HABITATS REGULATIONS APPRAISAL PROFORMA A: SCREENING

1. Name of Competent Authority

Aberdeen City Council

Note: Refer to NatureScot HRA Guidance whilst completing the HRA, this template only contains basic pointers for the completion of this document, further Guidance should be referred to for detail;

- If you would like more information on the terms used in this template, see the EU guidance document here, pages 33-52
- When producing a plan or strategy, use this <u>guidance</u> from NatureScot
- For projects where work is taking place on the ground, this <u>guidance</u> from NatureScot may be more useful
- For all cases, reference **must** also be made to the following additional <u>guidance note</u> from NatureScot
- <u>SiteLink</u> provides access to data and information on key <u>Protected Areas</u> across Scotland. You can view site boundaries, designated features and download supporting documents.

Note: Refer to Local Development Plan (LDP) HRA before progressing when assessing development within an Opportunity Site identified through the LDP.

2. SITE DETAILS

2a. Name of European site affected

The below lists the European and UK designated sites within the potential zone of influence (ZOI) which were considered and the qualifying interest features are outlined below in Section 2b.

- 1. River Dee SAC EU Site Code: UK0030251 Designated: 17 March 2005 Area: 2334.48 ha
- 2. Moray Firth SAC EU Site Code: UK0019808 Designated: 17 March 2005 Area: 151273.98 ha
- **3.** The Ythan Estuary, Sands of Forvie and Meikle Loch SPA EU Site Code: UK9002221 Designated: 03 December 2020 Area: 7062.03 ha
- 4. Loch of Skene SPA EU Site Code: UK9002261 Designated: 01 Oct 1986 Area: 121.76 ha
- 5. Buchan Ness to Collieston Coast SPA EU Site Code: UK9002491 Designated: 25 Sep 2009 Area: 5400.76 ha

- 6. Isle of May SAC (Grey seal) EU Site Code: UK0030172 Designated: 17 Mar 2005 Area: 356.64 ha
- 7. Berwickshire and North Northumberland Coast SAC (Grey seal) EU Site Code: UK0017072 Designated: 17 Mar 2005 Area: 65226.12 ha

It is recognised that the above list contains sites which are more than 2km distance away from the Masterplan area. However, there is no maximum distance specified in defining a 'Zone of Influence' and therefore additional SPAs and SACs have been identified for the purposes of this habitats appraisal. Such sites have been identified as being within the potential ZOI as their designations include mobile species, which may be on a flightpath, utilise supporting habitats on or near the site, and/or are hydrologically connected to the site. For example, the common tern which is a qualifying species at the Ythan Estuary, Sands of Forvie and Meikle Loch SPA typically forages up to 5–10 km (3.1–6.2 mi) away from the breeding colony, sometimes as far as 15 km (9.3 mi). Given the proximity of the Masterplan area to the coast determines that other sites with marine based attributes and qualifying interested should also be considered.

2b. European qualifying interest(s)

Site / Qualifying Interest / Condition

- **1. River Dee SAC: Otter** *Lutra lutra* (Favourable Declining); **Freshwater pearl mussel** *Margaritifera margaritifera* (Unfavourable No Change); **Atlantic salmon** *Salmo salar* (Favourable Maintained)
- 2. Moray Firth SAC: Bottlenose dolphin Tursiops truncatus (Favourable Maintained)
- 3. Ythan Estuary, Sands of Forvie and Meikle Loch SPA: Sandwich tern Sterna sandvicensis (Favourable Maintained); Common tern Sterna hirundo (Unfavourable No Change); Little tern Sterna albifrons (Favourable Maintained); Pink-footed goose Anser brachyrhynchus (Favourable Maintained); Common eider Somateria mollissima mollissima (Favourable Declining); Lapwing Vanellus vanellus (Favourable Maintained); Redshank Tringa tetanus (Favourable Maintained); Non-breeding waterbird assemblage (Favourable Maintained).
- 4. Loch of Skene SPA: Goldeneye Bucephala clangula (Favourable Maintained); Goosander Mergus merganser (Unfavourable Declining); Greylag goose Anser anser (Unfavourable Declining).
- 5. Buchan Ness to Collieston Coast SPA: Fulmar Fulmarus glacialis (Unfavourable Declining); Guillemot Uria aalge (Favourable Maintained); Herring gull Larus argentatus (Favourable Maintained); Kittiwake Rissa tridactyla (Unfavourable No change); Shag Phalacrocorax aristotelis (Unfavourable No change); Seabird assemblage (Favourable Recovered).
- 6. Isle of May SAC: Grey seal Halichoerus grypus (Favourable Maintained).
- **7.** Berwickshire and North Northumberland Coast SAC: Grey seal Halichoerus grypus (Favourable Maintained).

2c. Conservation objectives for qualifying interests

The following outlines both the conservation objectives for the qualifying interests of the sites, alongside factors influencing the site and vulnerabilities to changes/potential effects

1. River Dee SAC

- To ensure that the qualifying features (Freshwater pearl mussel, Atlantic salmon and otter) of the River Dee SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
- To ensure that the integrity of the River Dee SAC is restored by meeting objectives 2a, 2b, 2c for each qualifying feature (and 2d for freshwater pearl mussel):
 - 2a Restore the population of the qualifying feature species as a viable component of the site.
 - 2b Restore the distribution of the qualifying feature species throughout the site.
 - 2c Restore the habitats supporting the qualifying feature species within the site and availability of food.
 - 2d Maintain the distribution and viability of freshwater pearl mussel host species and their supporting habitats.
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - River engineering works
 - Habitat loss
 - Disturbance
 - Recreational impacts
 - Coastal squeeze
 - Water abstraction
 - Pollution Housing developments

2. Moray Firth SAC

- To ensure that the qualifying features (e.g. bottlenose dolphin and subtidal sandbanks) of Moray Firth SAC are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.
- To ensure that the integrity of Moray Firth SAC is maintained or restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature: <u>For subtidal sandbanks</u>
 - 2a Extent and distribution of the habitat within the site.
 - 2b Structure and function of the habitat and the supporting environment on which it relies.
 - 2c Distribution and viability of typical species of the habitat.
 - For bottlenose dolphin
 - 2a The population of the bottlenose dolphin is a viable component of the site.
 - 2b The distribution of bottlenose dolphin throughout the site is maintained by avoiding significant disturbance.

- 2c The supporting habitats and processes relevant to bottlenose dolphin and the availability of prey for bottlenose dolphin are maintained.
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - Dolphin watching
 - Disturbance
 - Harassment
 - Contamination
 - Death and injury
 - Potential poaching
 - Recreational impact
 - Reduction of food availability
 - Unviable population levels

3. Ythan Estuary, Sands of Forvie and Meikle Loch SPA

- To ensure that the qualifying features of Ythan Estuary, Sands of Forvie and Meikle Loch SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.
- To ensure that the integrity of Ythan Estuary, Sand of Forvie and Meikle Loch SPA is restored in the context of environmental; changes by meeting objectives 2a, 2b and 2c for each qualifying feature:
 - 2a The population of the qualifying features are viable components of the site.
 - 2b The distribution of the qualifying features throughout the site are maintained by avoiding significant disturbance of the species.
 - 2c The supporting habitats and processes relevant to the qualifying features and their prey/food resources are maintained, or where appropriate, restored.
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - Tourism / Leisure / Recreation
 - Onshore Wind & Micro-renewables
 - Development pressures on and/or edges of site
 - Damage and disturbance to sensitive habitats and species.
 - Predation
 - Overtopping of shingle beds by sand
 - Eutrophication and threats to invertebrates from algal mats
 - Long term threats from climate change and sea level rise
- 4. Loch of Skene SPA
- To avoid deterioration of the habitats of the qualifying species (Greylag goose, Goldeneye and Goosander) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and
- To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site
 - Distribution of the species within site
 - Distribution and extent of habitats supporting the species
 - Structure, function and supporting processes of habitats supporting the species
 - No significant disturbance of the species

- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - Off-shore wind
 - Tourism / Leisure impacts
 - Recreational pressures & maintenance of visitor numbers
 - Disturbance
 - Affects to mobile species
 - Impact on water quality
 - Pollution
 - Long term threats from fisheries and climate change

5. Buchan Ness to Collieston Coast SPA

- To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and;
- To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site
 - Distribution of the species within site
 - Distribution and extent of habitats supporting the species
 - Structure, function and supporting processes of habitats supporting the species
 - No significant disturbance of the species
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - Pollution
 - Disturbance
 - Development pressures
 - Habitat loss/destruction
 - Affects to mobile species
 - Impact on water quality
 - Pollution
 - Recreational activities
 - Long term threats from overfishing, fisheries, climate change and sea level rise

