:⁵

- (a) promote regeneration, stimulate economic growth and high-quality job creation;
- (b) promote decarbonisation and a just transition to a net zero economy;
- (c) establish hubs for global trade and investment; and
- (d) foster an innovative environment.

- 5.1.4 As such, the FGF plays a critical role in helping the Scottish and UK governments reach their legally binding targets of achieving net zero greenhouse gas emissions by 2045 and 2050 respectively, in accordance with their international obligations under the Paris Agreement.
- 5.1.5 The first developments at the FGF have been announced, including most recently a project by Scottish biotech company MiAlgae that will utilise byproducts from whisky distillation, backed by up to £3 million⁶.
- 5.1.6 The FGF's policy objectives complement those set out for the IGTZs, and Forth Ports and the Council are partners in the FGF initiative, seeking to maximise benefits flowing into the region by promoting and encouraging economic development.
- 5.1.7 The approval of the FBC also demonstrates a clear step forward on the Port's timeline for development. The positive long-term trajectory of the Port is evident and must be accounted for in the design of the Scheme.
- 5.1.8 The Energy Park sits within the Grangemouth Tax Site and will provide low-carbon alternative fuels to the shipping industry, electricity production and carbon capture and storage, supporting local, national and international decarbonisation targets, including Net Zero Scotland by 2045. The development of emerging technologies that will be hosted by the Energy Park also require significant time to develop.
- 5.1.9 The Energy Park can only be located on this land. There is no alternative location within the Port, the Grangemouth Tax Site, or the wider FGF area, that is suitable to host the Energy Park.
- 5.1.10 Grangemouth is identified as an area where industrial activity is concentrated, providing high value manufacturing and employment opportunities. The Port will continue to support jobs in the region through the FGF. This is critical to the surrounding community following Petroineos' decision to cease operations at the Grangemouth refinery in April 2025, which resulted in the loss of 430 jobs. The Energy Park will deliver 400-500 skilled jobs and 3,000-4,000 jobs during construction.
- 5.1.11 The Port land including the Energy Park land and Grange Burn land is also identified within the Urban and Village Limits of the Falkirk Local Development Plan 2 (**LDP2**).
- 5.1.12 During the development of LDP2 Forth Ports sought to have the land identified as a Business Site. This proposal was a 'preferred option' at the Main Issues Stage of LDP2 however the Council did not proceed, on the basis of what it considered to be 'constraints', being proximity to the Firth of Forth Special Protection Area (**SPA**), and uncertainties about flood risk and the future flood protection. The Council's solution was to include the land within the Urban and Village Limits given the land formed part of the operational Port estate,

⁴ <https://forthgreenfreeport.com/news/forth-green-freeport-secures-full-business-case-approval/>

⁵ [Green Freeports - Cities and regions - gov.scot](#) and [About - Forth Green Freeport](#)

⁶ <https://www.gov.scot/news/funding-to-support-up-to-460-new-jobs-at-grangemouth/>

thus affording Forth Ports with the potential opportunity to bring forward development in accordance with Policy JE04 Business Development Out with Designated Business Areas (subject to meeting the Policy requirements).

- 5.1.13 Also during development of LDP2, Forth Ports sought amendment to Spatial Strategy Map 3.6 which identified the Grangemouth Flood Protection Scheme (**GFPS**) cutting across land to the east of the developed Port area, prior to the final route of the GFPS being confirmed. The Reporter agreed that the Spatial Strategy Map should be amended for the GFPS to be routed around the entirety of the Port (including both the Energy Park land and the Grange Burn land) and concluded as follows:⁷

“5. Proposed Map 3.6 Spatial Strategy – Infrastructure shows the extent of the Grangemouth flood protection scheme watercourses and coastline. It is not intended to show the precise alignment of all proposed flood protection measures, which are yet to be finalised. The coastal extent excludes a small peninsula of reclaimed land. This peninsula comprises parcels in the ownership of Petroineos, Crown Estate, and the Port of Grangemouth (Plot C). Plot C is identified in the proposed plan as site 163.

6. Although there appear to be no structures on it and it is not currently being used for port-related undertakings, this area is obviously non-tidal ground, not water. During my site inspection, I was unable to access site 163 because the timber footbridge is no longer in use. Nevertheless, I could see a significant number of mature, if stunted, broadleaf trees, typical of self-seeded coastal woodland, growing on it. I also note that, on Proposals Map 5 and the map on page 97, the council has extended the proposed urban limit to include this peninsula.

7. Consequently, in my assessment it would be perverse to suggest that it is either water or tidal ground. I shall therefore recommend that the Grangemouth flood protection scheme coastline depiction is altered to include site 163 within its landward extent.”

- 5.1.14 Although the Spatial Strategy Map was then amended to be routed around the entirety of the Port (including both the Energy Park land and the Grange Burn land) in accordance with the Reporter's recommendation, the Council had not previously agreed to Forth Ports' suggestion to amend the Map, for the following reason:⁸

“[The GFPS] sets an objective to manage flooding in Grangemouth including reducing economic damages to residential and non-residential properties and reducing risk to people from river and coastal flooding. It is not therefore intended to protect undeveloped land. For these reasons, the Council does not agree to modify the plan in response to this representation.”

- 5.1.15 For the reasons set out in this statement, Forth Ports consider that reasoning is flawed, as the Energy Park land and the Grange Burn land are identified for development under national and local policy, and cannot be treated as 'undeveloped' land in the same way that rural land is considered.
- 5.1.16 The Energy Park land and Grange Burn land has now been put forward by Forth Ports in response to the Council's Call for Sites for the Falkirk Local Development Plan 3 (**LDP3**), proposed to be designated as a Core Business Area and Business Use (Port related industry/storage and distribution/logistics/energy). Further detail is set out in Forth Ports'

⁷ Submission of the Report of the Examination, Proposed Falkirk Local Development Plan 2, 27 March 2020, at page 252. Accessed at: [Scottish Government - DPEA - Document](#)

⁸ At page 246.

Falkirk LDP3 Call for Sites Briefing Note dated 02/05/2025, which is attached at **Appendix 3**.

- 5.1.17 Information provided by Forth Ports to inform the development of LDP2 should have informed initial development of the Scheme. Given that the Council's concerns with the proposed development of the Energy Park land and the Grange Burn land relate to flood risk and proximity to the SPA, and the fact that the Energy Park land in particular is identified by SEPA as having a high risk of flooding⁹, it is clear that the potential for inclusion of the Energy Park land and the Grange Burn land within the Scheme should have at least been considered, as a measure to address flood risk alongside enabling future development, and should have been accounted for within the Scheme's HRA (as discussed in more detail below).
- 5.1.18 In accordance with the national and local policy position described above, the Energy Park land and the Grange Burn land must be considered on its own merits and cannot be disregarded as undeveloped land. The Council's current approach in relation to the Scheme does not demonstrate that full regard has been had to policy or to the land's significance, both to the surrounding community and nationally. This approach is reflected in the Scheme's Environmental Impact Assessment (EIA) Report which fails adequately to assess direct, indirect, up and downstream as well as cumulative effects of the Scheme. The assessment does not recognise that the proposed route of the FPW severs parts of the Grangemouth Tax Site and as a result significantly underreports the likely significant adverse effects, whilst overlooking the likely significant beneficial effects of an alternative scheme.
- 5.1.19 The Council's inadequate understanding, consideration and assessment of the FGF and existing operation of the Port can also be seen by the lack of detail in the Scheme's design around critical port infrastructure, including the Lock Gate and its potential to interfere with or obstruct Port activity on North Shore Road as well as future proposals (Key Issues 2 and 4).
- 5.1.20 The Council's approach to development of the Scheme, in particular its failure to account for alternatives in location and design and to consider the future flooding protection needs of the Port, falls short of what is required by guidance for the development of flood protection schemes in accordance with the 2009 Act.
- 5.1.21 The 'Project Appraisal: Assessment of economic, environmental and social impacts' guidance¹⁰ recommends a formal appraisal-led design process which emphasises the need to consider a wide range of alternative solutions, and to take a holistic approach to analysis which accounts for a full suite of economic, environmental and social priorities, across a time span of at least 100 years. The guidance states, in particular:
- (a) "The cost-benefit analysis should stimulate the development of alternative solutions by clarifying the consequences of all options". (paragraph 1.7)
 - (b) The appraisal process should aim to achieve the following goals: [...] "Sustainability – A sustainable scheme will take full account of economic, environmental and social priorities, and protect and enhance our natural and built environment for ourselves and for future generations..." "Accountability – A formal process of project appraisal can demonstrate that a wide range of different options has been considered transparently, and that the advantages and disadvantages of each have been properly considered..." (paragraph 1.10).

⁹ The Energy Park land is identified as having a high risk of flooding on the [SEPA Flood Maps](#), and the Energy Park land and the Grange Burn land are identified as Potentially Vulnerable Areas of the SEPA [NFRA 2018](#) database for the 2028-2034 flood risk management cycle.

¹⁰ [The Flood Risk Management \(Scotland\) Act 2009 Flood Protection Schemes - Guidance for Local Authorities Chapter 5 Project Appraisal: Assessment of economic, environmental and social impacts](#)

- (c) "The appraisal period should reflect the physical life (with maintenance) of the longest-lived asset under consideration for a scheme. The presumption is that for most conventional schemes involving major earthworks, concrete or masonry structures, a 100-year timeframe will be appropriate. A 100-year timeframe allows for appropriate comparison of options... short time horizons can bias the economic appraisal against options that cost a lot now but which are less expensive to maintain, which provide significant benefits, and/or may be more sustainable over a longer timeframe. Longer appraisal periods also better allow for more of any environmental or adaptation benefits to be included in appraisals." (paragraph 3.8).
- (d) "In the early stages of analysis, the range of options should be as wide as possible..." (paragraph 4.10) "An appropriate range of options should be considered. These should normally include: (a) different standards of protection; (b) alternative alignments; and (c) different approaches to solution of the problem." (paragraph 4.12).

- 5.1.22 For the design of the Scheme to be properly justified it needs to be consistent with policy and guidance, have considered reasonable alternatives and have adequately assessed all effects including cumulative, and must not interfere with the carrying on of Forth Ports' statutory undertaking. By routing the FPW along the shoreline, enabling the Energy Park land and the Grange Burn land to come forward and facilitating other future development at the Port, the Scheme would provide indirect benefits to health and economic receptors, and support the achievement of Net Zero by 2045.
- 5.1.23 Additionally, the exclusion of this land from the protection of the Scheme demonstrates the inadequacy of the proposals for protecting strategic, nationally important development sites. Consideration of how this affects and undermines how the Scheme meets the tests under the Habitats Regulations¹¹ is set out in section 7.
- 5.1.24 The Port, its infrastructure and its estate are essential to the delivery of sustainable inclusive growth and net zero emissions, and now even more so with Petroineos' decision to convert the refinery to a fuel import terminal. For these reasons, it is critical that the Scheme enables the Energy Park land, the Grange Burn land and other port development to come forward.

5.2 Effects on Port access

- 5.2.1 The FPW is proposed to be aligned to the north of North Shore Road. This road is used for the movement of wide-loads and AILs to and from Scotland via the Port. The proposals are likely to reduce the operational width of North Shore Road, comprising the existing capacity to accept wide load AILs, general accessibility, safety and capacity. It is important that the Scheme is designed so that the FPW is set sufficiently far back from North Shore Road that it does not interfere with existing Port operations, including the transport of wide-loads and AILs between the highway network and vessels or breach its duties under the Ports and Marine Safety Code (Key Issue 2).
- 5.2.2 Additionally, the proposals require the replacement of the existing Lock Gate within the Port entrance channel, being the only access point for vessels to enter the Port. The design of this Lock Gate is critical, as any shortfall in the design specification, construction, operation, maintenance and management risks the ability of the Port to carry out its primary function of accepting vessels, causing significant harm to Port operations (Key Issue 4).

¹¹ Conservation (Natural Habitats, &c.) Regulations 1994.

- 5.2.3 Forth Ports acknowledges the efforts of the Council to agree a solution for the Lock Gate. Forth Ports will continue to seek engagement with the Council to finalise the solution and implementation plan.

6. CONSTRUCTION EFFECTS

- 6.1 As a statutory harbour authority, Forth Ports has responsibility for the operation of the Port and the safety and security of its users. The construction and operation of the Scheme will require the use of operational Port land and, at times, the closure of the Port. During construction, Port land will be used by construction workers and vehicles, and traffic management measures are proposed, including the partial closure of both North Shore Road and South Shore Road. Ongoing access arrangements will be required for maintenance and operation, and the management of the closure of the Lock Gates will need to balance flood risk with current and planned vessel movements and duties of the Port (Key Issue 5).
- 6.2 This extensive level of interaction will need to be managed through a bespoke legal agreement, providing Forth Ports with certainty on performance and proper effective oversight of all activity at the Port, consistent with its duties as a statutory harbour authority. Such an agreement will enable impacts on the operational Port and its tenants to be minimised and ensure that all contractors are aware of and comply with the related restrictions and other arrangements, so that the Scheme does not create any increased risk to health and safety or direct impact on Port traffic.
- 6.3 Forth Ports remains committed to finding workable solutions in this area with a focus on minimising the impact on Port operations whilst accounting for the construction programme of the Scheme.

7. HABITATS REGULATIONS

- 7.1 The HRA undertaken by the Council for the Scheme was published in August 2025 and so did not form part of the documents or environmental information made publicly available during the public consultation on the Scheme. As such the HRA was not addressed in the Objection, and so is now addressed in this written statement.
- 7.2 The HRA has not considered the proposed modifications to the Scheme put forward by Forth Ports in the Objection to address the key issues raised, primarily Key Issue 1. In particular the Council has not assessed the potential implications for adverse effects on site integrity (**AEoSI**) (or lack thereof) of rerouting the FPW around the Energy Park land, the implications for the alternatives and IROPI assessment of including this land within the FPW, retaining and futureproofing access to the Grange Burn land, and adjusting the Scheme to ensure existing and future Port operations are not impeded by the Scheme's construction and operation.
- 7.3 Forth Ports has reviewed the HRA and is confident that the changes to the Scheme that are requested in order to resolve the key issues could all be implemented without undermining the findings and conclusions of the HRA that it is appropriate for the Scheme (but as modified) to be confirmed. The requested changes would instead operate to make those findings and conclusions of the HRA more robust.
- 7.4 **Procedural considerations**
- 7.4.1 Regulation 48 of the Habitats Regulations provides that a competent authority, in this case the Council, must carry out an appropriate assessment (**AA**) of the implications of a plan or project on a European site, where the plan or project is likely to have a significant effect on the European site, **before** deciding to undertake or give any consent, permission or other authorisation for the plan or project. The competent authority shall agree to the plan or project **only after** having ascertained that it will not adversely affect the integrity of the site(s).

- 7.4.2 The HRA was not publicly available when the Council made its preliminary decision to confirm the Scheme on 23 January 2025. The Council has now determined in the HRA that the potential for AEoSI to the Forth of Firth SPA resulting from the Scheme cannot be ruled out, however it is not clear to what extent, if at all, the HRA was taken into account in the Council's preliminary decision to confirm the Scheme. The materials presented to the Executive Committee note only the need for a HRA to evaluate the Scheme's impact on the SPA and to determine whether an AA is necessary¹².
- 7.4.3 Additionally, Regulation 49 of the Habitats Regulations requires that where AEoSI cannot be ruled out the competent authority may still approve a plan or project where it considers there are no alternatives *and* there are imperative reasons of overriding public interest (IROPI) to proceed with the plan or project. Where the competent authority is not the Scottish Ministers, i.e. the Council in this case, it **must consult** the Scottish Ministers and have regard to their opinion in order to satisfy itself on the assessment of alternatives and IROPI.
- 7.4.4 The HRA includes an assessment of alternatives and determination of IROPI and concludes that the Scheme can proceed with appropriate compensation as proposed. As the HRA was not made public until August 2025 it is not clear whether the Council consulted the Scottish Ministers on its assessment, as required by Regulation 49.
- 7.4.5 As such, it is clear that the Council has not followed the procedural requirements of the Habitats Regulations and it appears to Forth Ports that the preliminary decision was not made lawfully. Now that the HRA has been published the requirements in Regulations 48 and 49 must be considered and complied with as part of the hearing process, to ensure the Scheme has been fully considered before a final decision is made by the Council on whether to confirm the Scheme and, if so, with any modifications. The views of the Scottish Ministers should therefore be sought prior to the hearing, and their views taken into consideration.

7.5 Appropriate Assessment

- 7.5.1 The Council has not considered the option of locating the FPW around the Energy Park land, adjacent to the SPA, so as to provide protection for the Energy Park land, and incorporating provision for access to the bridge across Grange Burn. Therefore, the Council has not assessed whether doing so would materially increase or alter the potential for AEoSI resulting from the Scheme, and has provided no evidence that this would be the case.
- 7.5.2 It is understood that adverse effects to the integrity of the SPA identified in the HRA broadly relate either to the permanent loss of SPA land or land that is functionally linked to the SPA, or to the temporary disruption caused by construction of the Scheme.
- 7.5.3 The AA finds that AEoSI *cannot be ruled out*. This is explained in the HRA as being connected to the very precautionary nature of the assessment. Accordingly, it is not a finding that there *will* be adverse effects, but simply that the assessment could not conclude, based on best available scientific evidence, that there *will not* be any AEoSI.
- 7.5.4 The AA concludes the potential for AEoSI is on the basis that there may be disturbance / displacement resulting in indirect habitat loss for certain bird species of the SPA, resulting from construction and maintenance activities for the Scheme occurring in proximity to the

¹² Reviewing the materials presented to the Executive Committee, being the Report and an Appendix, there is only a single mention of HRA. Within the Appendix at section 7.4 (Stage 4 Outline Design), a series of bullet points sets out the matters that were considered. The third bullet point says simply "Habitat Regulation Appraisal: Needed to evaluate the Scheme's impact on the Forth Estuary Special Protection Area (SPA) and determine if an Appropriate Assessment is necessary". There is no further mention of HRA, whether an Appropriate Assessment (AA) was necessary, nor the outcome of that AA.

