

MWP

Outline Construction Environmental Management Plan (OCEMP)

**Magherabeg Beach Facility Centre for Water Sport
Activities**

Kerry County Council

August 2025

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MWP, Engineering and Environmental Consultants

Address: Reen Point, Blennerville, Tralee, Co. Kerry, V92 X2TK, Ireland

www.mwp.ie



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1. Introduction

This Outline Construction and Environmental Management Plan (OCEMP) has been prepared by Malachy Walsh and Partners (MWP) on behalf of Kerry County Council (KCC) in respect of a proposed facility centre for water sport activities at Maherbeg Beach, Castlegregory, Co. Kerry.

This OCEMP outlines construction practices and environmental management measures which will be implemented during the construction phase, in order to ensure that the project is constructed in accordance with best practice, with the minimum impact on the surrounding environment.

1.1 CEMP Purpose & Objectives

The purpose of a CEMP is to outline how the Contractor(s) will implement a Site Construction Management System to meet the specified requirements which include contractual, regulatory and statutory requirements, environmental mitigation measures and planning conditions.

This outline CEMP achieves this by providing the environmental management framework to be adhered to during the pre-commencement, and construction phase of the Project. It outlines the work practices, construction management procedures, management responsibilities, general control and mitigation measures, as well as monitoring proposals that are required to be adhered to in order to construct the works in an appropriate manner.

This OCEMP is a 'live' document and shall be updated by the contractor as project progresses and construction methodologies are finalised. In particular, the CEMP will be updated to ensure the minimum requirements of all relevant planning conditions are incorporated.

2. Project Overview

The proposed development site is located within the townland of Magherabeg, approximately 2.9 km north of Castlegregory village on the Dingle Peninsula, Co. Kerry. The site is situated along Magherabeg Beach on the eastern side of the Magharees tombolo.

The proposed facility will contain a number of resources such as indoor and outdoor showers and serviced toilets, as well as external and internal seating. The proposed facility will also include a multi-functional outdoor induction space for operators and visitors. Ancillary upgrade works, including ancillary upgrade of existing beach access ramp to provide universal beach access, complementary with the blue flag beach designation, are also proposed. The proposed beach access ramp upgrade works will be confined to the footprint of the existing ramp, avoiding sensitive adjoining habitats. A new wastewater and separate stormwater treatment system are proposed to be constructed on-site, and these will replace the existing system and improve wastewater and stormwater management on-site.

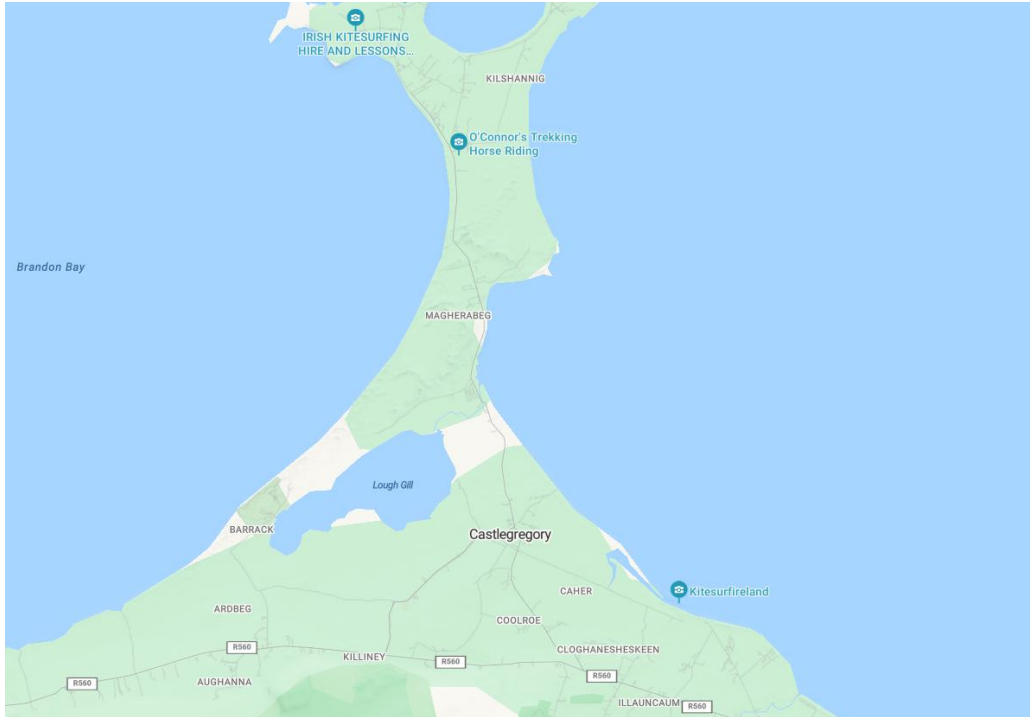


Figure 2-1 Site Location

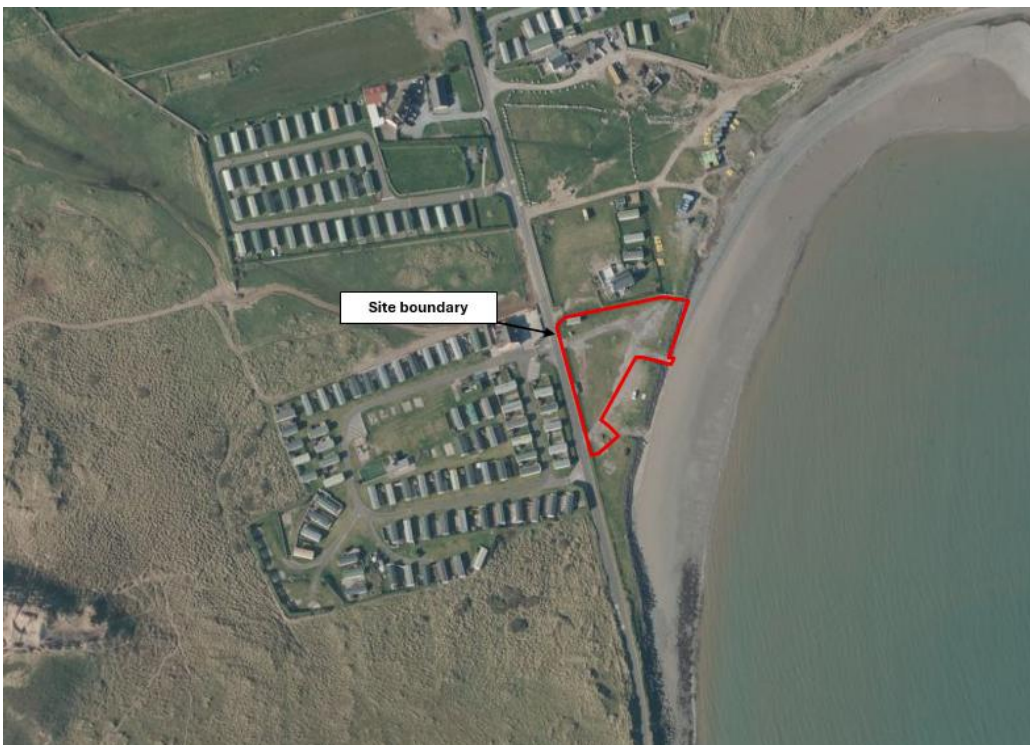


Figure 2. Proposed development site boundary

3. Construction Works

The construction phase of the development will include the removal and demolition of the existing septic tank and concrete apron that the seasonal facilities are situated on. The construction work includes a new shared water-sports facility, wastewater treatment system, percolation area, 2 new disabled parking spots, improvement of vehicle entrance at south side of the facility and upgrading the existing beach access at the east of the site.

The seasonal facilities already on site are accessible from March to October yearly. This will be removed and the concrete apron they are situated on will be demolished. This consists of 100mm of unreinforced slab, and the existing septic tank that these facilities are serviced by will be emptied and removed from the site.

All the existing site surfaces will then be cleared and excavated to formation level. Any of the excavated material will be reused on site. There are already existing services on the site for power and water, and the new community shared facility will be tied into these.