6. Isle of May SAC (Grey seal)

- To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and
- To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site
 - Distribution of the species within site
 - Distribution and extent of habitats supporting the species
 - Structure, function and supporting processes of habitats supporting the species
 - No significant disturbance of the species
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 Recreational pressure

- Tourism / Leisure
- Managing visitor numbers and boat landings
- Disturbance to breeding season and prey
- Habitat modification
- Offshore wind farm
- Maritime activities (collisions)
- Impact on water quality
- Tele-communications
- Harbour infrastructure

7. Berwickshire and North Northumberland Coast SAC (Grey seal)

- To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and
- To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site
 - Distribution of the species within site
 - Distribution and extent of habitats supporting the species
 - Structure, function and supporting processes of habitats supporting the species
 - No significant disturbance of the species
- Factors Influencing Site and Vulnerability to Changes / Potential Effects
 - Recreational pressure
 - Tourism / Leisure
 - Disturbance
 - Habitat loss
 - Offshore wind farm
 - Maritime activities
 - Impact on water quality
 - Infrastructure

8. PROPOSAL DETAILS

3a. Proposal Title

Energy Transition Zone (ETZ) Masterplan

3b. Details of proposal for both the construction (if relevant) and operational phase(s)

The **Aberdeen Local Development Plan (ALDP) 2023** was adopted on 19 June 2023. The ALDP 2023 contains Policy B5 (Energy Transition Zone) which identifies areas of land for development of an 'Energy Transition Zone', as well as specific 'Opportunity Sites' OP56 (St Fittick's Park), OP61 (Doonies) and OP62 (Bay of Nigg / Gregness) at and around Aberdeen South Harbour. The ALDP

2023 sets out that OP56 and OP61 will support renewable energy transition related industries in association with Aberdeen South Harbour while OP62 relates to the Aberdeen Harbour expansion. The Local Development Plan also highlights the need for a joint Masterplan for all three Opportunity Sites – please see **Figure 1** below.

The ALDP further states that the **Energy Transition Zone** will support renewable energy transition related industries in association with Aberdeen South Harbour. Any development at the OP56 site must have a functional association with the South Harbour which precludes it being located elsewhere, such as the size of the infrastructure preventing transport from other locations or requiring 'roll on / roll off' level access to the South Harbour. Appropriate environmental assessments will be required, including a Habitats Regulations Appraisal to accompany development proposals in order to avoid adverse effects on the qualifying interests of a range of Natura sites. A Flood Risk Assessment is required. Other issues which need to be addressed include water quality, recreational access, habitat connectivity, compensatory planting and landscape buffering with residential areas. Joint Masterplan needed for OP56, OP61 and OP62.

To articulate ETZ Ltd.'s vision and objectives into a spatial framework, a masterplan for the Energy Transition Zone (ETZ) has been developed in line with Aberdeen City Council's 'Placemaking Process' (formerly known as the 'Masterplanning Process').

The Energy Transition Zone (ETZ) Masterplan has been prepared by a consultant team on behalf of ETZ Ltd. A copy of the full ETZ Masterplan can be found in Appendix 2, however in broad terms the ETZ Masterplan has been prepared to provide a spatial framework for development across a wide area encompassing Aberdeen South Harbour, proposed ALDP 'Opportunity Sites' for Energy Transition Zone development, brownfield land within East Tullos and Altens, road and other infrastructures, areas of green and open space, and communities in Torry and Cove. It provides the basis for future development of energy transition industries, skills, innovation and investment in manufacturing. It also includes the delivery of wider benefits in terms of job-creation, place-making, and the local environment. It has been prepared in consultation with a wide range of statutory and non-statutory stakeholders and following an extensive period of local engagement including three community consultation events held in Torry and hosted by ETZ Ltd., and a period of 8 week Council-ran public consultation exercise. The Masterplan is structured around the development of a 'campus model', as outlined below and in Figure 2.

- <u>Community & Energy Coast</u> a programme of investment in local greenspace, biodiversity, and community infrastructures to deliver tangible local benefits across the area.
- <u>Marine Gateway</u> a hub of high-value manufacturing and port-integrated activity forming a catalyst for wider investment across ETZ sited at Aberdeen South Harbour and a reduced development area within the OP56 Opportunity Site at St Fittick's.
- <u>Hydrogen Campus</u> a specialist Campus for manufacturing, R&D, and test & demonstration of hydrogen technologies, strengthening Aberdeen's position as a sector leader – sited at the OP61 Opportunity Site (Doonies) and adjacent brownfield land for future expansion.
- <u>Offshore Wind Campus</u> a cluster of manufacturing, supply-chain, R&D, and test & demonstration activity for offshore wind and wider energy transition uses – sited in Altens.
- <u>Innovation Campus</u> a purpose-developed mix of flexible industrial and commercial units for innovative start-up and growing energy transition businesses sited in Altens.

 <u>Skills Campus</u> – a new net zero education & training facility to accelerate the next generation of energy skills and knowledge and support delivery of ETZ Jobs & Skills Plan – sited in Altens.

A Planning Permission in Principle application will also be submitted for development in Zones A, B and C over a total area of 34.99ha which includes land within the three areas of land allocated as OP56 (St Fittick's Park), OP61 (Doonies) and OP62 (Bay of Nigg / Gregness) – please see **Figure 3 below**.

Overall, the proposals are for a range of flexible development within Class 4, 5, and 6 across three zones with associated infrastructure, active travel connections, landscaping, environmental works, utilities, services drainage and other ancillary works. Whilst it is recognised that the Masterplan is at a strategic level and the details of the proposed development are still being planned and developed, for the purposes of this HRA the development is expected to comprise of the following:

- Buildings in a combination of Class 4 (Business), Class 5 (General Industrial), and Class 6 (Storage & Distribution uses), suitable for a range of energy transition activities, across a range of serviced development plots.
- Provision of road infrastructure including creation of new road links, connected to the Coast Road.
- Retention and partial re-alignment of a section of the East Tullos Burn in order to enable formation of development plots, supporting renewable energy transition related industries in association with Aberdeen South Harbour.
- Active travel measures including integration of existing Core Path networks and provision of new and enhanced path connections.
- Measures to protect and enhance the local environment and biodiversity within and around areas of development through buffer zones, boundary treatment, development plot landscaping, tree and pollinator planting, and other blue-green infrastructures.
- External areas within development plots for parking, servicing, and storage.
- Associated infrastructure including SUDS, utilities and other ancillary works.

The surrounding area accommodates a range of land uses and features including locally important environmental and biodiversity features. This includes Local Nature Conservation Sites at Balnagask-Cove Coast (within which the site is partially situated), and Tullos Hill. Nigg Bay has a geological Site of Special Scientific Interest (SSSI) at its southern edge, bordering the Zone B (Gregness) part of the site.

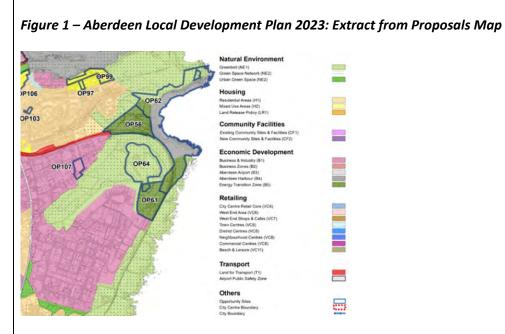
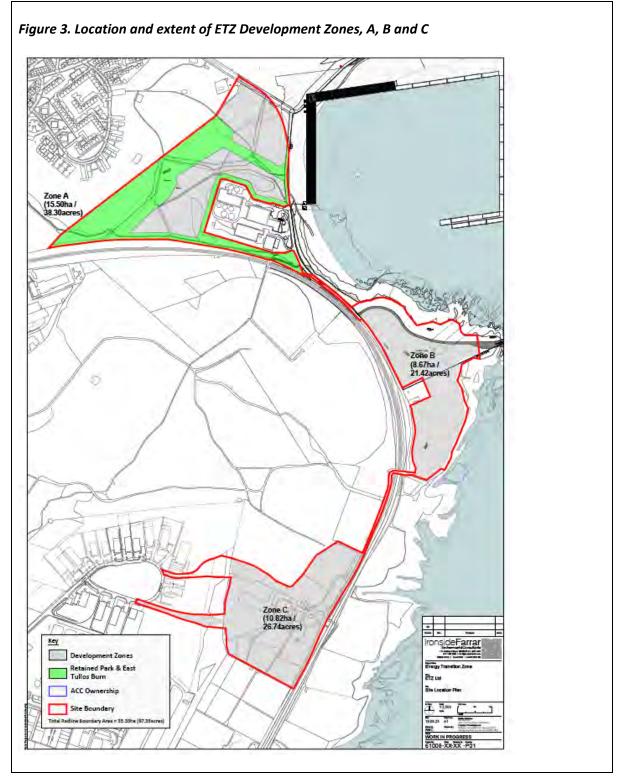


Figure 2. ETZ Masterplan Campus Model





4. Is the proposal directly connected with or necessary to the nature conservation management of a European site?

No

5. Is the proposal (either alone or in combination) likely to have a significant effect (LSE) on a European site?

YES – both for construction and operational phase, and in combination with other proposals in the south-east of Aberdeen, in particular the Aberdeen Harbour South (Port of Aberdeen); Aberdeen South Harbour Link Road (ASHLR), and other road infrastructure and development/land pressures from allocations of the ALDP and neighbouring authorities LDPs.

