Argyll & Bute Council

Helensburgh Waterfront Development

Environmental Impact Assessment Screening Report

661888

MAY 2018

RSK GENERAL NOTES

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1 INTRODUCTION

1.1 Background to the Project and Site Selection

1.1.1 Context

The main feature of the Helenburgh Waterfront development (HWD) project will be a new leisure facility incorporating a swimming pool, with associated parking and public realm to meet the needs of the local community and attract day visitors to the town. At the same time it is proposed that the current flood defences are increased to address current flooding issues in the area. The new leisure facilities will be run on behalf of the council by the newly formed trust LiveArgyll.

The HWD includes all areas within the red line boundary (Figure 1.1). The proposed works for the HWD comprise:

- Construction of new leisure facilities building to include 25m six lane swimming pool and learner pool;
- Installation of flood defence;
- Installation of new utility services;
- Formation of 265 space car park;
- Formation of public realm space;
- Demolition of former swimming pool and making good of site; and
- Future retail development (not part of this proposal).

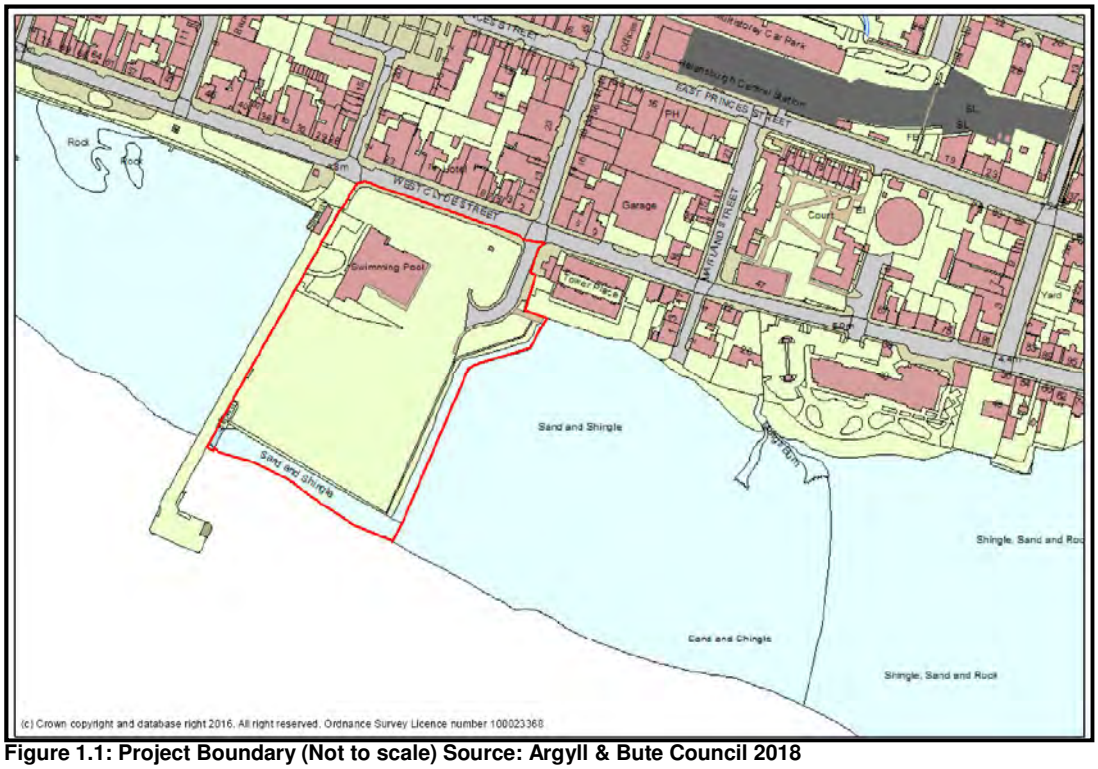


Figure 1.1: Project Boundary (Not to scale) Source: Argyll & Bute Council 2018

Figure 1.2: Existing Helensburgh Pier (aerial view) (not to scale) Source: Argyll & Bute Council 2018

1.1.2 Helensburgh Waterfront Masterplan

The Helensburgh pierhead is one of the most obvious features of the town and a key part of the waterfront. It currently has a leisure facility which is functional but nearing the end of its design life (Figure 1.2). Proposals for the Development of Helensburgh Waterfront have been worked on over a number of years, including for an Outline Business Case (OBC) Study (2008), production of a Revised Masterplan (2012), funding approval for the development of the project to Full Business Case (2016), and development of the leisure complex design (2017).

Figure 1.3: Site Plan – Detailed Design (Not to Scale) Source: Darnton B3 Architecture 2018

1.1.3 The Planning Process

Due to the scale of the proposed development it falls within the Scottish Government's designation of a 'Major Development'.

http://www.gov.scot/Publications/2009/07/03153034/5

Whilst this sets out the minimum Public Consultation that is required, Argyll & Bute Council want to go further and ensure that as many people and groups as possible have the chance to look at their proposals and give their opinions.

It is understood that, in January of this year, Argyll & Bute Council held informal meetings with a number of focus groups, and held a drop-in event for others, such as

the Chamber of Commerce; the MOD; Lomond & Clyde Tourist Association, Helensburgh Shorefront Development Project and the Scottish Submarine Museum. This was to give them a first opportunity to hear what people thought before the more formal part of the process began.

The focus groups covered specific interests like:

- Specific Need Groups (Grey Matters, ENABLE and parents of children with autism);
- Users of the existing building (e.g. swimming and kayak club);
- Staff of the existing Leisure Facility; and
- Helensburgh & Lomond Community Councils

1.1.4 Pre-Application Consultation

As part of the 12 week Pre-Application Consultation (PAC) period the following aims and objectives were put forward by Argyll & Bute Council:

- To deliver a new leisure facility and swimming pool which meets the needs of the Helensburgh and Lomond community;
- To encourage new businesses to open up in the town and to provide existing businesses with more opportunities;
- To add to what has been achieved through other projects such as CHORD and Hermitage Park, which have created an attractive, vibrant and contemporary town Centre that is attracting residents, businesses and visitors to the area;
- To create a safe, comfortable and, accessible public space to provide a visible link to and from Colquhoun Square, which is the main outdoor event space and the town centre; and
- To show the town of Helensburgh at its' best and encourage additional private sector investment in the waterfront area and town centre.

Three public events were also organised to take place between March and May 2018 to present the proposals and to give interested parties the opportunity to discuss them with the project team and provide opinions.

The following drawings have been made available by Argyll & Bute Council as part of the PAC and are provided in Appendix 1.

- Site Plan
- Perspective Views

- Ground Floor Isometric View
- First Floor Isometric View
- First Floor Plan
- Pool Hall Interior
- Potential Studios uses

1.1.5 Post Consultation Period

At the end of the 12 week period, Argyll & Bute Council will assess the responses. The Project Team will then bring forward recommendations to the Helensburgh & Lomond Area Committee setting out which of the suggestions received meet the pre-agreed criteria and could be included in proposals going forward.

Following any decision of the Area Committee the Project Team will finalise the development proposals for submission as Formal Planning Application.

As part of the Planning Application Argyll & Bute Council is expected to submit a Pre-Application Consultation (PAC) Report.

1.1.6 Planning Application

Proposals have been developed with the aim of submitting a planning application in June 2018.

1.2 Need for the Project

1.2.1 Project Aims

The HWD is all about creating a vibrant and attractive waterfront for the town. The main feature of the project will be a new leisure facility incorporating a swimming pool, with associated parking and public realm to meet the needs of the local community and attract day visitors to the town. At the same time it is proposed that the current flood defences are increased to address current flooding issues in the area. The new leisure facilities will be run on behalf of the council by the newly formed trust LiveArgyll.

1.2.2 Project Aims and Objectives

- To deliver a new leisure facility and swimming pool which meets the needs of the Helensburgh and Lomond community;
- To encourage new businesses to open up in the town and to provide existing businesses with more opportunities;

- To add to what has been achieved through other projects such as CHORD and Hermitage Park, which have created an attractive, vibrant and contemporary town Centre that is attracting residents, businesses and visitors to the area;
- To create a safe, comfortable and, accessible public space to provide a visible link to and from Colquhoun Square, which is the main outdoor event space and the town centre; and
- To show the town of Helensburgh at its' best and encourage additional private sector investment in the waterfront area and town centre.

1.2.3 Need for the proposals in Helensburgh

The Pierhead has over the years played its part in the history of Helensburgh. It was the historical arrival point to the Town for river traffic. Today the Pier is under utilised in this regard with only four passenger ferries docking each day.

The former outdoor pool (Lido) attracted many thousands of visitors to the Town, many of whom travelled by paddle steamers from Glasgow. The open air pool was decommissioned in 1968 following storm damage. The current swimming pool is today considered an important part of the local community infrastructure that nevertheless requires significant improvement.

Currently, the bulk of the site is utilised as a surface car park. Codona's amusement formerly occupied a part of this car park area, to the rear of the swimming pool. With the exception of the swimming pool, these uses are not necessarily Pier Head specific, they could be located elsewhere. This is an important consideration, given that the Pier Head is the sole significant development site in Helensburgh Town Centre and is regarded by Argyll and Bute Council as a regionally important development site.

1.3 EIA Screening Report

This Environmental Impact Assessment (EIA) Screening Report has been produced under the terms of the Environmental Impact Assessment (Scotland) Regulations 2017 (the 2017 regulations), in support of a Planning Application.

The structure of the report is as follows:

Section 2 – Statutory Consents

Section 3 – Site Characterisation

Section 4 - Identification and Screening of the Potentially Significant Effects

Section 5 – EIA Screening and Conclusion

Appendices

Appendix 1 - Drawings

Appendix 2 – EIA Screening Checklist: Identification of Potential Effects

Appendix 3 – EIA Screening Checklist: Significance of the Potential Effects

Appendix 4 – Pre-application Consultation Information

Appendix 5 – Technical Assessments

2 STATUTORY CONSENTS

2.1 Regulatory Roles

On land above Mean Low Water Springs (MLWS) planning and development control is regulated under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning, etc (Scotland) Act 2006. For that reason, the majority of the proposed works would be determined under the 1997 Act, as amended, by the planning authority.

However an area of proposed coastal defence works associated with the HWD (see Figure 2.1) extends below Mean High Water Springs MHWS and therefore under Section 20(1) of the Marine (Scotland) Act 2010 the works will also require a marine licence from **Scottish Ministers** for undertaking some or all of the following activities:

- deposit any substance or object in the sea or on or under the seabed;
- construct, alter or improve works on or over the sea or on or under the seabed;
- remove substances or objects from the seabed;
- dredging (including plough, agitation, side-casting and water injection dredging).

The Marine Scotland Licensing Operations Team (MS-LOT), based at the Marine Laboratory in Aberdeen, act on behalf of Scottish Ministers in processing and assessing licence applications.

Accordingly, the proposed coastal defence works has been subject to a separate EIA screening opinion from MS-LOT, which has determined that an EIA is not required for such works.

Only those parts of the development that lie above the Mean Low Water Springs (MLWS) are the subject of this screening request.

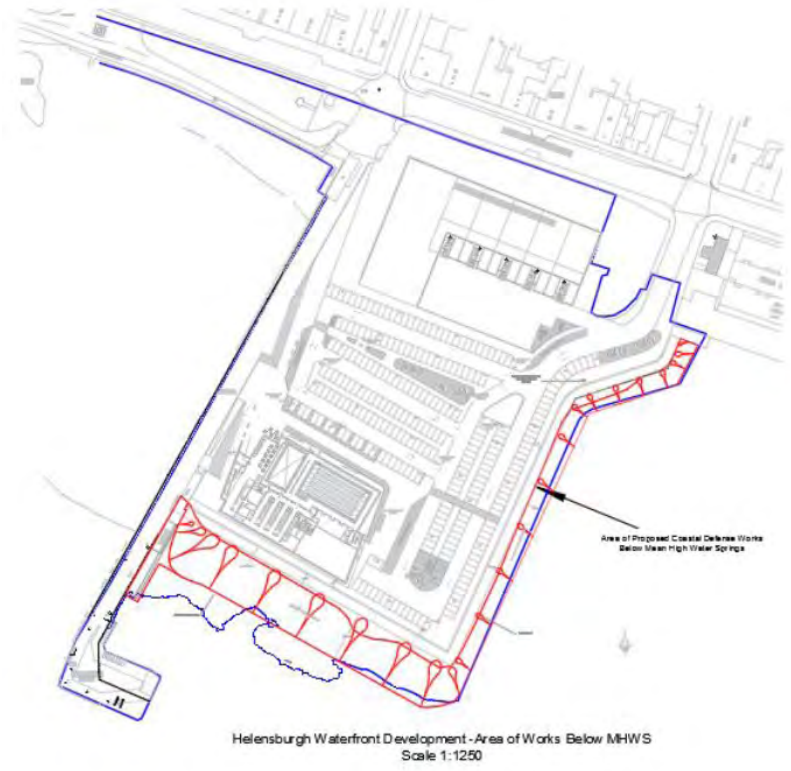


Figure 2.1 Plan of HWD below MHWS (Not to scale) Source: Argyll & Bute Council 2018

2.2 The Screening Process

2.2.1 Regulations

For planning applications under The Town and Country Planning (Scotland) Act 1997, as amended, the EIA process is set out in the 2017 regulations.

Where there is a possibility that an EIA may be required for a proposal, or where it is anticipated that a development proposal that qualifies as a Schedule 2 development may not have sufficiently significant adverse effects to warrant an EIA, developers should formally request a screening opinion under the 2017 regulations. In that context the HWD proposals may fall within the description of developments and applicable thresholds and criteria listed within:

- Schedule 2 of The Town and Country Planning (EIA) (Scotland) Regulations 2017 (Section 10: Infrastructure projects; (b) urban development project.

The HWD proposals are also considered to fall within the description of developments and applicable thresholds and criteria listed within:

- Schedule 2 of The Town and Country Planning (EIA) (Scotland) Regulations 2017 (Section 10: Infrastructure projects; (m) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for

example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works.

The HWD proposals are therefore considered to be “Schedule 2 development” and require further assessment of the characteristics of the development in combination with its proposed location in order to identify, through the “screening” process whether the proposal is “EIA development”.

It is important to note that under the the Habitats Regulations, a Habitats Regulation Appraisal (HRA) of the effects of the proposal on the nature conservation interests is required irrespective of whether the proposals are considered to be EIA Development. This is a separate consideration to the requirement for an EIA.