SPA. The AA determines the risk of AEoSI for the SPA is 'extremely small'. It determines that the Scheme 'could' have an AEoSI in relation to disturbance impacts, due to the requirement to follow the precautionary principle and 'inherent uncertainties associated with ecological systems and assessments'. The AA identifies that displacement impacts are anticipated to be localised and short term / intermittent, only occurring during certain tides, and will not result in displacement of birds out of the SPA therefore not impacting the species as viable components of the SPA.

- 7.5.5 Conversely, the AA concludes there is no potential for AEoSI resulting from direct habitat loss. While the Scheme will result in 1.15ha of permanent habitat loss and 0.43 of temporary habitat loss from the SPA, this loss is determined to be of a scale which, considering the remaining habitat available to birds in the SPA, will not result in AEoSI.
- 7.5.6 If the Scheme is modified as proposed by Forth Ports, the FPW would be shifted to incorporate the Energy Park land and would relocate the FPW adjacent to the SPA at this location. The land surveys undertaken as part of the HRA¹³ did not record any presence of SPA species on the Energy Park land, therefore there is no risk that including the Energy Park land within the FPW will result in direct habitat loss of land utilised by SPA species.
- 7.5.7 Considering indirect habitat loss due to disturbance and displacement during construction and operation of the Scheme, it is relevant that the Scheme already proposes at other locations to align the FPW adjacent to the SPA, including along part of the river Carron to the north of the Port, and on the northern side of Grange Burn where the SPA continues south to the railway adjacent to the petrochemical site.
- 7.5.8 Mitigation to reduce disruption to bird species has already been designed into the Scheme and could equally be applied at the Energy Park land, to reduce the extent of effects on birds of the SPA. These proposed measures include location-specific seasonal working restrictions and/or phasing of works; visual and noise screening (which could potentially be higher in certain locations, as compared to the 2m height committed to for the Scheme generally); Bird Species Management Plans, bird watching and monitoring surveys; soft start protocol for machinery; and removal of temporary works/infrastructure from within the SPA and restoration of intertidal areas following construction.
- 7.5.9 Overall, it appears unlikely that the conclusion of potential for AEoSI would change if the FPW was realigned as sought by Forth Ports. This is because the key reasoning that AEoSI cannot be excluded will not change as a result of the proposed realignment. First, the Council notes that AEoSI cannot be ruled out as, due to the scale of the Scheme, construction overall cannot be phased in order to avoid the protected bird's seasons. This finding is unaffected by a minor alteration to the alignment of the FPW. Secondly, the Council notes that the proposed mitigations to address disturbance will reduce effects but are not sufficient to avoid potential for AEoSI. These mitigations are already identified and assessed in locations where the FPW is to be constructed adjacent to the SPA, and the same conclusions can therefore be drawn in respect of aligning the FPW around the Energy Park land.
- 7.5.10 As such, in this context there is nothing to suggest that the proposed modification of the alignment to the FPW to follow the boundary of the Energy Park land would result in materially different effects to the SPA to those already identified by the HRA.
- 7.5.11 In any event, given the value of the Energy Park land to the Port, the FGF, the wider Falkirk area and Scotland, it is suggested that the HRA should be updated to consider the effects

¹³ The Energy Park land was surveyed as part of Sector 7. Figure 10 of the HRA illustrates the areas covered by survey efforts, and shows the Energy Park land was included in Jacobs Survey Sector (2022/23). The species maps in Figures 22 to 32 do not report any presence of SPA species having been recorded on the Energy Park land itself.

of the proposed alignment change in order to fully understand if there would be any differing conclusions.

- 7.5.12 In respect of the other key issues raised by Forth Ports and the modifications sought to the Scheme, these can be resolved without altering the fundamental elements of the Scheme that has been assessed in the HRA, and it is therefore considered unlikely that a resolution to these issues would affect the HRA.

7.6 Consideration of alternatives

- 7.6.1 The Council's consideration of alternatives under Regulation 49 is flawed. It fails to consider within the alternatives the option of including the Energy Park land within the FPW (and including a demountable section of the FPW to secure future access to the Grange Burn land), and therefore incorrectly identifies the preferred option as meeting the objectives set for the Scheme.
- 7.6.2 The Scheme objectives, as set out in the HRA¹⁴, include, relevantly:
- (a) GFPS-OBJ3: Provide flood protection to industry in the Communities, including the Port of Grangemouth, the petrochemical works and refinery (including the Kinneil Terminal);
 - (b) GFPS-OBJ4: Reduce risk to life and limit disruption from flooding within the Communities; and
 - (c) GFPS-OBJ5: Reduce economic damages within the Communities arising from flooding.
- 7.6.3 The Council's preferred option is 'Do Something' Option 4: 'Flood defences at the edge of the Firth of Forth SPA'. The other 'Do Something' options considered are Option 3: Natural Flood Management, Option 5: Flood defences set back from the Firth of Forth SPA within the Port of Grangemouth and petrochemical plant, and Option 6: Tidal barrier/barrage across the Firth of Forth. The Council considers that only Option 4 meets the Scheme objectives and therefore it is the only viable alternative.
- 7.6.4 Forth Ports consider that Option 4 and its assessment against the Scheme objectives is misleading. Option 4 is not truly an option which aligns the flood defences at the edge of the SPA in all relevant locations, as it does not incorporate the Energy Park land. Further, as set out in this written statement, the Energy Park land and the Grange Burn land lie within the urban limits of Grangemouth, were recommended for inclusion in the Scheme by the LDP2 Reporter, and have been earmarked for development under strategic national policy. Protecting the Energy Park land (and maintaining future access to the Grange Burn land) is critical to enable the future economic development of the Port. Therefore, Option 4 cannot meet the Scheme objectives, primarily because it does not provide flood protection to all of the Port.
- 7.6.5 This issue is further exacerbated once the construction timelines associated with the FGF are considered against the proposed construction programme of the FPW. It is very likely that development of the Energy Park land will be under construction and operational by the anticipated start date for construction of the Scheme in this area, being 2032 at the earliest. It is noted that delays associated with these objections to the Scheme only increase the likelihood of development of the FGF being in place before the FPW is commenced in this location. This then highlights that Option 4 also fails to meet objective 5, to reduce economic damages arising from flooding, as it will leave land which will be developed when the Scheme is constructed unprotected from flooding.

¹⁴ At page 118.

- 7.6.6 The alternatives assessment fails because it does not consider the future of the land, despite being included within the urban limits of Grangemouth, expressly recommended for inclusion in the then-nascent flood protection scheme, and the designation as part of the FGF and Grangemouth Tax Site. All of these considerations were known to the Council when designing the Scheme and assessing the options. As set out in this statement, the FGF is progressing apace, with significant investment in development at Grangemouth further prioritised through the closure of petrochemical operations. This omission must be addressed if the alternatives assessment is to be robustly relied upon.
- 7.6.7 Because Option 4 fails to account for the inclusion of the Energy Park land, it is essentially akin to Option 5 in this location: 'Flood defences set back from the Firth of Forth SPA within the Port of Grangemouth and petrochemical plant'. The Council identified that Option 5 was not a viable alternative as it would not provide protection to industry within the Communities including the Port of Grangemouth and the petrochemical plant" and that "significant economic damages would not be avoided". Forth Ports agrees and considers the same conclusion is true for Option 4 as currently proposed.
- 7.6.8 The Council's assessment of Option 4 includes consideration of various design options for the delivery of the Scheme. There does not appear to be any reason why the consideration of the alternative design options would have different conclusions if the Energy Park land was included within the FPW. Similarly, from the alternative design options considered, it does not appear that the conclusions would differ with the inclusion of a demountable section of the FPW to futureproof and secure access to the Grange Burn land. The additional cost of not securing the future development on this land far exceeds any additional cost from the minor increase in length and design of the FPW.
- 7.6.9 Forth Ports considers that a revised Option 4 which includes the Energy Park land within the FPW and enables the future access of the Grange Burn land is the only viable alternative which meets the Scheme objectives. It is only once this change is made that the Council can rely upon the conclusions of the HRA that there is no alternative for the purposes of the Habitats Regulations.

7.7 Imperative reasons of overriding public interest (IROPI)

- 7.7.1 The Council's assessment of IROPI in the HRA correctly identifies the Port as nationally important infrastructure and the roads providing access to and from the Port as crucial in the event of an emergency. The IROPI also identifies the economic benefits of protecting the Port and commercial tenants within the Port, and the potential economic impacts of a flood event, and therefore derives the economic benefits of the Scheme.
- 7.7.2 However, the IROPI case is flawed as it appears that the Council's assessment of the Scheme has simply not contemplated the Energy Park land and the Grange Burn land as part of the Port. There is no mention of the FGF in the HRA and no consideration of the economic value of including the FGF land within the Scheme, or conversely the economic loss of not including the land within the Scheme.
- 7.7.3 The Scheme as currently proposed directly undermines the developability and value of the FGF land. In the absence of a FPW, the Energy Park land would effectively be severed from the remainder of the Port, becoming isolated and undesirable for developers, being both inaccessible and at high flood risk. Once it has been severed, the land is effectively lost to future development and productive economic use as it is no longer viable or feasible for measures to be put in place on an individual project-by-project basis.
- 7.7.4 Therefore, the value of the FGF that would be lost through the Energy Park land being severed and left unprotected and at a high risk of flooding; through the constraint on existing Port activity; and the severance of almost 35 hectares of FGF development land (the Grange Burn land) must be counted against the IROPI case for the Scheme.

- 7.7.5 Conversely, the IROPI case would be substantially strengthened if the alignment of the FPW was adjusted so that the Energy Park land were protected, access to the Grange Burn land was not severed, and existing Port activity not constrained by the FPW being too close to and interfering with the safe and effective use of the North Shore Road, as this would mean that the Scheme is directly securing and protecting the developability and future economic potential of the FGF.
- 7.7.6 By failing to consider the true value of the land within the FGF (see section 8), and by ignoring the role of this land in long-term strategic planning for the area, the Council has failed to consider the true effect of the FPW. The Council has treated the land as akin to any other area of undeveloped land, critically overlooking the value that has been generated in that land through years of strategic planning and development focusing on complex and novel technologies. The nature of the land is such that, for its value to be fully realised, a complete strategy must evolve to support development of the nature proposed (i.e. novel technologies supporting the transition to Net Zero). The Council has failed to take that value added into consideration, with the effect both that the IROPI case for the Scheme is undermined and that investment in the FGF must be factored against the risk that a FPW will sever the Energy Park land and wider development land from the Port.
- 7.7.7 Forth Ports considers that it cannot be the intention of the Council to undermine its investment in the FGF proposals, and notes the extensive efforts to ensure that the decision by Petroineos to cease operations does not have a devastating impact on Grangemouth. The FGF provides the opportunity to support skilled job creation at Grangemouth, and lead the essential evolution to renewable energies. However, whilst Forth Ports is confident that this consequence is unintended, the decision of the Council to maintain the inadequate alignment of the FPW, and to fail to address the key issues detailed above, will significantly limit the opportunities that would otherwise be afforded to Grangemouth through the FGF. In this context, without amendments to the Scheme, the IROPI case cannot be made out. This is because, in its current form, the FPW would harm efforts to provide jobs and support the future of the communities living and working at Grangemouth, and is therefore anything but in the public interest.

7.8 Compensation

- 7.8.1 The Council's compensation case proposes to provide functionally equivalent habitat for the 'two main aggregations of birds at key high tide roost locations' within the SPA which will potentially be impacted by construction and maintenance of the Scheme in proximity to the SPA – these two areas are the breakwater area directly west of the Port, and the sheltered bay at the estuary edge south of the Grange Burn land and north of the petrochemical plant.
- 7.8.2 As set out above, there is nothing to indicate that the modifications to the Scheme requested by Forth Ports would cause any change to the conclusions of the AA. As such, the compensation already proposed to address potential AEoSI for bird species of the same SPA, within the same habitats and general location, as may be impacted by relocation of the FPW around the Energy Park land, will continue to be sufficient and appropriate following the realignment.
- 7.8.3 The Council proposes to deliver compensation at two sites within the SPA, Kinneil Lagoons and Bothkennar Pools, via habitat creation and vegetation management additional to existing conservation management. Both sites are owned by the Council.
- 7.8.4 The scale of compensation proposed by the Council well exceeds the anticipated scale of compensation required for the Scheme. At Kinneil Lagoons the Council's assessment is that the creation of four islands resulting in 0.62ha of habitat could provide additional theoretical capacity to accommodate 46,380 roosting birds. The Council assessment estimates as a worst-case scenario that Kinneil Lagoons would need to be used by 27,717 birds, being 10,500 birds from the Kinneil Lagoons and 17,217 displaced birds from shelter

bay. Therefore, there is a suggested additional capacity in the compensation measure for 18,663 displaced birds.

- 7.8.5 At Bothkenner Pools the Council determines that ‘approximately 2.90ha of roosting habitat will be available to fully compensation for birds displaced from the breakwater, which has an area of 0.9ha’.
- 7.8.6 As such, if the relocation of the FPW to protect the Energy Park land was concluded to result in any greater potential AEoSI than is currently anticipated, there is more than sufficient capacity in the proposed compensation measures to accommodate any potential additional displaced birds.¹⁵ There is therefore no apparent ecological challenge that would support the retention of the current alignment of the FPW. By contrast, and as set out above, there are clear and extensive benefits that can only be adequately realised by realigning the FPW, and which serve to further support the case for the FPW and mitigate the potential SPA effects.

7.9 Summary on HRA

- 7.9.1 Altering the alignment of the FPW to the boundary of the SPA to incorporate the Energy Park land and making provision for future access across Grange Burn is unlikely to result in materially different findings as to the potential for AEoSI to the SPA – however this option has not been considered by the Council and any differences in the conclusions of the AA have therefore not been explored.
- 7.9.2 There appears to be sufficient compensation provision already made within the HRA to account for any minor increase in AEoSI that may result from a change to the alignment of the FPW.
- 7.9.3 The current alignment of the FPW, so as to exclude the Energy Park land from the FPW and to sever the development land across Grange Burn, is inconsistent with the definition of the preferred alternative Option 4 and leads to the same criticisms as ‘unviable’ Option 5. It is only where the FPW is realigned to follow the boundary of the SPA in this location that the assessment of Option 4 as meeting the Scheme objectives is accurate and that it can truly be said that there is no alternative solution.
- 7.9.4 The strategic growth relating to the FGF is now being realised. The current alignment of the FPW would sterilise key development land within the FGF, making it impossible to realise the growth and ambitions underpinning the FGF policies. This undermines the IROPI case for the Scheme as, without *any* FPW, the FGF development could proceed unhindered, with individual developments addressing flood risk as required.
- 7.9.5 By aligning the FPW to the boundary of the SPA, the full ambition of the FGF is unlocked, by ensuring all parts of the FGF are readily accessible and the most vulnerable parts are protected from flooding. A change to the alignment of the FPW radically boosts the IROPI case for the Scheme, as it enables and supports the strategic growth ambitions for the Port.
- 7.9.6 The IROPI case must be considered by the Scottish Ministers against the national interest, and national policies such as the Green Freeports initiative, and endeavours to provide new, skilled jobs to mitigate the impacts of the Petroineos decision to cease refinery operations at Grangemouth, will be critical to the case for IROPI. The development land cannot be treated simply as undeveloped land, as to do so is to fail to adequately consider the strategic, national importance of the land to Scotland.

¹⁵ The survey data in the HRA having recorded no use of the Energy Park land by birds, it is anticipated that a precautionary assessment of bird displacement from this land would be correspondingly low.

8. FINANCIAL MATTERS

- 8.1 A detailed economic impact assessment has projected that the FGF will generate £7.9 billion of private and public investment over the next decade and boost GVA (gross value added) by £8.1 billion. This investment is projected to create up to 34,500 well paid jobs, with around 16,000 of these being direct employment in the FGF's target sectors and tax sites.¹⁶ The need case for the FGF has also been compounded by the job losses resulting from Petroineos' decision to cease refinery operations.
- 8.2 The Scheme, as currently designed, will impede the realisation of these benefits. The economic benefit of the Scheme is estimated to be £2.4 billion in terms of avoidance of flood-related damages to property and infrastructure¹⁷. Considering this against the £7.9 billion economic value of the FGF, sterilising a significant portion of FGF land greatly undermines the cost-benefit analysis and the case for the Scheme.
- 8.3 Excluding the Energy Park land and the remaining Port development land from the protections afforded by the Scheme undermines the development potential and value of land within the Grangemouth Tax Site, weakening investment pull for nationally supported decarbonisation projects. Including these areas within the protected limits, however, enhances the Scheme's economic case and long-term value creation. Additionally, a resolution to the issues highlighted in respect of North Shore Road and the Lock Gate, as well an agreement regarding how the Scheme's construction and operation will interact with Port activities, would also assist in robustly securing the economic benefits of the FGF and avoid constraining existing economic activity at the Port.

9. CONCLUSION

- 9.1 Forth Ports has identified five Key Issues with the Scheme that must be addressed if the Scheme is to be finally confirmed. These Key Issues, if not addressed, will result in the FPW constraining current Port operations and use, and restricting and sterilising nationally and strategically important development land at Grangemouth. If not managed appropriately, the construction of the Scheme would interfere with and disrupt Port activity, affecting the existing economic benefits of the Port to Grangemouth.
- 9.2 For each of these Key Issues, Forth Ports has identified proposed solutions. The solutions are modest in nature, prioritising the deliverability and viability of the Scheme by the Council, whilst maximising the benefits that would be provided by the FPW. A Scheme that incorporates the changes detailed in this Statement would benefit from a materially improved need case, a stronger financial case, and a more robust HRA case, but would not result in materially worse environmental effects, nor would it require materially more expensive or technically challenging design and construction.
- 9.3 The Council, in designing the Scheme, has failed to give appropriate or adequate consideration to:
- 9.3.1 the long term development plans of Forth Ports, as set out in its submissions to the Council as part of LDP2 and in response to the call for sites for LDP3. As set out in section 5, the Energy Park land and the Grange Burn land are within the urban limits, and were recommended for protection by any proposed flood protection scheme in recognition that they are both vulnerable land and the focus of long-term development ambitions at the Port; and
 - 9.3.2 the FGF and the designation of under-and un-developed areas of Port land within the Grangemouth Tax Site. It is notable that the Council was a principal part of the bid for the FGF, submitted in June 2022, and was therefore fully aware of and invested in the long term strategic development of this land at the Port. Despite this, the Scheme appears to have been designed in isolation from the proposals for the FGF and in ignorance of the extensive work and investment committed to the FGF by the Council, both prior to and after

¹⁶ <https://www.forthports.co.uk/latest-news/forth-green-freeport-secures-full-business-case-approval/>

¹⁷ Habitats Regulations Appraisal, paragraph 1.1.

the Scheme design was made public for consultation in May 2024. The FGF became operational on 12 June 2024 following approval of its outline business case and the designation of the Tax Sites¹⁸. However, the compatibility of the Scheme with the FGF was also not adequately considered by the Council in making its preliminary decision to confirm the Scheme without modification.