ALDP 2023 HRA Requirements

Policies B4 (Aberdeen Harbours) and B5 (Energy Transition Zone) were initially screened-in as part of this assessment as they outlined a presumption in favour of certain types of development within harbour-related areas, and depending on the specific nature of the development projects coming forward, there may be an impact on qualifying interests. The key issues identified were:

- Possible water abstraction and construction related impacts on qualifying interests of the River Dee SAC.
- Possible loss of foraging habitat impacts on SPA geese of Ythan Estuary, Sands of Forvie and Meikle Loch SPA, and Loch of Skene SPA.
- Possible impacts on eider (non-breeding) as a qualifying interest of Ythan Estuary, Sands of Forvie and Meikle Loch SPA through loss of supporting and foraging habitats or to water quality.

Appendix 1 contains a full itemised screening of the Draft Energy Transition Zone Masterplan (July 2023) for aspects which would have a likely significant effect on the aforementioned qualifying interests. The methodology used lists and assesses the vision, objectives, principles, policies and projects contained in the masterplan to determine whether it should be screened in or out.

Features of the Masterplan Screened In

(please read alongside Appendix 1)

	Masterplan Reference	Screened In			
1	4.1 Community & Energy Coast	unity & Energy Coast			
	East Tullos Burn & Wetlands	In – water quality			
	St Fittick's Park, Greenspace & Green Networks	In – water quality / increased			
		pressure from development / access			
		/ use			
2	4.2 Marine Gateway (Opportunities & Constraints; D	evelopment Guidance)			
	Opportunities & Constraints: St Fittick's Park &	In – direct harbour / port access			
	Aberdeen South Harbour	impacts / road construction			
	Land Use	In – land development pressures			
		In – outfall to Nigg Bay retained /			
		potential transference			
	Landscape & Environment	In – loss of green and natural spaces			
		/ changes to water quality			
3	sures and Gregness Preventative and				
	Remediative Measures				
		In – hydrology / ecology			
		In – potential impacts on supporting			
		coastal habitats			

	Indicative Masterplan (illustrative concept)	In – potential impacts on supporting coastal habitats
4	4.3 Hydrogen Campus (Development Guidance)	
	Land Use	In – potential impacts on supporting coastal habitats
	Transport & Connectivity	In – potential disturbance / increased accessibility
	Landscape & Environment	In – loss of green and natural spaces / supporting habitats
	Indicative Masterplan illustrative concept)	In – potential impacts on supporting coastal habitats

Summary of Potential Impacts of the Masterplan Features Screened In:

- 1. The River Dee SAC estuary is located at the existing Aberdeen Harbour and lies to the north of the Aberdeen South Harbour/Energy Transition Zone area. It is possible that Atlantic salmon might be impacted by construction related underwater noise.
- 2. While freshwater pearl mussel are not be present within Aberdeen Harbour or Nigg Bay, any impact upon migrating Atlantic salmon through the existing harbour or Nigg Bay could theoretically in turn affect Freshwater pearl mussels and Otters present in the Dee.
- 3. Removal and potential loss of supporting habitats for a range of species if grassland, wetlands, and coastal habitats are to be adversely impacted by proposed development which could reduce foraging, feeding and/or breeding grounds and prevent or reduce the potential for species recovery at the identified sites.
- 4. Species disturbance or potential loss from the geographical area as a result of development impacts (both construction and operational phases) including noise, vibration, lighting, surface run-off, pollution and impacts on water quality and hydrology.
- 5. Potential for disturbance to aquatic and marine environment species to be impacted upon by development close to the coast and tide line, through noise transmission and/or impacts on water quality in terms of discharges and transference.
- 6. Enhanced access to the area will increase the use of the coastal area and create recreational pressures, causing potential disturbance to a range of species through noise, pollution, and physical interference such as through coastal path erosion and damage to habitats.
- 7. Spread of invasive non-native species through inappropriate planting.
- 8. Potential impacts on species through accidental pollution events associated with the development (both construction and operational phases), and/or through potential increase in pollutants adversely impacting on air/water quality.
- 9. Effects on aquatic environment and/or mobile species from loss of supporting habitats due to increase in amount of development and development affecting the coast (including areas vulnerable to recreational pressure).
- 10. Increased impacts from water abstraction and poor/unsustainable water management use and practices.
- 11. Potential vulnerabilities to grey seal include: underwater noise from construction with potential to result in disturbance, injury and death; vessel movements causing disturbance and possible risk of injury from collision; reduction in water quality which could be directly harmful to seals or impair their foraging; and impacts upon the seals' prey species.

Features Screened Out

Aspects of the Masterplan are screened out on the basis of the following justification (*please read alongside* **Appendix 1**):

- *General policy / background info* They are general policy statements or provide background information;
- Too general with no info on where, how and when of development It is not possible to identify effects on any particular European site because proposals/policies are too general;
- *Preventive, enhancement and conservation policy* They are elements of the Masterplan that are intended to protect the natural environment;
- Not generated by this Masterplan Projects are referred to in, but not proposed by, the Masterplan;
- Does not generate development and change Elements of the Masterplan which will not in themselves lead to development or other change;
- Change with no pathway They are elements which make provision for change but which could have no conceivable effect because of the absence of a link or pathway between the plan and European sites;
- Change with 'no' or minimal effects They are elements of the Masterplan which make provision for change but effects are likely to minimal; or have no adverse effect on site integrity, alone or in combination with other aspects of the same plan, or with other plans or projects.

B: APPROPRIATE ASSESSMENT (AA)

Note: An AA is a scientific appraisal of the impacts on a European site that needs to be able to ascertain whether the integrity of a European site will not be adversely affected. Aberdeen City Council, as a competent authority, can only give consent if they are certain as to the absence of such effects.

6a. Undertake Appropriate Assessment (AA) of the implications for the site in view of its conservation objectives.

The ALDP HRA process on Policies and Opportunity Sites concluded that there would be no adverse effect on any of the protected sites integrity, and that our experience is that there are a range of mitigation measures available that could effectively control the risk of any impacts likely to arise as a result of Policy B4 (Aberdeen Harbours) and Policy B5 (Energy Transition Zone), e.g. as demonstrated through the HRA process and accepted mitigation for the Aberdeen Harbour Expansion Project.

The ALDP HRA process also concluded that if future developments were likely to cause any adverse effects, then at that stage Project Level HRA would be required (as is also noted under Policy NE3 Natural Heritage). The need for Project Level HRA (such as this current assessment) was identified in relation to the ETZ area, and for this reason it concluded that there would be no adverse effect on sites integrity.

The following sections outline the project level Appropriate Assessment associated to the ETZ Masterplan.