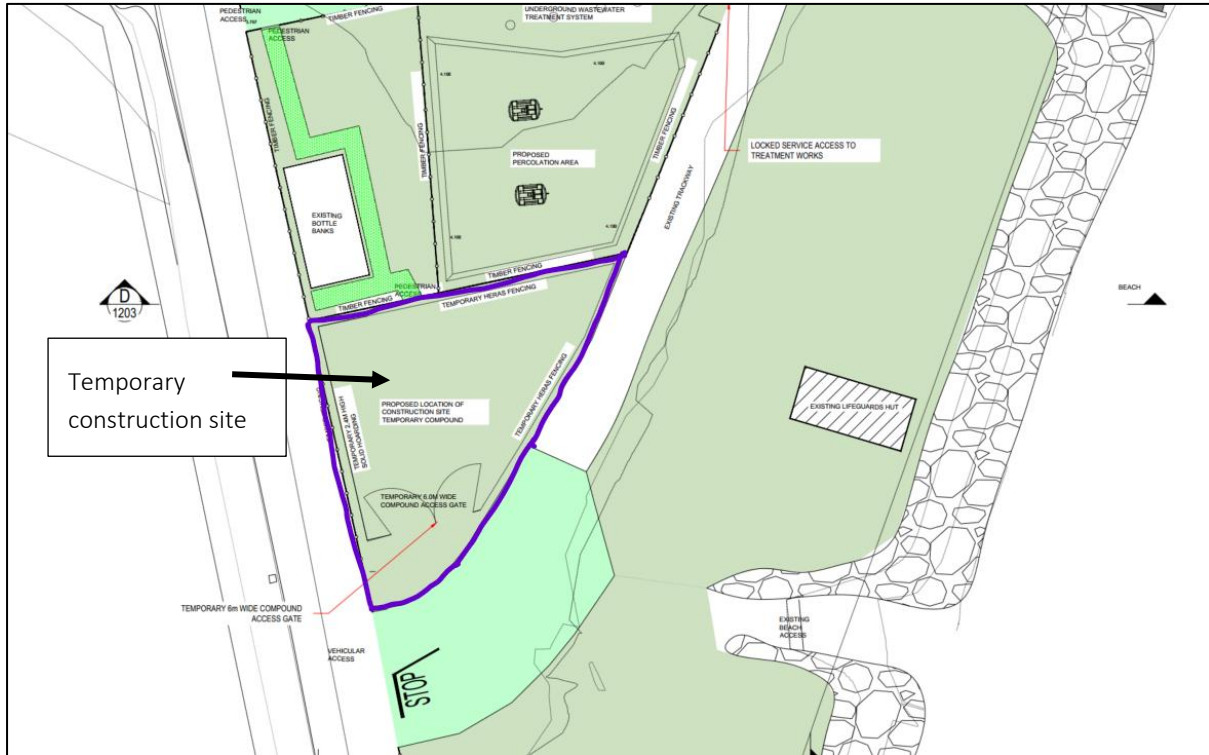
A new wastewater treatment system and percolation area will be constructed in the amenity area. This will be a tertiary treatment system with a polishing filter. Storm water will be directed to the new percolation area for drainage. Following installation, the area will be reinstated with topsoil.

The new building structure and surrounding area will consist of standard construction materials such as reinforced concrete, wood, stone, metal cladding and plastics. The building fit out will consist of standard materials such as tiling, sanitary ware, electrical and plumbing materials.

3.1 Construction Methodology and Activities

3.1.1 Mobilisation, Site Preparation, Compound Setup and Site Securing

- strip topsoil 100mm deep x 240m² and stockpile on site for redistribution on completion,
- bulk excavate sand subsoil and stockpile on site for redistribution on completion
- Import material from local quarry and roll in to form compound platform (60m³). Compound base to be retained on completion and sand and topsoil reinstated over.
- Provide 2.40m high solid hoarding to roadside of compound with 6,0m access gates and fencing to remaining compound perimeter and overall site perimeter



3.1.2 Existing Site Clearance, Site Stripping and stockpiling, Securing and Isolating existing services, demolitions, Excavations, Fill

- strip existing topsoil around facility structures (150m³) and store on site in WWTP and Percolation areas location for re-distribution on completion.
- bulk excavate for facility main structure and retaining walls, stockpile sand on site for redistribution on completion. Formation for retaining walls 2.60mOD, total volume 145m³. Formation for facility structure 3.420mOD total volume 32m³
- Secure and isolate existing services i.e. water, power and sewer to existing toilets and septic tank
- demolish existing site structures including toilets slab, stone seating, signage, entrance posts and barrier, timber fencing, relocate toilets structure, bottlebanks and storage container off site
- Excavations and filling for new underground services including foul, storm, water power and comms trenching and filling, ducting and chambers, total excavation to be stockpiled on site and redistributed 160m³, Imported fill peagravel surround 50m³
- bulk excavations for WWT plant, formation 0.5mOD. Total Excavation 110m³ to be stockpiled and redistributed on site. Imported fill base to system tanks 16m³.

3.1.3 Demolition/Removal methodology for the septic tank

- Client and PSDP to identify all associated structures and services to demolitions Contractor at tender stage as part of the project Safety File. Designers to provide Risk Assessments, PSDP to provide Preliminary Safety and Health Plan
- Disconnect, make safe and isolate all services to the existing temporary structure toilets block including, water, foul, stormwater and power.
- The septic tank will undergo complete drainage and desludging by an **appropriately licensed operator**.

- All materials extracted during this process will be transported to a duly **licensed waste facility** for proper treatment.
- Contractor will maintain a **comprehensive record** of all decommissioning activities, encompassing detailed documentation such as **waste transfer docket**s and evidence of completed works.
- Clients to remove toilet block off site once disconnected and made safe
- Break up concrete apron and remove off site
- Flush foul pipework and desludge septic tank, effluent to nearest wastewater treatment plant
- record line of pipework and location of septic tank and estimated percolation area for future works
- excavate and remove existing foul pipework to appropriate certified facility by licenced haulier from previous toilets location to septic tank, backfill trench with imported stone and topsoil over
- Remove septic tank cover slab off site to appropriate certified facility by licenced haulier
- clean down and drain septic tank and remove effluent to nearest wastewater treatment plant
- breakout and remove existing septic tank walls and floor as well as any contaminated surrounding fill to an appropriate certified facility by licenced haulier from previous toilets location to septic tank, backfill with imported stone and topsoil over
- Flag locations of all to future Main Works Contractor, Clients and Design Team by marking on the ground with permanent markers
- Demolitions Contractor to provide programme, RAMS, proposed temporary works and detailed methodology prior to works commencing and provide PSDP with all relevant Safety File information on completion

3.1.4 Substructures

- Main Facility Building
- Ancillary Binstore and Plant Room Building

3.1.5 Site service

- Site services incl foul, storm, water, comms ducting and services, total 160 linear m
- WWT system infrastructure with 200m² formed raised percolation
- 30m³ stone filled stormwater percolation area

3.1.6 Other Site Structures

- concrete footpath/ramps (188m²)
- suspended 2m/3m wide timber boardwalk with 1.2m high timber railings
- Seasonal Toilets concrete slab
- Bicycle stand concrete slab
- Walkway/Boardwalk Intersection concrete apron
- 1.1m high metal handrails,
- DBM travelways incl roadways and parking, entrance/exit pavement and accessway,
- grasscrete walkway to recycling centre

3.1.7 1.5m high Timber Fencing and galvanised decorative Gates

- Timber rails
- Timber posts
- Concrete base to posts,
- 3.0m wide decorative double gates with 2 nr 100x100 metal gateposts per pair
- concrete bases to gateposts Soft Landscaping
- topsoiling, planting native species, bulk earthworks

3.2 Construction Duration

Estimated Construction period – 10-12 months

3.3 Working Hours

Working hours will be.

8:00am – 6:00pm (Monday – Friday inclusive)

8:00am – 2:00pm (Saturday)

No works on Sundays or Bank Holidays without prior written agreement with KCC.

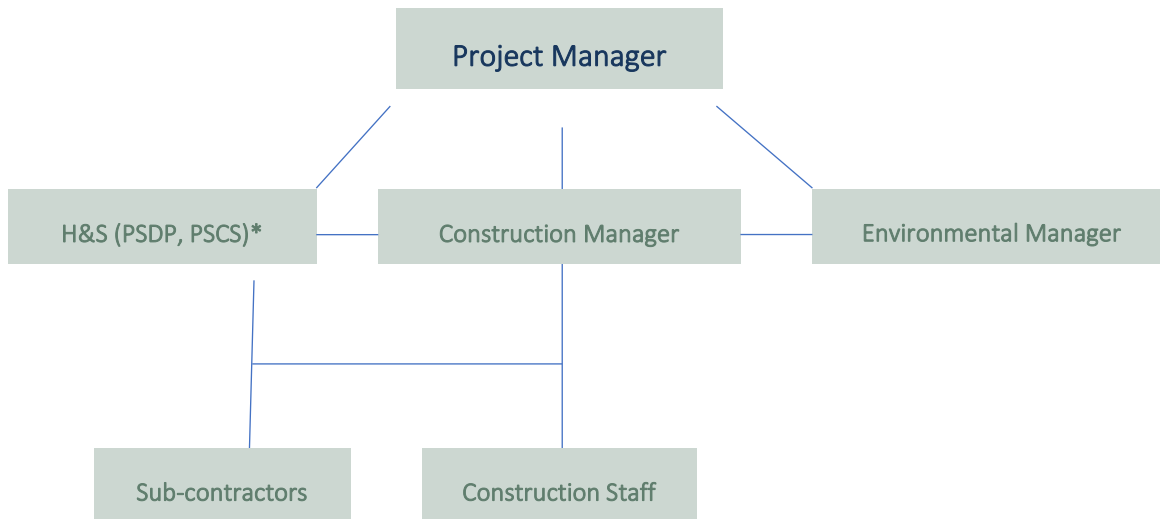
3.4 Welfare Facilities

Portable toilet facilities will be used on site during construction.