- 9.4 In consequence, the Council's approach to developing the Scheme does not accord with policy or guidance. At a local level, the Scheme is incompatible with the designation of the land as within the Urban and Village Limits of Grangemouth in LDP2; rejects the recommendation of the Reporter to protect the Energy Park land and the Grange Burn land in any flood protection scheme without justification; constrains and conflicts with local endeavours to develop Grangemouth, create skilled jobs and minimise the effects of the decision by Petroineos to cease refining activities; and restricts the Council's ability to secure business development within LDP3. At a national level, the Scheme is incompatible with the Green Freeports initiative and the designation of the Grangemouth Tax Sites; overlooks the role of the Port and the land as part of the Scottish Cluster and Grangemouth Investment Zone under NPF4; restricts the ability to deliver a Just Transition; and sterilises the only land available for the critical Energy Park development. Finally, at an international level, the Scheme severs and sterilises land from development that is critical for the transition to Net Zero in the fight against climate change, severely limiting the opportunities for the Port to decarbonise its activities and those of shipping, and hampering the achievement of international climate commitments.
- 9.5 In its current form, the Scheme endangers the efficient and economic operation of a critical, nationally important infrastructure asset, and the future development in the national interest that is currently being brought forward as part of the FGF. With only minor modifications, the Scheme would bolster and support local, national and international ambitions, with each change proposed by Forth Ports representing improved value for money with minimal challenges to delivery.
- 9.6 The Council's approach to the HRA is fundamentally flawed, with the Council having failed to properly incorporate the HRA into its consideration of the Scheme at the design / development and then the preliminary decision stage. This must be remedied as part of the hearing process to ensure that any final decision in respect of the Scheme is not unlawful under the Habitat Regulations.
- 9.7 In carrying out the HRA, the Council's assessment of alternatives misrepresents the preferred option and fails to recognise how the current design of the Scheme is *not* the best or only option. Without amendment, the Scheme cannot pass the Habitat Regulations' requirement that there must be no alternative to the proposals.
- 9.8 The Council's assessment of IROPI in the HRA, by failing to acknowledge the true value of the land within the Grangemouth Tax Sites, overstates the public benefit of the Scheme and fails to recognise the harm that will be caused to Grangemouth through the sterilisation of development land within the FGF. The development value of this land, as set out in section 8, is so significant that weighing the cost of lost development potential against the financial benefit of the Scheme significantly undermines the cost-benefit ratio for the Scheme. Without amendment, the Scheme cannot pass the Habitats Regulations requirement that there must be imperative reasons of overriding public interest in the proposals. Conversely, by making the minor amendments to the Scheme requested by Forth Ports, the value of the FGF development that would be enabled and facilitated by the Scheme works heavily in favour of IROPI and so providing the flood defences.
- 9.9 The Council failed to adequately consider the Objection and the output of the consultation when making its preliminary decision in January 2025 to confirm the Scheme without modification. As decision-maker, the Council will have been hampered in its ability to consider the proposals put forward by Forth Ports to the Council, by the Council ceasing to engage with Forth Ports from late 2024. The Council appears to have given itself insufficient opportunities to consider including the modifications proposed by Forth Ports as part of the preliminary decision to confirm the Scheme, as

¹⁸ See [The Designation of Special Tax Sites \(Forth Green Freeport\) Regulations 2024](#) and [Maps of Forth Green Freeport tax sites - GOV.UK](#)

inadequate efforts appear to have been made to understand the feasibility and viability of Forth Ports' suggested modifications.

- 9.10 Forth Ports remains committed to working collaboratively with the Council to find solutions to the Key Issues; however, this is only possible if the Council recommences engagement with Forth Ports, who wish to work with the Council to resolve these operational and development issues so that the Scheme can be confirmed with the necessary and appropriate modifications.
- 9.11 Unless and until the Key Issues are resolved, Forth Ports is unable to support the proposals and so maintains its objection to the Scheme.

16 December 2025

Forth Ports Limited (SC134741)

1 Prince of Wales Dock, Edinburgh, Midlothian, EH6 7DX

in its capacity as **Statutory Harbour Authority for the Port of Grangemouth**
Port Office, Grangemouth Docks, Grangemouth, FK38UE

APPENDIX 1

FORTH PORTS CONSULTATION RESPONSE OBJECTION, 14 JUNE 2024



FORTH PORTS LIMITED
RESPONSE TO CONSULTATION
GRANGEMOUTH FLOOD PROTECTION SCHEME
OBJECTION

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1. INTRODUCTION

- 1.1 This document is the formal response by Forth Ports Limited to the consultation for the Grangemouth Flood Protection Scheme (the Scheme), being promoted by Falkirk Council (the Council). This response constitutes an objection pursuant to paragraph 3 of Schedule 2 of the Flood Risk Management (Scotland) Act 2009, the details of which are set out in the below statement of reasons as required by regulation 12 of the Flood Risk Management (Flood Protection Schemes, Potentially Vulnerable Areas and Local Plan Districts) (Scotland) Regulations 2010.
- 1.2 Forth Ports Limited (Forth Ports) is the owner and operator of and statutory harbour authority for the Port of Grangemouth statutory harbour undertaking. The Port of Grangemouth (the Port) is Scotland's largest port handling 9 million tonnes of cargo each year through specialist container, liquid and general cargo terminals. This cargo flow represents as much as 30% of Scotland's gross domestic product (GDP), and the Port plays a critical role as an economic enabler for Scotland.
- 1.3 Forth Ports confirms that it will maintain this objection until the matters raised in this response have been adequately considered, assessed and fully addressed. It nevertheless remains committed to ongoing engagement and collaboration with the Council, in order to identify and implement the best available solutions to the concerns set out in this response and secure the coexistence and sustainable delivery of the designated national development at Grangemouth, of which the Scheme is one, with the Forth Green Freeport Grangemouth Tax Site.
- 1.4 It is only by addressing these concerns that the Scheme will be able to fully achieve its stated objectives, improving the integration of the Scheme with the operational Port and national policy directives, to ensure that the Scheme enables and facilitates:
 - 1.4.1 the development of an energy park that will provide low-carbon alternative fuels to the shipping industry, electricity production and carbon capture and storage (the Energy Park), supporting local, national and international decarbonisation targets, including Net Zero Scotland by 2045;
 - 1.4.2 the realisation of the full benefits of the Forth Green Freeport by ensuring all land designated as a special tax site is protected from flooding; and
 - 1.4.3 the continuance of all current and existing operational activity within the Port throughout the construction and the operational lifetime of the Scheme through the avoidance of any damage to works or property of Forth Ports' statutory undertaking, and by minimising the risks of interference with the Port statutory undertaking.
- 1.5 Forth Ports' concerns that underpin this objection are set out in full below, but in summary:
 - 1.5.1 the proposals will place the land that will be used for the Energy Park outside of the protection of the Scheme, sterilising this land and making it impossible to develop the Energy Park, contrary to National Planning Framework 4 (February 2024) (NPF4), the Just Transition workstream of the Grangemouth Future Industry Board, and the Green Freeport Designation;
 - 1.5.2 the proposals will reduce the operational width of North Shore Road, compromising existing operational activity relating to the delivery and export of wide abnormal indivisible loads;
 - 1.5.3 the proposals place Port development land, within the Grangemouth Tax Site, outside of the area protected by the Scheme, sterilising its development use and economic value;
 - 1.5.4 the design of the replacement Lock Gate and its proposed operation, maintenance and management must have full regard to the operational requirements of the Port, as it is to be constructed within the only vessel access to the Port; and

- 1.5.5 the activity associated with the construction, operation and maintenance of the Scheme has the potential to interfere with and disrupt the operational Port, and detailed management and monitoring will be necessary to minimise this risk.

2. POLICY CONTEXT

2.1 National Planning Framework 4

- 2.1.1 The importance of the Port for the achievement of Scotland's plan to reach Net Zero by 2045 is clearly recognised in Scottish government policy, including the NPF4.¹
- 2.1.2 Part 1 of NPF4 sets out that the North East of Scotland will "play a crucial role in achieving Just Transition to Net Zero", with one of three strategies for this area aiming to "plan infrastructure and investment to support the transition from oil and gas to Net Zero whilst protecting and enhancing blue and green infrastructure and decarbonising connectivity". The delivery of the special strategy in the area will also be supported by national developments, including the Industrial Green Transition Zones.
- 2.1.3 Annex B to NPF4 provides further details of the national developments referred to within the main NPF4 document. This explains that NPF4 creates two IGTZs that "will support the generation of significant economic opportunities while minimising carbon emissions", supporting Scotland's "wish to accelerate and maximise the deployment of green hydrogen". IGTZs must "demonstrate decarbonisation at pace", and that decarbonisation then cannot be used to justify fossil fuel extraction or impede Scotland's transition to Net Zero. The designation as an IGTZ provides increased policy support for relevant development, such as carbon capture. However, NPF4 makes clear: "if any IGTZ is found to be incompatible with Scotland's transition to Net Zero", the associated Scottish Government policy support will change accordingly.
- 2.1.4 In essence, designation as an IGTZ is a 'use it or lose it' status, designed to enable decarbonisation and Net Zero-compatible development to come forward at pace, freed from planning policy hurdles that would otherwise apply to slow or stifle this critical, urgent development.
- 2.1.5 The two IGTZs are:
- (a) The Scottish Cluster, relating to projects at Peterhead, St Fergus and Grangemouth, and focusing on industrial decarbonisation, energy generation, transportation and storage of captured carbon; and
 - (b) The Grangemouth Investment Zone, focusing on decarbonising industrial activities whilst continuing to host strategic and critical infrastructure, high value employment and manufacturing of materials.
- 2.1.6 NPF4 seeks to achieve the goals of the IGTZs by designating that a development contributing to the IGTZs, within one or more listed classes of development that would have been classified as 'major',² shall be a national development. NPF4 lists 16 classes of development that the designation applies to within the IGTZs, focusing primarily on classes relating to decarbonisation, carbon capture and storage and the production of hydrogen. The list also specifically includes:
- h) Port facilities for the transport and handling of hydrogen and carbon dioxide;
 - m) Grangemouth flood protection scheme.

¹ <https://www.gov.scot/publications/national-planning-framework-4/>

² Classification is set out in The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009.

- 2.1.7 The need case is clearly set out, with the listed development required to meet targets for emissions reduction. NPF4 also recognises the significant economic opportunities for lower carbon industry, and that development in the IGTZs will help to decarbonise other sectors, sites and regions.

2.2 Green Freeport Status

- 2.2.1 The Port sits within the Forth Green Freeport (FGF), and large areas of the Port have been recently designated as a “special tax site”, namely the Grangemouth Tax Site by The Designation of Special Tax Sites (Forth Green Freeport) Regulations 2024. These areas are shown on the Grangemouth Tax Site Plan at Appendix 1. The Grangemouth Tax Site is an area where special economic incentives apply to encourage investment in the area, creating jobs and feeding the economic benefits back into the surrounding community through mechanisms such as non-domestic rates retention.
- 2.2.2 The policy objective of the Green Freeports is to “promote regeneration and high-quality job creation in economically disadvantaged port geographies”. These will be achieved through three intermediary objectives:
- (a) promoting decarbonisation and a just transition to a Net Zero economy;
 - (b) establishing hubs for global trade and investment; and
 - (c) fostering an innovative environment.
- 2.2.3 The Green Freeport policy objectives complement those set out for the IGTZs, and both Forth Ports and the Council are partners in the FGF initiative, seeking to maximise the benefits flowing into the region by promoting and encouraging development.

2.3 Grangemouth Future Industry Board and ‘Just Transition’

- 2.3.1 The Grangemouth Future Industry Board³ (GFIB) is made up of private and public stakeholders, working to align public sector initiatives by focusing on industrial and economic activity to ensure that the region maintains and develops its competitiveness. Its membership includes both Forth Ports and the Council.
- 2.3.2 One focus for the GFIB is the ‘Just Transition’ workstream.⁴ This commits the Board to delivering the Just Transition Plan for the Grangemouth industrial cluster, with partners across the Board considering that “this can be best delivered through a co-ordinated approach that is co-designed alongside industry, workers and other stakeholders with a vested interest”.
- 2.3.3 The Just Transition plan has four key priorities:
- (a) preserve and enhance the economic contribution of the manufacturing cluster;
 - (b) reduce emissions towards Net Zero;
 - (c) capture and amplify existing assets such as skills and knowledge to progress the transition, and;
 - (d) ensure that the transition is fair for all.
- 2.3.4 These policies and initiatives are all complementary, seeking to promote and achieve decarbonisation and Net Zero targets. Forth Ports and the Port, located within both IGTZs

³ <https://www.gov.scot/groups/grangemouth-future-industry-board/>

⁴ <https://www.gov.scot/publications/discussion-paper-transition-grangemouth-industrial-cluster/pages/11/>

and the Grangemouth Tax Site, is uniquely placed as a hub for the coordination and support for development that will achieve the realisation of these objectives.

3. **LEGISLATIVE CONTEXT**

3.1 **Introduction**

3.1.1 The Scheme is proposed pursuant to the Flood Risk Management (Scotland) Act 2009 (the 2009 Act) and the Flood Risk Management (Flood Protection Schemes, Potentially Vulnerable Areas and Local Plan Districts) (Scotland) Regulations 2010.

3.1.2 Under Part 4 Flood Risk Management: Local Authority Functions of the 2009, section 56 sets out the general power to manage flood risk including to:

“(1) ...do anything which it considers—

(a) will contribute to the implementation of current measures described in any relevant local flood risk management plan,

(b) is necessary to reduce the risk of a flood in its area which is likely to—

(i) occur imminently, and

(ii) have serious adverse consequences for human health, the environment, cultural heritage or economic activity, or

(c) will otherwise manage flood risk in its area without affecting the implementation of the measures mentioned in paragraph (a).”

3.1.3 Section 56(2) further provides that a local authority may, in particular “(a) carry out any operations to which a flood protection scheme relates (see section 60).

3.1.4 Section 60 provides for flood protection schemes for the management of flood risk within a local authority’s area. Section 60(2) specifically provides that:

“(2) A proposed flood protection scheme must—

(a) contain a description of the operations the local authority proposes to carry out,

(b) include such maps, plans and specifications as may be specified by regulations by the Scottish Ministers,

(c) state how the operations will contribute to the implementation of current measures described in any relevant local flood risk management plan, and

(d) in as much as they will not so contribute, state the reasons why the local authority considers carrying them out will not affect the implementation of those measures.”

3.1.5 Schedule 2 of the 2009 Act contains further provisions about the procedures that apply to the making and confirming of flood protection schemes, and the Flood Risk Management (Flood Protection Schemes, Potentially Vulnerable Areas and Local Plan Districts) (Scotland) Regulations 2010 set out further requirements in relation to the assessment of the likely environmental effects of a flood protection scheme.

3.1.6 If confirmed, the Scheme would be the largest flood defence scheme in Scotland, and seeks to protect from flooding the communities of Grangemouth, Wholeflats, Glensburgh, Langlees, Carron, Carronshore and Camelon (Stirling Road).

3.2 Protection for Statutory Undertakings

- 3.2.1 Section 58 of the 2009 Act provides a limit of the general power to manage flood risk in relation to statutory undertakings. This provides that a local authority may **not** exercise its power to manage flood risk “in a way which—
- (a) damages any works or property belonging to a statutory undertaker, or
 - (b) interferes with the carrying on of its statutory undertaking,
- unless the undertaker consents.”
- 3.2.2 The consent of the statutory undertaker may not be unreasonably withheld, and if there is any question about whether consent has been withheld unreasonably, the Scottish Ministers will make a final determination.
- 3.2.3 Forth Ports is a statutory undertaker for the purposes of the 2009 Act by virtue of section 71(e). This includes statutory undertakers within section 214(1) of the Town and Country Planning (Scotland) Act 1997 (the 1997 Act), which provides for “persons authorised by any enactment to carry on any ... dock, harbour, ...” undertaking.

3.3 Legal Effect of an Objection from a Statutory Undertaker that is Not Withdrawn

- 3.3.1 Pursuant to paragraph 5 of Schedule 2 of the 2009 Act, Forth Ports is a ‘relevant objector’, being both a statutory undertaker and a person with an interest in affected land. If its objection is not withdrawn, following an agreement being reached with the Council, any preliminary decision made by the Council in respect of the Scheme will be referred to the Scottish Ministers along with copies of the objection.
- 3.3.2 Thereafter, depending on whether or not the Scottish Ministers decide to call in the Scheme, either the Council must hold a hearing or the Scottish Ministers must hold a public local inquiry before a decision is made whether or not to confirm the Scheme, and if confirmed, if this is with or without modification.