Assessment of risk and likely adverse effects on the integrity of the sites and conservation objectives for the qualifying interests/species:

Masterplan Reference Screened In	Site/qualifying interests/species	Risk of adverse effects on the integrity of the sites
 4.1 Community & Energy Coast East Tullos Burn & Wetlands St Fittick's Park, Greenspace & Green Networks 	River Dee SAC: Otter Lutra lutra Freshwater pearl mussel Margaritifera margaritifera Atlantic salmon Salmo salar	Atlantic salmon and freshwater pearl mussels are sensitive to disturbance to their river habitat. This includes silt and sediment entering the watercourse, as well as other forms of pollution. The greatest risk of pollution from development is usually at construction stage, especially if there is a clear connection between the development site and the river. Salmon and freshwater pearl mussels may also be adversely affected by abstraction which, if substantial enough, may expose and dry out available habitat, increase water temperatures, and reduce dilution of pollution. The qualifying interests are also potentially vulnerable to direct impacts, e.g. arising through river engineering works. These kind of changes might destroy or degrade habitat or can directly damage or stress the salmon or pearl mussels.
		catchment due to distance. Up to Peterculter marks the tidal limit. As such, any LSE are only considered to relate to the Outer/lower Dee catchment. Proposed development will not have any LSE on the freshwater pearl mussel due to distance with no direct pathways. Qualifying species populations located 6-30 km upstream of the mouth of the River Dee. There are no freshwater pearl mussel in the Outer Dee. Recent site-specific surveys 2021-23 (commissioned by ETZ Ltd.) have recorded no signs of use by Otter on any of the three development Zones, including surveying the St Fittick's wetlands and burn over the last three seasons. Zone C does not have habitat capable of supporting Otter. With regard to Zones A and B, it is also considered that Otter may make infrequent use of the mouth of East Tullos Burn, its surrounding wetland and the adjacent coast – specifically the mouth of the
		and the adjacent coast – specifically the mouth of the Dee mouth and Girdle Ness to Greg Ness section of coast. However it is recognised that this is not an optimal habitat and represents a relatively small

proportion of the designated area (2334.48ha). Habitat suitability will be increased in line with (i), (ii) and (iii) above. East Tullos Burn wetland habitat do not currently support prey species, notably amphibians appear to be absent. Neither frogs nor toads have been observed breeding in the wetland pools. There may be number of reasons which include poor water guality and absence of local populations for natural colonisation. Therefore, in the context of the overall Dee catchment and the likely identified construction and operational LSEs, development is not considered to adversely affect the status of Otter within the whole SAC. As such, the current site conditions for Otter will not be affected and the conservation objectives met during both construction and operation. However, given the proximity of the Masterplan site to these areas, there could be adverse effects on the qualifying species by:

- Loss of potential breeding habitat in the East Tullos Burn and wetlands;
- Denigration of water quality in all frequented areas; and;
- Construction disturbance including noise and light pollution. The latter during construction and operation of the site.

However, the Masterplan includes relevant policies and mitigations to protect Otter (please see Mitigations section below).

There is no watercourse connectivity with the River Dee and therefore no LSE on Atlantic salmon. Atlantic salmon do not make any use of the East Tullos Burn due low water volume, poor water quality, culvert impedances and lack of suitable spawning habitat. Breeding takes place in the upper Dee catchment which will not be directly or indirectly adversely impacted by the Masterplan. New drainage from zones A, B and C of the Masterplan area will partially discharge into Nigg Bay and surrounding coastal area where coastal migrating salmon could be locally adversely impacted by direct and diffuse pollution events via this pathway. However, adverse effects of localised pollution, sediment discharge and impedance through increased turbidity will not be a potentially adverse in impact because the level of suspension and volume of flow will both be low, and, would be discharged into a very high water volume for tidal dispersal.

	In terms of the River Dee SAC, another sensitivity and pressure is water abstraction. The River Dee SAC and any potential receptors (qualifying species) are generally considered to be both geographically remote and topographically isolated from any potential new discharges arising from construction or operation. The Masterplan will seek to minimise water usage through compliance with relevant building regulations and water use and drainage will be agreed with the relevant utilities providers. No abstractions from watercourses or groundwater are proposed as part of the Masterplan. As such, in the context of the background levels in the catchment and existing city discharge any new additions would be considered negligible and, if required, consented and licensed by SEPA. Therefore, in the context of any likely new discharge arising from development any impact would be "de minimis" due to dilution and quick flushing and as such would avoid any LSE.
Moray Firth SAC: Bottlenose dolphin Tursiops truncatus	For proposed developments in coastal locations there may be a potential negative impact on bottlenose dolphins if underwater noise is generated that prevents or limits their use of the areas that help support them such as Aberdeen harbour. Such noise might be generated from piling or blasting works. Coastal pollution might also affect dolphins or their prey species.
	There is potential for localised water quality impacts from outfall to Nigg Bay from pollution events, thus potential to affect supporting food sources of the qualifying species; however due to geographical distance, discharges are regulated by SEPA, and the Masterplan includes policies to protect and enhance water quality of the East Tullos Burn which is the only direct pathway to the marine environment via the outfall at Nigg Bay, it concludes that there is no LSE.
Ythan Estuary, Sands of Forvie and Meikle Loch SPA: Sandwich tern Sterna sandvicensis; Common tern Sterna hirundo;	Theoretically, a proportion of the common eider in Nigg Bay is from different SPAs, indicating upwards of 97% are from the breeding population at the Ythan estuary and will form part of the wintering population of that SPA. It is possible that some aspects of development at could affect qualifying species of the SPA.
Little tern Sterna albifrons; Pink- footed goose Anser	In general, mobile bird species are well represented by common coastal birds, wetland birds and birds of young plantations. The conservation status of the recorded bird species is a typical assemblage for the

brachyrhynchus; Common eider Somateria mollissima; Lapwing Vanellus; Redshank Tringa tetanus; Non- breeding waterbird assemblage.hakitats that were surveyed. Recent in-season bird surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for common eider and Sandwich tern, however given the geographical distance from the site no LSE are anticipated. In addition, the coastline here (adjacent to Zone B) is not considered a high value resource for breeding birds, bare ground being the dominant habitat. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however the Masterplan contains policies to avoid/minimise habitat disturbance/fragmentation and for biodiversity net-gain.Loch of Skene Bucephola clangula; Cangula; Greylag goese (angula; Greylag goese Anser anser.Greylag goese are present on the SPA in very low numbers but the city boundary is within foraging range (20km) of the SPA, and so it is theoretically possible that the proposed development (as opposed to construction or recreation). This aspect can be appraised by considering the SPA goose foraging distribution data and take account of the availability of alternative habitat for the geese, and the potential for any in-combination effects alongside other plans and allocations (in this case the most relevant being the Aberdeenshire proposed LDP).Goosander and goldeneye are also qualifying features of the SPA. We have little information on in-winter movements of goosander in Scotland. Goosander only use Loch of Skene as a roost and there has been a strong decline in their numbers at the loch. Only three were observed in 2018 counts. However numbers on the Dee and the Don remain healthy, and it is unilkely that development		
and for biodiversity net-gain.Loch of Skene SPA: Goldeneye Bucephala clangula; GoosanderGreylag geese are present on the SPA in very low numbers but the city boundary is within foraging range (20km) of the SPA, and so it is theoretically possible that the proposed development could result in some loss of foraging ground. Loss of foraging land to development is anticipated to be from the direct footprint of a development (as opposed to construction or recreation). This aspect can be appraised by considering the SPA goose foraging distribution data and take account of the availability of alternative habitat for the geese, and the potential for any in-combination effects alongside other plans and allocations (in this case the most relevant being the Aberdeenshire proposed LDP).Goosander and goldeneye are also qualifying features of the SPA. We have little information on in-winter movements of goosander in Scotland. Goosander only use Loch of Skene as a roost and there has been a strong decline in their numbers at the loch. Only three were observed in 2018 counts. However numbers on the Dee and the Don remain healthy, and it is unlikely that development would have any adverse effect on the SPA goosander and goldeneye populations.Our experience is that given the status of the relevant goose populations, the low land area for development, the geographical distance, no recorded recent species presence at the proposed development, and, the location of the development, it would not encroach on any known prefered SPA goose foraging area and therefore any loss of foraging habitat from the development will be negligible, concluding there will be no LSE on site integrity in relation to loss of foraging	Common eider Somateria mollissima mollissima; Lapwing Vanellus vanellus; Redshank Tringa tetanus; Non- breeding waterbird	surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for common eider and Sandwich tern , however given the geographical distance from the site no LSE are anticipated. In addition, the coastline here (adjacent to Zone B) is not considered a high value resource for breeding birds, bare ground being the dominant habitat. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however the Masterplan contains policies to
	Loch of Skene SPA: Goldeneye Bucephala clangula; Goosander Mergus merganser; Greylag goose	and for biodiversity net-gain. Greylag geese are present on the SPA in very low numbers but the city boundary is within foraging range (20km) of the SPA, and so it is theoretically possible that the proposed development could result in some loss of foraging ground. Loss of foraging land to development is anticipated to be from the direct footprint of a development (as opposed to construction or recreation). This aspect can be appraised by considering the SPA goose foraging distribution data and take account of the availability of alternative habitat for the geese, and the potential for any in-combination effects alongside other plans and allocations (in this case the most relevant being the Aberdeenshire proposed LDP). Goosander and goldeneye are also qualifying features of the SPA. We have little information on in-winter movements of goosander in Scotland. Goosander only use Loch of Skene as a roost and there has been a strong decline in their numbers at the loch. Only three were observed in 2018 counts. However numbers on the Dee and the Don remain healthy, and it is unlikely that development would have any adverse effect on the SPA goosander and goldeneye populations. Our experience is that given the status of the relevant goose populations, the low land area for development, the geographical distance, no recorded recent species presence at the proposed development, and, the location of the development, it would not encroach on any known preferred SPA goose foraging area and therefore any loss of foraging habitat from the development will be negligible, concluding there will be no LSE on site integrity in relation to loss of foraging