For the HWD development above the MLWS it will fall to Argyll & Bute Council to consider whether the proposed development is an EIA project. The flow chart below (Figure 2.2) is taken from Planning Circular 1 produced to accompany the EIA (Scotland) Regulations 2017 and will guide the council in their deliberations

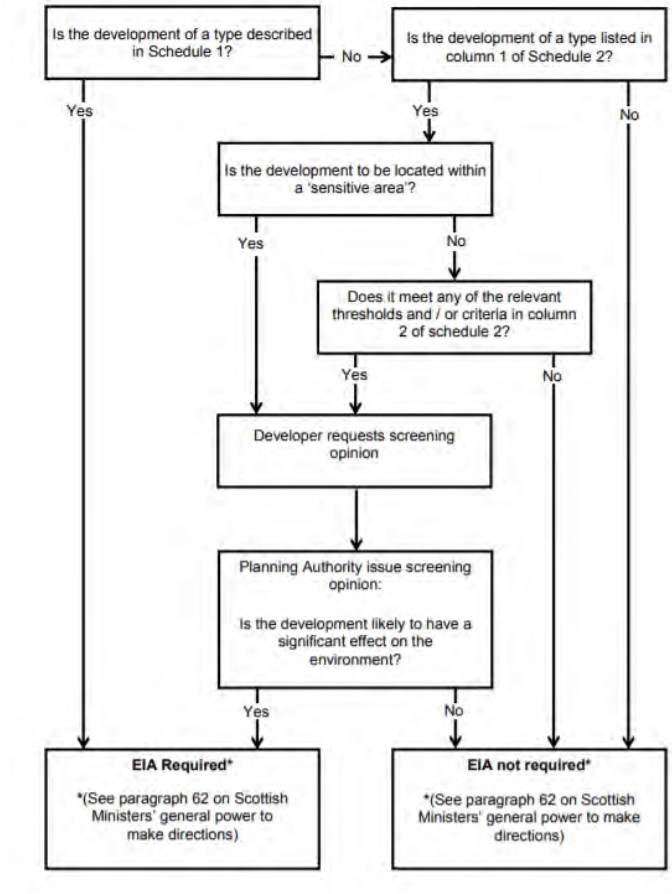


Figure 2.2 Establishing whether a proposed development requires EIA

It should be noted that ‘sensitive areas’ are defined in the 2017 regulations as:

- Sites of Special Scientific Interest
- Land subject to Nature Conservation Orders
- European Sites

- National Scenic Areas
- World Heritage Sites
- Scheduled Monuments
- National Parks
- Marine Protected Areas

In order to assist the planning authority's deliberations, this screening report has been produced to assist in the decision as to whether an EIA is required or not and the approach taken is described further below.

Section 25 of the Town and Country Planning (Scotland) Act 1997 requires that all decisions taken on planning applications be made in accordance with the development plan unless material considerations indicate otherwise.

2.2.2 Approach

Selection criteria for "screening" Schedule 2 projects are set out in Schedule 3 of 2017 Regulations. They require the assessment to consider whether the proposed development has the potential for interactions likely to have a significant effect on the environment in relation to the:

- Characteristics of the development;
- Location of the development; and
- Characteristics of the potential impact.

Consideration of the third of these categories is designed to help in determining whether any interactions between the first two categories are likely to be significant.

The 2017 EIA regulations state that a request for a screening opinion must be accompanied by:

- A plan sufficient to identify the land
- A description of the purpose and nature of the development and of it's potential effects on the environment; and
- Any other information or representations that the person making the request may wish to provide or make.

Guidance on the information to be included within the request for a screening opinion in relation to identifying, characterising and assessing the significance of the potential effects of the project is provided in a number of European Commission and Scottish Government publications. Sample checklists are available which although not mandatory are regarded as a useful tool which applicants for a screening opinion are advised to consider in relation to the particular circumstances of the project. The checklists are intended to provide a brief description of the likely impacts of the project considering the following factors:

- Duration, frequency and reversibility of the impact;

- Probability of the impact;
- Magnitude and complexity of the impact;
- Extent of the impact;
- Impacts on people, human health, fauna and flora, soils, land use, material assets, water quality and hydrology, air quality, climate, noise and vibration, the landscape and visual environment, historic and cultural heritage resources, and the interactions between them.
- Nature of the impacts (i.e. direct, indirect, secondary, cumulative, short, medium and longterm, permanent and temporary, positive and negative).

In line with the above, the available design information and proposed construction techniques have been used to undertake a screening exercise to identify the potential effects of the project using the recommended checklist format as presented in Appendix 2.

For each of the identified potential effects the Helensburgh Pierhead Masterplan, HWD design information, PAC information and technical assessments commissioned by Argyll & Bute Council have been used to prepare an assessment of the characteristics of the potential effects and is presented in the recommended checklist format in Appendix 3.

The completion of the EIA screening report relies on the collation of information from a range of sources, both desk based and previously completed field surveys, in order to judge whether the development is likely to have “significant effect” on the environment by virtue of its nature, size or location”.

The sources of information used to support this position are as follows:

- Topographical Survey;
- Flood Risk Analysis;
- Ground Investigation Report;
- Ecological Assessments;
- Pre-Application Consultation Response(s); and
    - Scottish Environment Protection Agency (SEPA)
    - Argyll & Bute Council Biodiversity Officer
    - Scottish Natural Heritage (SNH)
    - WOSAS (West of Scotland Archaeology Service)
    - Argyll & Bute Council Developemnt & Infrastructure

- Scottish Water
- Historic Environment Scotland (HES)
- Argyll & Bute Council Environmental Health
- Northern Lighthouse Board

- Preliminary comments relating to public events (although Pre-Application Consultation Report will not be available until after 14th May 18).

2.3 Pre-Application Consultation

A Planning Pre-Application meeting took place on the 14th February 2018, between the Argyll & Bute Council's Design Team and relevant stakeholders including the Royal Society for the Protection of Birds (RSPB), SEPA, SNH, Scottish water and others.

No areas of concern were identified in relation to those parts of the development that lie above MLWS which could not be addressed through environmental good practice mitigation or through the completion of technical assessments.

A summary of pre-application stakeholder responses and formal correspondence, meeting minutes etc. is provided in Appendix 4.

3 SITE CHARACTERISATION

3.1 Location and Setting

Helensburgh Pierhead is a large and prominent site located within the designated town centre. The site is both prominent and important in marking the transition of the urban form of Helensburgh to the coast and open water beyond. The site is currently accessed at the bottom end of Sinclair Street, with a secondary access to the west onto West Clyde Street. Location and setting details are summarised in the table below.

Detail	Description
OS Grid Reference	229508E 682193N
Area	Approximately 2.62 hectares (6.48 acres).
Location	The site is located to the south of West Clyde Street, A814, Helensburgh, Scotland.
Site	The site forms a flat roughly rectangular plot of land of reclaimed marine shoreline, approximately 190m long and 130m wide. The site currently comprises an existing swimming pool and car park. Access to the site is directly south of West Clyde Street, A814, Helensburgh, Scotland.
Adjacent Land Use	North: Helensburgh town centre with mixed commercial and residential properties. South: Helensburgh Ferry Terminal and the Forth of Clyde water body. East: Unclaimed marine shore and Forth of Clyde water body. West: Unclaimed marine shore and Forth of Clyde water body.

3.2 History

Information relating to the early site history is available from the Geoenvironmental interim report prepared by Patrick Parsons Limited (PPL) in February 2018, Appendix 5. A brief summary of the significant points relating to the history of the site are described in the table below.

Dates	On-Site	Off-Site
1861	Northern site area covered by hard standing with an unnamed building in north-east corner. Beach front and forth of Clyde water body to the south.	Pier running in a north to south direct along western site boundary. Helensburgh town directly to the north. Unclaimed marine shore and Forth of Clyde water body to the east and west.
1898	The platform to the north becomes more defined.	The platform to the north becomes more defined. Extension to the Pier to include mooring points in the south-west. Continued development to Helens burgh town and railway station.
1919	A band stand is constructed onsite.	Continued development to Helens burgh town and railway station.
1964	Outdoor swimming pool developed along western site boundary on reclaimed marine shore. Band stand is replaced by a car park.	Continued development to Helens burgh town and railway station.
1975	Entire site becomes reclaimed marine shoreline. A second swimming pool developed adjacent to original outdoor pool. Car park is extended to rest of the site. East and south boundaries defined as boulders.	No significant changes noted.
1982	Construction of sub-station in north-east corner adjacent to unnamed building.	No significant changes noted.

3.3 Site Levels relative to existing features and and Forth of Clyde

On the instructions of Argyll & Bute Council, Aspect Land & Hydrographic surveys (ALHS) carried out topographical, multibeam bathymetric and 3D laser scan surveys of an area around Helensburgh Pier in July 2017. Eight survey control points were established on-site for the duration of the works and left in-situ to enable further works to be completed, if required, at a later date whilst retain the same reference points. Recorded levels varied from 4.7 m Chart Datum (CD) to 7.1 m CD.

A bathymetric survey is the submerged equivalent of an above water topographic map. These surveys present accurate, measurable descriptions and visual representation of the submerged terrain.

The Topographical, Bathymetric & 3D Laser Scan Survey undertaken by Aspect Land & Hydrographic Surveys in July 2017 is included in Appendix 5.

3.4 Ground Conditions within the development area

3.4.1 Geology and Mining

Description	Details
Made Ground	None recorded on published maps although a significant deposit is likely given that the site is reclaimed marine shoreline.
Superficial Geology	BGS maps record raised marine deposits beneath the site. Historical borehole records onsite record made ground ranging between ground level and 0.9m. The underlying marine deposits consist of sand, gravel and large boulders ranging in depth between 0.2m – 0.9m extending to a depth ranging between 5.4m - 5.7m onto bedrock.
Solid Geology	Rosneath Conglomerate Formation - A conglomerate with clasts up to 40 cm in size of quartz, quartzite, metamorphic, igneous and volcanic rocks with minor sandstone and pebbly sandstone interbeds.
Mining and Natural Cavities	The site is not located within a Coal Authority mining reporting area. The site is not indicated to lie within a Brine Extraction Area or any other underground extractive activities. The site is not indicated to be underlain by natural cavities.

Natural Ground Subsidence Risks	Moderate risk potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build – consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly. Moderate risk potential for running sand problems with relatively small changes in ground conditions. Avoid large amounts of water entering the ground (for example through pipe leakage or soakaways). Do not dig (deep) holes into saturated ground near the property without technical advice. For new build - consider the consequences of soil and groundwater conditions during and after construction
Faults	None recorded on or immediately adjacent to the site.
Quarrying	None recorded on or immediately adjacent to the site.

3.4.2 Hydrology and Hydrogeology

Description	Details
Watercourses	The Forth of Clyde is located directly adjacent to the southern site boundary.
Flood Risk	The site has been assessed to be at a High Risk of surface water (pluvial) flooding. This indicates that this area would be expected to be affected by surface water flooding in a 1 in 75-year rainfall event to a depth of between 0.1m to 0.3m. Higher flood potential from the sea: the first areas to experience the effects of coastal flooding. The Flood Risk Assessment undertaken in April 2018 by Kaya Consulting Limited is provided in Appendix 5 and the findings are summarised in Section 3.6.
Groundwater Classification	Clyde Estuary surface water body has been designated as a heavily modified water body on account of physical alterations that cannot be addressed without a significant impact on navigation and from an increased risk of subsidence or flooding. The site is underlain by the Rhu Coastal ground water body, recorded by SEPA to be of good chemical quality as of 2014.

Source Protection Zones	None recorded within 500m.
Springs / Wells	None recorded on or immediately adjacent to the site.
Licensed Surface Water Abstractions	None recorded within 1km.
Licensed Groundwater Abstractions	None recorded within 1km.
Discharge Consents	None recorded within 250m.
Pollution Incidents	None recorded within 250m.

3.4.3 Landfill and Waste Management

No landfills are recorded within 500m.

3.4.4 Environmental Licenses, Permits and Registers

None recorded within 500m.

3.4.5 Radon

A Groundsure report was obtained by PPL to assess radon risk using data supplied by the Health Protection Agency (now Public Health England along with BRE Docuement BR 211 - Radon: Guidance on the Protective Measures for New Dwellings. The report indicates that the site lies within an area where no radon protective measures are currently required.

3.4.6 Wave Climate and Flood Risk

An investigation of wave climate was undertaken in 2018 by Kaya Consulting Limited to predict (by computer modelling) the likely wave climate in Helensburgh in the most extreme conditions. Prediction of wave climate was sought at both the South and East of the Pier.

The current site is at risk from flooding caused by extreme tides and storm surges as well as waves. The estimated present 200 year still water level at the site is 4.03m above ordnance datum (AOD), rising to 4.45m AOD in 2080 and 4.62m AOD in 2100. This indicates that the site would flood up to a depth of 0.73m during a 200 year event, increasing in the future due to the effects of climate change. It is predicted that the site would be flooded on average once every five years, and therefore the site must be raised and defended to allow new development.

The mathematical modelling work assumes that the flood defences will be in the form of rock armour revetment with a crest level of 5.4m AOD.

The results of the model indicate that the proposed development will not have a significant impact on flooding risk elsewhere.

The model also shows that local flow velocities are low, even during a 200 year storm event, and therefore significant longshore drift is unlikely. This assumption is supported by the shape and stability of the existing beachline.

The low local velocities are likely to result in deposition of suspended sediment within the navigation channel adjacent to the pier. The proposed development should have no significant impact on the present siltation mechanism of the navigation channel or its frequency of dredging.

Wave overtopping calculations have shown that a 200 year risk resulting from the combination of still water and waves would be unlikely to cause overtopping exceeding 0.1l/s/m. Guidance provided in Eurotop Manual suggests that such levels of overtopping would be acceptable. The wave overtopping calculations are based on empirical equations which are bases on underlying assumptions.

3.5 Geoenvironmental Ground Investigation (February 2018)

PPL was commissioned by Argyll & Bute Council (ABC) to undertake a Geoenvironmental Ground Investigation for HWD in February 2018. The purpose of the site investigation is to assist in the rock revetment design assessment, building car park and future retail buildings designs.

The Geoenvironemntal interim report is provided in Appendix 5.

The main findings are presented in the table below.

Technical Details	Main Findings
Ground Conditions	The superficial deposits comprised extensively of made ground underlain by bedrock which was encountered between 2m-6m during the investigations. Made ground was recorded to a maximum depth of 6m bgl, generally consisting of hard standing underlain by granular made ground deposits comprising of sandy gravel. Gravel content generally consists of demo rubble with wood fragments, brick, glass, concrete, metal, occasional rootlets and sandstone.