4. Organisational Structure, Duties and Responsibilities

4.1 On Site Organisational Structure and Responsibility

The Organisational Structure for the Contractor’s Project Team is included below. This structure is defined by the Contractor and includes the names of the assigned personnel with the appropriate responsibility and reporting structure reflected



*H&S – Health and Safety

*PSDP – Project Supervisor Design Process

PSCS – Project Supervisor Construction Stage

The Contractor will select the Project Team for the construction of the Project. The Contractor’s Project Team will include an overall Project Manager, whose duties will stretch beyond the day-to-day works to budgetary, procurement and scheduling matters. The selected Construction Manager will have overall responsibility for the construction site personnel carrying out the works and the Construction Manager will report to the Project Manager.

An Environmental Manager will be appointed for the duration of the works and will report to the Project Manager. The Construction Manager will communicate regularly with the Environmental Manager to ensure mitigation measures are applied to specific works. The Environmental Manager will carry out tasks as required, including installation and maintenance of sediment control measures and implementing and maintaining approved waste management control measures. The use of dedicated staff, under the direction of the Environmental Manager, will ensure the environmental controls are in situ ahead of the works on site.

4.2 Duties and Responsibilities

The general role of key people on site implementing the CEMP will be:

- The Project Manager - liaises with the Project Team in assigning duties and responsibilities in relation to the CEMP to individual members of the main contractor(s)'s project team.
- The Construction Manager - liaises with the Environmental Manager when preparing site works where there is a risk of environmental damage and manages the construction personnel and general works.
- The Design Engineer - undertakes and certifies the Design and supervises the standard of works, including geotechnical aspects (Geotechnical engineer may need to be consulted).
- The Environmental Manager - ensures that the CEMP is developed, implemented and maintained. The Environmental Manager's tasks at the construction-site are described below at **Section 4.2.4**. To ensure adequate cover of environmental tasks, waste management tasks and responsibilities, dedicated construction staff will be assigned to the Environmental Manager.

Other Roles include:

- Health and Safety (PSDP and PSCS);
- Specialist environmental contractors (if required);
- Geotechnical engineer (if required).

4.2.1 Project Manager

A Project Manager is to be appointed on behalf of the main Contractor(s) to manage and oversee the entire project. The Project Manager is responsible for:

- Implementing of the Construction and Environmental Management Plan (CEMP);
- Implementing the Health and Safety Plan;
- Management of the construction project;
- Liaison with the client/developer;
- Liaison with the Project Team;
- Assigning duties and responsibilities in relation to the CEMP;
- Production of construction schedule;
- Materials procurement; and
- Maintaining a site project diary.

4.2.2 Construction Manager

Name: TBC

The Construction Manager manages all the works to construct the project, on behalf of the Contractor. The Construction Manager reports to the Project Manager. In relation to the CEMP, the Construction Manager is responsible for:

4.2.2.1 Site-Specific Method Statements

- Liaising with the Environmental Manager in preparing site-specific Method Statements for all Works activities where there is a risk of environmental damage, by incorporating relevant Environmental Control Measures and referring to relevant Environmental Control Measure Sheets;
- Liaising with the Environmental Manager in reviewing and updating site-specific Method Statements for all Works activities where Environmental, Resource & Waste Management Control Measures and Environmental Control Sheets have been altered; and
- Liaising with the Environmental Manager where third party agreement is required in relation to site-specific Method Statements, Environmental, Resource & Waste Management Control Measures and/or Environmental Control Measure Sheets.

4.2.2.2 General

- Being aware of all project Environmental Commitments and Requirements;
- Ensuring that all relevant information on project programming, timing, construction methodology, etc., is communicated from the Project Manager, to the Environmental Manager in a timely and efficient manner in order to allow pre-emptive actions relating to the environment to be taken where required;
- Programming and planning of excavation works and communicating this schedule to the Environmental Manager;
- Ensuring that adequate resources are provided to design and install any environmental interventions;
- Liaising with the Project Team in assigning duties and responsibilities in relation to the CEMP to individual members of the Contractor's project staff;
- Ensuring that the Environmental Manager performs regular and frequent environmental site inspections; and
- Reviewing and approving all waste management control measures ensuring compliance with National and International Waste legislation and best practice.

4.2.3 Design Engineer

Name: TBC

The Design Engineer is responsible for:

- Design of the Works;
- Review and approval of relevant elements of the method statements – assist the Construction Manager with the overall review;
- Participating in Third Party Consultations; and

- Liaising with Third Parties through the Environmental Manager.

-

4.2.4 Environmental Manager

Name: TBC

The Environmental Manager is responsible for:

General

- Being familiar with the project environmental commitments and requirements;
- Being familiar with baseline data gathered for the various environmental assessments and during pre-construction surveys;
- Assisting the Construction Manager with the provision of the information on environmental management during the course of the construction phase;
- Liaising with the Project Team in assigning duties and responsibilities in relation to the CEMP to individual members of the Contractor's project staff;
- Implementing the environmental procedures of the CEMP;
- Liaising with the Construction Manager to ensure that the control measures set out in the Schedule of Environmental Mitigation are implemented;
- Liaising with the client/developer in relation to environmental issues; and
- Auditing the construction works from an environmental viewpoint.

Site-Specific Method Statements

- Liaising with the Construction Manager in preparing site-specific Method Statements for all Works activities where there is a risk of environmental damage. These site-specific Method statements should incorporate relevant Environmental Control Measures and take account of relevant Environmental Control Measure Sheets;
- Liaising with the Construction Manager in reviewing and updating site-specific Method Statements for all Works activities where Environmental Control Measure and Environmental Control Sheets have been altered; and
- Liaising with the Construction Manager where third party agreement is required in relation to site-specific Method Statements, Environmental Control Measures and/or Environmental Control Measure Sheets.

Third Party Consultations

- Overseeing, ensuring coordination and playing a lead role in third party consultations required statutorily, contractually and in order to fulfil best practice requirements;
- Ensuring that the minutes of meetings, action lists, formal communications, etc., are well documented and that the consultation certificates are issued as required;
- Liaising with all prescribed bodies during site visits, inspections and consultations;

- Where new Environmental Control Measures are agreed as a result of third party consultation, ensuring that the CEMP is amended accordingly;
- Where new Environmental Control Measures are agreed as a result of third party consultation, the Environmental Manager should liaise with the Construction Manager in updating relevant site-specific Method Statements; and
- Where required, liaising with the Construction Manager in agreeing site-specific Method Statements with third parties.

Licensing

- Ensuring that all relevant works have (and are being carried out in accordance with) the required permits, licences, certificates, planning permissions, etc.;
- Liaising with the designated licence holders with respect to licences granted pursuant to the Wildlife Act, 1976, as amended (if required); and
- Bringing to the attention of the Project, Design and Construction Team any timing and legal constraints that may be imposed on the carrying out of certain tasks.

Resource & Waste Management Documentation

- Holding copies of all permits and licences provided by waste contractors;
- Ensuring that any operations or activities that require certificates of registration, waste collection permits, waste permits, waste licences, etc., have appropriate authorisation; and
- Gathering and holding documentation with the respect to waste disposal.

Legislation

- Keeping up to date with changes in environmental legislation that may affect environmental management during the construction phase;
- Advising the Construction Manager of these changes; and
- Reviewing and amending the CEMP in light of these changes and bringing the changes to the attention of the Contractor's senior management and subcontractors.

Specialist Environmental Contractors

- Identifying requirements for specialist environmental contractors (including ecologists, asbestos, waste contractors and spill clean-up specialists) before commencement of the Project;
- Procuring the services of specialist environmental contractors and liaising with them with respect to site access and report production;
- Ensuring that the specialist environmental contractors are competent and have sufficient expertise to co-ordinate and manage environmental issues; and
- Co-ordinating the activities of all specialist environmental contractors on environmental matters arising out of the contract.