3.4 The Role of Forth Ports as Statutory Harbour Authority

- 3.4.1 As harbour authority, Forth Ports has responsibility for the operation of the Port, and the safety and security of its users. Its duties include the ‘open port’ duty. This requires Forth Ports to maintain safe and secure availability and use of and access to the Port for its users at all times.
- 3.4.2 The powers and duties conferred for the improvement, maintenance or management of the harbour of Grangemouth were transferred to the Forth Ports Authority by the Forth Harbour Reorganisation Scheme Confirmation (Special Procedure) Act 1967, with further powers and duties transferred to the Forth Ports Authority by the Forth Ports Authority Order Confirmation Act 1969. These powers and duties, forming the statutory harbour undertaking at Grangemouth, were transferred to Forth Ports (then known as the Forth Ports Public Limited Company) by the Forth Ports Authority Scheme 1992 Confirmation Order 1992.
- 3.4.3 Pursuant to this legislation, Forth Ports has the power to make byelaws for the Port in order to, amongst other things, regulate the use and prevent the misuse of Port facilities, and to promote the safety of persons and vessels on the Firth of Forth. Forth Ports may also make regulations for the use of port premises. The powers conferred on Forth Ports enable it to comply with its duties, including the ‘open port’ duty that is fundamental to the Port operation.

- 3.4.4 In considering the proposals for the Scheme, Forth Ports must have regard to its duties to ensure that any activity that takes place within the Port is consistent with the regulations and bye laws governing the Port and is carried out in a safe manner and having regard to all other operations and activity within the Port.

3.5 **Extent and Scope of Forth Ports' Statutory Undertaking**

- 3.5.1 Forth Ports holds an extensive statutory undertaking within the Firth of Forth, covering any port premises, defined by the Forth Ports Authority Order Confirmation Act 1969 as including "the docks, landing places, and other works and conveniences and the lands, buildings and heritages and property of whatever nature of, or at any time belonging to" Forth Ports. The extent of the Port is shown indicatively in Appendix 2.
- 3.5.2 Forth Ports' statutory undertaking therefore also includes land that is held for development purposes but not yet built out. This broad definition is also consistent with the role and importance of ports to the economy, and the emphasis on the importance of the growth and intensification of ports within Scottish and UK policy.
- 3.5.3 It is the position of Forth Ports that the unnecessary sterilisation of development land and opportunities and the risk to the continuity of operations of the Port, particularly in relation to the Lock Gate and accesses will constitute damage to its property and an interference with the carrying on of its statutory undertaking.

3.6 **Summary of Interaction of the Scheme with Forth Ports' Statutory Undertaking**

- 3.6.1 The Port is located within Flood Cell 3, as shown on the Scheme plans. The Scheme proposals are to construct a flood defence wall (FDW) around the boundary of the developed Port, and the replacement of the Lock Gate within the vessel access to the Port.
- 3.6.2 Forth Ports is broadly supportive of appropriate and sustainable flood defences being designed, developed, managed and maintained. However, the Scheme does not deliver this in its current form, particularly in relation to specific areas where the proposals will or are likely to cause harm to Forth Ports statutory undertaking. These areas are located within Working Areas 3-2 (West Coast of the Port), 3-3 (West Gate to Port), and 3-4 (East Gate to Port), shown on Figure A1.3 of the Environmental Impact Assessment Report (EIA Report), as well as the Working Area for the Lock Gate.
- 3.6.3 Within Area 3-4, the FDW is proposed to follow the boundary of the developed parts of the Port and not the boundary of the harbour undertaking and the Grangemouth Tax Site. This has the effect of placing land constituting some 70,000sqm outside of the flood protection area. Forth Ports has the benefit of an option agreement over this land and is actively promoting this area for use for the development of an Energy Park. The Energy Park in turn forms a key component of the detailed business case for the FGF and will be the landmark development around which investment to support, enable and achieve the just transition to Net Zero by 2045. This area is shown indicatively shaded red on EIA Report Figure A4.10, in Appendix 3.
- 3.6.4 Within Areas 3-2 and 3-3, the FDW is proposed to be aligned to the north of North Shore Road. This road is used for the movement of wide-load abnormal indivisible loads (AILs) to and from Scotland via the Port. The proposals are likely to reduce the operational width of North Shore Road, compromising the existing capacity to accept wide-load AILs, general accessibility and capacity.
- 3.6.5 Within Area 3-2, the FDW is also proposed to follow the boundary of the developed parts of the Port and not the boundary of the harbour undertaking and the Grangemouth Tax Site. These proposals will exclude around 8,000sqm of Port land from flood protection, despite it being some of the only land within the Port that has not yet been developed,

which would, if protected from flooding, be particularly desirable for investors. This area is shown indicatively shaded red as the Development Land, North Shore Road (West), in Appendix 4.

- 3.6.6 The proposals require the replacement of the existing Lock Gate within the Port entrance channel, being the only access point for vessels to enter the Port. The design of this Lock Gate is critical, as any shortfall in the design specification, construction, operation, maintenance and management risks the ability of the Port to carry out its primary function of accepting vessels, breaching the open port duty and causing significant harm to Port operations.
- 3.6.7 Finally, the construction and operation of the Scheme will require the use of Port land and the closure of the Port as part of the flood defences. During construction, Port land will be used by construction workers and vehicles, and traffic management measures are proposed, including the partial closure of both North Shore Road and South Shore Road. Ongoing access arrangements will be required for maintenance and operation, and the management of the closure of the Lock Gates will need to balance flood risk with current and planned vessel movements. This extensive level of interaction will need to be managed through a bespoke agreement, providing Forth Ports with certainty on performance and proper effective oversight of all activity at the Port, consistent with its duties as statutory harbour authority. Such an agreement will enable impacts on the operational Port and its tenants to be minimised, and ensure that all contractors are aware of and comply with the Port regulations and bye laws, so that the Scheme does not create any increased risk to health and safety.

4. ENGAGEMENT WITH THE COUNCIL

- 4.1.1 Forth Ports acknowledges the levels of engagement with the Council to date, and welcomes the Council's recognition that the Scheme needs to coexist with the Port undertaking. Forth Ports has been working with the Council since 2018, attending numerous meetings and design workshops. These meetings have been positive, with significant progress made. This has enabled this objection to be limited to only these outstanding concerns, and Forth Ports has sought to identify where solutions to these concerns may exist with the intention to engage fully with the Council to agree how the concerns are addressed and necessary outcomes delivered.
- 4.1.2 Forth Ports is supportive of the objectives of the Scheme and recognises the urgent need for flood defences at scale to be constructed. The extent of the investment and the 200+ year lifetime of the proposals do, however, place a greater emphasis on ensuring that the Scheme is designed in a way that minimises its impacts and maximises the benefits over the long term. Forth Ports recognises that there will not be an opportunity to redraw the proposals later, and is committed to working with the Council to ensure that the Scheme that is confirmed and granted deemed planning permission fully maximises the Scheme's potential and avoids and minimises negative impacts.
- 4.1.3 Forth Ports is confident that all of the issues in this objection are capable of being resolved positively and it looks forward to continued constructive discussion and engagement to achieve this. Forth Ports confirms its commitment to cooperation and collaboration, working with the Council to identify and implement solutions that will secure and deliver the best and most sustainable outcomes for all parties, including the wider community, for many years to come and achieving all national development.

5. STERILISATION OF THE ENERGY PARK LAND

5.1 Introduction

- 5.1.1 The Scheme proposals for Working Area 3-4 (East Gate to Port) route the FDW along the eastern edge of South Shore Road and existing built environment within the Port. An area

of land of approximately 70,000sqm, between South Shore Road and Grange Burn and the Firth of Forth is located outside of the area that will benefit from flood protection. Forth Ports has the benefit of an option agreement over this land, and is actively promoting this area for use for the development of an Energy Park.

5.2 The Energy Park

- 5.2.1 The proposed Energy Park is the flagship development of the FGF and Grangemouth Tax Site, leading the way for further development focusing on industrial decarbonisation, energy generation, and hydrogen and carbon capture technologies. It forms a major component of the FGF business case, and will be a priority development following approval of the final FGF business case, expected in early 2025.⁵
- 5.2.2 The Energy Park will include facilities for liquid natural gas (LNG), a key transitional fuel on the road to decarbonising the shipping industry. With vessels typically accounting for more than 90% of the carbon emissions from a port, it is critical that infrastructure is provided to enable and facilitate vessel owners and operators to move to lower carbon fuel options. This is an important step towards fully sustainable vessel fuels, necessary to minimise emissions whilst emerging technologies continue to be developed that will enable an emission-free future for shipping. LNG can also be converted into hydrogen, which can be used to generate electricity to support the National Grid, and is an emerging technology anticipated to be the Net Zero fuel of the future.
- 5.2.3 The Energy Park will include and support carbon capture storage, as part of the Scottish Cluster, with a pipeline connecting to St Fergus to transfer carbon dioxide for storage in the North Sea, providing an important mechanism enabling industry to decarbonise. It will also support the energy requirements of industry as it seeks to decarbonise by moving to sustainable alternatives, and required by new investment and development seeking to innovate within the FGF. As a leading project supporting the transition to Net Zero, in a location benefitting from significant Scottish policy support and incentives as part of a Freeport Tax Site, green investment is expected to gravitate to the area, with Grangemouth becoming both a major hub and a blueprint for the transition to Net Zero in Scotland and beyond.
- 5.2.4 The Energy Park is a significant development involving £2.5bn of investment and generating up to 3,000 jobs during construction and over 800 jobs during operation. It will reduce the reliance on fossil fuels, providing health benefits for the area that will only increase over time.
- 5.2.5 The Energy Park can only be located on the land to the east of South Shore Road, which is currently proposed to be excluded from the area of flood protection. There is no alternative location within the Port, the Grangemouth Tax Site, or the wider FGF area, that is suitable to host the Energy Park. If this land is not included within the flood protection area, it will not be possible to develop the Energy Park, with consequential impacts to the potential for decarbonisation at Grangemouth. The importance of the Energy Park is clear, and a decision to exclude this land from flood protection, making the Energy Park project impossible, and therefore incompatible with the designation of Grangemouth as an IGTZ, undermining Scotland's transition to Net Zero.

5.3 Consideration of NPF4 and Freeport Policy within the Environmental Impact Assessment

- 5.3.1 Chapter 15 of the Environmental Impact Assessment (EIA) Report purports to assess the cumulative effects of the Scheme. This includes effects of the Scheme in combination with other foreseeable developments. Paragraph 15.3.3 states that 'foreseeable developments' is "committed (existing or approved) developments as well as developments that are yet to

⁵ The final business case will be submitted to the Government for approval in Autumn 2024.

be determined, where some information may be known about their potential for environmental effects”.

- 5.3.2 Section 15.5 looks at the potential for cumulative effects “associated with the strategic planning initiatives in the Scheme area”. The assessment has, however, only assessed “strategic planning instruments adopted prior to the publication and adoption of the Falkirk Local Development Plan 2 (LDP2; 2020)”, as such instruments are “assumed to be considered appropriately within the national planning hierarchy and zoned appropriately within LDP2”.
- 5.3.3 Section 15.5.3 recognises that the FGF, ‘Just Transition’ discussion paper (leading to the just transition workstream referred to above), and NPF4 all post-date LDP2. However, the consideration of these initiatives within this Chapter is wholly inadequate and unsatisfactory.
- 5.3.4 The Chapter assumes that, as the Scheme design team and Falkirk Council are in regular contact with Forth Ports, any FGF development “will consider the construction and operation of the Scheme, and no cumulative effects of significance are anticipated”. The Report does not recognise that the proposed route of the flood defences severs parts of the Grangemouth Tax Site, sterilising its development potential. Whilst any proposals for development as part of the Green Freeport will need to consider the impact cumulatively with the Scheme, this does not make adequate or absolve the Chapter from assessing the impacts of the Scheme with the FGF as a strategic initiative.
- 5.3.5 The Chapter indicates that the Just Transition discussion paper is a report on progress of the ‘just transition to Net Zero’ that sets out the need to establish a carbon baseline to identify key actions and effectiveness. This fails to recognise the ongoing ‘just transition’ workstream and that this policy and the GFIB has identified, at a strategic level, the requirement for a co-ordinated approach and co-design alongside industry to deliver the Just Transition plan. Proper strategic consideration of this policy requires a review of whether the Scheme is taking a co-ordinated approach, or if its proposals are incompatible with the Just Transition plan.
- 5.3.6 Having failed to assess the FGF at a strategic level, the impacts associated with sterilising the Energy Park have not been identified or considered. With the Council a partner in the FGF and the GFIB, it has full knowledge of the Energy Park proposals for this land, and a co-ordinated approach and co-design would, if properly implemented, ensure that the Scheme was designed so as not to frustrate and sterilise key development for the Just Transition plan. The decision of Forth Ports and the Council to focus on obtaining the FGF and Grangemouth Tax Site designations to complement and support the Just Transition plan and policy support in NPF4, with planning permission for the Energy Park to follow once the full business case has been approved and investment secured, has resulted in a failure to adequately consider and assess the Scheme in the context of this planned and committed development. The future baseline and cumulative likely significant effects have therefore been under reported and assessed.
- 5.3.7 In respect of NPF4, the Chapter assumes that any proposals arising from NPF4 will consider the construction and operation of the scheme on the basis that “the note does acknowledge that “Grangemouth FPS will comprise 25km of flood defences (including walls and embankments)”. This is misleading, as the quoted text does not appear in NPF4, but is taken from the lifecycle greenhouse gas emissions: assessment findings, published 8 November 2022. The quote omits the word “assuming” from the beginning, and fails to recognise that the context of the quote is the list of assumptions that were used for the assessment of greenhouse gas emissions of the NPF4 policy.
- 5.3.8 Critically, the quote must be viewed within the context of the other assumptions used, including assuming:

- (a) the majority of emissions from burning bio fuels will be captured, however there is a scope for carbon leakage as CCUS can typically capture 95% of emissions;
- (b) **hydrogen produced supports the transition to Net Zero and could be used for transport, heat and energy storage;**
- (c) **long-term offshore storage of captured carbon.** Assuming that improvements to utilities infrastructure will be delivered;
- (d) greater freight movement within the Forth. Assuming these vessels will be diesel powered but **over the long-term transition to lower carbon alternatives such as LNG and new or upgraded ports facilities;**
- (e) use of carbon capture on existing emissions sources or implementing energy efficiency measures;
- (f) **new or upgraded green and blue infrastructure;**

(emphasis added)

- 5.3.9 If the Energy Park is sterilised, many of these assumptions will be rendered unachievable and therefore invalid. This goes to the heart of the policy promoted within NPF4. The assumption that the Scheme will provide 25km of flood defences must be seen in the context of it facilitating (by protecting from flooding) the infrastructure and development integral to the other assumptions. In this context, the quoted text requires the Scheme to be designed in a way that enables, and certainly does not sterilise or prevent, the critical infrastructure that has been designated as 'national' development within NPF4.
- 5.3.10 NPF4 places the Scheme at equal standing in the planning hierarchy with the Energy Park, with the assumptions underpinning NPF4 clearly requiring the newly designated national developments to co-exist so that all of this critical development can be brought forward. The suggestion within the Chapter that other NPF4 development will consider the construction and operation of the Scheme can only be sustained if the Scheme considers the construction and operation of the other development designated by NPF4 in a manner commensurate to what is known about that development. In the case of the Energy Park, sufficient information is known to enable a high-level assessment of whether the Scheme and the Energy Park will coexist, with design changes and mitigation implemented to ensure that the Scheme does not cut across development of equal importance and continuance of the Port statutory undertaking.
- 5.3.11 Indeed, the NPF4 Delivery Programme: September 2023⁶ confirms that the designated national developments "should be delivered in a way which helps to apply the principles, opportunities, challenges and policy identified in NPF4 in the round. Their contribution to addressing the global climate emergency and nature crisis, community wealth building and just transition will be of particular importance". The Delivery Programme continues, confirming that "National Developments are also expected to interface with, and contribute to, strategies beyond NPF4, including marine plans, transport, islands, heat and energy amongst others".
- 5.3.12 The failure to adequately consider these policies and the Energy Park is contrary to the latest policy for the delivery of national development, such as the Scheme. The approach not only results in the under reporting of likely significant adverse effects, but also overlooks likely significant beneficial effects. By routing the flood defence wall along the shoreline, enabling the Energy Park to come forward, the Scheme would provide indirect benefits to health and economic receptors, and support the achievement of Net Zero by 2045. The transition to alternative fuels will result in significant benefits, and Forth Ports note that the

⁶ <https://www.transformingplanning.scot/media/3194/npf4-delivery-programme-v2-september-2023-final.pdf>

identification of indirect likely significant effects (both positive and negative) is an important part of Environmental Assessment in accordance with Schedule 2 paragraph 5(2) of the Flood Risk Management (Flood Protection Schemes, Potentially Vulnerable Areas and Local Plan Districts) (Scotland) Regulations 2010.

5.4 Achievement of the Scheme Objectives

- 5.4.1 The Scheme Objectives are set out in Chapter 1 of the EIA Report. The Objectives most relevant to and affected by the sterilisation of the Energy Park are:
- (a) Continuing to improve the health, safety and well-being of citizens and communities;
 - (b) That the preferred Scheme represents best value for money for Falkirk Council;
 - (c) That the Scheme is delivered in line with the National Planning Framework Action Program for the Grangemouth investment zone (noting, however, that the Action Plan part of National Planning Framework 3, which has since been superseded by the National Planning Framework 4 Delivery Programme v2: September 2023);
 - (d) That the Scheme delivers the required level of protection;
- 5.4.2 As set out above, the Energy Park is of great importance if the Council and other stakeholders and partners in the IGTZ and GFIB are to achieve the decarbonisation and Net Zero targets and ambitions at Grangemouth. Designing the Scheme so that it ensures that the Energy Park can come forward with flood protection will enable and improve the achievement of the Scheme's Environmental Objectives, particularly around Climate Change, by enabling decarbonisation technology to be invested in and implemented in the Grangemouth industrial area.
- 5.4.3 In the economic assessment, whilst the benefit / cost ratio (BCR) for Flood Cells 3, 5 and 6 is high at 37.4, it is recognised that this is primarily due to these cells covering the Petrochemical plant and port area. It does not follow that the high BCR demonstrates that best value for money has been achieved. On the contrary, it highlights and emphasises the value of the industry and opportunity of the land within these Flood Cells. Any opportunity to include more development land within the flood protection area will have a correspondingly significant increase in the BCR for these zones, with any increase in cost or technical difficulty being surpassed by the value added from the flood protection.
- 5.4.4 The value of the Energy Park, with consequential and widespread impacts on development potential elsewhere if this project is sterilised, makes it clear: including the Energy Park Land within the flood protection provided by the Scheme provides best value for money; excluding the Energy Park Land from flood protection will harm the economic potential of Flood Zone 3, worsening the value for money below what has presently been assessed.