Groundwater	Moderate to fast groundwater ingress was recorded in five of the trial pits (TP1- 4 & TP6) and four of the boreholes (BH 2-4 & BH6). These seepages were generally noted to occur between 2.1 - 7.9 m depth and are considered representative of tidal influence however monitoring is still ongoing and will be re evaluated at the end of the monitoring period.
Ground Gas	CIRIA C665 Characteristic Situation 2 gas regime. Gas protection measures are considered necessary (subject to completion of gas monitoring).
Contamination and Remediation	Asbestos contamination was identified in the extensive made ground. This is considered to present a human health risk based on the proposed development and the associated Generic Assessment Criteria (GAC). It should be noted that demolition of the current swimming pool building has not taken place and as such the foot print of this building proved inaccessible during the site investigation. Further ground investigation may be required at a later stage, post- demolition. Construction personnel should be vigilant during redevelopment works, with appropriate protective measures and working practices adopted as/if necessary. If during site redevelopment works, potentially significant soil (or groundwater) contamination is encountered, then all works should cease and the advice of a geoenvironmental engineer should be sought. The close proximity of the site to the nearest surface water receptor creates a potential linkage between the lateral and vertical migration of any possible leachable contamination such as metals and the Forth of Clyde water body. As it is a source-pathway-receptor linkage for significant pollution to occur and as metals been found to be leaching into the Forth of Clyde further groundwater or chemical testing will be required over the next few months (June to August) to establish the exact levels of contaminants. It is expected that Environmental Health are likely to put a condition on the planning approval which requires any remedition to be agreed prior to works commencing on site.
Mining	The site is not located within a Coal Authority mining reporting area.

Foundations	It is considered that piling will be suitable, founding into rockhead based on an allowable bearing capacity of 100kPa. Suspended floor slabs will be required as made ground is >600mm thick.
Concrete Classification	Buried concrete should be designed to BRE Special Digest 1:2005 Design Sulphate Class DS-2 with an ACEC site classification AC-2.
Soakaway Drainage	The site is not considered suitable for soakaways due to the overbearing presence of made ground and risk of discharge directly into the Forth of Clyde.
Waste Classification	Should the developer wish to discard any materials, the made ground is likely to be hazardous, however subject to confirmation by the receiving landfill and any necessary Waste Classification and WAC testing.

3.6 Ecology Preliminary Ecological Appraisal

Echoes Ecology Ltd were commissioned by Argyll & Bute Council to carry out a Preliminary Ecological appraisal (PEA) of the the proposed HWD in February 2018. Habitats within the site, and where possible up to 100 m outwith the boundary, were surveyed. In addition, an otter survey of the site and up to 250m around the site was carried out. A Preliminary Roost Assessment of a building within the site was also carried out.

The full PEA is included in Appendix 5 and the conclusions and recommendations presented are summarised below.

- There are no designated sites within 2 kilometres (km) of the proposed works at Helensburgh Waterfront. The Inner Clyde Special Protection Area (SPA), which is also a Site of Special Scientific Interest (SSSI) and a Ramsar site is located just over 2km southeast of the site. The Inner Clyde SPA is designated for its importance to bird assemblages. Scottish Natural Heritage (SNH) have declared that, given the separation distance between the site and the SPA and the nature of the existing habitats within and adjacent to the development site, the proposed redevelopment of Helensburgh Waterfront will not have a likely significant effect on the qualifying interest of the SPA. There will also be no impacts on the saltmarsh habitat feature of the Inner Clyde SSSI due to the location of the nearest area of saltmarsh being over 3.5km away;

- As the habitats within the site are of low ecological value, if pollution prevention controls are put in place, there will be no adverse impact upon habitats as a result of the proposed works. As the habitat has been deemed unsuitable, there is no potential for badger and reptiles within the site. Therefore, there will be no adverse impact upon these species;
- A single, fresh otter spraint was located 155m east of the site boundary. No otter resting places were found within the site or the 250m buffer surveyed. As there may be otter in the vicinity commuting past the site, there should be a construction Method Statement which details working practices designed to minimise potential impacts. If the working practices detailed in the Method Statement are adhered to, there will be no adverse impact on any otters within the site or surrounding area;
- A nesting bird check of the wooden structure beneath the pier should be carried out prior to works. If nesting birds are present within the site the proposed works cannot proceed until the chicks have fledged. If this mitigation is followed there will be no adverse impact upon breeding birds;
- The building within the site is constructed of brick and breezeblock, covered with a roughcast render. Due to the type and number of potential roost features (PRFs) present it is classed as having a moderate suitability for roosting bats. It is considered to have a low suitability for winter hibernation roosts. Two bat activity surveys should be carried out during the active bat season (May to September inclusive) with at least one of these surveys carried out between May and August. Because the winter roost suitability is low, there is no requirement for winter surveys;
- Further assessment and recommendations for bats and marine mammals will be required, these should be revisited once the activity surveys for bats have been carried out and the design for the improvements to the sea wall defences have been finalised.

3.7 Outfalls

There are a number of surface water discharges to the Forth of Clyde through the existing pier wall. New potential outfalls will be discussed with SEPA and are to be installed between MHWS and HAT. However, should the outfall fall below MHWS, Marine Scotland will be consulted.

3.8 Ownership and Adjcacent Land Use

Argyll & Bute Council own the area to be developed for the HWD as shown in Figure 3.1 below.

Figure 3.1 Land Ownership Boundary (not to scale) Source: Argyll & Bute Council 2018

3.9 Related Projects (current and proposed) in vicinity of site

The approved Masterplan from 2012 identifies an area an proposed footprint for a potential future retail development. Whilst the proposals for the HWD do not include the design of a retail development, the public realm and car park design have taken cognisance of the potential for a future development.

4 IDENTIFICATION AND SCREENING OF THE POTENTIALLY SIGNIFICANT ENVIRONMENTAL EFFECTS

4.1 Introduction

The location and characteristics of the development have been described in the preceding sections of the report.

The available design information and proposed construction techniques have been used to undertake a screening exercise to identify the potential effects of the project using the recommended checklist format as presented in Appendix 1**.**

For each of the identified potential effects the site selection and feasibility studies undertaken by Argyll & Bute Council have been used along with the extensive research and assessment of the potential effects of the proposals on the potentially affected "sensitive" areas to prepare an assessment of the characteristics of the potential effects and is presented in the recommended checklist format in Appendix 2**.**

4.2 Summary of effects

The characterisation which has been undertaken is relative to the selection criteria for "screening" Schedule 2 / Annex II projects set out in Schedule 3 of the EIA Regulations. Overall, the checklists have identified that:

- During construction, there is a potential to have significant effects, however standard environmental good practice mitigation will be effective in minimising these. The Design Team will ensure that the contractor produces and instigate a suitable construction environmental management plan (CEMP) to ensure appropriate mitigation is implemented; and
- HWD is an upgrade of an existing pierhead to accommodate a new leisure facility.. As such impacts during operation are not expected to be significant overall or indeed differ significantly from the current operational conditions.