Environmental Induction Training and Environmental Toolbox Talks

- Ensuring that Environmental Induction Training is carried out for all the Contractor's site personnel. The induction training may be carried out in conjunction with Safety Induction Training;

- Providing toolbox talks on Environmental Control Measures associated with Site-specific Method Statements to those who will undertake the work;

Environmental Incidents/Spillages

- Prepare and be in readiness to implement at all times an Emergency Response Plan;
- Notifying the relevant statutory authority of environmental incidents;
- Carrying out an investigation and producing a report regarding environmental incidents. The report of the incident and details of remedial actions taken should be made available to the relevant authority, and the Construction Manager;
- The Site Environmental Manager shall notify the Client of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services or where any pollution events occur, the Client shall be notified within 1 hour; and
- In the event of encountering a spillage or contaminated land/buried waste being encountered the Environmental Manager will contact MWP - Engineering and Environmental Consultants who have at their disposal Environmental Engineers and Scientists with experience in addressing spillage or contaminated land/buried waste. MWP have personnel based in three offices in Ireland and will be available to dispatch suitably qualified and experienced personnel at short notice in the event of an Environmental Incident.

Site Environmental Inspections and Auditing

- Carrying out regular documented inspections of the Site to ensure that work is being carried out in accordance with the Environmental Control Measures and relevant site-specific Method Statements, etc.,
- Carrying out inspections of the site drainage system;
- Appending copies of the inspection reports to the CEMP;
- Liaising with the Construction Manager to organise any repairs or maintenance required following the daily inspection of the Site;
- Accommodate audits by the Employer and/or independent auditing consultants during the Project;
- Accommodate third party environmental auditing when required;
- During audits, the Environmental Site Manager shall make the necessary staff available during each audit and provide access to all documentation and site areas (and provide necessary induction and training to allow access where required);
- If there are any adverse findings arising from the environmental audits, the Environmental Site Manager shall be required to take prompt mitigation actions and provide written reports to the Employer detailing such mitigation; and
- The Environmental Site Manager shall notify the Employer of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services or where any pollution events occur, the Employer shall be notified within 1 hour.

Note: Communication in respect of the project to regulatory or statutory bodies shall be undertaken by the Employer, unless otherwise agreed, except in the case of incident notification.

Environmental Records

The Construction Environmental Manager shall provide all CEMP documentation to the Client on completion of the site works. Reports arising during the site works, such as verification reports or waste disposal records shall be provided to the Client within one month of completion of the activity and may be subject to review.

4.2.5 Site Personnel

All Contractors, and other site personnel, on the project will adhere to the following principal duties and responsibilities:

- To co-operate fully with the Project Manager/Environmental Manager in the implementation and development of the CEMP at the site;
- Adhering to the relevant Environmental Control Measures and relevant site-specific Method Statements
- To conduct all their activities in a manner consistent with regulatory and best environmental practice;
- To participate fully in the environmental training programme and provide management with any necessary feedback to ensure effective environmental management at the site; and
- Adhere fully to the requirements of the site environmental rules.
- Adhering to the Health and Safety Plan;
- Reporting immediately to the Environmental Manager and Construction Manager any incidents where there has been a breach of agreed procedures including:
 - A spillage of potentially environmentally harmful substance;
 - An unauthorised discharge to ground, water or air etc

4.2.6 Other Roles

4.2.6.1 Health and Safety Personnel

The Health and Safety personnel for the construction project is appointed by the Contractor in line with the Construction Regulations:

- Carrying out duty of Project Supervisor Construction Stage (PSCS);
- Responsible for safety induction of all staff and personnel on-site;
- Implementing the Health and Safety Plan;
- Auditing and updating the Health & Safety Plan; and
- All other required legal duties.

4.2.6.2 Specialist Environmental Contractors

- Identifying requirements for specialist environmental contractors (including ecologists, asbestos/waste contractors and spill clean-up specialists) before commencement of the project;

- Procuring the services of specialist environmental contractors and liaising with them with respect to site access and report production;
- Ensuring that the specialist environmental contractors are competent and have sufficient expertise to co-ordinate and manage environmental issues, and
- Co-ordinating the activities of all specialist environmental contractors on environmental matters arising out of the contract.

4.3 Contacts

4.3.1 Main Contractor Details

Table 4-1: Main Contractor Contacts

Position Title	Name	Phone	Email
Main Contractor	TBC		
Project Manager	TBC		
Construction Manager	TBC		
Environmental Manager*	TBC		
Safety (PSCS)*	TBC		
Safety Manager*	TBC		
Site Emergency Number*	TBC		
Resource & Waste Management Coordinator	TBC		
Overall Project PSDP	TBC		

**24 hour contact details required*

4.3.2 Employer Details

Table 4-2: Employer Contacts

Position Title	Organisation	Name	Phone	Email
Employer	Kerry County Council	XXX	XXXX	XXXX

4.3.3 Third Party Contacts

Table 4-3: Third Party Contacts

Organisation:	Position:	Name/Address	Phone:	Email Address:
Inland Fisheries Ireland	Dublin Office	Inland Fisheries Ireland Sunnyside House Co. Cork P12 X602 Ireland	+353 (0) 26 41222	macroom@fisheriesireland.ie
National Parks and Wildlife Service	South Western Division	National Parks & Wildlife Service 90 King Street North Dublin 7 D07 N7CV IRELAND	064 6670 166	nature.conservation@chg.gov.ie
Environmental Protection Agency (EPA)	EPA Regional Inspectorate Cork	EPA Cork Inniscarra County Cork P31 VX59	(021) 487 5540	info@epa.ie
Local Authority	Kerry County Council	Kerry County Council, Room 13, Planning Department, Rathass, Tralee, Co. Kerry. V92 H7VT	(066) 7183582	plan@kerrycoco.ie
Health and Safety Authority	HSA Contact Centre	HSA Contact Centre Health and Safety Authority Metropolitan Building James Joyce Street Dublin 1	0818 289 389	contactus@hsa.ie
Emergency Services	An Garda Síochána Castlegregory Garda Station	Castlegregory Garda Station, Main Street, Castlegregory, Co. Kerry, T92 X6D2	(066) 713 9690	KY.KerryCounty.CE@garda.ie
Emergency Services	Ambulance and Fire Service	Ambulance and Fire Service	999 or 112	

5. Environmental Commitments

5.1 Auditing and Monitoring

A Preliminary Monitoring Schedule is provided below (Table 5-1) and will be finalised pending appointment of the Contractor.

The Contractor will assign a full-time Environmental Manager who will visit the site regularly to monitor the construction activities on a day to day basis. The duties will include completing the required checklists (sample checklist included below) and coordinating with the relevant personnel (e.g. Design Engineer as required) ensuring all environmental monitoring is carried out.

Table 5-1: Example of Environmental Monitoring Schedule

Aspect	Area of Inspection	Monitoring Required	Note/Checks	Frequency	Responsibility
Surface Water Run-off Controls	Weather Forecast	Met Éireann download	<ul style="list-style-type: none"> Pre-determined rainfall trigger levels (e.g. 1 in 5-year storm event or heavy rainfall at >25mm/hr) 	Regular/daily/weekly during the construction phase as well as during and after significant rainfall events	Environmental Manager
	Discharges from on-site sediment and erosion controls	Visual inspection	<ul style="list-style-type: none"> Colour, presence of silts 	Weekly	Environmental Manager
Water quality monitoring	Discharges from on-site sediment and erosion controls	Visual inspection	<ul style="list-style-type: none"> Unacceptable level of sediment/silt on the road surface Presence of waste 	Weekly	Environmental Manager
	Internal site road Site Entrance	Visual inspection	<ul style="list-style-type: none"> Unacceptable level of sediment/silt on the road surface Presence of waste Surface Condition 	Daily	Project Manager
Temporary Compound	Fuel & Oil Storage areas	Visual inspection	<ul style="list-style-type: none"> Damage to containers or ancillary equipment Leakages Unlocked storage container Fuels stored within bunded area 	Daily	Project Manager
	Construction Materials Storage Areas	Visual inspection	<ul style="list-style-type: none"> Damage Untidiness 	Daily	Environmental Manager
	Waste Collection Areas	Visual inspection	<ul style="list-style-type: none"> Damage Untidiness Full skips 	Daily	Environmental Manager
	Wastewater facilities	Visual inspection	<ul style="list-style-type: none"> Holding tank requiring emptying 	Weekly	Project Manager
Concrete pours	Pour location	Visual inspection	<ul style="list-style-type: none"> Run-off / spills 	To be scheduled with pours Weekly	Project Manager/Environmental Manager

Aspect	Area of Inspection	Monitoring Required	Note/Checks	Frequency	Responsibility
Dust generation	Site entrance	Visual Inspection	<ul style="list-style-type: none"> Cleanliness of roads Site Boundaries 	Weekly	Project Manager
	Internal site road Material Stockpiles				

5.2 Environmental Performance Indicators

The Contractor will outline the key performance indicators (KPIs) for the Site in gauging successful site management in the prevention of pollution and the protection of the environment.