5.5 Potential Impacts to Adjacent Port Development Land

- 5.5.1 The location and design of the FDW has the potential to landlock the area of Forth Ports' land on the opposite bank of Grange Burn, if all-purpose access is not suitably provided for in the design. This land, the 'Grange Burn Land', is bounded on three sides by water, with access from the land side being severed by a railway line. The Grange Burn Land is only accessible via the bridge located at the south-eastern point of the Energy Park Land.
- 5.5.2 The bridge is shown on the Port of Grangemouth Boundary provided as Appendix 2, linking the Energy Park Land to the Grange Burn Land. It is also shown as part of the Grangemouth Tax Site, linking the Grange Burn Land with the Energy Park Land. It is, however, absent

from the topographical plan, used in Figure A4.11 to illustrate the working area and route of the FDW, and the extent to which this access point has been considered in the assessment and design of the Scheme is therefore unclear.

- 5.5.3 Sheet 19 of the Cell 3 Operations plan does show that provision has been made for ongoing access to be maintained to the existing road around the shoreline of the Energy Park Land, from which the bridge is accessed, via a gate (reference C3-FG-05). This gate is described in the Scheme Operations document as being 5m wide, a maximum of 1.4m above existing ground levels, and being normally in the closed position.
- 5.5.4 Ongoing all-purpose access to the bridge is required to both maintain the current access, and so that the Scheme does not interfere with future growth and development at the Port. The Grange Burn Land forms part of the recently designated Grangemouth Tax Site, and it is expected that there will be development of the FGF at Grangemouth. Development on this land is anticipated to commence within the next decade in order to take advantage of the space available at the Grange Burn Land, as well as the benefits associated with its designation as part of the Grangemouth Tax Site. It is therefore intended that the existing bridge will be replaced, creating a new all-purpose access to the Grange Burn Land suitable for use by Port-related traffic, within the next 5 years as part of plans to enable and facilitate investment in and development of this part of the Grangemouth Tax Site.
- 5.5.5 It is therefore important that the design of the Scheme not only retains an access to the bridge, but provides an all-purpose access through the FDW that enables Forth Ports to carry out the necessary maintenance and improvement works required to bring the Grange Burn Land within the operational area of the Port.
- 5.5.6 In addition to the need for suitable access to be maintained, Forth Ports are mindful that the Scheme will affect where flood water accumulates on land. It is mindful that the parameters for modelling flood risk need to be validated against the latest flood modelling and climate change allowances. It is unclear if this has been undertaken in relation to both direct and indirect effect. There is therefore insufficient information available for Forth Ports to fully understand the impacts of the Scheme on its land. Further information will therefore need to be provided, in order to be confident that all likely environmental effects of the Scheme have been identified both direct and indirect and the mitigation hierarchy followed in the design of any final Scheme.

5.6 Resolution Required

- 5.6.1 The Scheme must be amended to relocate the flood defences to follow the shoreline, so that the Energy Park Land is included within and benefits from flood protection.
- 5.6.2 Whilst Forth Ports considers the need case for including the Energy Park Land within the flood protection of the Scheme to be overwhelming, it recognises that the Council may be concerned to commit to protecting land that does not, at present, benefit from a planning application and permission. An alternative to simply relocating the flood defences, would be to revise the Scheme to include the shoreline route as an option, with both routing options being consented by the deemed planning permission, but with appropriate conditionality.
- 5.6.3 The design of the FDW in the vicinity of the existing bridge, where the Scheme seeks to retain existing access points, must have regard to retaining access and use in the wider context of the existing access. In this case, as the sole access point between two areas of land located within the Port and held by Forth Ports' for the purposes of its statutory undertaking, any access must be suitable for Port-related traffic seeking to access all parts of the Port, notwithstanding that the Grange Burn Land has not yet been actively developed.

- 5.6.4 The proposed route of the realigned FDW is shown indicatively in Appendix 5, including Forth Port's preference for demountable barriers in the location of the bridge.

5.7 Funding

- 5.7.1 Forth Ports understands that, notwithstanding the economic case for including this land within the area of flood protection, the Council has concerns about the up-front capital funding requirements to construct this route. Forth Ports is keen to ensure that its preferred and necessary option is not abandoned due to cost, where there is no technical reason why the shoreline route could not be constructed.
- 5.7.2 The value of the Energy Park and the designation of the Grangemouth Tax Site provide potential opportunities for funding of this route that Forth Ports would like to explore with the Council. These include:
- (a) The relocation of the flood defences to the shoreline will provide certainty for investors that the Energy Park can and will be taken forward, enabling further National Development at Grangemouth, combined with the benefits of the FGF. Sustainable, long-term investment in the Falkirk area will be encouraged, providing additional, long-term funding for the Council that can itself be invested in improving public services and supporting growth in the local area.
 - (b) As a designated FGF and Tax Site, this area benefits from both funding initiatives and tax reliefs. SEED funding is a prime example of this, with each of the two Green Freeports being provided with up to £25 million capital funding, with the purpose of addressing infrastructure gaps in the locations of the Green Freeports and create the right physical conditions to encourage private sector investment. There is the potential for further funding to be injected into the area by a new UK Government,⁷ with scope for this to be used towards the construction of the FDW, due to its clear role in helping to realise the ambitions of the FGF and industry decarbonisation targets. It would also be open to the Council to allocate the non-domestic rates retention tied to the Energy Park being located within the Grangemouth Tax Site towards the cost of implementing the FDW around the boundary of the land.
 - (c) The newly announced Investment Opportunity Fund may be available to fund the FDW, based on the additional certainty that flood protection will give investors, unlocking the advanced projects associated with the Energy Park.
 - (d) Any increased certainty that the Energy Park Land will benefit from flood protection will make these proposals more attractive to investors, with the corresponding scope for private funding to support any additional gap in funding of the flood defences in this area.
 - (e) There may also be opportunities to share the construction costs of the FDW in this area, for example through an agreement that the contractor for the Energy Park will also undertake construction of the FDW at the same time, providing potential economies of scale and contractual delivery benefits and minimisation of likely significant effects of construction.

5.8 Conclusion

- 5.8.1 Forth Ports will continue to seek to meaningfully engage with the Council about the route of the FDW in this area, with a view to ensuring that the Scheme is 'future proofed' so that

⁷ The Labour Party announced on 18 April 2024 that it would invest £1.8bn into ports in order to upgrade port infrastructure, helping to encourage more private sector investment into UK ports and harbours. The Conservative Party manifesto includes support for the maritime sector, including shipping and ports, as it decarbonises, and seeks to speed up planning for major projects.

it can protect the Energy Park (also being designated national development). It is committed to assisting the Council to understand how this route can be funded in the short term to realise the greater medium and long-term benefits, improve the Scheme's alignment with and delivery of current policy, and avoid unnecessary negative economic impacts and sterilisation. These benefits include:

- (a) Achievement of the FGF and national ambitions around industrial decarbonisation and Net Zero by 2045;
- (b) Securing resilience in the energy network by supplying electricity to the grid, providing additional capacity to meet future demand requirements;
- (c) Attracting international investment and development to the local area by maximising development land within the Grangemouth Tax Site, with the FGF benefits (including retention of non-domestic rates) enabling the Council to fund projects and public services that will improve the quality of life for the community, including the Scheme;

5.8.2 Any alternative use of the land for the FGF (such as logistics warehousing) would still be impacted by the lack of flood protection provided by the proposed FDW route, and would, if capable of use at all, attract lower investment of a type that would not support the Green Freeport objectives and Net Zero by 2045 ambitions.

6. INTERFERENCE WITH EXISTING PORT OPERATIONS BY NARROWING NORTH SHORE ROAD

6.1.1 The Scheme proposals place the FDW to the north of North Shore Road. This road is used for the transport of wide-load AILs as part of the ordinary operation of the Port, with wide AILs regularly being moved within the operational Port, as well as being delivered to the Port for onward transport via the highway network. Whilst Forth Ports recognises the importance of the Scheme and the benefit to the Port of flood protection, it is important that the Scheme is designed so that the FDW is set sufficiently far back from North Shore Road that it does not interfere with Port operations, including the transport of wide-load AILs between the highway network and vessels.

6.1.2 As proposed, the FDW will be aligned in close proximity to the north of the existing North Shore Road, which has the potential to prevent and impede the use of the road for transporting AILs. It is recognised that, as North Shore Road is located close to the shoreline in places, there may be increasing technical difficulties as the FDW is moved away from the road, however this should still be capable of design and delivery.

6.1.3 It is Forth Ports' position that the FDW should be aligned and designed so that it does not interfere with its existing operations. There is no maximum width of AIL that may be taken on Scottish highways, albeit loads in excess of 6.1m require discretionary consent from Traffic Scotland to be transported. As the Port is capable of accepting such discretionary loads, the alignment of the FDW must seek to maximise and maintain the available width of North Shore Road, including allowances for turning and oversailing, at all times.

6.1.4 For any locations where the FDW is proposed to encroach on the available width, it will be necessary to carry out swept path assessments to confirm the maximum width of load that could be transported past that point. If it appears that interference with wide-load AILs using North Shore Road will be impossible to avoid, alternative flood defences must be investigated, that would allow for all above-surface elements to be demounted to facilitate AILs.

6.1.5 Forth Ports is mindful that, whilst the Council may not interfere with its statutory undertaking without its consent, that consent must not be unreasonably withheld. In the event the

Council believes it necessary for the Scheme to interfere with the Port undertaking, specifically the transport of wide-load AILs, before Forth Ports consents to this interference, it will require the Council to demonstrate that the interference is necessary and unavoidable. This will need to be demonstrated with evidence showing that:

- (a) aligning the FDW closer to the shoreline would give rise to unreasonable technical or engineering difficulties;
- (b) it would not be possible to use demountable flood protection, or this would be at a wholly disproportionate cost.
- (c) alternative technical solutions proposed by Forth Ports would not be capable of remedying the interference.

- 6.1.6 Forth Ports recognises that there may be technical limitations and difficulties aligning the FDW sufficiently far back from North Shore Road that there is no interference with its undertaking. It therefore is seeking to ensure that the Scheme is designed to maximise the distance between the FDW and the road, and that all options are explored before a design is taken forward that will interfere with Port operations.
- 6.1.7 In order to provide sufficient time to identify the best available route and technical solution, the Scheme must ensure that it includes the ability to locate the FDW up to, or potentially beyond, the shoreline, and that this level of flexibility is included within any deemed planning permission, with necessary conditionality.
- 6.1.8 Forth Ports looks forward to continued engagement and technical discussions with the Council, and welcomes the opportunity to carry out further work to identify the best available solution to provide the flood defences in this location whilst minimising any impact on the Port undertaking.

7. STERILISATION OF PORT DEVELOPMENT LAND WITHIN THE GRANGEMOUTH TAX SITE

7.1 Introduction

- 7.1.1 Within Work Area 3-1, the route of the FDW provided in the proposed Scheme follows the boundary of the developed Port, not the boundary of the land or the boundary of the Grangemouth Tax Site. The area of land that is outside the area to be protected from flooding is approximately 8,000sqm, and is one of very few areas of land at the Port that has not yet been developed.
- 7.1.2 It is important that all development land at the Port continues to be available and capable of development due to its limited availability, so that it can be utilised by future development that may not otherwise be possible to accommodate within the existing Port operational area, even through intensification of operational land use. This is particularly important where the land forms part of one of a very small number of Freeport Special Tax Areas in the UK. If the FDW does not protect this prime development land, then it will sterilise its development potential, placing even greater pressure to intensify the existing Port and remaining areas of the Grangemouth Tax Site.
- 7.1.3 As set out above in respect of the Energy Park, the designation as a Tax Site provides significant incentives for international investors and will enable complementary development consistent with ambitions to decarbonise industry and reach Net Zero by 2045. The exclusion of this land from the flood protection provided by the Scheme is contrary to the NPF4 Delivery Programme and means that likely significant beneficial effects will have been under reported, noting that this land will be developed during the intended lifespan of the Scheme of more than 200 years.

7.2 Proposed Solution

- 7.2.1 The FDW should be relocated in this area so that it follows the shoreline as closely as possible. This route will minimise harm and provide the greatest benefits from the Scheme and should be considered the preferred option in order to maximise value for money for the Scheme.
- 7.2.2 Notwithstanding this, Forth Ports recognises that it does not currently have detailed identified development plans for this area of land, and that it is more challenging to identify the benefits of protecting this area in the absence of a clear development proposal. It also understands that the Council may be cautious about committing to route the FDW along the shorelines before clear proposals for its use are developed.
- 7.2.3 To address this, the Scheme should be revised to allow for both routing options in the alternative on a conditional basis: the primary route along the shoreline; and the alternative route as set out in the consultation documents. This would ensure that the primary, shoreline route was constructed, except in circumstances where no development proposals have been identified before the construction of this part of the Scheme is due to commence and, despite all best efforts having been made, there remains a funding shortfall that makes it impossible to implement the preferred, shoreline route.
- 7.2.4 This approach will:
- (a) ensure that opportunities to bring forward designated national development and Green Freeport development are maintained, without prioritising one form of national development unless and until this becomes necessary;
 - (b) provide the necessary flexibility to ensure that best form of the FDW is delivered, whilst also ensuring that the Scheme can be implemented even in the most challenging circumstances of a serious funding shortfall;
 - (c) achieve the co-ordinated approach, co-designed alongside industry, workers and other stakeholders, promoted by the Just Transition plan and the Grangemouth Future Industry Board, by ensuring that, at the point of design and construction of the FDW in this area (currently proposed for Construction Year 6 (2031)), the route of the FDW to be constructed would be determined by the availability of funding and by reference to known planned and committed development proposals in the area at that time;
 - (d) extend the period to determine the route to be constructed, providing time to identify opportunities for collaboration and additional funding sources. It may, for example, be possible to secure funding by way of a planning obligation (pursuant to s75 of the 1997 Act) imposed on an application for planning permission located on this land, as flood protection would be required in order to make the development acceptable in planning terms. Freeport-related funding may also be available, due to the role of the flood defences in securing investment on this part of the Grangemouth Tax Site.

7.3 Conclusion

- 7.3.1 The option to construct the FDW along the shoreline in this area must be secured as a priority, so that there is time for the opportunities provided by the Green Freeport to come to fruition. It would be shortsighted to design the Scheme so that only the route in the consultation documents can be provided, sterilising this development land and impeding and frustrating the potential of the FGF.

- 7.3.2 As with the Energy Park Land, Forth Ports looks forward to ongoing engagement and collaboration in order to identify the best way for the preferred routing option to be provided, securing the development potential of this land and most sustainable outcomes.

8. DESIGN AND RELIABILITY STANDARDS OF THE REPLACEMENT LOCK GATE

8.1 Introduction

- 8.1.1 The Scheme proposals require a replacement Lock Gate to be constructed in the access channel to the Port. The access channel is the only route for vessels to enter and exit the Port and is therefore critical integral infrastructure for Port operations.
- 8.1.2 It is imperative that the design of the replacement Lock Gate does not result in any new or greater restriction on vessels seeking to gain access to the Port. The Lock Gate must also be designed to a high level of resilience, with suitable redundancies built in, to ensure that it remains fully operational. Any failure of the replacement Lock Gate to operate would have one of two outcomes: either the Port would become inaccessible to vessels for an uncertain period of time, until the issue could be rectified; or the Lock Gates would be stuck open creating a gap in the flood defences, with the resulting flooding impacting development in the Port on both sides of the Eastern and Western channels.
- 8.1.3 In order to minimise the risks associated with any failure of the replacement Lock Gate, Forth Ports has worked with the Council, identifying that replacing the existing middle gate will minimise the risks to both the Port and the Lock Gate. The position of the middle gate, within the channel, offers greater protection from strike from vessels entering and exiting the channel. With the majority of vessels entering the Port being of a size that use of the full lock is required, the middle gate therefore has a reduced workload, and this gate has been chosen for the replacement with the intention of improving the longevity and working life of the Lock Gates.
- 8.1.4 However, whilst the risk of damage and wear and tear has been reduced, the risk of the Lock Gate failing can only be addressed through the design and inherent resilience of that design and its construction. Any failure of the Lock Gates could have a devastating impact on the Port and its tenants, including the industry-leading investment in sustainable technologies that are intended to be located within the harbour area.
- 8.1.5 Therefore, the design, construction programme and implementation, operation and maintenance of the replacement Lock Gate must all be carefully thought through, monitored and delivered as part of any acceptable and sustainable Scheme to be brought forward.

8.2 Design of the Lock Gate

- 8.2.1 Forth Ports has had positive discussions with the Council about the options for the design of the Lock Gate, and is confident that the Council understands the importance of ensuring the best design is identified and secured. A collaborative optioneering process has been carried out, narrowing the options for the Lock Gate to two designs:
- (a) sub-option C2: a new dual-function mitre flood gate, with the base of the gate to be shot-bolted into the lock channel floor under a reverse head situation;
 - (b) sub-option D2: a new dual-function mitre flood gate, with the base of the gate to be propped by a frame hinging on the channel walls.
- 8.2.2 Forth Ports looks forward to continued technical discussions to identify which of these options (or any suitable alternative or iteration that might emerge from that exercise) is to be preferred.

8.3 Resilience of the Lock Gate

- 8.3.1 Once the design of the Lock Gate has been identified and agreed, Forth Ports is concerned to ensure that the new Lock Gate will be constructed to a programme and the high specification required to provide the necessary resilience of such critical infrastructure. The tolerances, materials, and manufacturing methods used and commissioning testing all have the potential to affect how well the replacement Lock Gate is implemented and operates, as well as the amount of redundancy monitoring and resilience factored into the detailed design.
- 8.3.2 Ongoing discussions and agreement will be required in order for Forth Ports to be confident that the replacement Lock Gate will be of a standard that inspires confidence that the Lock Gate will be in use and operational for many years to come.