APPENDIX 1 – FIGURES

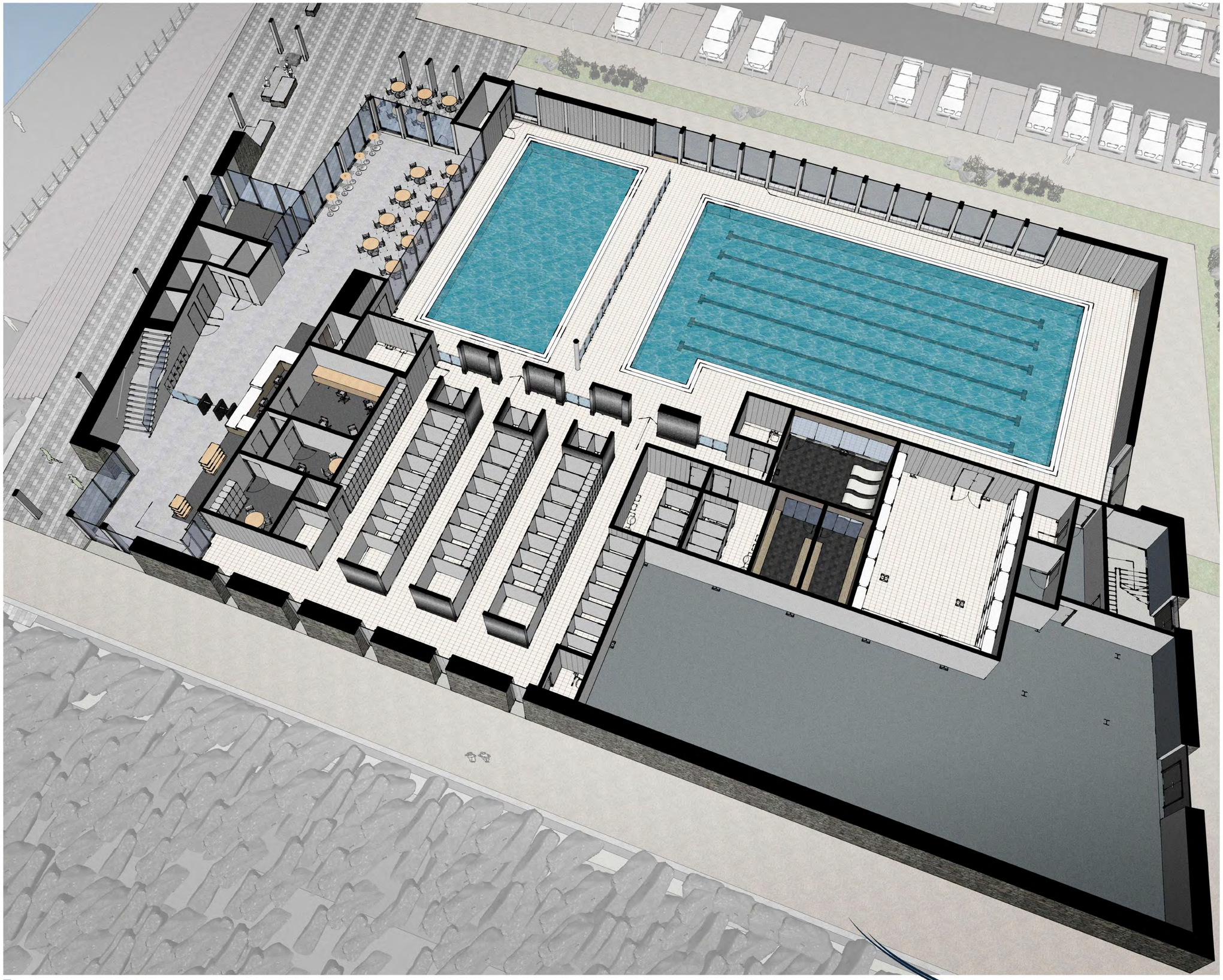
POOL ENVIRONMENT / DEEP GLULAM BEAMS

CONNECTION BETWEEN BEAMS & GLAZING

SPLASH POOL WATER FEATURES

ANGLED BUTRESS WALL TO BASE OF BUILDING

COLOURED ZINC CLADDING WRAPS AROUND FIRST FLOOR



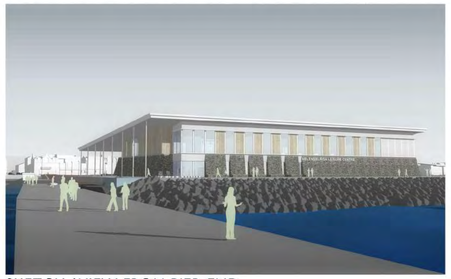
MATERIALS

GROUND FLOOR ISOMETRIC VIEW

darntonB3 ARCHITECTURE

HELENSBURGH WATERFRONT DEVELOPMENT

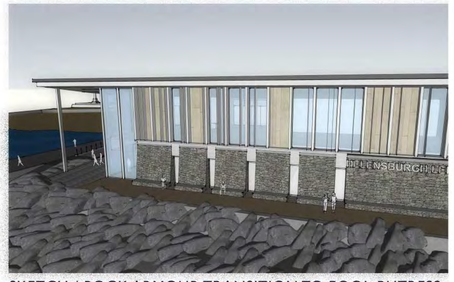
SKETCH / VIEW FROM COLQUHOUN SQUARE



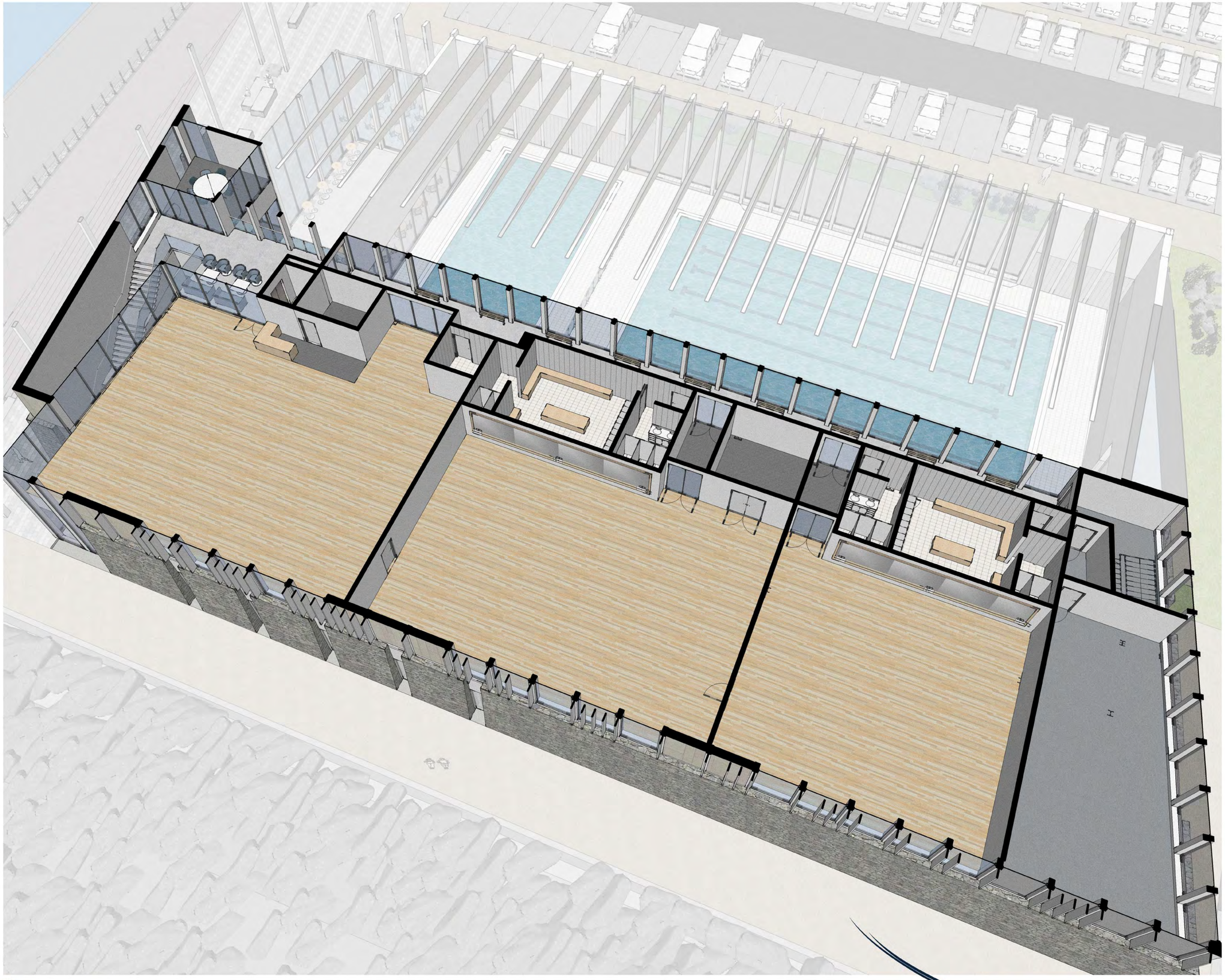
SKETCH / VIEW FROM PIER END

SKETCH / SOUTH WEST PERSPECTIVE

SKETCH / ENTRANCE CANOPY OPTION



SKETCH / ROCK ARMOUR TRANSITION TO POOL BUTRESS WALL

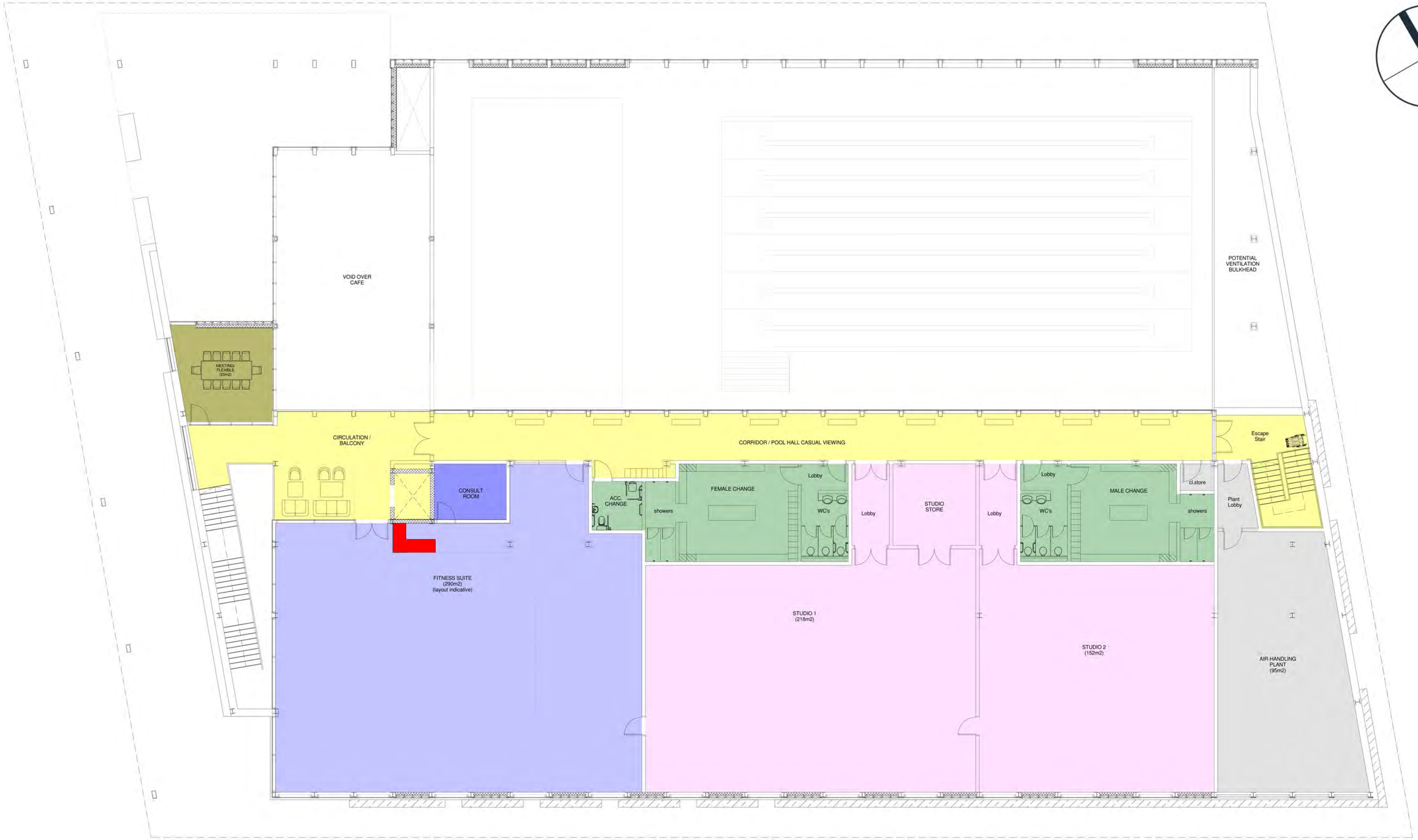


DEVELOPMENT SKETCHES

FIRST FLOOR ISOMETRIC VIEW

darntonB3 ARCHITECTURE

HELENSBURGH WATERFRONT DEVELOPMENT



KEY

- POOL HALL & CHANGING VILLAGE (WET AREAS)
- RECEPTION / CONTROL
- FITNESS SUITE
- DRY CHANGING AREAS
- PLANT & GENERAL STORES
- STAFF AREAS
- CONSULT
- CAFE
- STAFF AREAS
- CONSULT
- ACTIVITY STUDIOS
- FOYER / GENERAL CIRCULATION & PUBLIC WC'S
- RETAIL & VENDING
- FLEXIBLE / MEETING

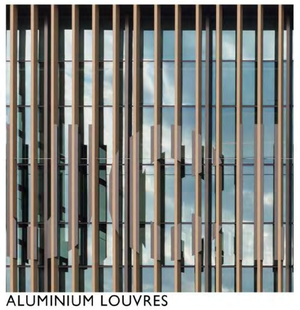
FIRST FLOOR PLAN

0 1 5 10m

darntonB3 ARCHITECTURE

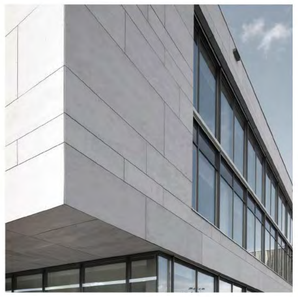
HELENSBURGH WATERFRONT DEVELOPMENT

RUBBLE WALL AS BUILDING BASE



ALUMINIUM LOUVRES

TRESPA CLADDING



TECU ZINC GOLD CLADDING

CLASSIC KALWALL

DAYTIME VIEW

NIGHT VIEW

MATERIALS

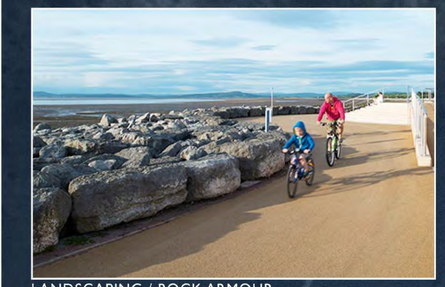
PERSPECTIVE VIEWS

darntonB3 ARCHITECTURE

HELENSBURGH WATERFRONT DEVELOPMENT

POOL HALL INTERIOR

LANDSCAPING / EMERGING STEPS



LANDSCAPING / ROCK ARMOUR

LANDSCAPING / URBAN FURNITURE

STONEHENGE VISITOR CENTRE, SALISBURY

ENTREPOT MACDONALD
EDUCATION & SPORTS COMPLEX, PARIS *

PREVAILING WIND

KEY

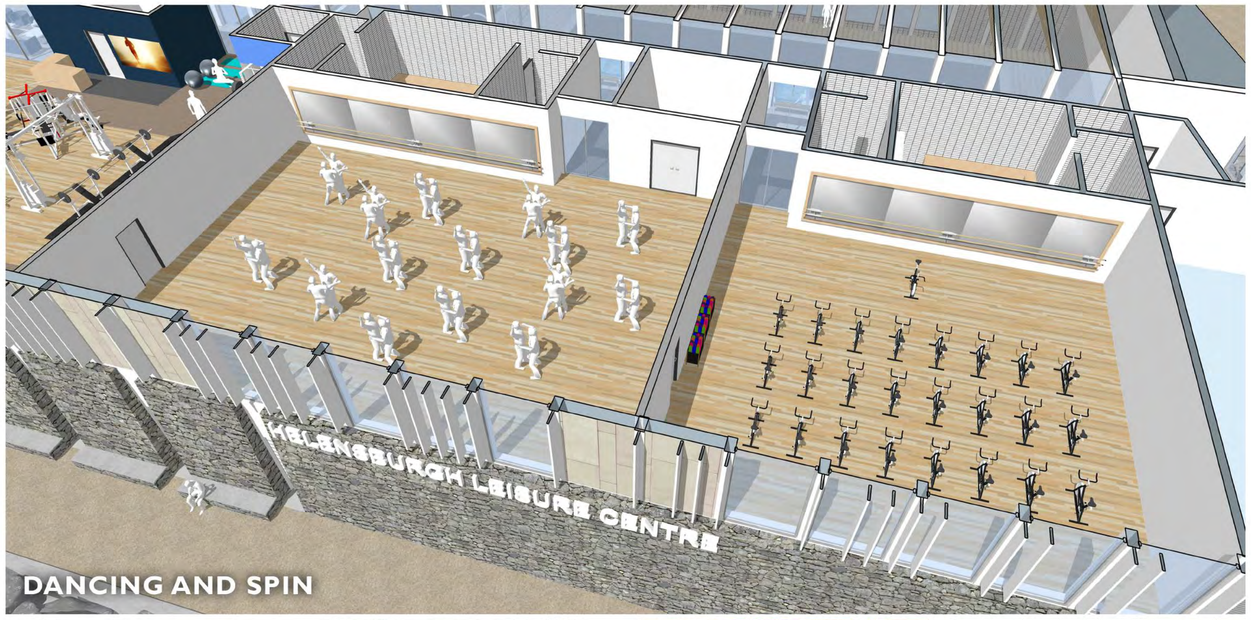
1. Proposed Helensburgh Leisure Centre
2. Cark Park, 265 Spaces
3. Future Retail Development shown dashed
4. Urban Realm / Streetscape
5. New Rock Armour Sea Defence
6. Slipway
7. Clock Tower
8. Coach Drop Off
9. Existing Pier
10. Promenade
11. Public Toilets