Environmental performance indicators will include:

- Number of environmental accidents/incidents logged;
- Breach of procedure and corrective actions;
- Number of environmental complaints received;
- Results of site audits.

The performance indicators will be communicated to all relevant personnel and sub-contractors. The review periods for analysing site performance indicators must also be specified.

5.3 Response Procedure / Corrective Action

In the event of an environmental incident, or breach of procedure, or where a complaint is received, or in the event of encountering buried waste or contaminated soils/groundwater, the contributing factors are to be investigated and remedial action taken as necessary. The Contractor will ensure that the following response actions will take place:

1. The Project Manager must be informed of any incident, breach of procedure and/or complaint received and details must be recorded in the incident/complaint register
2. The Project Manager is to conduct/co-ordinate an investigation to determine the potential influence that could have led to the non-compliance.
3. The Project Manager is to notify and liaise with the appropriate site personnel where required, e.g. Site Environmental Manager.
4. The Project Manager shall notify the Client of any complaints or environmental incidents within 24 hours of occurrence. Where significant incidents occur requiring the involvement of statutory authorities or emergency services or where any pollution events occur, the Client shall be notified within 1 hour.
5. If necessary, the Project Manager will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident.

6. The details of the incident will be recorded on an Incident / Complaints Form which is to record information such as the cause, extent, actions and remedial measures used following the incident/complaint. The form will also include any recommendations made to avoid reoccurrence of the incident.
7. The Project Manager will be responsible for any corrective actions required as a result of the incident e.g. an investigative report, formulation of alternative construction methods or environmental sampling, and will advise the Designer and Client as appropriate.
8. The Project Manager is to ensure that the relevant environmental management plans/procedures are revised and updated as necessary.

6. Environmental Management Plans

A number of environmental management plans (EMP) have been prepared for managing the impacts of Construction Activities associated with the Project. See **Table 6-1**. These plans are to be implemented by the Appointed Project Manager and/or Project Contractor(s) as relevant.

The Contractor will ensure that plans/procedures are communicated to all site staff, including sub-contractors, through induction, training and at relevant meetings.

Table 6-1: Plans for Managing Construction Activities

Ref:	Plan
EMP 1	Surface Water Runoff and Excavation Management
EMP 2	Fuels and Oils Management
EMP 3	Management of Concrete
EMP 4	Construction Noise Management
EMP 5	Construction Resource & Waste Management
EMP 6	Construction Traffic Management
EMP 7	Construction Dust Management
EMP 8	Ecological Management Plan Protection of Habitats and Fauna
EMP 9	Emergency Response
EMP 10	Site Environmental Training and Awareness
EMP 11	Monitoring and Auditing
EMP 12	Environmental Accidents, Incidents and Corrective Actions
EMP 13	Environmental Complaints

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
<p>EMP 1:</p> <p>Surface Water Runoff and Excavation Management</p>	<p>The purpose of this plan is to describe measures for the management of excavations, the management of all surface water and run-off on the site, and in particular, sediment and erosion control.</p>	<p><u>Management of Surface Water during Earthworks</u></p> <p>It is important that surface water/ground water is controlled during the construction phase of the proposed development to prevent heavy silting/contamination to Tralee Bay.</p> <p>Surface water/ground water run off will be managed using the following methods:</p> <ul style="list-style-type: none"> • Erosion controls are required to be implemented to prevent runoff flowing across exposed ground and become polluted by sediments. These measures include: <ul style="list-style-type: none"> ▪ Monitoring of the weather forecast prior to planning excavation works; ▪ Minimising the area of exposed ground and ensuring excavation will not proceed faster than the rate of construction. ▪ Stripped pavement/soil material will be temporarily stockpiled more than 10m away from any drain or watercourse or taken off-site. Stockpiles will be in a dry zone that is not subject to ponding. Bunds or other diversions to prevent run off from entering the stockpile area will be provided where required. ▪ Providing impermeable mats (plastic sheeting) as covers to mounded excavated material and open excavations during periods of heavy rainfall. • Earth movement activities will be suspended during periods of prolonged rainfall events; • The earthworks material will be placed and compacted in layers to prevent water ingress and degradation of the material; • Clean water runoff will be intercepted and diverted away from construction site runoff to avoid cross-contamination of clean water with soiled water. 	<ul style="list-style-type: none"> • The Environmental Manager • The Construction Manager

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> Any introduced or artificial materials required (e.g. silt fencing, straw bales, sand bags, etc.) that might need to be deployed onsite, will be removed on completion of the works. Discharge from the silt control measures will be discharged into an area of vegetation for dispersion or infiltration <p><u>Dewater of Works Area / Excavations</u></p> <ul style="list-style-type: none"> There are no dewatering works anticipated for the proposed development. <p><u>Stockpile Control Measures:</u></p> <ul style="list-style-type: none"> Soil and/or subsoil will be left undisturbed in situ for as long as possible prior to excavation. Stockpiles of excavated soil and/or subsoil will be graded so as to shed water. Repeated handling of soil will be avoided and ideally all soil stockpiles will remain undisturbed until otherwise required. <p><u>Excavation and Earthworks</u></p> <p>All excavation and earthworks will be carried out in accordance with BS6031:2009 Code of Practice for Earthworks. Soil handling, extraction and management will be undertaken with regard to best practice guidelines such as Guidance on the Waste Management (Management of Waste from the Extractive Industries) Regulations 2012.</p> <p>The following practices will be followed in relation to the excavation of pipeline/culvert trenches, topsoil stripping and any other earthworks:</p> <ul style="list-style-type: none"> If any contaminated earth is uncovered, this will be stored separately and disposed of accordingly once the contaminant has been identified. All topsoil and subsoil will be stored separately, and care will be given to ensure the structure and quality of the soil is not damaged. 	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p><u>Monitoring</u></p> <ul style="list-style-type: none"> The Environmental Manager will regularly inspect the site and is responsible for ensuring that appropriate water pollution prevention measures are put in place and that water inspection including visual monitoring of Sediment and Erosion Control measures is carried out. Any damage will be repaired or cleared promptly. 	
<p>EMP 2: Fuel and Oils Management</p>	<p>The purpose of this plan is to describe measures for the management of all fuel and oils on-site for the protection of natural resources (soils and groundwater) from any spills.</p>	<p>The potential for hydrocarbons getting into the existing drains and local watercourses will be mitigated by only refuelling construction machinery and vehicles in designated refuelling areas using a prescribed refuelling procedure.</p> <p>Refuelling will be carried out using 110% capacity double bunded mobile bowsers and will be carried out on bunded area, using drip trays. The bowser will have spill containment equipment which the operators will be fully trained in using;</p> <p>All containers of any size will be correctly labelled indicating their contents and any hazard warning signs.</p> <p>All oil, diesel, mobile bowsers, tanks and drums will be stored in impermeable storage areas at least 30m from any watercourse</p> <p>Fuel fill pipes will not extend beyond the bund wall and will have a lockable cap secured with a chain;</p> <p>Plant nappies or absorbent mats to be placed under refuelling point during all refuelling to absorb drips. Plant nappies to be provided beneath small mobile plant (e.g. small generators, pumps, etc.);</p> <p>To reduce the potential for oil leaks, only vehicles and machinery will be allowed onto the site that are mechanically sound. An up-to-date service record will be required from the main contractor;</p> <p>Should there be an oil leak or spill, the leak or spill will be contained immediately using oil spill kits which will be easily accessible and kept in site vehicles and machinery; the nearby dirty water drain outlet will be blocked with an oil absorbent boom until the fuel/oil spill has been cleaned up and all oil and any contaminated material removed from the area. This contaminated material will be properly disposed of in a</p>	<ul style="list-style-type: none"> The Construction Manager The Environmental Manager