8.4 Consultation Documents

- 8.4.1 Whilst Forth Ports has had positive engagement with the Council to date, insufficient detail has been provided to identify whether or not the proposals will meet the standard required. The work description within the Scheme Operations document is simply:
- “Construct a replacement dual purpose lock/ flood gate, 37m wide, typically 15m high as generally shown on the plans. The gate will be hinged and have appropriate seals, gaskets and locking devices, and associated mechanical and electrical control and monitoring equipment.”
- 8.4.2 Accordingly, this objection is being made, and will be maintained, until the detailed design of the Lock Gate, including aspects that influence the construction method and programme, commissioning testing and the resilience and redundancy of the design, have been agreed. Forth Ports is keen to continue to explore both design options and any other appropriate alternatives and iterations that may deliver, with the next step being an increased level of design to enable proper scrutiny of the suitability of each option.
- 8.4.3 The result of the optioneering process and final design choice needs to ensure that it will not impact the normal operation of the Port whilst also being an effective flood barrier.
- 8.4.4 This conditionality will also need to be secured ahead of any consent or secured by a satisfactory condition and control document that requires these matters to be resolved to the full satisfaction of the Port before any Scheme can be progressed and implemented.

8.5 Conclusion

- 8.5.1 Forth Ports will continue to work with the Council to identify the best design solution. Whilst the design and level of resilience have not yet been agreed, any deemed planning permission must secure by condition that the Lock Gate to be installed must not cause, or be likely to cause, any new or greater restriction for vessels seeking to gain access to the Port and should have appropriate conditionality and control documentation that requires Port agreement before any final design can be brought forward and implemented for the Lock Gate.

9. INTERACTION WITH AND POTENTIAL FOR INTERFERENCE FROM THE SCHEME WITH THE OPERATIONAL PORT

9.1 Introduction

- 9.1.1 In order to construct the flood protection for Flood Zone 3, the Council will need to carry out works within and to the operational Port. The ongoing operation and maintenance of the Scheme will also require the Council to access the Port or management and

maintenance agreement to be reached with the Port for this to be carried out on the Council's behalf.

- 9.1.2 Any person operating within the secure, operational Port is required to adhere to the rules, regulations and bye laws of the Port, and the nature of works proposed may require an agreement with Forth Ports that manages the specific interaction between those works and the operations of the Port. This is necessary to ensure that Forth Ports is able to continue to comply with its statutory duties, including the 'open port' duty, ensuring that access to, use and ongoing development of the Port is maintained in a safe and secure environment at all times.
- 9.1.3 The Scheme includes the construction of flood defences within the harbour boundary, and in order to achieve this, partial road closures are envisaged to roads within the Port. In order to comply with its duties, Forth Ports must ensure that this does not block or unduly impede Port users. Similarly, the replacement of the Lock Gates will require temporary closure of the access channel to the Port. Any closures must be arranged and agreed with Forth Ports, and managed so as to minimise the impacts and allow for proper management of both vessel traffic seeking to enter or exit the Port and road and rail traffic seeking to transfer goods onto or from vessels.
- 9.1.4 The Port is Scotland's largest container port and is of strategic importance to the national and regional economy, is of local importance for employment, and will provide support to develop skills and employment in the area through the NPF4 and Green Freeport development. Accordingly, it is important that the construction and maintenance of the Scheme within, around and to the Port is carried out in a way that allows it to coexist with the operational Port and associated activity. This includes ensuring that all workers associated with the Scheme comply with the regulations that apply to all activity on the Port, with the Council being responsible for ensuring that these standards are monitored, reported on and met by all its contractors, taking timely and effective action in the event of any issues arising.

9.2 **Engagement with the Council**

- 9.2.1 Forth Ports wish to acknowledge that discussions with the Council have been positive, with the Council recognising the need for an agreement. Negotiations are ongoing and it is hoped that heads of terms will be agreed shortly.
- 9.2.2 Forth Ports also wish to acknowledge that the consultation documents recognise the importance of an agreement, including noting within Appendix C4 of the EIA Report that traffic management on Forth Ports' land will need to be agreed with Forth Ports.
- 9.2.3 The importance of an agreement should not be underestimated, as it will be fundamental to managing the ongoing interaction between the Port and the Scheme, as well as future nationally designated development pursuant to NPF4 and the Green Freeport policies, in a way that enables each of these important elements to coexist. Whilst this agreement remains outstanding, the Scheme poses a significant risk to the operation of Forth Ports' statutory harbour undertaking, and this objection will be maintained.

9.3 **Proposed Solution - Control Documents**

- 9.3.1 Chapter 14 of the EIA Report on Traffic and Transportation confirms that a Construction Traffic Management Plan (CTMP) and Transport Statements will be developed and implemented by construction contractors, detailing ways to reduce the construction traffic impact. A construction specific Travel Plan is also proposed, to be drafted and implemented by the contractor, following approval by the Council. This will provide support for and promote sustainable travel for staff, contractors and visitors travelling to the Scheme work sites.

- 9.3.2 These measures are welcomed, albeit only a high level of detail is provided within the consultation documents and there is no mechanism for engagement and approval by Forth Ports. Therefore, these measures must be supplemented by bespoke measures for works within Flood Zone 3 that reflect that these works will be carried out within an operational Port.
- 9.3.3 By way of example, Table 14-15 within Chapter 14 of the EIA Report identifies an average workforce for Flood Zone 3 of 90 people, with 60 1-way car journeys. The Port cannot accommodate an additional 60 cars (or even half that number) parking within it as part of the construction of the Scheme,⁸ and if uncontrolled and unchecked, it is a foreseeable consequence that cars will be parked in locations that obstruct or interfere with activity at the Port. Forth Ports must be consulted on the Travel Plan for Flood Zone 3, with its comments fully addressed and agreed before the Travel Plan is approved by the Council.
- 9.3.4 Similarly, the Scheme will require traffic management measures on North Shore Road and South Shore Road during construction. Whilst the Council has recognised that these measures will need to be agreed with Forth Ports where they are proposed for its land, the interaction of these measures with the proposals in the CTMP must also be considered. For example, the potential measure of regulating site working hours to avoid morning and evening peak hours should, within and close to the Port, have regard to the timing of peak activity within the Port and not simply the traditional peak hours. There should also be communication with Forth Ports to agree the dates of proposed delivery movements, in order to avoid dates where scheduled activity at the Port may cause a conflict.
- 9.3.5 In order to ensure that these management plans support the terms of an agreement, and do not compete or conflict with those terms, it is important that Forth Ports is consulted on the traffic management measures, CTMP and Transport Statements where they affect the Port or transport routes to the Port. Its comments must then be fully addressed and agreed before these measures and control documents can be considered for approval by the Council.

9.4 **Proposed Solution - Agreement with Forth Ports**

- 9.4.1 As set out above, the extent of interaction between the Scheme and the Port, during construction, operation and maintenance, will require a detailed agreement setting out the obligations for both parties. This will provide a framework setting out what is required in terms of communication, information sharing, timing of works, and other measures necessary to enable the Scheme to be implemented without causing undue impacts to the Port. The agreement will also supplement a number of existing legal provisions, such as the requirement that a statutory undertaker consents to work that will interfere with the undertaking, by setting out the detail of what information is required in order for Forth Ports to grant consent, and mechanisms to resolve disagreements through collaborative working and any ultimate resolution mechanism.
- 9.4.2 Forth Ports expect and require the agreement to cover at least the following matters:
- (a) Design, plan and construction methodology approval rights for Forth Ports in respect of works within the Port (such approval not to be unreasonably withheld or delayed);
 - (b) Phasing and timing of works within the Port to be agreed with Forth Ports;

⁸ There may be scope to provide some limited parking and storage facilities within the Port as part of a commercial agreement with the relevant contractor, to work in combination with the other measures referred to that will manage construction and workforce traffic and travel.

- (c) Working hours to be agreed with Forth Ports so as to minimise the effects on the operation of the Port;
- (d) Forth Ports to be consulted by the Council when considering the submission and approval of the Construction Method Statement, CTMP, and Travel Plan for Flood Zone 3; any comments made by Forth Ports to be fully factored into the Council's consideration;
- (e) Measures to manage workers within the Port, and in particular to ensure safety is maintained for all persons whilst construction activities are carried out;
- (f) Access arrangements for construction traffic to and from the Port, and within the Port;
- (g) Rights for Forth Ports to inspect the works carried out as part of the Scheme within the Port, and an agreed process for remediating any work found to be deficient or damaged;
- (h) Provisions relating to the Lock Gates, including testing requirements and contractor warranties and undertakings;
- (i) Measures setting out responsibility for the maintenance, monitoring, repair and operation of the Scheme works;
- (j) Other conditions that are necessary to protect the continued operation of and development at the Port;
- (k) Operation of the Lock Gate, covering both Port and flood protection purposes;
- (l) Liability, insurance and indemnity provisions; and
- (m) Costs.

9.4.3 In addition, Forth Ports would highlight the potential for an agreement to provide a clear mechanism for ongoing cooperative working and collaboration, with a goal of identifying the most efficient and effective way to implement the Scheme, exploring opportunities to combine the flood defence works with other development being carried out in the same location and timescale, and identifying potential sources of additional funding for the Scheme at the Port.

10. **CONCLUSION**

10.1 The flood protection that will be provided by the Scheme is important to Grangemouth and the Port. However, in its present form, it will frustrate development that is key to realising the future of Grangemouth envisaged by the Scottish Government as a leader in sustainability, a hub of industrial decarbonisation, and a skilled centre of employment. This consequential negative legacy would be contrary to planning and economic policy developments since the Falkirk Local Plan 2 was published, and hold back the local area by limiting economic growth potential, harming the achievement of the Scheme's economic objectives.

10.2 However, this need not be the case, and the solutions presented in this representation will maximise the benefits of the Scheme by ensuring that it facilitates the positive future and outcomes for Grangemouth, through significant indirect beneficial effects to health, the economy and climate change. Every effort should be made to ensure that the legacy of the Scheme is of being the first step in a raft of investment and development that will benefit Grangemouth. Forth Ports confirms that it will continue to work with the Council to ensure that the necessary improvements to the Scheme

are made in order to maximise the beneficial effects of the Scheme and minimise likely significant negative effects.

11. SUMMARY OF ISSUES AND SOLUTIONS

- 11.1 The following table summarises each issue that Forth Ports has with the Scheme as currently proposed, and the solutions required to rectify these issues.

Issue	Solution
The route of the flood defence wall east of the lock gate will not protect land from flooding that is required for the Energy Park, the anchor development of the Green Freeport and national development within the IGTZs designated by NPF4.	Re-route the flood defence wall to follow the shoreline, ensuring the land benefits from flood protection and the Energy Park can be developed.
The alignment of the flood defence wall to the north of North Shore Road has the potential to interfere with or obstruct Port activity, namely the transport of wide-load abnormal indivisible loads.	The flood defence wall must be aligned as far back from the road as possible. If the alignment is proposed to encroach into the current available width of North Shore Road, it must be demonstrated to Forth Ports that the encroachment is unavoidable and all alternatives investigated.
The route of the flood defence wall to the western edge of the Port will not protect Port development land from flooding. This land has been designated as part of the Grangemouth Tax Site within the Forth Green Freeport, and will be sterilised without flood defences.	Re-route the flood defence wall to follow the shoreline, ensuring the land benefits from flood protection and the Green Freeport designation and associated development to be located here. Alternatively, the current route and the preferred shoreline route must both be secured, with the current route constructed only where no development proposals have been identified before construction of this part of the flood defence wall is due to commence <i>and</i> , despite best efforts, there remains a funding shortfall making the preferred shoreline route impossible.
The design of the Lock Gate and its reliability are critical to the operation of the Port and the Scheme, and it must be of a high standard to meet the requirements for both Port and flood defence use.	The detailed design of the Lock Gate and factors going to its resilience, including choice of contractor and construction methodology, must be agreed with Forth Ports.
The construction of the Scheme within and around the Port, and the ongoing operation and maintenance activity for the Scheme, have the potential to interfere with the operation of the Port.	An agreement is required to manage the detail of how the Scheme will interact with the Port, ensuring impacts are minimised; and When considering for approval any control documents that will affect the management of the Scheme within and around the Port, the Council must consult Forth Ports and have regard to its comments.

14 June 2024

Forth Ports Limited (SC134741)

1 Prince of Wales Dock, Edinburgh, Midlothian, EH6 7DX

in its capacity as **Statutory Harbour Authority for the Port of Grangemouth**
Port Office, Grangemouth Docks, Grangemouth, FK38UE

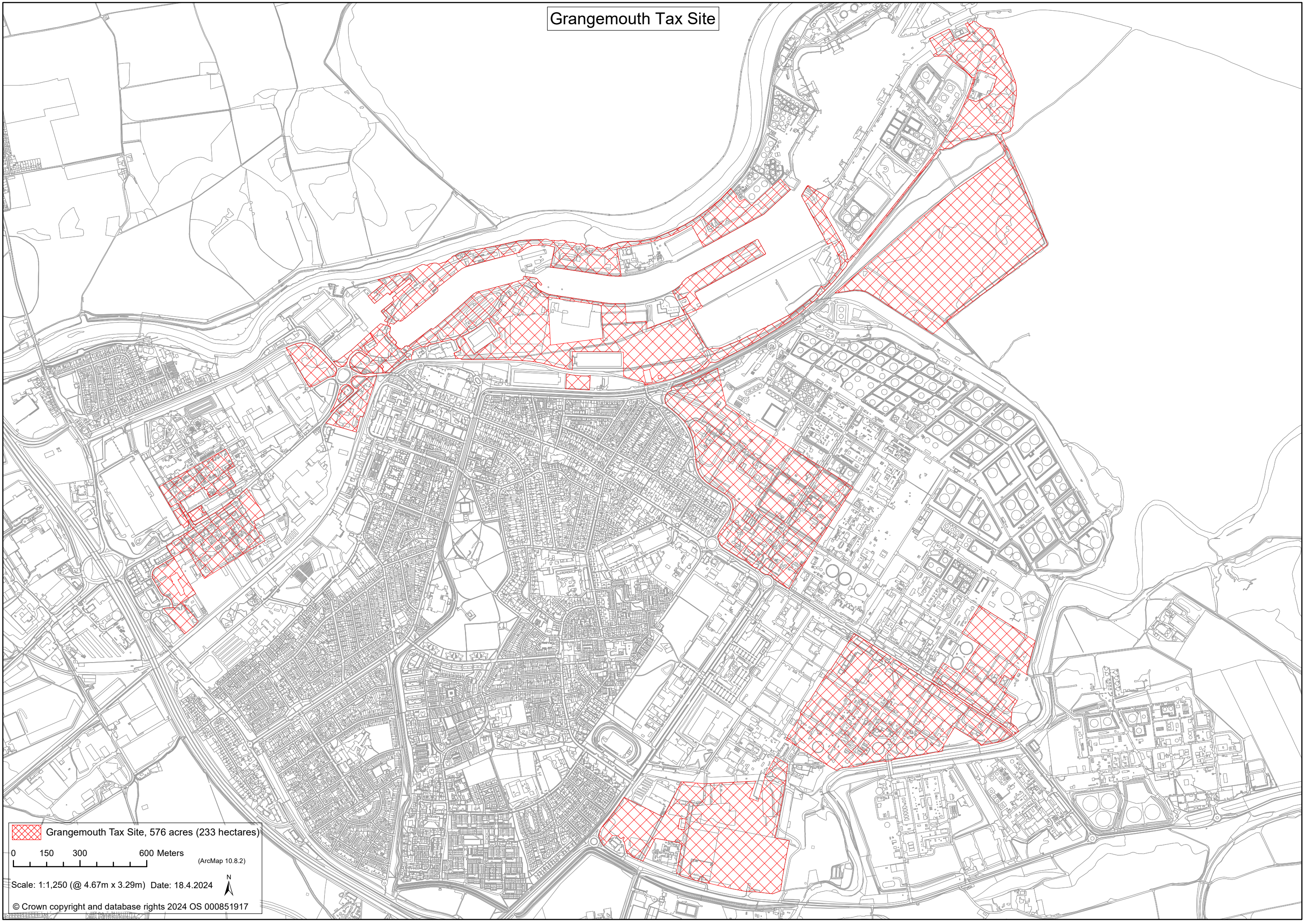
APPENDIX 1


Grangemouth Tax Site Plan

https://assets.publishing.service.gov.uk/media/6645cc2a993111924d9d362b/Grangemouth_Tax_Site.pdf

Accessed 14 June 2024

Grangemouth Tax Site



 Grangemouth Tax Site, 576 acres (233 hectares)

0 150 300 600 Meters (ArcMap 10.8.2)