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	Buchan Ness to Collieston Coast SPA: Fulmar Fulmarus glacialis; Guillemot Uria aalge; Herring gull Larus argentatus; Kittiwake Rissa tridactyla; Shag Phalacrocorax aristotelis; Seabird assemblage.	In general, mobile bird species are well represented by common coastal birds, wetland birds and birds of young plantations. The conservation status of the recorded bird species is a typical assemblage for the habitats that were surveyed. Recent in-season bird surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for and Herring gull and Shag , for feeding and foraging. Local breeding for Herring gull and Kittiwake has been recorded however this is in relation to the roof of the WWTW (Zone A) and on the Coastline outside Zone B. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however given the geographical distance from the site, and the Masterplan contains policies to avoid/minimise habitat disturbance/fragmentation, and for biodiversity net-gain, no LSE are anticipated.
	Isle of May SAC: Grey seal Halichoerus grypus.	Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). However, it is concluded that there will be no LSE on the distribution of the qualifying species or extent of the habitats supporting it due to geographical distance from the proposed Masterplan zone and that the development does not directly relate to harbour construction or operations beyond the shoreline.
	Berwickshire and North Northumberland Coast SAC: Grey seal Halichoerus grypus.	Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). No LSE on the distribution or extent of the habitats supporting the qualifying interest due to geographical distance from the proposed Masterplan zone.
4.2 Marine Gateway	River Dee SAC: Otter Lutra lutra	No LSE, as per response to Ref 4.1 above.

(Opportunities &	Freshwater pearl	
Constraints;	mussel	
Development	Margaritifera	
Guidance)	margaritifera	
- Opportunities	Atlantic salmon	
&	Salmo salar	
Constraints:	Moray Firth SAC:	As per above. For proposed developments in coastal
St Fittick's	Bottlenose	locations there may be a potential negative impact on
Park &	dolphin Tursiops	bottlenose dolphins if underwater noise is generated
Aberdeen	trncatus	that prevents or limits their use of the areas that help
South		support them such as Aberdeen harbour. Such noise
Harbour		might be generated from piling or blasting works.
- Land Use		Coastal pollution might also affect dolphins or their
- Infrastructure		prey species.
- Landscape &		
Environment		There is potential for localised water quality impacts
		from outfall to Nigg Bay from pollution events, thus
		potential to affect supporting food sources of the
		qualifying species; however due to geographical
		distance, discharges are regulated by SEPA, and the
		Masterplan includes policies to protect and enhance
		water quality of the East Tullos Burn which is the only
		direct pathway to the marine environment via the
		outfall at Nigg Bay, it concludes that there is no LSE.
	Ythan Estuary,	As per above. Theoretically, a proportion of the
	Sands of Forvie	common eider in Nigg Bay is from different SPAs,
	and Meikle Loch	indicating upwards of 97% are from the breeding
	SPA: Sandwich	population at the Ythan estuary and will form part of
	tern Sterna	the wintering population of that SPA. It is possible that
	sandvicensis;	some aspects of development at could affect qualifying
	Common tern Sterna hirundo;	species of the SPA.
	,	In general mehile hird energies are well represented by
		In general, mobile bird species are well represented by
	albifrons; Pink-	common coastal birds, wetland birds and birds of
	footed goose Anser	young plantations. The conservation status of the
	brachyrhynchus;	recorded bird species is a typical assemblage for the habitats that were surveyed. Recent in-season bird
	Common eider	surveys (commissioned by ETZ Ltd.) have only
	Somateria	indicated visiting presence for common eider and
	mollissima	Sandwich tern, however given the geographical
	mollissima;	distance from the site no LSE are anticipated. In
	Lapwing Vanellus	addition, the coastline here (adjacent to Zone B) is not
	vanellus;	considered a high value resource for breeding birds,
	Redshank Tringa	bare ground being the dominant habitat. Indirect
	tetanus; Non-	effects through potential loss of supporting habitats,
		Enects unough potential 1055 of supporting Hduitdts,
	breeding	foraging land (inc. wetlands) and food sources for bird
	breeding waterbird	foraging land (inc. wetlands) and food sources for bird species, however the Masterplan contains policies to
	breeding	foraging land (inc. wetlands) and food sources for bird

Loch of Skene SPA: Goldeneye Bucephala clangula; Goosander Mergus merganser; Greylag goose Anser anser.	Greylag geese are present on the SPA in very low numbers but the city boundary is within foraging range (20km) of the SPA, and so it is theoretically possible that the proposed development could result in some loss of foraging ground. Loss of foraging land to development is anticipated to be from the direct footprint of a development (as opposed to construction or recreation). This aspect can be appraised by considering the SPA goose foraging distribution data and take account of the availability of alternative habitat for the geese, and the potential for any in-combination effects alongside other plans and allocations (in this case the most relevant being the Aberdeenshire proposed LDP).
	Goosander and goldeneye are also qualifying features of the SPA. We have little information on in-winter movements of goosander in Scotland. Goosander only use Loch of Skene as a roost and there has been a strong decline in their numbers at the loch. Only three were observed in 2018 counts. However numbers on the Dee and the Don remain healthy, and it is unlikely that development would have any adverse effects on the SPA goosander and goldeneye populations.
	Our experience is that given the status of the relevant goose populations, the low land area for development, the geographical distance, no recorded recent species presence at the proposed development, and, the location of the development, it would not encroach on any known preferred SPA goose foraging area and therefore any loss of foraging habitat from the development will be negligible, concluding there will be no LSE on site integrity in relation to loss of foraging habitat for SPA geese.
Buchan Ness to Collieston Coast SPA: Fulmar Fulmarus glacialis; Guillemot Uria aalge; Herring gull Larus argentatus; Kittiwake Rissa tridactyla; Shag Phalacrocorax aristotelis;	As per above. In general, mobile bird species are well represented by common coastal birds, wetland birds and birds of young plantations. The conservation status of the recorded bird species is a typical assemblage for the habitats that were surveyed. Recent in-season bird surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for and Herring gull and Shag , for feeding and foraging. Local breeding for Herring gull and Kittiwake has been recorded however this is in relation to the roof of the WWTW (Zone A) and on the Coastline outside Zone B. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however given the geographical distance from the site,

	Seabird assemblage.	and the Masterplan contains policies to avoid/minimise habitat disturbance/fragmentation,
	Isle of May SAC: Grey seal Halichoerus grypus.	and for biodiversity net-gain, no LSE are anticipated. Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). However, it is concluded that there will be no LSE on the distribution of the qualifying species or extent of the habitats supporting it due to geographical distance from the proposed Masterplan zone and that the development does not directly relate to harbour
	Berwickshire and North Northumberland Coast SAC: Grey seal Halichoerus grypus.	construction or operations beyond the shoreline. Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). No LSE on the distribution or extent of the habitats supporting the qualifying interest due to geographical distance from the proposed Masterplan zone. There is potential disturbance to grey seals through increased maritime activities, such an through increased offshore wind and associated infrastructure, however this is not directly generated by the Masterplan and is regulated by others.
St Fittick's Park Preventative and Remediative Measures and Gregness Preventative and Remediative Measures	River Dee SAC: Otter Lutra lutra Freshwater pearl mussel Margaritifera margaritifera Atlantic salmon Salmo salar	No LSE, as per response to Ref 4.1 above and Mitigations section below.
 East Tullos Burn & Wetlands Park, Greenspace 	Moray Firth SAC: Bottlenose dolphin Tursiops truncatus	As per above. For proposed developments in coastal locations there may be a potential negative impact on bottlenose dolphins if underwater noise is generated that prevents or limits their use of the areas that help support them such as Aberdeen harbour. Such noise