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p>licensed facility. The Environmental Manager will be informed, and they will assess the cause and the management of the clean-up;</p> <p>All vehicle/machinery operators will be trained by the Environmental Manager in the use of spill kits and the correct containment of oil spills or leaks</p> <p>In the event of a major oil spill, a company who provide a rapid response emergency service for major fuel spills will be immediately called for assistance, their contact details will be kept in the site office and in the spill kits kept in site vehicles and machinery.</p> <p>Only the required volume of oil will be stored for the works taking place at the time.</p> <p>Collision with oil stores will be prevented by locating oils within a steel container in a designated area away from vehicle movements.</p> <p>The volume of leakages will be prevented through monitoring oil storage tanks/drums for leaks and signs of damage. This will be carried out daily by the Environmental Manager and</p> <p>Long term storage of waste oils will not be allowed on site. These waste oils will be collected in leak-proof containers and removed from the site for disposal or re-cycling by an approved service provider.</p>	
<p>EMP 3: Management of Concrete</p>	<p>The purpose of this plan is to describe measures for the management of concrete on-site for the protection of watercourses from any spillages.</p>	<p>Concrete Water</p> <ul style="list-style-type: none"> • Pours will not take place during heavy rainfall and no disposal of concrete remnants will be permitted on site; • To reduce the volume of cementitious water, washout of concrete trucks will not take place on site. Concrete trucks will be washed out off site at the source quarry. Only concrete truck chutes will be washed down on site. The concrete trucks shall wash down their chutes at a designated chute wash down area. The wash down area shall consist of a polythene lined bunded area of about 10m3 capacity. The collected washdown water will be disposed of using a registered contractor; 	<ul style="list-style-type: none"> • All concrete pours will be supervised by suitable personnel; • Environmental Manager

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> • Breaking of concrete (associated with structure demolition) has the potential to emit alkaline dust into the receiving environment. Where necessary a barrier between the dust source and the sensitive receptor (the water body in this case) will be erected to limit the possibility of dust contacting the receptor. • Concrete works will be regularly inspected by the Environmental Manager. • The use of wet concrete and cement in or close to any water body will be carefully controlled so as to minimise the risk of any material entering the water. Concrete will not be allowed to enter watercourses under any circumstances, and drainage from excavations in which concrete is being poured will not be discharged directly into existing watercourses without appropriate treatment and consent from the relevant authority. Delivery trucks, tools and equipment will be cleaned at the wheel wash facility. 	
EMP 4: Construction Noise Management	The purpose of the plan is to describe measures for the management of impacts from construction noise.	To mitigate against the impacts of noise on the local community during construction, the following measures are proposed: <ul style="list-style-type: none"> • A nominated person from the appointed contractor will be appointed to liaise with local residents and businesses regarding noise nuisance events. • Working hours at the site during the construction phase will be limited to 08.00 to 18.00 Monday to Friday and 08.00 to 14.00 on Saturday. No intrusive works on Sundays or public holidays¹. • Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). The main control measures will be control of noise at source using the following methods in line with Clause 8 'Control of noise' of BS 5228-1:2009+A1:2014:	<ul style="list-style-type: none"> • The Construction Manager • The Environmental Manager

¹ Without written agreement from Kerry County Council

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> • Use of appropriate plant and equipment with low noise level generation where possible, avoiding unnecessary revving of machinery (Clauses 8.2.1 General and 8.2.2 Specification and substitution). • Noise generating equipment will be located as far as possible away from local noise sensitive areas identified (Clause 8.2.5 Use and siting of equipment); and, • Regular and effective maintenance of site machinery including a full maintenance schedule to ensure that all pieces of equipment are in good working order. With efficient use of well-maintained mobile equipment, considerably lower noise levels than those predicted can be attained (clause 8.2.6 Maintenance). <p>In addition, the following best practice measures are proposed:</p> <ul style="list-style-type: none"> • Training of site staff in the proper use and maintenance of tools and equipment. • Machines that could be in intermittent use will be shut down between work periods. • Plant start-up will be sequential rather than all together. • Plant known to emit noise strongly in one direction will, when possible, be orientated so that the noise is directed away from noise-sensitive locations. • Drop heights for materials such as gravels will be minimised whenever practicable 	
<p>EMP 5: Construction Resource & Waste Management</p>	<p>The purpose of the plan is to describe measures for the management of all wastes associated with the construction works. There will be limited waste generated during the construction phase of the Proposed Development.</p>	<p><u>Minimisation, Reuse, Recycling, and Management of Construction Waste</u></p> <p>The primary aim is to ensure that wastes generated during the course of the project are managed in a systematic manner in accordance with Waste Management Legislation and the principles of the waste Hierarchy, i.e. Prevention, Minimisation, Reuse, Recovery, and Recycling.</p> <p>Wastes generated during the construction phase will be identified and segregated according to their category as described by the List of Waste code (LoW). In order to affect this, designated waste storage areas will be created at the site at suitable locations, for storage and segregation of wastes prior to transport for recovery/disposal at suitably licensed/permitted facilities.</p> <p>Suitably sized containers for each waste stream will be provided at the temporary site compound</p>	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p>Under Waste Management Regulations 2007 a waste collection permit, for appropriate waste codes and destinations is required by the waste haulier, to transport the waste from one site to another. The contractor will ensure the movement of all wastes are carried out in compliance with relevant waste regulations.</p> <p>Wastes will only be treated or disposed of at waste facilities to carry out a specific activity (i.e. chemical treatment, landfill, incineration etc.) for the specific waste types. Records of all waste movements and associated documentation will be held on site. It is planned that all waste activities at the site will comprise of;</p> <ul style="list-style-type: none"> • source, • segregation, • storage, and • collection <p>An overview of the methods to manage the primary waste streams is presented in the following sections:</p> <p><u>Soils and Spoil</u></p> <p>There will be a requirement to excavate topsoil and subsoil. The soil and subsoil will be reused on site where possible to back fill excavations. As a precautionary measure, it is recommended that an “Unexpected Contamination Finds Protocol” is developed prior to the commencement of works, which will enable the contractor to safely manage any potential contamination on the site should it be encountered during planned excavation works.</p> <p>Should contaminated soil be encountered during excavations works the Contractor shall cease excavation works in the area where contaminated soil has been uncovered. The Contractor shall engage the services of a Consultant who specialises in Contaminated Land and arrange a site visit for the inspection of the contaminated soil. The Contaminated Land Consultant shall provide guidance on appropriate soil sampling and chemical testing and classification of the waste. Once the test results are available the Contaminated Land Consultant will issue a report.</p> <p><u>Concrete</u></p>	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p>Concrete management procedures are detailed in EMP 3: Management of Concrete.</p> <p><u>Waste-Water Treatment / Effluent disposal</u></p> <p>Temporary W/C utilities will be provided on site during the construction phase for contractor staff. Wastewater from wash hand basins in temporary W/C utilities will be held in above-ground sealed storage tanks. The temporary W/C utilities will be maintained appropriately by an approved and permitted contractor. Wastewater will be disposed of by the approved and permitted contractor subject to the agreement of KCC.</p> <p><u>Hazardous and Other Waste</u></p> <p>If hazardous waste / contaminated ground is encountered, then appropriate handling, storage, transportation, and disposal will be carried out. Works to the area where the hazardous waste/contaminated ground is encountered will stop. The ground will be assessed by an Environmental Engineer. Prior to being removed from the site, the waste will undergo a comprehensive waste assessment and classification by suitably trained/qualified person(s), in accordance with the EWC hazardous waste list. If non-hazardous waste becomes contaminated with hazardous waste, the entire load will be considered hazardous. At the site every effort will be made to segregate waste, and properly segregate hazardous waste from non-hazardous and inert waste arising. Hazard wastes will be identified, removed and kept separate from other wastes in order to avoid cross contamination. Specific method statement detailing the necessary mitigation measures during the excavation/handling, transportation, and disposal of hazardous materials encountered at the site will be prepared as required.</p> <p>Oils, paints, adhesives and chemicals will be kept in a separate contained secured storage area. Lids will be kept on containers to avoid spillage/evaporation. Waste oils, adhesives etc will be handled, and disposed of appropriately. Every effort will be made at the site for no long-term storage of hazardous materials/fuels/oils/chemicals, etc. There shall be no long-term storage of waste oils etc. at the site.</p> <p><u>Gravel/Stone/Asphalt/ Bituminous Materials</u></p> <p>These materials will be delivered to site, with excess returned to supplier.</p>	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p><u>Metals</u></p> <p>It is now common practice to segregate metals for reuse and recycling, however there are still sites where waste metal is thrown away in the general rubbish. One of primary sources of metal on sites is rebar. Waste of rebar will be reduced by ordering ‘made to measure’ from the source and detailed scheduling of all reinforced concrete structural elements.</p> <p><u>Packaging/Plastic</u></p> <p>Double handling will be avoided by segregating packaging wastes immediately after un-wrapping. Waste packaging will be segregated and in separate containers, at storage area for collection by the waste contractor for disposal to licensed facility.</p> <p><u>Mixed Waste</u></p> <p>This waste stream will arise from waste packaging of piping components. To contain and manage construction phase waste, multiple skips will be provided; one for recyclable waste and others for various construction waste. These skips will be emptied when required by a licensed waste management company. Waste oil and waste oil drums will be collected and stored in containers and on a bunded tray within the storage container.</p> <p>At the end the works, the completed works areas will be tidied of any unused material or waste; this material will be reused or placed in the appropriate skip for disposal.</p> <ul style="list-style-type: none"> • Special care will be taken to ensure that no green waste or food waste will be disposed of in this skip. The purpose of this arrangement is to stop birds scattering food items across the site and therefore prevent vermin infestation; • This material will be collected by contracted and licensed non-hazardous waste collectors. <p><u>Mixed Waste/Canteen Waste</u></p> <p>Designated receptacles will be provided at the staff canteen(s) to allow for segregation, and storage of individual waste streams such as food waste and packaging waste. All offices and canteens will be equipped</p>	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p>with black plastic refuse bags and wheelie bins for the purpose of collecting and delivering this waste stream to the compactor. This material will be collected by the contracted waste management company/transported to licensed facility.</p> <p><u>Dry recyclable collection from welfare facilities</u></p> <ul style="list-style-type: none"> • All offices and canteens will be equipped with clear plastic bags and wheelie bins for the purpose of collecting • dry recyclables. This will be strictly managed to prevent any food waste entering the dry recyclable stream; • Recycling wheelie bins will be located at all welfare facilities and offices associated with the project; and • This material will be collected by the contracted and licensed non-hazardous waste collectors. <p><u>Waste Records</u></p> <p>All details of wastes (arising/generated/movement, etc) will be recorded during the project and retained by the Contractor and made available for auditing of the Resource & Waste Management plan. Each consignment of waste removed from the site will be documented in the form of a waste management movement record form which will ensure full traceability of the material to its final destination.</p>	
<p>EMP 6: Construction Traffic Management</p>	<p>The purpose of this plan is to describe measures for the management of all traffic, including construction traffic, for the minimization of disturbance and nuisance to the local community.</p>	<p><u>General</u></p> <p>A CTMP will be prepared by the Appointed Contractor. This Plan will be finalised in agreement with Kerry County Council but as a minimum the plan will include provision for:</p> <ul style="list-style-type: none"> • Details of site access and any site traffic rules, including security, parking, loading and unloading, required speed or other relevant details. • Programme of maintenance and upkeep of public roads. • Site operating hours (including delivery) to be outlined. 	<ul style="list-style-type: none"> • Project Manager • Construction Manager • Construction personnel • Sub-contractors as appropriate