SITE PLAN

0 5 10 20 50 100

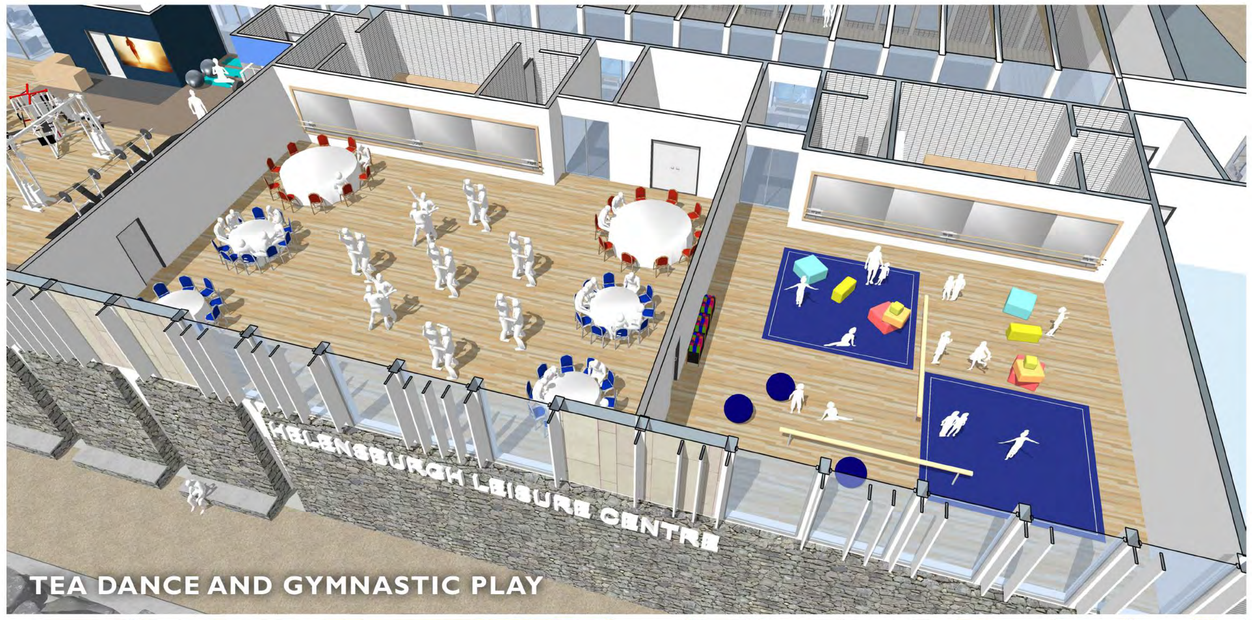
darntonB3 ARCHITECTURE

HELENSBURGH WATERFRONT DEVELOPMENT



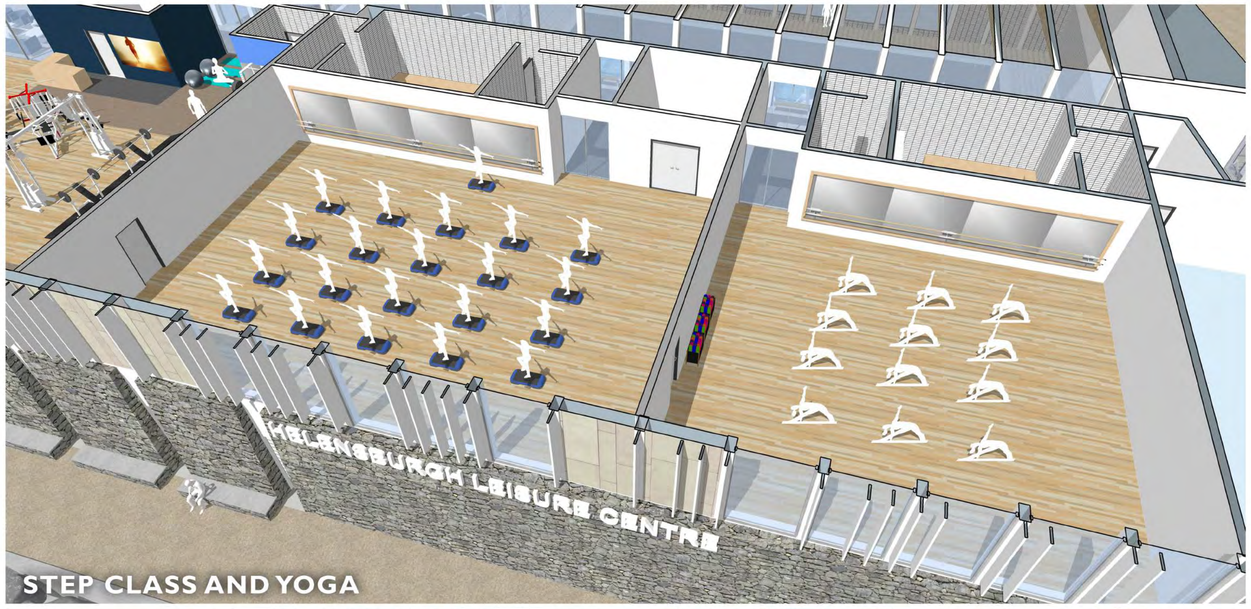
DANCING AND SPIN



TEA DANCE AND GYMNASTIC PLAY



STEP CLASS AND YOGA




MULTIPURPOSE (PARTY) ROOM


POTENTIAL STUDIO USES

darntonB3 ARCHITECTURE

HELENSBURGH WATERFRONT DEVELOPMENT

APPENDIX 2 – EIA SCREENING CHECKLIST: IDENTIFICATION OF POTENTIAL EFFECTS

1. Characteristics of the Development

Question	Yes/No	Brief Description	Significant? (Ref.App.2)
(a) Size of the development			
(i) Will the development be out of scale with the existing environment?	No	Unique building design of local importance which has been designed to integrated within proposed Masterplan for Helensburgh Pierhead.	
(ii) Will it lead to further consequential development or works (e.g. new roads, extraction of aggregate, provision of new water supply, generation or transmission of power, increased housing and sewage disposal)?	No	Accessed from existing roads and servicing within capacity of HWD infrastructure.	
(b) Cumulation with other development			
(i) Are there potential cumulative impacts with other existing development or development not yet begun but for which planning permission exists?	No	None identified.	
(ii) Should the application for this development be regarded as an integral part of a more substantial project? If so, can related developments which are subject to separate applications proceed independently?	Yes	HWD will improve the regeneration potential of the Helensburgh Pierhead. This will include any future retail development around the Pierhead which will be able to proceed independently.	No
(c) Use of natural resources			
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?			
(i) land (especially undeveloped or agricultural land)?	Yes	The flood defence consist of raising the existing level of the pier to 4.7m AOD with infill clean material, construction of a reinforced concrete wall along south and east perimeter of the pier, construction of a rock armour revetment including raising the crest to 5.4m AOD.	No
(ii) water?	Yes	Water from the public mains water supply will be used for construction water, heating systems, toilets, cleaning and	No

		consumption by staff and visitors. The individual systems will be designed in accordance with current regulations and good practice guidance to minimise water use where possible.	
(iii) minerals?	No	Mineral use limited to those contained in building materials.	
(iv) aggregates?	Yes	Aggregates will be used in construction materials such as imported stone, pavement foundations, concrete and tiling. A reinforced concrete wall and construction of a rock armour revetment is required as part of the flood defence works.	No
(v) forests and timber?	Yes	Hardwood flooring and finishes all from FSC certified sources.	No
(vi) energy including electricity and fuels?	Yes	The building electrical supply will come from local utility sources.	No
(vii) any other resources?	No		
(d) Production of waste			
Will the development produce wastes during construction or operation or decommissioning?			
(i) spoil, overburden or mine wastes?	No		
(ii) municipal waste (household and/or commercial)?	Yes	Commercial waste generated by the users of the proposed Swimming Pool and catering facilities.	No
(iii) hazardous or toxic wastes (including radioactive)?	No		
(iv) other industrial process wastes?	No		
(v) surplus product?	No		
(vi) sewage sludge or other sludges from effluent treatment?	No		
(vii) construction or demolition wastes?	Yes	Cuttings of timber, plastic, masonry, wood, boarding, pipe, concrete, cable and ducting etc.	No
(viii) redundant machinery or equipment?	No		
(ix) contaminated soils or other material?	Yes	Asbestos contamination was identified in the extensive made ground. SI chemical testing of soils does not suggest the presence of significant concentrations of any other contaminants of concern.	No
(x) agricultural wastes?	No		

(xi) any other solid wastes?	No		
(xii) liquid or solid wastes in suspension?	No		
(xiii) Will the development produce wastes during construction or operation or decommissioning?	Yes	See comments above re HWD at section d (vii)	No
(e) Pollution and nuisances			
Will the development release pollutants or any hazardous, toxic or noxious substances to air?	No		
Emissions from:-			
(i) combustion of fossil fuels from stationary or mobile sources?	**Unknown**	**Not known at this stage.**	No
(ii) production processes?	No		
(iii) materials handling including storage or transport?	No		
(iv) construction activities including plant & equipment?	Yes	Construction Plant	No
(v) dust or odours from handling of materials including construction materials, sewage & waste?	No	Proposed materials are not likely to provide a significant source of dust or odours during construction.	
(vi) incineration of waste?	No		
(vii) burning of waste in open air (e.g. slash material, construction debris)?	No		
(viii) any other sources	Yes	Refrigerants from Air Conditioning (AC) Units may be released	No
Is there a potential risk from:-			
(i) leachates?	No		
(ii) Escape of wastes or other products/by-products that may constitute a contaminant in the environment?	No		
Will the development cause noise and vibration or release of light, heat energy or electromagnetic radiation?	No		

(i) from operation of equipment e.g. engines, ventilation plant, crushers?	No		
(ii) from industrial or similar processes?	No		
(iii) from blasting or piling?	Yes	The swimming pool building will be most likely founded on piles. Pile installation will generate noise and vibration.	No
(iv) from construction or operational traffic? (v)	No		
(vi) from lighting or cooling systems? (vii)	Yes	External lighting in previously unlit areas.	No
(viii) from sources of electromagnetic radiation (effects on nearby sensitive equipment as well as people)?	No		
(ix) from any other sources?	No		
(f) Risk of accidents, having regard in particular to substances technologies used			
Will there be a risk of accidents during construction or operation of the development which could have effects on people or the environment?			
(i) from explosions, spillages, fires etc from storage, handling, use or production of hazardous or toxic substances?	Yes	Accidental spillage/fugitive release of hydrocarbons or conceting relating contaminants during construction activity adjacent to the river edge.	No
(ii) from events beyond the limits of normal environmental protection e.g. failure of pollution control systems?	No		
(iii) from any other causes?	No		
(iv) could the development be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslip, etc)?	No		
Will the development involve use, storage, transport, handling or production of substances or materials which could be harmful to people or the environment			

(flora, fauna, water supplies)?			
(i) use of hazardous or toxic substances ?	No		
(ii) potential changes in occurrence of disease or effect on disease carriers (e.g. insect or water borne diseases)?	No		
(iii) effect on welfare of people (e.g. change of living conditions)	No		
(iv) effects on vulnerable groups (e.g. the elderly)?	No		
(g) Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development			
(i) permanent or temporary change in land use, landcover or topography including increases in intensity of land use?	Yes	The flood defence consist of raising the existing level of the pier to 4.7m AOD with infill clean material, construction of a reinforced concrete wall along south and east perimeter of the pier, construction of a rock armour revetment including raising the crest to 5.4m AOD	No
(ii) clearance of existing land, vegetation & buildings?	No		
(iii) Peat land disturbance and/ or degredation leading to; carbon release, damage to habitats, affecting land stability or hydrology?	No		
(iv) creation of new land uses?	No		
(v) pre-construction investigations e.g. boreholes, soil testing?	Yes	Should the developer wish to discard any materials, the made ground is likely to be hazardous, however subject to confirmation by the receiving landfill and any necessary Waste Classification and WAC testing. It should be noted that demolition of the current swimming pool building has not taken place and as such the foot print of this building proved inaccessible during the site investigation. Further ground	No

		investigation may be required at a later stage, post- demolition	
(vi) construction or demolition works?	No		
(vii) temporary sites or housing for construction workers?	No		
(viii) above ground buildings, structures or earthworks including linear structures, cut & fill or excavations?	Yes	Deep excavation required for swimming pool.	No
(ix) underground works including mining or tunnelling?	No		
(x) reclamation works?	No		
(xi) dredging?	No		
(xii) Coastal structures (seawalls, piers)?	Yes	Installation of flood defence consisting of raising the existing level of the pier to 4.7m AOD, construction of a reinforced concrete wall along south and east perimeter of the pier and construction of a rock armour revetment following the profile of the existing revetment including raising the crest to 5.4m AOD.	No
(xiii) offshore structures?	No		
(xiv) production and manufacturing processes?	No		
(xv) facilities for storage of goods or materials?	No		
(xvi) facilities for treatment or disposal of solid wastes or liquid effluents?	No		
(xvii) facilities for long term housing of operational workers?	No		
(xviii) new road, rail or sea traffic during construction or operation?	Yes	Materials deliveries along existing highways during construction	No
(xix) new road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No		
(xx) closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No		
(xxi) new or diverted transmission lines or pipelines?	No		

(xxii) impounding, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No		
(xxiii) stream crossings	No		
(xxiv) abstraction or transfers of water from ground or surface waters?	No		
(xxv) changes in waterbodies or the land surface affecting drainage or run-off?	Yes	Impervious areas of the development area to new drainage outfalls to SEPA satisfaction to the Forth of Clyde	No
(xxvi) transport of personnel or materials for construction, operation or decommissioning?	Yes	Materials deliveries along existing highways during construction	No
(xxvii) long term dismantling or decommissioning or restoration works?	No		
(xxviii) ongoing activity during decommissioning which could have an impact on the environment?	No		
(xxix) influx of people to an area either temporarily or permanently?	No		
(xxx) introduction of alien species?	No		
(xxxi) loss of native species or genetic diversity?	No	As the habitats within the site are of low ecological value there will be no loss of native species or generic diversity.	
(xxxii) any other changes?	No		
(xxxiii) long term dismantling or decommissioning or restoration works?			
2. LOCATION OF THE DEVELOPMENT			
(a) Existing land use			
Are there existing land uses on or around the location which could be affected by the development, e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, water catchments, functional floodplains, mining or quarrying?	Yes	Residential and commercial properties located to the North in East and West Clyde Street	No
Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals,	No		

schools, places of worship, community facilities, which could be affected?			
Is the development located in a previously undeveloped area where there will be loss of greenfield land?	No		
(b) Relative abundance, quality and regenerative capacity of natural resources in the area			
Are there any areas on or around the location which contain important, high quality or scarce resources which could be affected by the development?			
(i) groundwater resources	No		
(ii) surface waters	No		
(iii) forestry	No		
(iv) agriculture	No		
(v) fisheries	No		
(vi) tourism	No		
(c) Absorption capacity of the natural environment			
(i) Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the development?	No	There are no designated sites within 2km of the proposed HWD. The Inner Clyde SPA/SSSI/Ramsar Site which is designated for it's importance to bird assemblages is located just over 2km southeast of the site. SNH have declared that, given the separation distance beteen the site and the SPA and the nature of the existing habitats within and adjacent to the development site, the proposed HWD will not have a likely significant effect on the qualifying interest of the SPA. There will also be no impacts on the saltmarsh habitat feature of the Inner Clyde SSSI due to the location of the nearest area of saltmarsh being over 3.5km away.	
(ii) Are there any other areas on or around the location which are important or sensitive for reasons of their ecology			

• wetlands, watercourses or other waterbodies	No		
• the coastal zone	No		
• mountains, forests or woodlands	No		
• nature reserves and parks	No		
(iii) Are there any areas on or around the location in which species and habitats of Local Biodiversity Action Plan importance are present?	No		
(iv) Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected?	Yes	Otter may be commuting past the site or in the vicinity. Nesting birds may be present in the wooden structure beneath the pier. The building within the development area has potential to support roosting bats.	No
(v) Are there any inland, coastal, marine or underground waters on or around the location which could be affected?	No		
(vi) Are there any groundwater source protection zones or areas that contribute to the recharge of groundwater resources?	No		
(vii) Are there any areas or features of high landscape or scenic value on or around the location which could be affected?	No		
(viii) Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected?	No	Footpath and pay and display car parking facilities for Ferry Terminal.	
(ix) Are there any transport routes on or around the	No	Vehicular access to the HWD will be via an existing site	No

location which are susceptible to congestion or which cause environmental problems, which could be affected?		entrance on the A814 which is one of the principal routes through the town. The number of vehicles accessing the HWD will not add significantly to the existing volume of traffic entering the area, Staff and visitors to the HWD will take access on foot from public transport drop off points on the A814 and from the car parking facilities proposed.	
(x) Is the development in a location where it is likely to be highly visible to many people?	Yes	The development is located to the south of West Clyde Street, A814. North: Helensburgh town centre with mixed Commercial and Residential Properties. South: Helensburgh Ferry Terminal and the Forth of Clyde water body with two slipways, one at each end. East: Unclaimed marine shore and Forth of Clyde water body. West: Unclaimed marine shore and Forth of Clyde water body. The development has been sensitively designed so that it fits in with the Masterplan approved by Argyll & Bute Council for the Pierhead. The existing setting is predominantly land in nature, and there will be clear visibility from the estuary.	No
(xi) Are there any areas or features of historic or cultural importance on or around the location which could be affected?	Yes	There is a listed building The Clock Tower at the corner of the entrance to the site (Bell Tower of former Church Listing Category C), 17-19 West Clyde Street opposite site Listed Category C and Monument Category B. These features will be treated with sensitivity through the design of the landscape and siting of elements on the site to ensure the environment around listed buildings and monuments remain an appropriate setting.	No
(xii) Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected?	No	There are no Air Quality Management Areas designated in Argyll & Bute. However reference should be made to Argyll and Bute Council Air Quality Management Plan https://www.argyll-bute.gov.uk/planning-and-environment/air-pollution-and-local-air-quality.	
(xiii) Is the location of the development susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature	Yes	The proposed development is located in an area which has a high likelihood of coastal flood risk (an event which occurs on average one in ten years).	No

inversions, fogs, severe winds, which could cause the development to present environmental problems?			