& Green Networks - Indicative		might be generated from piling or blasting works. Coastal pollution might also affect dolphins or their prey species.
Masterplan (illustrative concept)		There is potential for localised water quality impacts from outfall to Nigg Bay from pollution events, thus potential to affect supporting food sources of the qualifying species; however due to geographical distance, discharges are regulated by SEPA, and the Masterplan includes policies to protect and enhance water quality of the East Tullos Burn which is the only direct pathway to the marine environment via the outfall at Nigg Bay, it concludes that there is no LSE.
	Ythan Estuary, Sands of Forvie and Meikle Loch SPA: Sandwich tern Sterna sandvicensis; Common tern Sterna birundo;	As per above. Theoretically, a proportion of the common eider in Nigg Bay is from different SPAs, indicating upwards of 97% are from the breeding population at the Ythan estuary and will form part of the wintering population of that SPA. It is possible that some aspects of development at could affect qualifying species of the SPA.
	Sterna hirundo; Little tern Sterna albifrons; Pink- footed goose Anser brachyrhynchus; Common eider Somateria mollissima mollissima; Lapwing Vanellus vanellus; Redshank Tringa tetanus; Non- breeding waterbird assemblage.	In general, mobile bird species are well represented by common coastal birds, wetland birds and birds of young plantations. The conservation status of the recorded bird species is a typical assemblage for the habitats that were surveyed. Recent in-season bird surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for common eider and Sandwich tern , however given the geographical distance from the site no LSE are anticipated. In addition, the coastline here (adjacent to Zone B) is not considered a high value resource for breeding birds, bare ground being the dominant habitat. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however the Masterplan contains policies to avoid/minimise habitat disturbance/fragmentation, and for biodiversity net-gain.
	Loch of Skene SPA: Goldeneye Bucephala clangula; Goosander Mergus merganser; Greylag goose Anser anser.	No LSE due to geographical distance, no direct pathway, and, in relation to the Masterplan's nature- positive and remediative policies. Indirect effects from the potential increase in off-shore wind activities affecting mobile species, however this is not directly generated by the Masterplan and would be regulated by others.

	Buchan Ness to Collieston Coast SPA: Fulmar Fulmarus glacialis; Guillemot Uria aalge; Herring gull Larus argentatus; Kittiwake Rissa tridactyla; Shag Phalacrocorax aristotelis; Seabird assemblage.	As per above. In general, mobile bird species are well represented by common coastal birds, wetland birds and birds of young plantations. The conservation status of the recorded bird species is a typical assemblage for the habitats that were surveyed. Recent in-season bird surveys (commissioned by ETZ Ltd.) have only indicated visiting presence for and Herring gull and Shag , for feeding and foraging. Local breeding for Herring gull and Kittiwake has been recorded however this is in relation to the roof of the WWTW (Zone A) and on the Coastline outside Zone B. Indirect effects through potential loss of supporting habitats, foraging land (inc. wetlands) and food sources for bird species, however given the geographical distance from the site, and the Masterplan contains policies to avoid/minimise habitat disturbance/fragmentation,
	Isle of May SAC: Grey seal Halichoerus grypus.	Avoid/minimise habitat disturbance/fragmentation, and for biodiversity net-gain, no LSE are anticipated. Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). However, it is concluded that there will be no LSE on the distribution of the qualifying species or extent of the habitats supporting it due to geographical distance from the proposed Masterplan zone and that the development does not directly relate to harbour construction or operations beyond the shoreline.
	Berwickshire and North Northumberland Coast SAC: Grey seal Halichoerus grypus.	Previous seal telemetry analysis (for Aberdeen harbour expansion in 2016) showed that although grey seals tagged at the Isle of May SAC and Berwickshire and North Northumberland Coast SAC used Nigg Bay, the degree of connectivity was only of a sufficient strength to warrant further assessment of the Isle of May SAC grey seal population (but not the Berwickshire and North Northumberland Coast SAC population). No LSE on the distribution or extent of the habitats supporting the qualifying interest due to geographical distance from the proposed Masterplan zone.
4.3 Hydrogen Campus	River Dee SAC: Otter Lutra lutra Freshwater pearl	No LSE due to lack of supporting habitats for qualifying species and no direct pathway. Indirect impacts

(Development	mussel	through water abstraction and pollution events, please
Guidance)	Margaritifera	see above in this respect and below under mitigations.
- Land Use	margaritifera	
- Transport &	Atlantic salmon	
Connectivity	Salmo salar	
- Landscape &	Moray Firth SAC:	No LSE due to geographical distance from site and no
Environment	Bottlenose	direct pathway.
- Indicative	dolphin Tursiops	
Masterplan	truncatus	
illustrative	Ythan Estuary,	No LSE due to geographical distance and no pathway
concept)	Sands of Forvie	i.e. no supporting feeding habitat.
	and Meikle Loch	i.e. no supporting recuing habitat.
	SPA: Sandwich	
	tern Sterna	
	sandvicensis;	
	Common tern	
	Sterna hirundo;	
	Little tern Sterna	
	albifrons; Pink-	
	footed goose	
	Anser	
	brachyrhynchus;	
	Common eider	
	Somateria	
	mollissima	
	mollissima;	
	Lapwing Vanellus	
	vanellus;	
	Redshank Tringa	
	tetanus; Non-	
	breeding	
	waterbird	
	assemblage.	
	Loch of Skene	No LSE due to geographical distance and no pathway
	SPA: Goldeneye	i.e. no supporting feeding habitat.
	Bucephala	
	clangula;	
	Goosander	
	Mergus	
	merganser;	
	Greylag goose	
	Anser anser.	
	Buchan Ness to	No LSE due to geographical distance and no pathway
	Collieston Coast	i.e. no supporting feeding habitat.
	SPA: Fulmar	
	Fulmarus	
	glacialis;	
	Guillemot Uria	
	aalge; Herring	

gull Larus argentatus; Kittiwake Rissa tridactyla; Shag Phalacrocorax aristotelis; Seabird	
assemblage. Isle of May SAC: Grey seal Halichoerus grypus.	No LSE due to geographical distance from site and no pathway.
Berwickshire and North Northumberland Coast SAC: Grey seal Halichoerus grypus.	No LSE due to geographical distance from site and no pathway.

6b. Mitigation or modifications required to ensure adverse effects are avoided & reasons for these.

The following section lists the relevant mitigations and modifications to the ETZ development proposal and Masterplan which are proposed to ensure no adverse effects on the integrity of the protected sites and their qualifying interests. In terms of delivery, these measures will be referenced in production of the final Draft ETZ Masterplan as an appendix. Furthermore, an additional HRA will be required on the subsequent PPiP application and the respective mitigation measures as per below will be carried through to this stage and thus secured through suitable conditions applied to any future PPiP consenting process.

Relevant overarching mitigations for the **development** include:

- 1. Development of the site would adhere to environmental legislation and best practice guidance in relation to protection of human health and groundwater (and the water environment), and also to the appropriate management of soils during construction.
- Potential impacts in relation to the natural environment will be assessed and addressed through the development of technical assessments, including Contaminated Land Assessment, Construction Environmental Plan (CEMP), Construction Traffic Management Plan and Noise Impact Assessment.
- 3. Operationally, the proposals will include a Landscape Framework supported by a Site Biodiversity Action Plan.
- 4. Furthermore, it is however anticipated that detailed mitigation measures, if required, will be included as part of any detailed planning application for proposals within land covered by the Masterplan area. However, it is unlikely that any further such HRA assessments would be required in Zone C.

Key mitigations to minimise disturbance, loss and fragmentation to habitats includes:

- 1. The East Tullos Burn crosses St Fittick's Park (Zone A) and is to be retained, with a partial section re-aligned in order to enable formation of development plots.
- 2. The proposals will also include measures to protect and enhance the local environment and biodiversity within and around areas of development through buffer zones, boundary treatments, development plot landscaping, tree and pollinator planting, and other blue-green infrastructures.
- 3. Importance of a Site Biodiversity Action Plan (SBAP) has been recognised to deliver 'no net loss' to biodiversity and promotion of 'nature-based solutions' in line with the SBAP.
- 4. Area-specific, over-arching CEMP, absorbing the AHEP CEMP for delivery of mitigation, and any follow-on compensation and enhancement in order to capture the complexity of habitats and their intrinsic public appeal and biodiversity value in a semi-urban setting. Proposed to be delivered at the same time as, finalising the masterplan and any landscape plans.