Scale: 1:1,250 (@ 4.67m x 3.29m) Date: 18.4.2024

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APPENDIX 2

For illustrative purposes only – Port of Grangemouth Boundary



APPENDIX 3

For illustrative purposes only – Energy Park Land

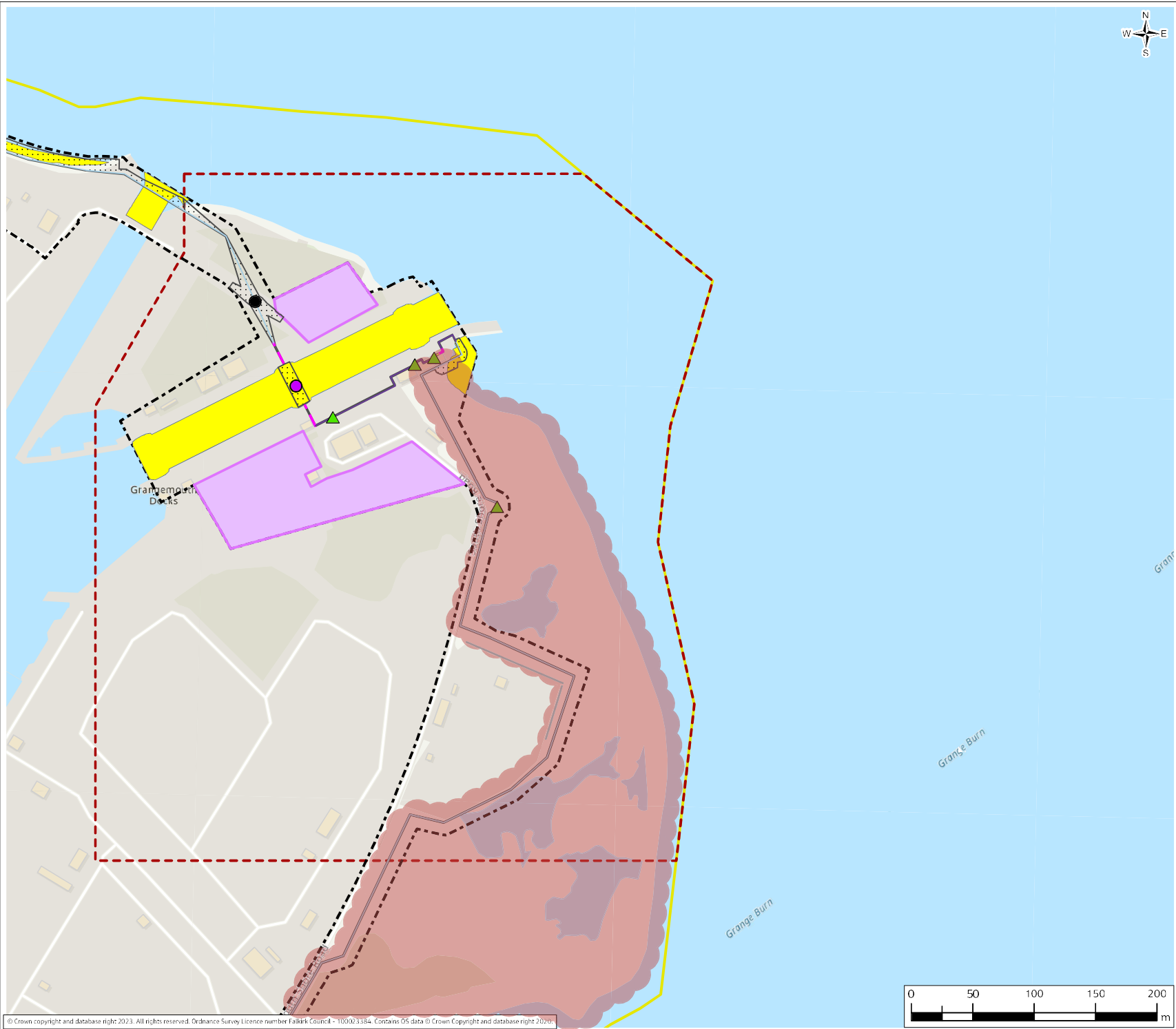




FIGURE A4.10

- Legend
- Bare sheet pile wall
 - Formed concrete wall
 - Plain concrete wall
 - Demountable defence
 - Site Boundary
 - Permanent Works Footprint
 - Site Compounds
 - In-water Working
 - Flood Cell 3 Boundary
 - Working Area
 - Lock Gates
 - Flood Gates
 - Access Point - Ramps



P01.1	APR 24	ISSUED FOR PUBLICATION		AR	RM	AB	AMc
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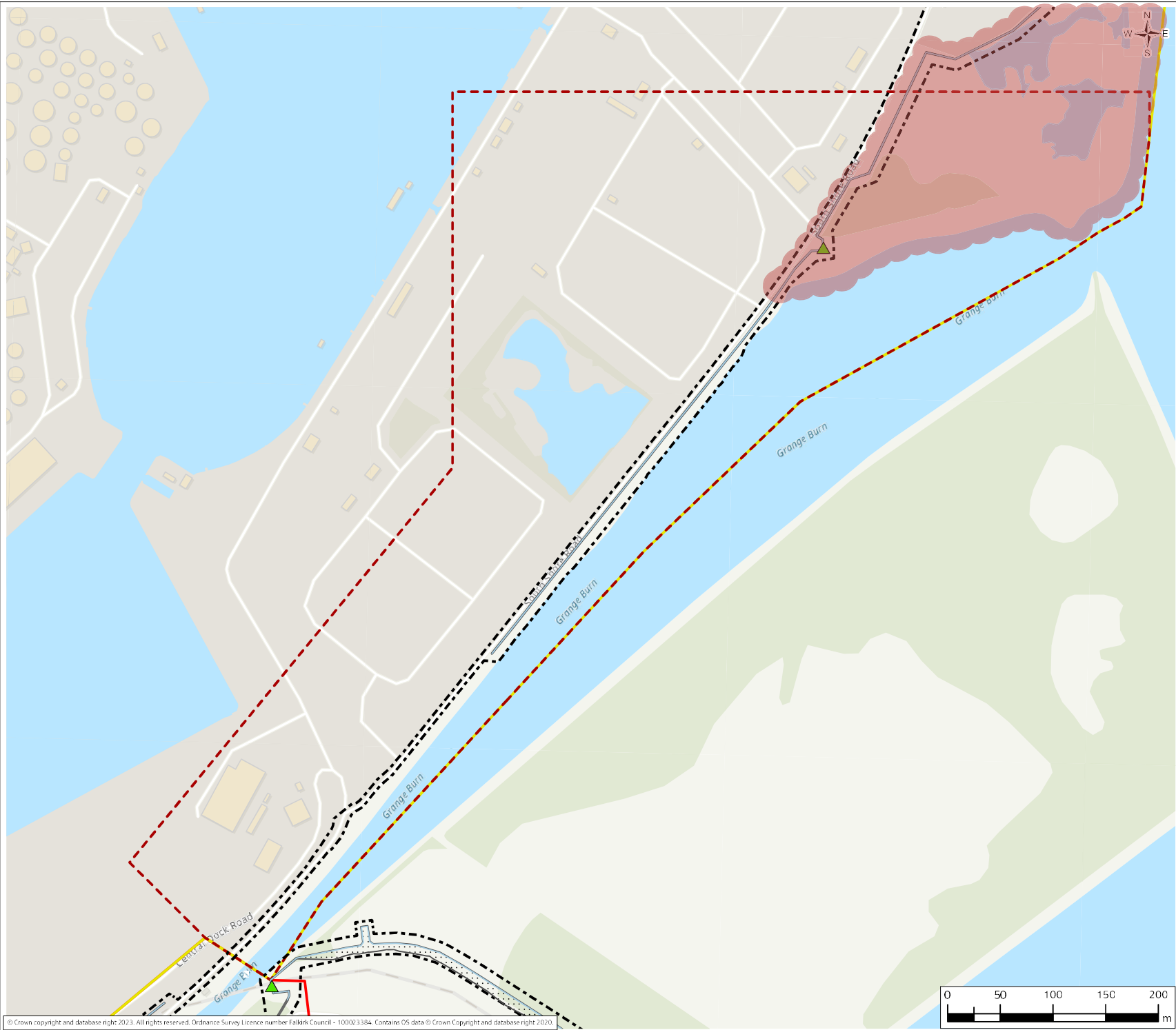


FIGURE A4.11

- Legend
- Bare sheet pile wall
 - Seepage
 - Site Boundary
 - Permanent Works Footprint
 - Flood Cell 3 Boundary
 - Flood Cell 4 Boundary
 - Working Area
 - Flood Gates



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APPENDIX 4

For illustrative purposes only – Development Land, North Shore Road (West)



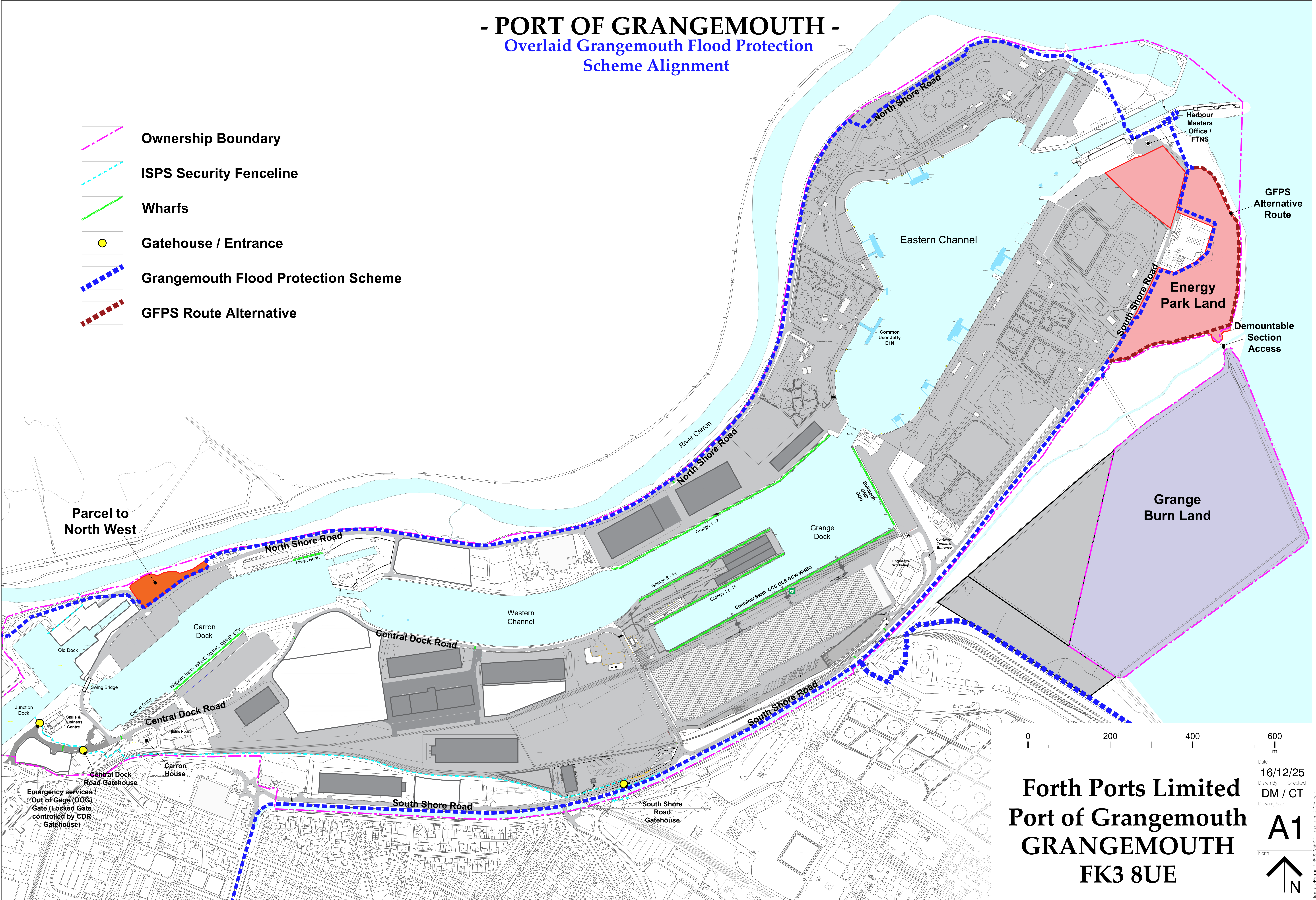
APPENDIX 5

For illustrative purposes only – Proposal for Realigned Flood Defence Wall – East of Lock Gates



APPENDIX 2
PLAN OF THE PORT OF GRANGEMOUTH

- PORT OF GRANGEMOUTH -
Overlaid Grangemouth Flood Protection
Scheme Alignment



APPENDIX 3

FORTH PORTS' FALKIRK COUNCIL LDP3 CALL FOR SITES BRIEFING NOTE (02/05/2025)

Forth Ports Limited, Port of Grangemouth, Falkirk LDP3 Call for Sites, 02/05/25

Introduction

1. The purpose of this briefing note is to set out the Forth Ports' vision for the Port of Grangemouth, over the medium term (next 10 to 15 years) to inform the forthcoming Falkirk Local Development Plan, which will have a duration of 10 years and should be in place by 2028.
2. The Planning Authority will appreciate that, by their nature, and as reflected in their Permitted Development Rights, port operations are fluid and transient. Ports are required to adapt to meet their customer requirement as well as changing national and global factors. It is therefore important for that the forthcoming LDP puts in place a supportive policy context for the Port of Grangemouth which reflects the operations expected to take place. Broadly Port and the operations which take place within them are aligned with general business, industry, storage and distribution uses.
3. This briefing note provides a brief introduction to Forth Ports and the Port of Grangemouth. It outlines key issues for the Port, anticipated / potential developments, infrastructure proposals and considerations and identifies connections with wider initiatives.

Forth Ports Limited and the Port of Grangemouth

4. Forth Ports Limited are both the Statutory Harbour Authority and the Competent Harbour Authority for the Firth of Forth and perform a number of functions as prescribed by legislation (Forth Ports Authority Order Confirmation Act 1969) including overseeing of safety of navigation and licencing of all works below MHWS between the tidal limits inland and the mouth of the Firth. In addition to the Port of Grangemouth, they own and operate a number of ports within the Firth of Forth, including the Ports of Leith, Rosyth, Burntisland and Methil as well the Port of Tilbury in Essex and the Port of Dundee. Forth Ports also operate the Forth and Tay Navigation Service which controls vessel movements on the Firths of Forth and Tay.
5. The Port of Grangemouth has an area of approximately 162 ha. Its Port operational boundary extends to the Firth of Forth in the north and east, South Shore Road and the Grange Burn to the south and east and the River Carron to the west. The town of Grangemouth sits predominantly to the east and south of the Port. The Port's main access is via Central Dock Road with a further vehicle access on Powdrake Road. A rail freight connection is located within the Port.

6. As outlined on [Forth Ports' website](https://www.forthports.co.uk/our-ports/grangemouth/)¹, the Port of Grangemouth is Scotland's largest port handling 9 million tonnes of cargo each year through specialist container, liquid and general cargo terminals. This cargo flow represents as much as 30% of Scotland's gross domestic product (GDP), highlighting the port's essential role as an economic facilitator for Scotland. Situated midway between Scotland's main cities of Glasgow and Edinburgh, the port is the ideal logistics and distribution hub with 70% of Scotland's population within 1 hour's drive and unrivalled connectivity via road, rail and sea.
7. Further information on the Port, including its capabilities can be found on [Forth Ports' website](https://www.forthports.co.uk/our-ports/grangemouth/).

Towards Net Zero – NPF4, Growth Deal, Forth Green Freeport and Project Willow

8. Grangemouth is identified as an area where industrial activity is concentrated, providing high value manufacturing and employment opportunities however it is also recognised as a large emitter of greenhouse gas emissions. In 2019, Falkirk Council declared a Climate Emergency and set a target for Grangemouth to be the Falkirk Council Area's first net zero town.

NPF4

9. Recognising the need to decarbonise 'nationally important industrial sites in a way that ensures continued jobs, investment and prosperity' for identified areas and communities, NPF4 has identified qualifying developments in Grangemouth within the scope of National Development '15 - Industrial Green Transition Zones.' It recognises the need to accelerate and maximise the deployment of green hydrogen and the utilisation of Carbon Capture Storage with the highest possible carbon capture rates. For Grangemouth it identifies the Grangemouth Investment Zone as

"...a focus for transitioning the petro-chemicals industry and associated activities into a leading exemplar of industrial decarbonisation, significantly helped through the coordination activities of the Scottish Government's Grangemouth Future Industry Board. Decarbonisation could include opportunities for: renewable energy innovation; bioenergy; hydrogen production with carbon capture and storage; and repurposing of existing strategic and critical infrastructure such as pipelines." (NPF4, page 118)

Growth Deal – Invest Falkirk

10. The Government's Growth Deal puts in place a package of £90 million towards delivery of the Falkirk-Grangemouth Investment Zone. The associated proposals aim to maximise the economic potential of the area whilst managing a net zero future. The focus of investment is on the following:

¹ <https://www.forthports.co.uk/our-ports/grangemouth/>

“Industrial innovation: particularly in industrial biotechnology, carbon capture and autobus innovation to enable the transition to more sustainable industries whilst preserving our manufacturing base.

Infrastructure including roads, rail and ports projects to support industries such as construction, logistics, manufacturing, tourism and their supply chains.

Place: to enhance our town centres and the tourism sector.”²

Forth Green Freeport

11. Green Freeports provide a range of tax and other incentives are designed to secure inclusive economic growth and a just transition towards net zero. The Port of Grangemouth forms part the Forth Green Freeport³ which is focused around delivery of new green technologies (including hydrogen and e-methanol manufacture), alternative fuels and renewable energy manufacturing. The tax sites within the Grangemouth area, including the Port and Grangemouth are identified on the attached ‘Grangemouth Tax Site’ plan (Appendix A).

Project Willow

12. In response to Petroineos’ announcement that it proposes to convert the Grangemouth refinery to a fuel import terminal the UK and Scottish Governments have been actively collaborating with Petroineos and its shareholders, INEOS and PetroChina, to ensure a positive long-term future for the site. Project Willow is the result of this collaboration, identifying and supporting options supported by the public and private sector. The opportunities recognise Grangemouth’s ongoing role as the entry point for the majority of Scottish fuel, which creates a logistical advantage to supply SAF and low carbon biofuels.⁴ Port infrastructure will support the transition and potential bio-fuel projects.
13. NPF4, the Growth Deal, Forth Green Freeport and Project Willow all support the Just Transition of the area. The Port, its infrastructure and its estate are essential to the delivery of sustainable inclusive growth and net zero emissions, and now even more so with Petroineos’ decision to convert the refinery to a fuel import terminal. The Local Development Plan must fully put in place a policy framework for Forth Port’s land holding which supports new green technologies, alternative fuels, renewable energy manufacturing and modern port infrastructure requirements including warehousing.

² www.investfalkirk.com

³ Partners include Scottish and UK Government, Falkirk Council, Fife Council, City of Edinburgh Council, Forth Ports Limited, Edinburgh Airport, Babcock, Ineos, CalaChem, Ministry of Defence and Scarborough Muir.