APPENDIX 3 - EIA SCREENING CHECKLIST: SIGNIFICANCE OF THE POTENTIAL EFFECTS

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(b) Cumulation with other development		
(ii) Should the application for this development be regarded as an integral part of a more substantial project? If so, can related developments which are subject to separate applications proceed independently?	Yes	HWD will improve the regeneration potential of the Helensburgh Pierhead. Any future retail development will be able to proceed independently.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Proposals are contained within the HWD area which encompasses Helensburgh Pier.
	Will many people be affected?	No	Relatively few residential properties in the vicinity of the HWD and none in the immediate vicinity of the swimming pool development.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Current baseline conditions in relation to the Forth of Clyde (which doesn't carry any designations) should not change as a result of any cumulative effects. There is potential for contamination of the water table which may discharge into the Firth of Forth. However precautions and statutory regulations will ensure that any risk is minimised.
	Will the effect be unusual in the area or particularly complex?	No	There is an existing consented drainage outfall from Helensburgh Pier that complies with current regulations. New potential outfalls will be discussed with SEPA and are to be installed between MHWS and HAT.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	No designated sites located within 2km.
	Will valuable or scarce features or resources be affected?	No	As above.
		No	Any changes in baseline

	Is there a risk that environmental standards will be breached?		conditions will have to comply with current legislation.
	Is there a risk that protected sites, areas, features will be affected?	No	No designated sites located within 2km.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	The effect will, however be negligible.
	Is there a low probability of a potentially highly significant effect?	Yes	See above.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	Any minor changes in baseline conditions will be established very quickly.
	Will the effect be permanent rather than temporary?	Yes	Certain to be permanent.
	Will the impact be continuous rather than intermittent?	Yes	See above.
	If intermittent, will it be frequent rather than rare?	No	Not intermittent.
	Will the impact be irreversible?	Yes	Buildings and infrastructure unlikely to be removed once completed.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	Yes	Any mitigation will be small scale.

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(c) Use of natural resources		
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?		
(ii) land (especially undeveloped or agricultural land)?	Yes	The flood defence consist of raising the existing level of the pier to 4.7m AOD with infill clean material, construction of a reinforced concrete wall along south and east perimeter of the pier, construction of a rock armour revetment including raising the crest to 5.4m AOD.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	The area of direct impact from construction of a reinforced concrete wall and rock armour revetment will be small.
	Will many people be affected?	No	Use of the development area is limited to users of the Ferry Terminal and people walking along the footpath towards the pierhead.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Changes will be limited to to the scale identified above.
	Will the effect be unusual in the area or particularly complex?	No	The vicinity of the site has been the subject of great change over several centuries, with the extension of Helensburgh pier, reclamation of marine shoreline, construction of an outdoor swimming pool and a second swimming pool etc.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental	No	Construction Environmental Plans and Codes of

	standards will be breached?		Construction Practice will ensure compliance with national and international standards.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Effects are certain
	Is there a low probability of a potentially highly significant effect?	Yes	If pollution prevention controls re put in place there will be no adverse impact upon habitats
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Direct habitat losses under the structures will be long-term,
	Will the effect be permanent rather than temporary?	Yes	Direct effects will be permanent
	Will the impact be continuous rather than intermittent?	Yes	Permanent impacts will be continuous
	If intermittent, will it be frequent rather than rare?	N/A	Not intermittent
	Will the impact be irreversible?	N/A	Impact not significant
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	Yes	There is no potential to compensate for these measures. To date all effort has been to minimise effect through design.

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(c) Use of natural resources		
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?		
(iii) water?	Yes	Water from the public mains water supply will be used for construction water, heating systems, toilets, cleaning and consumption by staff and visitors. The individual systems will be designed in accordance with current regulations and good practice guidance to minimise water use where possible.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Adequate capacity within the existing public water supply
	Will many people be affected?	No	Ditto
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Ditto
	Will the effect be unusual in the area or particularly complex?	No	Development will be integrated into existing landscape through sensitive design.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	None identified
	Will valuable or scarce features or resources be affected?	No	Adequate capacity within the existing public water supply.
	Is there a risk that environmental standards will be breached?	No	Ditto
	Is there a risk that protected sites, areas, features will be affected?	No	Ditto
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Certain
	Is there a low probability of a	Yes	Negligible

	potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Duration of operation
	Will the effect be permanent rather than temporary?		Except for water used during construction
	Will the impact be continuous rather than intermittent?		Duration of operation
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	Yes	Reversed on cessation of use of building(s)
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	Removal of source of abstraction

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(c) Use of natural resources		
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?		
(iv) aggregates?	Yes	Aggregates will be used in construction materials such as imported stone, pavement foundations, concrete and tiling. A reinforced concrete wall and construction of a rock armour revetment is required as part of the flood defence works.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Aggregates will be sourced locally as far as possible and where possible to be recycled construction and demolition waste.
	Will many people be affected?	No	Ditto
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Quantities required are small
	Will the effect be unusual in the area or particularly complex?	No	
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	
	Is there a risk that protected sites, areas, features will be affected?	No	Materials sourced from existing suppliers and certified sources.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Aggregates will be required.
	Is there a low probability of a potentially highly significant	No	Materials sourced from existing suppliers and consented sources.

	effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	
	Will the effect be permanent rather than temporary?	Yes	Effects due to material transport would be temporary
	Will the impact be continuous rather than intermittent?	Yes	
	If intermittent, will it be frequent rather than rare?	No	
	Will the impact be irreversible?	No	Aggregates could be recycled at the end of building life.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(c) Use of natural resources		
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?		
(v) forests and timber?	Yes	Hardwood flooring and finishes all from FSC certified sources.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	FSC (Forest Stewardship Council) certified products are tracked through the supply chain from a responsibly managed forest.
	Will many people be affected?	No	Ditto
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Ditto
	Will the effect be unusual in the area or particularly complex?	No	Ditto
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Ditto
	Will valuable or scarce features or resources be affected?	No	Ditto
	Is there a risk that environmental standards will be breached?	No	Ditto
	Is there a risk that protected sites, areas, features will be affected?	No	Ditto
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Hardwoods will be used
	Is there a low probability of a potentially highly significant effect?	No	FSC (Forest Stewardship Council) certified products are tracked through the supply chain from a responsibly managed

			forest.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	
	Will the effect be permanent rather than temporary?	Yes	
	Will the impact be continuous rather than intermittent?	Yes	
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	FSC (Forest Stewardship Council) certified products are tracked through the supply chain from a responsibly managed forest.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	Ditto

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(c) Use of natural resources		
Will construction or operation of the development use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?		
(vi) energy including electricity and fuels?	Yes	The building electrical supply will come from local utility sources. The source of heating and cooling will be through a standard energy efficient heating system.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	
	Will many people be affected?	No	
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Ditto
	Will the effect be unusual in the area or particularly complex?	No	HWD located south of Helensburgh town centre in close proximity to mixed commercial and residential properties.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Ditto
	Will valuable or scarce features or resources be affected?	No	Ditto
	Is there a risk that environmental standards will be breached?	No	Ditto
	Is there a risk that protected sites, areas, features will be affected?	No	Ditto
Probability of the impact	Is there a high probability of the effect occurring?	Yes	
	Is there a low probability of a potentially highly significant effect?	No	

Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	
	Will the effect be permanent rather than temporary?	Yes	
	Will the impact be continuous rather than intermittent?	Yes	
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(d) Production of waste		
(ii) municipal waste (household and/or commercial)?	Yes	Commercial waste generated by the users of the proposed facility and catering facilities.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Waste generation compatible with current operations/facilities in the vicinity. Waste disposal undertaken using local authority collection and disposal arrangements.
	Will many people be affected?	No	Ditto
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Ditto
	Will the effect be unusual in the area or particularly complex?	No	Ditto
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Ditto
	Will valuable or scarce features or resources be affected?	No	Ditto
	Is there a risk that environmental standards will be breached?	No	Ditto
	Is there a risk that protected sites, areas, features will be affected?	No	Ditto
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Waste will be generated
	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Project duration
	Will the effect be permanent rather than temporary?	Yes	

	Will the impact be continuous rather than intermittent?	Yes	
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(d) Production of waste		
(vii) construction or demolition wastes?	Yes	Cuttings of timber, plastic, masonry, wood, boarding, pipe, concrete, cable and ducting etc.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	The effect will be limited to the site area and transport route for material delivery and waste removal/disposal.
	Will many people be affected?	No	There will be no effect on people.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	There will be no change in environmental conditions.
	Will the effect be unusual in the area or particularly complex?	No	Construction demolition waste generated throughout the Argyll & Bute area at all construction sites.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	Yes	
	Is there a low probability of a potentially highly significant effect?	No	Construction demolition waste will be generated but Site Waste Management Plans will minimise generation rates and optimise re-use and re-cycling opportunities.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	no	Construction phase only
		No	

	Will the effect be permanent rather than temporary?		
	Will the impact be continuous rather than intermittent?	No	
	If intermittent, will it be frequent rather than rare?	No	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(d) Production of waste		
(ix) contaminated soils or other material?	Yes	Asbestos contamination was identified in the extensive made ground. SI chemical testing of soils does not suggest the presence of significant concentrations of any other contaminants of concern.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Asbestos identified will be addressed in site remediation proposals which may include retention in situ with appropriate cover or removal in accordance with current legislation.
	Will many people be affected?	No	Exposure to asbestos is a human health risk so measures to protect the environment, and people in particular, from exposure to asbestos are required by law.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	It is not considered that the development will change the environmental conditions at the site significantly.
	Will the effect be unusual in the area or particularly complex?	No	Testing to date suggests asbestos is restricted to the extensive made ground.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	Soil chemical testing undertaken to date does not indicate contaminants present which breach Generic Assessment Criteria.
	Is there a risk that protected sites, areas, features will be affected?	No	Site is not located in a protected area
Probability of the		No	

impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	
	Will the effect be permanent rather than temporary?	N/A	
	Will the impact be continuous rather than intermittent?	N/A	As above.
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	N/A	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(d) Production of waste		
(iii) Will the development produce wastes during construction or operation or decommissioning?	Yes	See comments above re Construction Demolition Waste at section d (vii)

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?		See comments above re Construction Demolition Waste at section d (vii)
	Will many people be affected?		
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?		
	Will the effect be unusual in the area or particularly complex?		
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?		
	Will valuable or scarce features or resources be affected?		
	Is there a risk that environmental standards will be breached?		
	Is there a risk that protected sites, areas, features will be affected?		
Probability of the impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?		
	Will the effect be permanent rather than temporary?		
	Will the impact be continuous rather than intermittent?		

	If intermittent, will it be frequent rather than rare?		
	Will the impact be irreversible?		
	Will it be difficult to avoid or reduce or repair or compensate for the effect?		

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(e) Pollution and nuisances		
Emissions from:-		
(i) combustion of fossil fuels from stationary or mobile sources?	**Unknown**	**Not known at this stage.**

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	
	Will many people be affected?	No	
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	
	Will the effect be unusual in the area or particularly complex?	No	
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	Boiler installed will comply with all current building regulations.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	N/A	
	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	Intermittent seasonal use if at all.
	Will the effect be permanent rather than temporary?	No	

	Will the impact be continuous rather than intermittent?	No	
	If intermittent, will it be frequent rather than rare?	No	Frequency of use not known but unlikely to be frequent.
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(e) Pollution and nuisances		
Emissions from:-		
(ii) construction activities including plant & equipment?	Yes	Construction Plant

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Other than vehicles delivering materials or removing waste the effects will be local to the site.
	Will many people be affected?	No	Relatively few residential properties within close proximity to construction site.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Site procedures/Construction Code of Practice will ensure that emissions to air are minimised in accordance with current regulations and good practice.
	Will the effect be unusual in the area or particularly complex?	No	Construction activity not uncommon in Helensburgh area
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Marine environment likely to be unaffected by emissions to air and no other land sensitive receptors identified.
	Will valuable or scarce features or resources be affected?	No	See above.
	Is there a risk that environmental standards will be breached?	No	See above.
	Is there a risk that protected sites, areas, features will be affected?	No	See above.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	
	Is there a low probability of a potentially highly significant	No	

	effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	During construction only.
	Will the effect be permanent rather than temporary?	No	During construction only.
	Will the impact be continuous rather than intermittent?	No	
	If intermittent, will it be frequent rather than rare?	Yes	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(e) Pollution and nuisances		
Emissions from:-		
(iii) any other sources	Yes	Refrigerants from Air Conditioning (AC) Units may be released

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	
	Will many people be affected?	No	
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	
	Will the effect be unusual in the area or particularly complex?	No	
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	AC System will comply with all current building regulations
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	No	
	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	
	Will the effect be permanent rather than temporary?	No	
	Will the impact be continuous rather than intermittent?		

	If intermittent, will it be frequent rather than rare?	Yes	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(e) Pollution and nuisances		
Is there a potential risk from:-		
(i) from blasting or piling?	Yes	The swimming pool building will be most likely founded on piles. Pile installation will generate noise and vibration.

Question		**Yes/No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	Yes	Airborne and potentially water borne noise will extend outwith the site during periods of pile installation.
	Will many people be affected?	No	Relatively few residential properties in close proximity. Mitigation measures will be agreed with Argyll & Bute Environmental Health Department.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Mitigation measures relating to pile installation during the construction phase s will be agreed with the relevant authority.
	Will the effect be unusual in the area or particularly complex?	No/Yes	Land based piling is not unusual for the development of a swimming pool. If there is any interaction with the water environment Marine Scotland will have to be consulted.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	All regulation in respect of noise will be fully met.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the		Yes	Noise generation will be

impact	Is there a high probability of the effect occurring?		certain.
	Is there a low probability of a potentially highly significant effect?	No	Pre-application discussions with Argyll & Bute Council Environemntal Health excluded any potentially significant effect
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	Period of noise generation will be over a few weeks.
	Will the effect be permanent rather than temporary?	No	Certain to be temporary
	Will the impact be continuous rather than intermittent?	No	Noise generation will be limited to agree working hours and will ensure a daily respite, when no piling will be taking place.
	If intermittent, will it be frequent rather than rare?	Yes	Noise generation has less effect if there are fewer interruptions between bouts
	Will the impact be irreversible?	No	Noise effects are temporary
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	Mitigation measures will be agreed with Argyll & Bute Council Environmental Health.