Key mitigation measures for **Otter** are:

- 1. Protections and control measures implemented through a Construction Environmental Management Plan, with integral Pollution Plan.
- 2. Production of a Site Biodiversity Action Plan.
- 3. Maintenance and improvement of natural otter corridors at St Fittick's Park and East Tullos Burn.
- 4. Avoiding disturbance to inter-tidal habitat or coastal escarpment habitat in Zone B, as masterplanned.
- 5. Provision of two artificial breeding holts, constructed to the specification in NatureScot guidance.
- 6. Reduction of potential disturbance caused by construction noise, soft starts will be adopted in Zones A and B.
- 7. Wildlife friendly lighting, directed away from potential otter habitat during construction and operational phases in Zones A and B.
- 8. Retention of otter habitat at St Fittick's including, retention of open channel, reedswamp and pools for shelter and foraging.
- 9. Enhancement of St Fittick's Park wetland by upstream water treatment to improve water quality, primarily by removal of suspended sediments and nutrient stripping. Water quality discharges will be better than existing.
- 10. Proposed potential for otter food sources (amphibian) to be re-introduced to the wetland system by direct translocation of spawn during the construction period but only after the completion of the upstream measures to improve water quality.
- 11. Application of regular protected species survey updates (annual survey) to maintain records of otter interest and ensure appropriate mitigation. Consultation with NatureScot should otter features requiring licensing be identified.
- 12. Specific mitigation measures will be proposed to encourage spread of any local Otter into Zone A, the St Fittick's wetlands and burn, and to ensure that any future use of the coastline at Zone B is not adversely affected. These measures will include:
 - (i) Retention of all key habitat capable supporting the viability of otter e.g. retention of reedbeds, retention of reedswamp for above ground couching and avoidance of potentially adverse effects on the ponds so that they may support otter prey populations. There is one culvert crossing required and this would be limited in width as far as possible with mammal ledges designed in.
 - (ii) Improvements to the discharged water quality in the East Tullos Burn and wetlands and outfall

(iii) Construction of an artificial holts in Zones A and B based on project ecologist's advice.

Key mitigations for **mobile bird species** include:

- 1. Avoid/minimise impacts on breeding birds Where practical, time all groundworks, particularly tree and scrub clearance, outwith the bird breeding season. Any new disturbance to any habitats during the bird breeding season will require advance surveys to ensure that legal obligations are met. Findings and recommendations of such surveys should be fully implemented.
- 2. Key bird species mitigation Red List SoCC and UK, Scottish and local BAP priorities will be adversely impacted in small numbers through displacement following development. Special measures must be included to minimise the local reduction in number, particularly in Zone C.
- 3. Bat Species Protection Plan (SPP) Commission and implement a bat SPP which delivers Black Hill Ecology Ltd 2023 Bat Report recommendations. Only one species roosting – pipistrelle, but recommended inclusion of bat boxes as part of the overall development scheme.
- 4. Habitat / foraging wise, mitigation and enhancement as covered in the SBAP for the development zones.
- 5. Write and deliver SBAPs for Zones A, B and C Each SBAP should assimilate all principle proposed measures as well as identifying new enhancements based on updating surveys, detailed site layouts, drainage and landscaping. An Ecological Clerk of Works (EcCOW) should be appointed to ensure delivery of the SBAP during the construction phase.

A detailed **Site Biodiversity Action Plan** has been drafted and includes a range of requirements that also relate to **mobile species**, including the following:

Zone A - East Tullos Burn and Wetlands

- Upstream interventions to improve water quality reaching the wetlands to encourage submerged plants.
- Re-alignment and enhancement of the East Tullos Burn. Enhancements to include meanders, mini-floodplains and small detention basins.
- Toad introduction scheme to establish a breeding population.
- Construction of a new artificial otter holt to encourage a more regular presence.
- Management of native invasives, for example reed sweet grass, to maintain open water.

Zone B – Gregness

- Protection of the coastal heath and species rich grassland that has naturally regenerated.
- Enhancement of the coastal habitat through removal of invading scrub.
- Supporting the Pollinator Coast Project by encouraging the spread of kidney vetch, a larval food plant for the small blue butterfly.
- Coastal grassland seed mix sowing to encourage coastal butterflies in decline e.g. grayling.
- New native tree and scrub planting (species lists included within the PPiP Landscape Framework too).

Zone C – Doonies

- Protection of the integrity of the northern ecological corridor.
- Compensatory native tree and scrub planting for loss of gorse scrub (species mixes included).
- Grassland enhancement through sowing new native species rich swards for seed eating birds, invertebrates, pollinators and hedgehogs.

- Installation of new native hedges and log-piles for hedgehogs and other fauna.
- Nestbox scheme for house sparrow, tree sparrow and starling.
- Bat box scheme to compensate for loss of non-breeding common pipistrelle roost.
- Breeding bumblebee homes/boxes.

Effects and consideration of alternatives:

Subject to the above mitigations consideration of alternative sites is not required. Nevertheless, the development site has been subject to the local development plan process which has considered alternative sites previously, and the 'Aberdeen Energy Transition Zone Feasibility Study' (February 2020) produced by Barton Wilmore/Opportunity North East and Invest Aberdeen also assessed suitably of alternative (Aberdeen-area sites). This site assessment criteria was based on:

- planning policy implications and environmental constraints,
- review of existing road infrastructure and potential new road provision/investment that could include site selection,
- to consider operational end-user requirements for land and proximity to the harbour etc; deliverability, availability, ownership, infrastructure constraints and servicing, and
- commentary received during technical workshops with key stakeholders which provided an extra level of insight on top of desktop reviews.

6c. Can it be ascertained that the proposal will not adversely affect the integrity of the site?

YES – In the light of the foregoing, we consider that it has been ascertained that the proposal will not adversely affect the integrity of any of the protected sites or their qualifying interests, and that the conservation objectives for will be met during and after construction and following implementation and delivery of the aforementioned mitigation measures.

Note: Seek advice from NatureScot as required at this point

7. Advice and conclusion received from NatureScot in relation to plan or project

NatureScot has been consulted at an early stage on the proposals through the SEA and HRA processes for the LDP allocations and were subsequently consulted by both the applicant and The Planning Authority on the developing Draft Masterplan.

NatureScot feedback letter dated 30/10/2023:

"Thank you for consulting us on the Habitats Regulations Appraisal (HRA) for the Aberdeen Energy Transition Zone Masterplan and for agreeing to an extension to our response deadline. We agree with the conclusions reached in the HRA, that from the information currently available, the masterplan should not adversely affect the integrity of any of the designated sites identified. This should be revisited through project level HRA once planning applications come forward to deliver the masterplan. We note the mitigation suggested in relation to the River Dee SAC population of otters and advise that an up to date survey for otter is provided with future planning applications for zone A. This can inform an HRA for those applications and allow consideration of otter as a European Protected Species.

Additional Comments;

We would note that there is a lack of clarity between the stages of the assessment as conclusions in section 6a sometimes incorrectly refer to 'no likely significant effect' rather than 'no adverse effect on site integrity'. Section 6a is the Appropriate Assessment and should determine whether or not the proposal will adversely affect the integrity of the site following a conclusion of 'likely significant effect' in section 5. Although we agree with the conclusions of the HRA, we would advise a change of wording and structure to ensure a clear reasoning can be followed to reach the conclusions of no adverse impact on site integrity."

8. Tracking Checklist/ Sign off

Proposal directly for Nature Conservation of a European site – Section 4	No
Proposal Screened Out – Section 5	No
Appropriate Assessment Concludes Proposal Will Not Adversely Affect Any Site/	Yes
Qualifying Interest – Section 6c	
Appropriate Assessment <u>Cannot</u> Conclude Proposal Will Not Adversely Affect	No
Any Site/ Qualifying Interest – Section 6c	

Date LDP HRA checked	July/August 2023
Date NatureScot consulted	Consulted 25/09/2023
	Response received 30/10/2023
Date any other organisations consulted e.g.	n/a
Dee Salmon Fishery Board, SEPA, Marine	
Scotland	
Signature (author)	RKerr
Name and Job Title (author)	Rebecca Kerr (Planner – Development
	Management)
Date (author)	Draft v2 completed 15/09/2023
	Revised final v3 completed 09/11/2023

Appendix 1. Screening of Energy Transition Zone Masterplan (July 2023) for aspects which would be likely to have a significant effects