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> • Access to the Site is off an unnamed local road. It is anticipated the haul route will likely be from this unnamed road via Station Road in Castlegregory and the R560. • Access on this existing road will be maintained where possible. The volume of traffic generated by the transportation requirements will be minimal. • The details of the road closures will be agreed between the Appointed Contractor and Kerry County Council and communicated to the public as necessary. • Final details of road closures will be provided in the CTMP prepared by the appointed contractor. <p><u>Public Roads</u></p> <ul style="list-style-type: none"> • In order to mitigate from a significant impact during peak traffic hours, the majority of staff will either arrive on-site before or after the peak morning traffic and finish work before or after the evening peak traffic hours. • The condition of the public roads and site entrance will be monitored on an on-going basis and a road sweeper provided to clean the public roads if required. <p><u>Site Entrance</u></p> <ul style="list-style-type: none"> • There will be no parking of any vehicles on the public road near the site entrance. • Adequate parking will be provided on-site for both employees and visitors. 	<ul style="list-style-type: none"> • Delivery personnel
<p>EMP 7: Construction Dust Management</p>	<p>The purpose of this plan is to describe the measures for the management of nuisance impacts on air quality from construction generated dust.</p>	<p>Construction phase generated dust can be minimised by the following measures:</p> <ul style="list-style-type: none"> • Bowers or suitable watering equipment will be available during periods of dry weather through the construction period. Research has found that watering can reduce dust emissions by 50% (USEPA, 1997). 	<ul style="list-style-type: none"> • The Environmental Manager • The Construction Manager • The Project Manager

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> Public roads in the vicinity of the site will be inspected regularly for cleanliness and cleaned as necessary and any hard surface roads will be swept to remove mud and aggregate materials from their surface Control of vehicle speeds passing over access road within the site-limited to 5km/h to minimise dust generation; Where necessary, site stockpiling of materials will be designed and laid out to minimise exposure to wind and will be covered when left for extended periods of time. Regular site inspections should take place to examine dust measures and their effectiveness. During windy conditions, any dust generating activities will be avoided or minimised where practical. The dust minimisation plan will be reviewed at regular intervals during the construction phase to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practice and procedures 	
EMP 8: Ecological Management Plan for the Protection of Habitats and Fauna	To describe measures for the management and protection of habitats and fauna on the site	Ecological Protection Measures <u>General Habitats and Fauna</u> <ul style="list-style-type: none"> Habitat degradation and disturbance of fauna will be limited by controlling the movement of construction vehicles and machinery. Construction vehicles and machinery will not encroach onto habitats and fauna beyond the proposed development footprint Construction materials and wastes will be kept in designated areas to reduce risk of accidental injury/entrapment of any wildlife on-site; Vegetation removal will be minimised within the proposed development site; Excavated areas will be covered over outside of working hours to reduce risk of accidental entrapment of wildlife. All new build facilities are required to conform to nearly zero energy building standards and be appropriately and sensitively designed to integrate with the site’s natural environment and surrounding location. 	<ul style="list-style-type: none"> Environmental Manager; and Construction Manager.

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> Mitigation measures set out in the Natura Impact Statement prepared by MWP for the proposed development will be adhered to for the protection of habitats, ecology and fauna during construction. <p><u>Protection of Bats</u></p> <p>The proposed development will not take place in any areas of importance for bats.</p> <p><u>Protection of Otter</u></p> <p>The presence of otter is expected to be constrained to areas adjacent to the end of the Maharees tombolo near Killanshannaig and south passed Castlegregory.</p> <p>There is potential for any commuting otters using the site during the construction phase to become trapped in trenches excavated during works. In line with construction best practice, all excavations during the construction phase of the proposed development will be covered securely to prevent the accidental trapping of otters. In addition, it is a pre-commencement survey will be carried out for the presence of otters prior to construction.</p> <p><u>Invasive Species</u></p> <p>No invasives were recorded on-site; However, on a precautionary basis, a pre-construction invasive species survey should be undertaken by a suitably qualified individual to confirm this finding prior to works starting.</p> <p>To reduce the likelihood of invasive species being introduced to the site from other area, prior to first accessing the site, validation is to be provided by al suppliers that construction machinery and vehicles are free from any invasive species, and this is to be documented, and records retained. All vehicles, machinery and equipment/tools are to arrive to site clean and steam washed. Visual inspections are to take place.</p>	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p>All PPE brought to site is to be clean and dry. All PPE will be visually inspected, and any attached vegetation or debris removed and disposed of appropriately. Work boots will be dipped in or scrubbed with a disinfectant solution and thoroughly dried afterwards before being used on site.</p> <p>Prior to being brought to site, certification is to be obtained from all suppliers that all raw materials including soil, fill, sand, gravel and any landscaping materials, where required to be imported, are free from invasive species. This is to be documented, and records retained.</p> <p>In the event of an invasive species being encountered on-site (introduced to site within raw building materials or on plant/machinery etc. or otherwise), the area/equipment is to be isolated, and the advice and direction of the Environmental Manager and/or an invasive specialist is to be sought as soon as possible in relation to the management/treatment approach to be adopted.</p> <p><u>Landscape Recommendations</u></p> <p>Only native tree, shrub and plant species will be utilised during landscaping.</p> <p><u>Construction Phase Lighting</u></p> <p>Lighting associated with the site works could cause disturbance/displacement of bats.</p> <p>The following measures will be applied in relation to site lighting:</p> <ul style="list-style-type: none"> • Lighting will be provided with the minimum luminosity sufficient for safety and security purposes. • Where possible, construction lights will be switched off when not in use. • Lighting will be positioned and directed so that it does not to unnecessarily intrude on adjacent ecological receptors. There will be no directional lighting focused towards the boundary habitats respectively and cowlings and focusing lights downwards will minimise light spillage. • Works will primarily take place during hours of daylight to minimise disturbance to any nocturnal mammal species. 	