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(e) Pollution and nuisances		
Is there a potential risk from:-		
(ii) from lighting or cooling systems? (iii)	Yes	External lighting in previously unlit areas.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	
	Will many people be affected?	No	Light pollution levels in the area are currently acceptable and the HWD should not add significantly to the existing baseline, therefore not likely to affect people.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Effect will be limited and localised.
	Will the effect be unusual in the area or particularly complex?	No	
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	
	Is there a risk that protected sites, areas, features will be affected?	No	Not from light pollution
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Lighting will be required
	Is there a low probability of a potentially highly significant effect?	No	Effects are likely to be neutral in significance.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	For the duration of operation

	Will the effect be permanent rather than temporary?	Yes	As Above
	Will the impact be continuous rather than intermittent?	Yes	
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	All infrastructure could be removed and previous environmental baseline re-established.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	Yes	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(f) Risk of accidents, having regard in particular to substances technologies used		
Will there be a risk of accidents during construction or operation of the development which could have effects on people or the environment?	Yes	Accidental spillage/fugitive release of hydrocarbons or concreting relating contaminants during construction activity adjacent to the river edge.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	Yes	Spillage into the marine environment could extend over a large area if not contained.
	Will many people be affected?	No	
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Source volume is unlikely to be significant and receiving water is of a large volume.
	Will the effect be unusual in the area or particularly complex?	No	
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Source volume is unlikely to be significant and receiving water is of a large volume.
	Will valuable or scarce features or resources be affected?	No	See above.
	Is there a risk that environmental standards will be breached?	No	Construction Environmental Management Plan (CEMP) will include emergency response procedures to ensure that accidental spillages/release are limited and can be managed within existing environmental standards.
	Is there a risk that protected sites, areas, features will be affected?	No	See above.
Probability of the impact	Is there a high probability of the effect occurring?	No	Provided construction practices adhere to agreed CEMP there should only be a low probability of accidental spillage/release.
		No	See above.

	Is there a low probability of a potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	See above.
	Will the effect be permanent rather than temporary?		Any releases would occur during construction and be of short duration/low volume.
	Will the impact be continuous rather than intermittent?	No	
	If intermittent, will it be frequent rather than rare?	No	
	Will the impact be irreversible?	No	See above.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	See above.

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(g) Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(i) permanent or temporary change in land use, land cover or topography including increases in intensity of land use?	Yes	The flood defence consist of raising the existing level of the pier to 4.7m AOD with infill clean material, construction of a reinforced concrete wall along south and east perimeter of the pier, construction of a rock armour revetment including raising the crest to 5.4m AOD

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Local to site.
	Will many people be affected?	No	No people affected
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Change will be limited to the scale identified above,
	Will the effect be unusual in the area or particularly complex?		The vicinity of the site has been the subject of great change over several centuries, with the extension of helensburgh pier, reclamation of marine shoreline, construction of an outdoor swimming pool and a second swimming pool etc.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	CEMP will ensure compliance with national and international standards.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the	Yes	Effects are certain

	effect occurring?		
	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Any habitat losses will be long-term for the duration of operation
	Will the effect be permanent rather than temporary?	Yes	
	Will the impact be continuous rather than intermittent?	Yes	Permanent impacts will be continuous
	If intermittent, will it be frequent rather than rare?	N/A	Not intermittent
	Will the impact be irreversible?	N/A	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	N/A	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(ii) pre-construction investigations e.g. boreholes, soil testing?	Yes	Should the developer wish to discard any materials, the made ground is likely to be hazardous, however subject to confirmation by the receiving landfill and any necessary Waste Classification and WAC testing. It should be noted that demolition of the current swimming pool building has not taken place and as such the foot print of this building proved inaccessible during the site investigation. Further ground investigation may be required at a later stage, post- demolition

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Local to site.
	Will many people be affected?	No	No people affected
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Change will be limited to the scale identified above,
	Will the effect be unusual in the area or particularly complex?	No	Typical for these types of development.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	CEMP and procedures for WAC testing will ensure compliance with national and international standards.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	Yes	Effects are certain.

	Is there a low probability of a potentially highly significant effect?	No	
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	Investigations will be temporary in nature.
	Will the effect be permanent rather than temporary?	Yes	Direct effect over a small area
	Will the impact be continuous rather than intermittent?	No	
	If intermittent, will it be frequent rather than rare?	No	
	Will the impact be irreversible?	N/A	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	N/A	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(iii) above ground buildings, structures or earthworks including linear structures, cut & fill or excavations?	Yes	Deep excavation required for swimming pool.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?		**See responses at 1 (g) (i)**
	Will many people be affected?		
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?		
	Will the effect be unusual in the area or particularly complex?		
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?		
	Will valuable or scarce features or resources be affected?		
	Is there a risk that environmental standards will be breached?		
	Is there a risk that protected sites, areas, features will be affected?		
Probability of the impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?		

	Will the effect be permanent rather than temporary?		
	Will the impact be continuous rather than intermittent?		
	If intermittent, will it be frequent rather than rare?		
	Will the impact be irreversible?		
	Will it be difficult to avoid or reduce or repair or compensate for the effect?		

1. Characteristics of the Development		
Question	Yes/No	Brief Description
Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(iv) Coastal structures (seawalls, piers)?	Yes	Installation of flood defence consisting of raising the existing level of the pier to 4.7m AOD, construction of a reinforced concrete wall along south and east perimeter of the pier and construction of a rock armour revetment following the profile of the existing revetment including raising the crest to 5.4m AOD.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	**See responses at 1 (g) (i)**	
	Will many people be affected?		
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?		
	Will the effect be unusual in the area or particularly complex?		
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?		
	Will valuable or scarce features or resources be affected?		
	Is there a risk that environmental standards will be breached?		
	Is there a risk that protected sites, areas, features will be affected?		
Probability of the impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?		

Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	
	Will the effect be permanent rather than temporary?	
	Will the impact be continuous rather than intermittent?	
	If intermittent, will it be frequent rather than rare?	
	Will the impact be irreversible?	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
(g) Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(v) new road, rail or sea traffic during construction or operation?	Yes	Materials deliveries along existing highways during construction

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	Yes	Service routes
	Will many people be affected?	No	Change in existing baseline conditions (noise, vibration, air quality, etc.) along service routes not anticipated to be significant to people.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Not relative to existing on land transport activity
	Will the effect be unusual in the area or particularly complex?	No	Existing roads already subject to traffic movements.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	Traffic routes and method statements would be agreed with regulators and incorporated into traffic management plan
	Is there a risk that protected sites, areas, features will be affected?		See above.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	
	Is there a low probability of a	No	

	potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	No	Transport due to construction activity will last several months
	Will the effect be permanent rather than temporary?	No	See above.
	Will the impact be continuous rather than intermittent?	No	See above.
	If intermittent, will it be frequent rather than rare?	Yes	
	Will the impact be irreversible?	Yes	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(vi) changes in waterbodies or the land surface affecting drainage or run-off?	Yes	Impervious areas of the development area to new drainage outfalls to SEPA satisfaction to the Forth of Clyde

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Local to site.
	Will many people be affected?	No	No people affected
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Change will be limited to the scale identified above,
	Will the effect be unusual in the area or particularly complex?	No	Typical for these types of development.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	CEMP and adherence to SEPA Guidance and Best Practice will ensure compliance with national and international standards.
	Is there a risk that protected sites, areas, features will be affected?	No	
Probability of the impact	Is there a high probability of the effect occurring?	No	
	Is there a low probability of a potentially highly significant effect?	Yes	Effects are certain.
Duration, frequency and reversibility of	Will the effect continue for a long	No	

the impact	time?		
	Will the effect be permanent rather than temporary?	Yes	Changes to land surface are required as part of the development and will be permanent.
	Will the impact be continuous rather than intermittent?	Yes	Direct effect over a small area
	If intermittent, will it be frequent rather than rare?	No	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	N/A	

1. Characteristics of the Development		
Question	Yes/No	Brief Description
Other characteristics: potential physical changes (topography, land use, changes in waterbodies etc) from construction, operation or decommissioning of the development		
(vii) transport of personnel or materials for construction, operation or decommissioning?	Yes	Materials deliveries along existing highways during construction

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	**See responses at 1. (g) (v) above.**	
	Will many people be affected?		
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?		
	Will the effect be unusual in the area or particularly complex?		
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?		
	Will valuable or scarce features or resources be affected?		
	Is there a risk that environmental standards will be breached?		
	Is there a risk that protected sites, areas, features will be affected?		
Probability of the impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?		
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?		

	Will the effect be permanent rather than temporary?	
	Will the impact be continuous rather than intermittent?	
	If intermittent, will it be frequent rather than rare?	
	Will the impact be irreversible?	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	

2. Location of the Development		
Question	Yes/No	Brief Description
(a) Existing land use		
Are there existing land uses on or around the location which could be affected by the development, e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, water catchments, functional floodplains, mining or quarrying?	Yes	Residential and commercial properties located in East and West Clyde Street

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Development area covers the existing Helensburgh Pierhead only therefore any effects will be over a small area.
	Will many people be affected?	No	A few people adversely affected during construction with aspiration to positively affect many people once operational.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	Yes	HWD is of local importance. It is hoped that the development potential of other parts of the site adjacent sites will be improved.
	Will the effect be unusual in the area or particularly complex?	No	Although unique in design and function the proposed swimming pool and leisure centre is in scale and of similar footprint to what already occupies the site.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Not in relation to existing land uses.
	Will valuable or scarce features or resources be affected?	No	See above.
	Is there a risk that environmental standards will be breached?	No	Buildings and services designed to comply with current standards and guidance.
	Is there a risk that protected	No	No designated features occupy the development

	sites, areas, features will be affected?		area. area
Probability of the impact	Is there a high probability of the effect occurring?	Yes	See above.
	Is there a low probability of a potentially highly significant effect?	Yes	See above.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Duration of operation.
	Will the effect be permanent rather than temporary?	Yes	Extended building life.
	Will the impact be continuous rather than intermittent?	Yes	Building life and duration of operation.
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	Site and building integration with surrounding land uses will ensure effects are minimised.

2. Location of the Development		
Question	Yes/No	Brief Description
(a) Absorption capacity of the natural environment		
(i) Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected?	Yes	Otter may be commuting past the site or in the vicinity. Nesting birds may be present in the wooden structure beneath the pier. The building within the development area has potential to support roosting bats.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	The habitats within the site are of low ecological value and there are no designated sites within 2km of the proposed works. Any effects will be localised.
	Will many people be affected?	No	There is great public interest in flora and fauna but the scale of change and associated effects will have no impact on public enjoyment. Indeed development will provide an opportunity for better viewing across the Forth of Clyde by improving access.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	The habitats within the site are of low ecological value
	Will the effect be unusual in the area or particularly complex?	No	The area is already developed.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Receptors are limited to a small area and it's associated species.
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	The development will be compliant with all known obligations.
	Is there a risk that protected sites, areas, features will be	No	There are no designated sites within the development area or within

	affected?		2km.
Probability of the impact	Is there a high probability of the effect occurring?		
	Is there a low probability of a potentially highly significant effect?	No	It is very low due to the limited range of features affected and the small scale of impact.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	Pile footprint is permanent.
	Will the effect be permanent rather than temporary?	Yes	See above.
	Will the impact be continuous rather than intermittent?	Yes	See above.
	If intermittent, will it be frequent rather than rare?	N/A	
	Will the impact be irreversible?	No	The building and it's infrastrucue could be removed at some time in the future.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	Yes	Effects are unavoidable.

2. Location of the Development		
Question	Yes/No	Brief Description
(a) Absorption capacity of the natural environment		
(ii) Is the development in a location where it is likely to be highly visible to many people?	Yes	The development is located to the south of West Clyde Street, A814. North: Helensburgh town centre with mixed Commercial and Residential Properties. South: Helensburgh Ferry Terminal and the Forth of Clyde water body with two slipways, one at each end. East: Unclaimed marine shore and Forth of Clyde water body. West: Unclaimed marine shore and Forth of Clyde water body. The development has been sensitively designed so that it fits in with the Masterplan approved by Argyll & Bute Council for the Pierhead. The existing setting is predominantly land in nature, and there will be clear visibility from the estuary.

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Development area covers the existing Helensburgh Pierhead only therefore any effects will be over a small area.
	Will many people be affected?	No	The areas to the south and east of the site are currently open water with 2 slipways, one at each end. The ares to the north is extensively developed, with a main road, commercial and private building. The site is bounded along west with an access to the old timber piers and 1 slipway.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	The habitats within the site are of low ecological value
	Will the effect be unusual in the area or particularly complex?	No	The area is already developed.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Receptors are limited to a small area.
	Will valuable or scarce features or resources be affected?	No	

	Is there a risk that environmental standards will be breached?	No	The development will be compliant with all known obligations.
	Is there a risk that protected sites, areas, features will be affected?	No	There are no designated sites within the development area or within 2km.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	See above.
	Is there a low probability of a potentially highly significant effect?	Yes	Risk has been managed as far as reasonably practicable through careful design of buildings.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	See above.
	Will the effect be permanent rather than temporary?	Yes	See above.
	Will the impact be continuous rather than intermittent?	N/A	
	If intermittent, will it be frequent rather than rare?	Yes	See above.
	Will the impact be irreversible?	Yes	Effects are unavoidable.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	See above.

2. Location of the Development		
Question	Yes/No	Brief Description
(a) Absorption capacity of the natural environment		
(iii) Is the location of the development susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the development to present environmental problems?	Yes	The proposed development is located in an area which has a high likelihood of coastal flood risk (an event which occurs on average one in ten years).

Question		**Yes/ No**	**Brief Reason for Conclusion**
Extent of the Impact	Will the effect extend over a large area?	No	Development area covers the existing Helensburgh Pierhead only therefore any effects will be over a small area.
	Will many people be affected?	No	Although it is acknowledged that the proposed development is in an area of high coastal flood risk, it is accepted that the risk can be managed through design and management procedures. The presence of the flood protection system will also help reduce localised wave action effects along the waterfront. The site ground level will be raised by 1.4m and it will be coastal protected with a reinforced concrete wall and rock armour revetment with the crest approximately 1.9m higher than the existing crest.
Magnitude and Complexity of the Impact	Will there be a large change in environmental conditions?	No	Modelling work carried out by Kaya Consulting Ltd in April 2018 indicates that raising the site as proposed would not have a significant effect on flooding risk elsewhere.
	Will the effect be unusual in the	No	It is predicted that at present the site would be

	area or particularly complex?		flooded on average` once every 5 years. Therefore, the site has to be raised and defended to allow new development.
	Will many receptors other than people (fauna and flora, businesses, facilities) be affected?	No	Receptors are limited to a small area.
	Will valuable or scarce features or resources be affected?	No	
	Is there a risk that environmental standards will be breached?	No	The development will be compliant with all known obligations.
	Is there a risk that protected sites, areas, features will be affected?	No	There are no designated sites within the development area or within 2km.
Probability of the impact	Is there a high probability of the effect occurring?	Yes	At present, the site is at risk of flooding from extreme tides, storm surges and waves.
	Is there a low probability of a potentially highly significant effect?	Yes	Risk can be managed through design and management procedures.
Duration, frequency and reversibility of the impact	Will the effect continue for a long time?	Yes	See above.
	Will the effect be permanent rather than temporary?	Yes	See above.
	Will the impact be continuous rather than intermittent?	N/A	
	If intermittent, will it be frequent rather than rare?	Yes	See above.
	Will the impact be irreversible?	Yes	Effects are unavoidable.
	Will it be difficult to avoid or reduce or repair or compensate for the effect?	No	Risk can be managed through design and management procedures.