List of vision, objective, principles, policies and projects in the Energy Transition Zone Masterplan	General policy / background info	Too general with no info on where, how and when of development	Preventive, enhancement and conservation policy	Not generated by this Masterplan	Does not generate development and change	Change with no pathway	Change with 'no' or minimal effects	Screen in / out
1. Introduction			-					
Contents & Executive Summary	Yes	Yes			Yes			Out
1.1 ETZ Vision & Objectives	Yes				Yes			Out – issues covered in more detail elsewhere in document
1.2 Strategic Context & Need		Yes			Yes			Out – issues covered in more detail elsewhere in document
1.3 Engagement & Consultation	Yes				Yes			Out
2. Place Context & Strategy	ý				-			
Masterplan Study Area (Map / Plan)	Yes							Out – issues covered in more detail elsewhere in document
Land ownership	Yes			Yes	Yes			Out
2.1 Place Context: Planning History	Yes							Out – descriptive /scene setting
2.2 Place Context: Community & Social	Yes				Yes			Out – descriptive /scene setting
2.3 Place Context: Environnent, Biodiversity & Landscape	Yes	Yes			Yes			Out
2.4 Place Context: Infrastructure & Development	Yes	Yes						Out – descriptive /scene setting
2.5 Place Context: Community Infrastructure & Local Development	Yes	Yes		Yes				Out – descriptive /scene setting
3. ETZ Masterplan Framew								
3.1 Masterplan Vision & Opportunity	Yes	Yes						Out – issues covered in more detail elsewhere in document
3.2 Masterplan Principles		Yes	Yes					Out
3.3 Core Masterplan	Yes							Out – issues covered in

Elements & Enabling Infrastructures								more detail elsewhere in document
Screening of plan or projects described in Development Framework document	General policy / background info	Too general with no info on where, how and when of development	Preventive, enhancement and conservation policy	Not generated by this Framework	Does not generate development and change	Change with no pathway	Change with 'no' or minimal effects	Screen in / out
4. ETZ Campuses								
4.1 Community & Energy Co	ast						1	
 East Tullos Burn & Wetlands 								In – water quality
 St Fittick's Park, Greenspace & Green Networks 								In – water quality / increased pressure from development / access / use
- Biodiversity Protection & Enhancement			Yes					Out
 Active Travel & Healthy Communities 	Yes						Yes	Out
- Community Fund	Yes						Yes	Out
- Development & Delivery	Yes						Yes	Out
4.2 Marine Gateway								
 Visions, Planning & Policy Overview 	Yes							Out
 Opportunities & Constraints: St Fittick's Park & Aberdeen South Harbour 								In – direct harbour / port access impacts / road construction
- Investment & Development Proposition	Yes	Yes						Out
 Development Guidance: Land Use 								In – land development pressures
 Development Guidance: Design Quality 	Yes							Out
 Development Guidance: Transport & Connectivity 	Yes							Out
- Development Guidance:								In – outfall to Nigg Bay retained / potential

Infrastructure								transference
 Development Guidance: Landscape & Environment 								In – loss of green and natural spaces / changes to water quality
Screening of plan or projects described in Development Framework document	General policy / background info	Too general with no info on where, how and when of development	Preventive, enhancement and conservation policy	Not generated by this Framework	Does not generate development and change	Change with no pathway	Change with 'no' or minimal effects	Screen in / out
St Fittick's Park Preventative	and Remediativ	ve Measures	1	1	r	T	1	1
 East Tullos Burn & Wetlands 								In – hydrology / ecology
- Trees & Woodland						Yes		Out – no direct pathway for qualifying species / habitats
 Biodiversity Protection & Enhancement 			Yes					Out
- Heritage						Yes		Out
 Park, Greenspace & Green Networks 								In – potential impacts on supporting coastal habitats
- Local Amenity							Yes	Out – residential amenity factors
Gregness Preventative and F	Remediative Mea	asures			I		1	
 Biodiversity Protection & Enhancement 			Yes					In – potential impacts on supporting coastal habitats
 Park, Greenspace & Green Networks 								In – potential impacts on supporting coastal habitats
- Local Amenity						Yes		Out – residential amenity factors
Key Masterplan Constraints, Opportunities & Considerations (illustrative plan)		Yes						Out
Strategic Mitigations & Compensations (illustrative plan)			Yes					Out
Indicative Masterplan – St Fittick's (illustrative		Yes						In – potential impacts on supporting coastal

concept)								habitats
Indicative Masterplan – Gregness (illustrative concept)		Yes						In – potential impacts on supporting coastal habitats
Screening of plan or projects described in Development Framework document	General policy / background info	Too general with no info on where, how and when of development	Preventive, enhancement and conservation policy	Not generated by this Framework	Does not generate development and change	Change with no pathway	Change with 'no' or minimal effects	Screen in / out
4.3 Hydrogen Campus		-				•	•	-
 Development Vision, Planning & Policy Overview 	Yes							Out
 Site Opportunities & Constraints 	Yes							Out
 Investment & Development Proposition 	Yes	Yes						Out
- Development Guidance: Land Use								In – potential impacts on supporting coastal habitats
 Development Guidance: Design Quality 	Yes							Out
- Development Guidance: Transport & Connectivity								In – potential disturbance / increased accessibility
- Development Guidance: Infrastructure	Yes						Yes	Out
 Development Guidance: Landscape & Environment 								In – loss of green and natural spaces / supporting habitats
Doonies Preventative and Re	emediative Meas	sures						
 Biodiversity Protection & Enhancement 			Yes					Out
 Local Amenity 						Yes		Out
Indicative Masterplan Hydrogen Campus (illustrative concept)		Yes						In – potential impacts on supporting coastal habitats
Screening of plan or projects described in	General policy /	Too general with no info on where, how	Preventive, enhancement	Not generated by	Does not generate	Change with no	Change with 'no'	Screen in / out

Development Framework document	descriptive info	and when of development	and conservation policy	this Framework	development and change	pathway	or minimal effects	
4.4 Offshore Wind Campus								
 Development Vision, Planning & Policy Overview 	Yes						Yes	Out – existing business industrial zoning
- Site Opportunities & Constraints	Yes						Yes	Out – existing business industrial zoning
 Investment & Development Proposition 	Yes	Yes						Out
- Development Guidance: Land Use	Yes							Out – existing business industrial zoning
 Development Guidance: Design Quality 	Yes	Yes						Out
 Development Guidance: Transport & Connectivity 	Yes						Yes	Out
- Development Guidance: Infrastructure	Yes						Yes	Out
 Development Guidance: Landscape & Environment 							Yes	Out – limited pathways to qualifying species
Offshore Wind Campus (indicative masterplan)		Yes						Out
4.5 Innovation Campus								
 Vision, Planning & Policy Review 	Yes					Yes		Out
- Investment & Development Proposition	Yes					Yes		Out
- Development Guidance: Land Use	Yes					Yes		Out
 Development Guidance: Design Quality 	Yes					Yes		Out
 Development Guidance: Transport & Connectivity 	Yes					Yes		Out

Screening of plan or projects described in Development Framework document	General policy / descriptive info	Too general with no info on where, how and when of development	Preventive, enhancement and conservation policy	Not generated by this Framework	Does not generate development and change	Change with no pathway	Change with 'no' or minimal effects	Screen in / out
- Development Guidance: Infrastructure	Yes	Yes				Yes		Out – infrastructure in existing brownfield and industrial zonings
 Development Guidance: Landscape & Environment 	Yes		Yes					Out – supports brownfield land remediation
Innovation Campus (indicative masterplan) 4.6 Skills Campus	Yes					Yes		Out – existing industrial land
 Vision, Planning & Policy Overview 	Yes					Yes		Out
- Opportunities & Constraints	Yes					Yes		Out
 Investment & Development Proposition 	Yes					Yes		Out
 Advance Manufacturing Skills Hub 	Yes					Yes		Out
- Development Guidance: Land Use	Yes					Yes		Out
 Development Guidance: Design Quality 	Yes					Yes		Out
 Development Guidance: Transport & Connectivity 	Yes					Yes		Out
- Development Guidance: Infrastructure	Yes					Yes		Out
 Development Guidance: Landscape & Environment 	Yes					Yes		Out
Skills Campus (indicative masterplan)	Yes					Yes		Out
5. Supporting Infrastructur			1	1	1			1 -
5.1 Brownfield Land	Yes					Yes		Out

Renewal						
5.2 Road Infrastructure	Yes				Yes	Out
5.3 Rail Freight Infrastructure	Yes			Yes		Out
5.4 Energy & Net-Zero Infrastructure	Yes			Yes		Out
5.5 Utilities Infrastructure & Waste Management	Yes			Yes		Out
6. Masterplan Delivery					-	
Planning & EIA	Yes					Out
Phasing & Development Timeline	Yes					Out
- Years 0-3	Yes					Out
- Years 3-6	Yes					Out
- Years 6-10	Yes					Out
Project Partnerships & Delivery	Yes					Out