⁴ <https://www.sdi.co.uk/media/vlubfykz/project-willow-public-information-document.pdf>

Key Issues for the Port

14. In summary the key issues for the Port are; availability of land to accommodate demand, utilities, transport and the Grangemouth Flood Protection Scheme and its implications for the Port. Port operational development will continue with capacity expected to grow. With respect to energy, the development of a power plant on land in the north east of the Port Estate remains a serious prospect whilst opportunities to accommodate hydrogen and other alternative sustainable fuels facilities are also recognised. Seed funding opportunities are being considered to support the Port and the Green Freeport designation and include provision of road upgrade works on South Shore Road which would support improved access in the north east of the Port.

Development on Port Land

15. Port operations will continue to take place at the Port including haulage and supporting marine operations. Aligned with Project Willow, there is market interest for the development of hydrogen other sustainable fuels including, Sustainable Aviation Fuel (SAF) and e-ethanol manufacturing facilities which could be accommodated within the Port. A Border Control post is located within the Port which is operated with Falkirk Council and Border Force. New scanners under the Cyclamen programme, which involves the screening of incoming freight, are scheduled to be constructed throughout 2025/26.
16. A new learning facility is proposed close to the Port's entrance. The facility, which is being brought forward under the umbrella of the Falkirk Growth Deal – Transport, Renewables and Career Exploration Hub (TRACE), will contribute to the development of appropriately skilled workforce in Falkirk and Grangemouth to both support and benefit from the skills requirements of emerging technologies in the area around renewable energy and green maritime. This will encompass offshore wind energy generation support and management; hydrogen production, storage and fuelling, electrical battery charging, storage and utilisation, Hydrogenated Vegetable Oil (HVO) fuel purification, enrichment, storage and fuelling, and a range of green maritime training activities.
17. It will provide upskilling and reskilling to unemployed, school leavers and those currently employed in the area, add to and tailor the capabilities of HE and FE graduates to meet skills requirements and creating awareness and engagement of potential green jobs in the area primary and high school students. It will include the potential for wider net zero energy developments linked to wider industrial activity and local energy and hydrogen networks in the Falkirk Grangemouth area. The construction project management and revenue costs will be funded by Forth Ports Ltd.
18. Forth Ports will continue to develop port-related warehouses. Capacity is expected to grow by 100,000 sq ft per annum with the development of sheds over the next 5 years. This will see the provision of over 1,000,000 sq ft of warehousing within the Port. Forth Ports have been

developing 100,000 sq ft buildings but are considering the development of larger facilities including a 150,000 sq ft building. Development will take place throughout the port estate including land identified as Tax sites within the Forth Green Freeports submission.

19. Once warehouse development is complete the only available land that would be left in the Port will be the land in the north east of the port adjacent to the Grange Burn (Appendix B). There is potential at this location for an energy generation facility (LNG Power Plant with associated hydrogen and carbon capture capabilities). The site requires infrastructure improvements and seed funding for an access road has been identified as part of the Forth Green Freeport proposals. Alternative uses for this land include warehouse storage/distribution, port laydown or it can accommodate Project Willow related developments.
20. The LDP identifies the site within the settlement boundary, which provides a limited amount of support for development. However, with limited land available elsewhere in the Port, the land is required for development. It will enable carbon reduction either through the development of:
 - A Net Zero Energy Hub comprising a 2.4 GW Carbon Capture ready CCGT power plan, hydrogen manufacturing facility, 2 x low visual impact wind turbines with estimated 3,000 to 4,000 jobs during construction and 400 to 500 high skilled jobs during operation. NZEH will give the industrial belt in central Scotland, competitively priced 24/7 on tap uninterrupted energy to be used as an anchor ensuring net-zero targets are met and maintained with certainty;
 - Port warehousing, which support the 'Port Centric'⁵ modal of the Port;
 - Laydown to support renewable energy development;
 - Project Willow related projects;
 - Solar array.
21. Forth Ports has submitted a response to the Council's 'Call for Sites' consultation, and seeks to have the site identified as a 'Core Business Area' and 'Business Use' proposal, aligned with the operational port estate and Green Freeport Tax Sites.
22. Following the development of all land within Forth Ports control (5 to 10 years), which includes the land in the north east of the port adjacent to the Grange Burn, land will potentially require to be created by infill (Junction Dock) within the north west sector of the Port, or by reclamation,

⁵ The Port Centric model at the Port of Grangemouth is designed to reduce the double handing of goods and associated road miles creating savings in logistic costs and environmental benefits, including a reduction in CO2 emissions.

noting that the Firth of Forth designations would be a significant matter for consideration. There is also potential for, and benefits to, utilising land for Port operational use within the immediate surrounding area which is presently identified for business use. The continued designation of land to the west of the Port for business use is therefore key to the Port's operations.

23. In conclusion, the availability of land within the Port over the next plan period will become constrained. The Council's Evidence Report and supporting Topic Papers recognise this. The Economy and Employment Land Topic Paper states,

"5.11 Clearly there is a very substantial supply of employment land in the area, in relation to the rate of take up, but consideration needs to be given to the flexibility of the supply, particularly given that land at Ineos and Grangemouth Port is likely to be reserved for specific purposes.... "

It is therefore necessary for the next LDP to continue to recognise the Port as a Core Business site and identify the Green Freeport Tax Sites (Appendix A) within the Forth Ports' estate as Business Use proposals aligned with the extant LDP's Proposal BUS15 Grangemouth Docks West which comprise, 'Port related industry/ storage and distribution/ logistics/ energy.'

Infrastructure

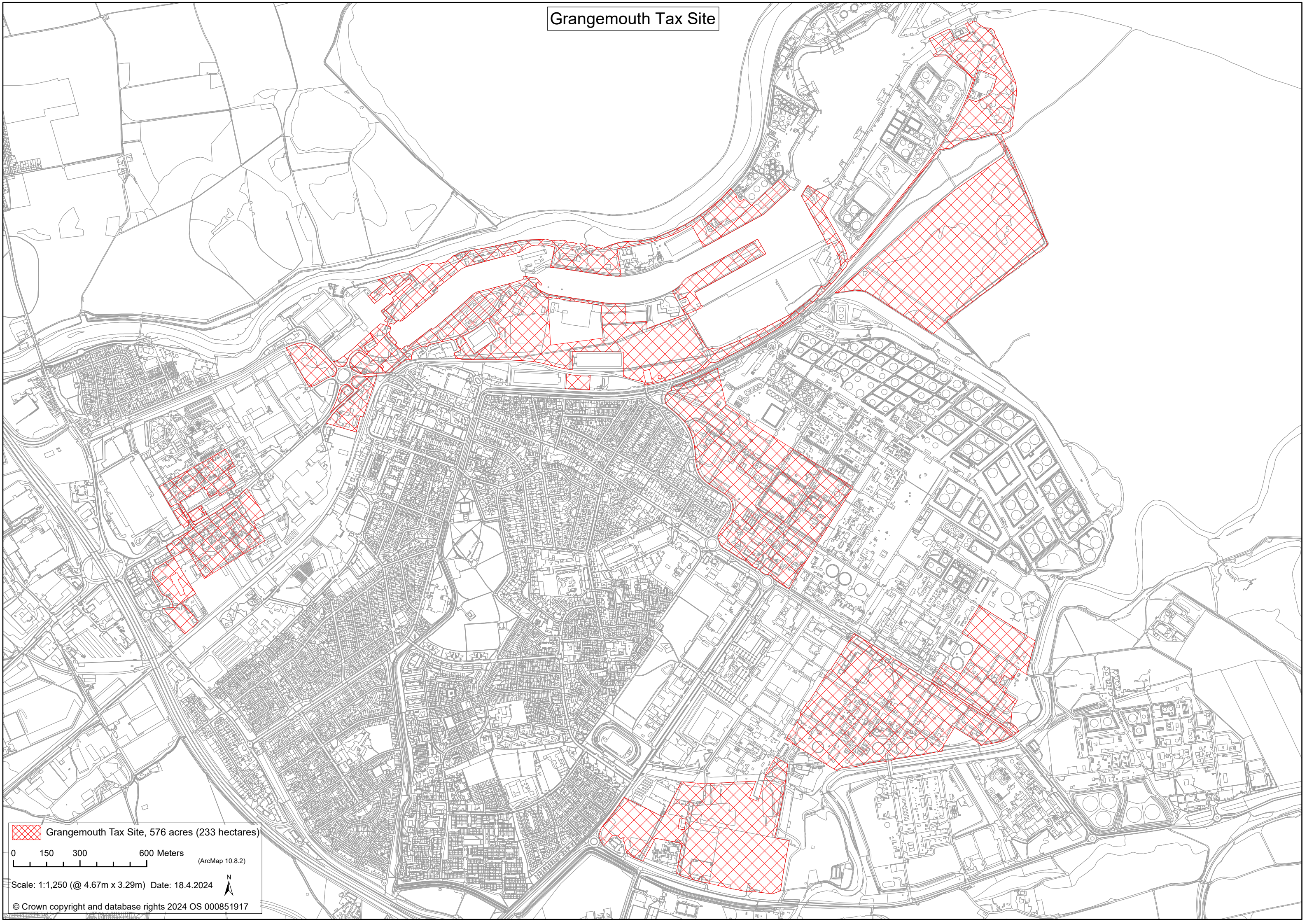
24. Forth Ports will be making provision for solar energy generation within the proposed introduction of PV on premises and land in the Port. The Company is committed to making its operations [carbon neutral by 2032 and net zero 2042](#). Provision for PV is proposed on an area of land (approx. 0.25 ha) in the south of the Port, adjacent to the Border Control Post. Other pockets of land within the Port are being considered, where these do not lend themselves to warehouse development. Proposals could include the provision of floating PV.
25. There is growing pressure on utilities, including available capacity of electricity, within the area and this is a consideration for any potential manufacturing within the Grangemouth area. The energy plant would make a contribution to resolving the matter. Seed funding for upgrade improvements to electrical infrastructure has been identified as part of the Forth Green Freeport proposals.
26. Development and management of the Port entrance is being reviewed to take into account various projects under FGFP and the Grangemouth TRACE scheme.
27. Provision for a 3rd rail line in the Port is being considered however it will require investment. There is growing demand for the movement of freight by rail however there is a market shortage of rolling stock at present to facilitate growth.


Grangemouth Flood Protection Scheme

28. The Grangemouth Flood Protection proposals, follow a route which isolates the land to the north east of the Port from the remainder of the Port and the town of Grangemouth. Whilst it continues to have positive dialogue with the Council regarding matters related to the Scheme's development the inclusion of all Port land remains a concern. With limited developable land available within the Port, it is necessary to ensure that all Port land is within the Flood Protection boundary.
29. The Forth Green Freeport, of which Falkirk Council are a partner, identifies the land to the north east of the Port as a tax site and as outlined above seed funding is proposed to improve access to the site. The proposed location of the Flood Protection barrier undermines this designation and has the potential to create investor uncertainty.
30. Forth Ports has submitted an objection to the Protection Scheme consultation outlining that its current route will result in the isolation of land which can make a valuable contribution to the operation of the Port of Grangemouth and the wider economy. Forth Ports therefore cannot support planning policies which will follow the current proposed route of the flood defence.
31. In combination, the absence of a business designation on the land in the north east of the Port and the proposed route of the Grangemouth Flood Protection Scheme, reduce the likelihood of investment coming forward on the land contrary to the UK and Scottish Government's economic and net zero development policies and programmes.

Appendix A – Green Freeport Tax Sites (Grangemouth)

Grangemouth Tax Site



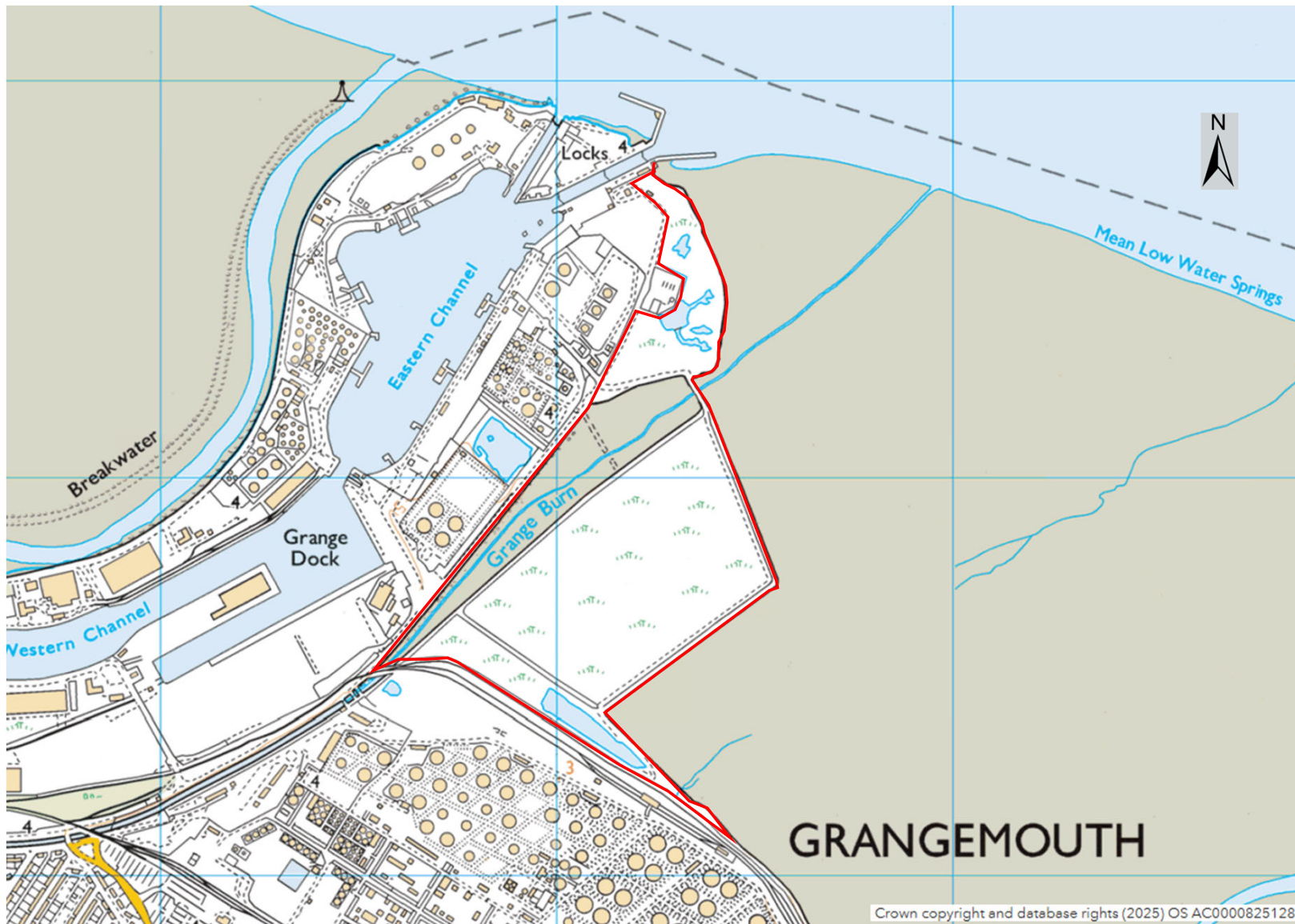
 Grangemouth Tax Site, 576 acres (233 hectares)

0 150 300 600 Meters (ArcMap 10.8.2)

Scale: 1:1,250 (@ 4.67m x 3.29m) Date: 18.4.2024

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Appendix B – Land in north east of the Port of Grangemouth



**FORTH
PORTS**
SCOTLAND

APPENDIX 4

LIST OF DOCUMENTS

Legislation

- a) [Flood Risk Management \(Flood Protection Schemes, Potentially Vulnerable Areas and Local Plan Districts\) \(Scotland\) Regulations 2010](#)
- b) [Flood Risk Management \(Scotland\) Act 2009](#)
- c) [Forth Harbour Reorganisation Scheme Confirmation \(Special Procedure\) Act 1967](#)
- d) [Forth Ports Authority Order Confirmation Act 1969](#)
- e) [The Conservation \(Natural Habitats, &c.\) Regulations 1994](#)
- f) [The Designation of Special Tax Sites \(Forth Green Freeport\) Regulations 2024](#)
- g) [The Forth Ports Authority Scheme 1992 Confirmation Order 1992](#)
- h) [The Town and Country Planning \(Hierarchy of Developments\) \(Scotland\) Regulations 2009](#)
- i) [Town and Country Planning \(Scotland\) Act 1997](#)

Guidance

- j) [The Flood Risk Management \(Scotland\) Act 2009 Flood Protection Schemes - Guidance for Local Authorities Chapter 5 Project Appraisal: Assessment of economic, environmental and social impacts](#)

Policy

- k) [Grangemouth Industrial Just Transition Plan](#)
- l) [Green Freeports](#)
- m) [Investment Opportunity Fund: prospectus](#)
- n) [Just Transition for the Grangemouth industrial cluster: discussion paper](#)
- o) [National Planning Framework 4 \(NPF4\)](#)
- p) [NPF4 Delivery Programme v3](#)
- q) [Ports & Marine Facilities Safety Code dated April 2025](#)

Local Development Plan

- r) [Examination Report dated 27 March 2020](#)
- s) [Falkirk Local Development Plan 2 \(LDP2\) Main Issues Report dated February 2017](#)

Grangemouth Flood Protection Scheme

- t) [Environmental Impact Assessment Report dated April 2024](#)
- u) [Habitats Regulations Appraisal dated August 2025](#)
- v) [Scheme Operations](#)

- w) [Scheme Plan – Land Affected Sheet 5](#)
- x) [Scheme Plan – Plan B Scheme Operations](#)
- y) [Scheme Plan – All drawings within Plan B](#)
- z) [Preliminary Decision – Report dated 23 January 2025](#)
- aa) [Preliminary Decision – Appendices](#)

Forth Ports

- bb) [Grangemouth Tax Site Plan](#)

Press Releases

- cc) [Forth Green Freeport secures Full Business Case approval](#)
- dd) [Funding to support up to 460 new jobs at Grangemouth](#)
- ee) [Grangemouth refinery stops processing crude oil](#)