APPENDIX 4 – PRE-APPLICATION CONSULTATION INFORMATION

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131-668-8716
HMConsultations@hes.scot

By email: elsa.simoes@argyll-bute.gov.uk

Argyll & Bute Council
Corporate and Legal Services
Kilmory
Lochgilphead
Argyll
PA31 8RT

Our ref: AMN/16/SA
Our case ID: 300026373
Your ref: ES/MS/PAC
19 March 2018

Dear Ms Simoes

Helensburgh Waterfront Development - Rock Armour Revetment

Thank you for your consultation which we received on 14 March 2018 seeking our comments on an Environmental Impact Assessment (EIA) screening opinion for the above proposed development. This letter contains our comments for our historic environment interests. That is world heritage sites, scheduled monuments and their setting, category A-listed buildings and their setting, gardens and designed landscapes and battlefields on their respective Inventories.

We note that a pre-application consultation event has been scheduled for 30 April, and a request made for any comments on the proposals at this stage. We have also received a separate consultation on the EIA screening of this project from Marine Scotland.

We are content that the Helensburgh Waterfront Development, including the proposed rock armour revetment, will not have significant impacts on our interests as identified above. We therefore have no advice to offer at this stage, and will not be attending the consultation event.

We recommend that you also consult directly with your council's archaeological and conservation advisors in relation to impacts on the historic environment. They may be able to offer advice on impacts beyond our remit, such as unscheduled archaeology.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Ruth Cameron, who can be contacted by phone on 0131 668 8657 or by email on Ruth.Cameron@hes.scot.

Yours sincerely

Historic Environment Scotland

Helensburgh Waterfront Development		
Notes from Meeting with Statutory Consultees 14.02.18		
	Statutory Consultee	**Info required for application**
1.0	**SEPA**	
1.1	Providing flood risk is no worse than we have already, in principle there would be no objection in terms of flood risk from the sea. Need to ensure mitigate any elements of risk. Consideration to be given to position of new building. Does moving location increase risk?	Flood Impact Assessment
1.2	Elevations and Sections across site required with levels so that comparison can be made to existing levels.	Site elevations, sections and levels.
1.3	As we are looking to reinforce the existing flood defences they don't foresee any regulatory issues.	Note
1.4	Query is there a Scoping Study covering more of Helensburgh Coastline in terms of flooding? Is there a flood risk management plan in place?	Note
1.5	As any potential retail element sits within the Coastal Floodplain this could potentially be against SPP.	Retail not part of application
1.6	No objection to car parking being in flood plain providing but appropriate emergency access should be in place. Resilience and Emergency Planning Officer to comment separately on Emergency issues.	Provide plan with emergency routes shown?
1.7	Drainage impact assessment required. No need to treat water from site draining into coastal waters (post meeting note SEPA confirmed in fact area is in Transitional waters so some SUDS required although not containment?). Query over what happens with existing drains?	Provide DIA report. Look at means of creating some SUDS. Provide copy of existing drainage survey.
2.0	**Biodiversity Officer and SNH**	
2.1	SNH enquired if Ecology Survey to be carried out? Consideration to be given to seals and harbour porpoises in particular.	Ecology Survey
2.2	EIA screening to be issued to planning for comment.	EIA screening opinion
2.3	Marine litter issue was raised? Does our	Establish if there

	proposals have any effect on this? Is it an issue on the current site?	is a current issue with Marine Litter through discussions with Amenity Services.
2.4	Biodiversity Officer asked the question over what is being done regarding marine litter on the site. The idea is that it shouldn't become a litter "sink".	Provide statement as part of design statement in PAC report.
2.5	Consideration to be given how development looks from sea?	3D images
3.0	**WOSAS (West of Scotland Archaeology Service).**	
3.1	1st pier may be preceded by another element. Chance there may be deposits of pre-historic elements surviving in soft mud. Possible maritime elements to be excavated.	Provide details of connections of new toe of rock armour to seabed/ rocks? Provide sections and copy of GI report.
3.2	Question raised will other slip (currently blocked) to the East be opened for ease of access to the beach.	Provide details of access proposals.
4.0	**Development and Infrastructure Technical Officer**	
4.1	Confirmation that no Road Construction Consent is required.	Note
4.2	Parking survey and Traffic Impact Assessment required.	Parking Survey Report/ Traffic Impact Assessment
4.3	Need to look at traffic volumes at junction and if improvements are required?	Traffic Impact Assessment
4.4	Method statement and plan required for phasing of work to also include volumes of materials to be transported to site (flood defences).	Traffic Impact Assessment
5.0	**Scottish Water**	
5.1	Confirmation that Combined sewer across top of site however only connection allowed will be foul.	Note
5.2	Wastewater from swimming pool normally discharged into foul. Are we are increasing volume of pool water discharge?	Calculations for pre and post construction pool discharge loads to be provided.
6.0	**Historic Environment Scotland (not present)**	
6.1	Planning officer asked if images could be	Images, rationale

	presented that show relationship of development in context of listed buildings.	to be included in Design Statement
7.0	**Environmental Health**	
7.1	Query if there will be piling on site. Provide a Noise Impact Assessment as part of planning application.	Noise Impact Assessment

SEPA
Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

Our ref: PCS/156043
Your ref:

[Redacted]

If telephoning ask for:
[Redacted]

4 December 2017

By email only to: [Redacted]

Dear Sir

Pre-planning enquiry
Proposed Sea Defence Works
Helensburgh Waterfront Development

Thank you for your consultation email which SEPA received on 13 November 2017.

If formally consulted through the planning process on the proposed development we would be unlikely to object on flood risk grounds based on the information supplied with this consultation. Notwithstanding this we would expect Argyll and Bute Council to undertake their responsibilities as the Flood Risk Management Authority.

Our pre-application advice relies on the accuracy and completeness of the information supplied with this consultation. Should finalised development proposals differ in any future planning application we reserve the right to alter our position if we are of the opinion that such proposals would not meet with the principles of Scottish Planning Policy.

1. Flood Risk

1.1 Having reviewed the proposed levels provided by AECOM, we are satisfied that they provide adequate freeboard and protection for this development.

1.2 When land raising is proposed within the functional floodplain, we would typically expect the applicant to provide compensatory storage to offset the loss of flood plain storage. However, as this proposals involves land raising on an area of open coast, there are (a) none or virtually no dominant river processes, and (b) the volume of water from coastal inundation is so significant that loss of adjacent land (via land raising) makes no difference to the depth or extent of inundation. As such, compensatory storage is not required.

1.3 As proposals do not introduce an element of overnight accommodation onto the site, we do not require details on how access and egress will be maintained during a flood event. However, as per our Development Management Guidance, this development may expose people to risk, and we will therefore recommend the provision of safe access and egress as good practice, (DM. 86, page 57).

Angus Smith Building
6 Parklands Avenue, Eurocentral,
Holytown, North Lanarkshire ML1 4WQ
tel 01698 839000 fax 01698 738155
www.sepa.org.uk • customer enquiries 03000 99 66 99

2. Flood Risk Cavats and Additional Information

2.1 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km^2 using a Digital Terrain Model (DTM) to define river cross-sections and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland. For further information please visit http://www.sepa.org.uk/environment/water/flooding/flood-maps/.

2.2 We refer the applicant to the document entitled: "*Technical Flood Risk Guidance for Stakeholders*". This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from http://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf Please note that this document should be read in conjunction with Policy 41 (Part 2).

2.3 Our Flood Risk Assessment checklist should be completed and attached within the front cover of any flood risk assessments issued in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist our review process. It can be downloaded from http://www.sepa.org.uk/media/159170/flood-risk-assessment-checklist.xls.

2.4 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.

3. Regulatory advice for the applicant

3.1 Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs).

3.2 Details of regulatory requirements and good practice advice for the applicant can be found on the Regulations section of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory team in your local SEPA office at:

SEPA Balloch
Carrochan
Carrochan Road
Balloch
G83 8EG
Tel: (0141) 945 6350

If you have any queries relating to this letter, please contact me by telephone on [Redacted] or by e-mail to planning.sw@sepa.org.uk .

Yours

[Redacted]
Planning Officer
Planning Service

Disclaimer
This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our website planning pages.

Summary of Statutory Consultee Responses

1.1 Scottish Natural Heritage (SNH) and Argyll & Bute Biodiversity Officer

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by SNH and the Argyll & Bute Biodiversity Officer. Details of the comment and the information required for the planning application are summarised in the table below.

Biodiversity Officer and SNH	Information Required for application
SNH enquired if Ecology Survey to be carried out? Consideration to be given to seals and harbour porpoises in particular.	Ecology Survey
EIA screening to be issued to planning for comment.	EIA screening opinion
Marine litter issue was raised? Does our proposals have any effect on this? Is it an issue on the current site?	Establish if there is a current issue with Marine Litter through discussions with Amenity Services.
Biodiversity Officer asked the question over what is being done regarding marine litter on the site. The idea is that it shouldn't become a litter "sink".	Provide statement as part of design statement in PAC report.
Consideration to be given how development looks from sea?	3D images

1.2 Scottish Environment Protection Agency (SEPA)

A pre-planning enquiry response was received from SEPA in December 2017 which stated that if formally consulted through th planning process on the proposed HWD they would be unlikely to object on flood risk grounds based on the information supplied with this consultation. Notwithstanding this they confirmed that they would be expect Argyll & Bute Council to undertake their responsibilities as the Flood Management Authority.

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by SEPA. Details of the comment and the information required for the planning application are summarised in the table below.

SEPA Comments	Information Required for application

Providing flood risk is no worse than we have already, in principle there would be no objection in terms of flood risk from the sea. Need to ensure mitigate any elements of risk. Consideration to be given to position of new building. Does moving location increase risk?	Flood Impact Assessment
Elevations and Sections across site required with levels so that comparison can be made to existing levels.	Site elevations, sections and levels.
As we are looking to reinforce the existing flood defences they don't foresee any regulatory issues.	Note
Query is there a Scoping Study covering more of Helensburgh Coastline in terms of flooding? Is there a flood risk management plan in place?	Note
As any potential retail element sits within the Coastal Floodplain this could potentially be against SPP.	Retail not part of application
No objection to car parking being in flood plain providing but appropriate emergency access should be in place. Resilience and Emergency Planning Officer to comment separately on Emergency issues.	Provide plan with emergency routes shown?
Drainage impact assessment required. No need to treat water from site draining into coastal waters (post meeting note SEPA confirmed in fact area is in Transitional waters so some SUDS required although not containment?). Query over what happens with existing drains?	Provide DIA report. Look at means of creating some SUDS. Provide copy of existing drainage survey.

1.3 West of Scotland Archaeology Service

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by West of Scotland Archaeology Service (WoSAS). Details of the comment and the information required for the planning application are summarised in the table below.

WoSAS Comments	Information Required for application
1st pier may be preceded by another element. Chance there may be deposits of pre-historic elements surviving in soft mud. Possible maritime elements to be excavated.	1st pier may be preceded by another element. Chance there may be deposits of pre-historic elements surviving in soft mud. Possible maritime elements to be excavated.

Question raised will other slip (currently blocked) to the East be opened for ease of access to the beach.	Question raised will other slip (currently blocked) to the East be opened for ease of access to the beach.

1.4 Argyll & Bute Council Development and Infrastructure

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by Argyll and Bute Councils Developemnt and Infrastructure team. Details of the comment and the information required for the planning application are summarised in the table below.

Development and Infrastructure Comments	Information Required for application
Confirmation that no Road Construction Consent is required.	Note
Parking survey and Traffic Impact Assessment required.	Parking Survey Report/ Traffic Impact Assessment
Need to look at traffic volumes at junction and if improvements are required?	Traffic Impact Assessment
Method statement and plan required for phasing of work to also include volumes of materials to be transported to site (flood defences).	Traffic Impact Assessment

1.5 Scottish Water

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by Scottish Water. Details of the comment and the information required for the planning application are summarised in the table below.

Scottish Water Comments	Information Required for application
Confirmation that Combined sewer across top of site however only connection allowed will be foul.	Note
Wastewater from swimming pool normally discharged into foul. Are we are increasing volume of pool water discharge?	Calculations for pre and post construction pool discharge loads to be provided.

1.6 Historic Environment Scotland

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by the planning officer on behalf of Historic Environment Scotland (HES). Details of the comment and the information required for the planning application are summarised in the table below.

Comments raised by planning officer on behalf of Historic Environment Scotland	Information Required for application
Planning officer asked if images could be presented that show relationship of development in context of listed buildings.	Images, rationale to be included in Design Statement

HES were consulted as part of the request for a EIA Screening Opinion from MS-Lot. A response was received from HES dated 14th March 2018 which stated that they were content that the Helensburgh Waterfront Development, including the proposed rock armour revetment, will not have significant impacts on their interests.

1.7 Argyll and Bute Council Environmental Health

At a pre-application meeting held with statutory consultees on the 14th February 2018 several comments/queries were raised by Argyll and Bute Councils Environmental Health DEpartment. Details of the comment and the information required for the planning application are summarised in the table below.

Comments raised by planning officer on behalf of Historic Environment Scotland	Information Required for application
Query if there will be piling on site. Provide a Noise Impact Assessment as part of planning application.	Noise Impact Assessment

1.8 Northern Lighthouse Board

Northern Lighthouse Board were consulted as part of the request for a EIA Screening Opinion from MS-Lot. A response was received from the Northern Lighthouse Board dated 20th March 2018 which stated that they had no objections to the HWDL, including the proposed rock armour revetment, and will will reply formally in response to the Marine Licence application.

APPENDIX 5 – TECHNICAL ASSESSMENTS

The following technical reports are provided separately:

1. Geo-environemntal Interim Report , Patrick Parsons Limited (February 2018)
2. Preliminary Ecological AppraisAL, Echoes Ecology Ltd (March 2018)
3. Topographics, Bathymetric & 3D laser Scan Survey, Aspect Land and Hydrographics (July 2017)
4. Flood Risk Assessment, Kaya Consulting Ltd (April 2018)