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<p><u>Monitoring</u></p> <p>In the unlikely event that protected faunal species are found actively using the Site for breeding/roosting during the construction phase, works will cease immediately, and the area will be cordoned off until advice is sought from a suitable qualified expert / NPWS by the Environmental Manager and Construction Manager.</p>	
<p>EMP 9: Emergency Response</p>	<p>To describe measures for the prevention of an environmental accident or incident and the response required to minimise the impact of such an event.</p>	<p>In the event of an environmental emergency, all personnel will react quickly and adhere to this procedure.</p> <p>All site personnel will be inducted in the provisions of the Emergency Response Plan.</p> <p>The following outlines some of the information, on the types of emergency, which must be communicated to site staff:</p> <ul style="list-style-type: none"> • Release of hazardous substance – Fuel and oil spill; • Concrete spill or release of concrete or silt; • Flood event – extreme rainfall event; • Environmental buffers and exclusion zones breach; • Housekeeping of materials and waste storage areas breach; • Stop works order due to environmental issue or concern (threat to archaeological or ecological feature); and • Fire on-site. <p>If any of the above situations occur; the Emergency Response Plan is activated. The Environmental Manager will most likely be responsible for overseeing the Emergency Response Plan (to be confirmed by the Appointed Contractor(s)) and will be prepared and ready to implement the plan at all times. The Environmental Manager will be immediately informed and report to the scene. He / she must be aware of the:</p> <ul style="list-style-type: none"> • Nature of the situation – brief description of what has happened; 	<ul style="list-style-type: none"> • The Environmental Manager will prepare and finalise an Emergency Response Plan to be ready to respond to any incident; • All site personnel will report any spillages of oil or chemicals to the Environmental Manager and Construction Manager immediately; and • As appropriate, the Environmental

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> • Location of the incident; • Whether any spill has been released; and • Whether the situation is under control. <p><u>Oil Spillages</u></p> <p>The following list outlines issues likely to be appropriate for inclusion the plan:</p> <ul style="list-style-type: none"> • Site staff will report the spillage immediately to the Environmental Manager or Construction Manager; • Where relevant, the Environmental Manager will report the spillage to Inland Fisheries Ireland, EPA and Kerry County Council as appropriate; • Where possible, the source of pollution will be identified; • Switch off all sources of ignition; • Stop the spillage spreading: • Use absorbent materials from the spill kit to mop up the spill (sand or absorbent materials should be used rather than detergents); • Do not wash spillage into drainage system. Washing will only make the situation worse and extend the pollution to other water bodies/drainage systems; • If the spill has already reached drains, block the inlet of the dirty water cross pipes in the nearby drainage outflow points on the roadside drains with oil absorbent booms, which will prevent oils flowing into the existing drains; • Shovel contaminated sand/earth/absorbent granules into sacks or skips; and • A specialist oil removal company should remove pooled oil. <p><u>Concrete Spillages</u></p> <p>The following list outlines issues likely to be appropriate for inclusion in such a plan:</p>	<p>Manager will report the spillage to the Inland Fisheries Ireland, Kerry County Council and any other relevant authority.</p>

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
		<ul style="list-style-type: none"> • Site staff will report the concrete spillage immediately to the Environmental Manager or Construction Manager; • Where relevant, the Environmental Manager will report the spillage to Inland Fisheries Ireland and Kerry County Council; • If there is a risk of concrete spreading into the drainage system, the inlet of the dirty water cross pipes in the nearby drainage outflow points on the roadside drains will be blocked using the absorbent booms, which will prevent concrete flowing into the existing drains; • Do not wash spillage into drainage system. Washing will only make the situation worse and extend the pollution to other water bodies/drainage systems; • If the spill has already reached drains, acid may be added to the drains by the Environmental Manager to neutralise the alkalinity of the concrete; and • Shovel contaminated concrete granules into sacks or skips for treatment in the Roadside Concrete Wash unit. <p><u>Contacts</u></p> <p>As an Environmental Control Measure, the Environmental Manager will append the relevant contact details to the Emergency Response Plan document. Examples of such contact details include the Environmental Manager, Specialist oil removal company, Kerry County Council, Inland Fisheries Ireland and National Parks and Wildlife Service.</p> <p>Location of Emergency Spill Kits</p> <p>A map indicating the location of all emergency spill kits will be attached to the Emergency Response Plan document and emergency oil spill kits will also be carried in all site vehicles and machinery and in the site office.</p>	
<p>EMP 10: Site Environmental</p>	<p>To describe measures for informing the public of</p>	<p>Site signage will be provided at the entrance to the site to inform the public that access to the site is restricted to those directly involved in the construction works.</p>	<ul style="list-style-type: none"> • Construction Manager;

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
<p>Training Awareness</p>	<p>restricted access to the construction-site and the training of all site personnel in the protection of the environment and the relevant controls.</p>	<p>An initial site environmental induction and ongoing training will be provided to communicate the main provisions of the CEMP including this EMP to all site personnel. Two-way communication will be encouraged to promote a culture of environmental protection.</p> <p>The following outlines some of the information which will be communicated to site staff:</p> <ul style="list-style-type: none"> • Environmental procedures of the CEMP; • Housekeeping of materials and waste storage areas; and • Environmental Emergency Response Plan. • Sub-contractors will provide a copy of the Material Safety Data Sheets for all hazardous substances brought on-site. <p>All finalised CEMP policies will be adhered to, in the management of fuels and oils, concrete, and installation of sediment and erosion controls and drainage features. All finalised details will be communicated with site personnel. Environmental Training including spill kit training, installation of silt fence training is to be provided by the Appointed Contractor(s). Environmental training records will be retained in the site office</p>	<ul style="list-style-type: none"> • Environmental Manager; and • All site personnel.
<p>EMP 11: Monitoring and Auditing</p>	<p>To describe measures for environmental monitoring during the construction works and audit of control measures to ensure environmental protection.</p>	<p>All mitigation measures, any planning conditions and relevant construction methods will be monitored on-site. The Contractor will nominate an Environmental Manager for the works. The Environmental Manager will provide Audit Checklists to ensure regular checks of the Site’s control measures for the ongoing protection of the environment.</p> <p>Monitoring will be carried to ensure adherence with all Environmental Management Plans.</p> <p>Checklists for daily, weekly or monthly site audits will be finalised by the Environmental Manager and the relevant personnel informed of their duties. Checklists will include (but are not limited to) confirmation that fuel is stored appropriately, resource & waste management rules are adhered to, all environmental buffers are maintained, Surface water and run-off control measures of the are in place and functioning, and concrete chute wash-out procedure is being followed. Checklists will be finalised with the Contractor’s EOP.</p> <p>All environmental records, including completed checklists, will be retained at the site office.</p>	<ul style="list-style-type: none"> • Project Manager; • Environmental Manager; and • Construction Manager.

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
<p>EMP 12: Environmental Accidents, Incidents and Corrective Actions</p>	<p>To describe measures for the recording, investigating and close-out of any environmental accidents or incidents on the Site.</p>	<ul style="list-style-type: none"> • The Environmental Manager or Construction Manager will be contacted as soon as possible where there is any incident that carries the possibility of negative environmental consequences (e.g. minor oil leakage or blockage of drainage pipe); • The Emergency Response Plan and standard emergency procedures will be applied to get the incident under control and prevent injury or loss of life in the first instance; • Work in the area will be halted and the Environmental Manager will be called to the scene to assess the situation and to decide on initial responses and remedial measures; • Once the situation is under control, the environmental accident or incident will be recorded and the cause investigated; • Corrective actions will be communicated to personnel and sub-contractors where relevant – particularly where it results to a change in procedure. <p>Example list of environmental accidents & incidents:</p> <ul style="list-style-type: none"> • Accidents involving large spill of fuel or concrete from delivery truck (emergency response required) • Spills of fuel and oil (minor); • Waste or rubbish left around the Site (not in dedicated waste areas); • Breach of any buffers (archaeological, ecological, watercourse); • Failure of any control measures (silt fences collapsed in a storm); • Concrete chute wash out in a non-dedicated area; • Unplanned vehicle movement off the access tracks; and • Unplanned vehicle movement within a buffer zone. 	<ul style="list-style-type: none"> • Site staff will contact the Environmental Manager or Construction Manager as soon as possible where there is any incident that carries the possibility of negative environmental consequences; and • The Environmental Manager is responsible for alerting the relevant authorities.

Environmental Management Plan (EMP)	Purpose of EMP	Procedure	Responsibility
<p>EMP 13: Environmental Complaints</p>	<p>To describe measures for the recording and resolving complaints by third parties, including local residents or members of the public.</p>	<p>Any environmental complaints received, whether internal or external, will be recorded and investigated. It is recommended that immediate action is taken as relevant to resolve environmental complaints to avoid any nuisance to the local community or any environmental damage.</p> <p>This procedure includes:</p> <ul style="list-style-type: none"> • Recording of any complaints to a Site Log; • Follow up by the relevant site representative – Environmental Manager; • Remedial measures where required; • Ongoing communication with complainant to confirm resolution; and • Any required training or communication with site personnel and sub-contractors as a result. <p>The out of hours contact number for the Site is: TBC</p>	<ul style="list-style-type: none"> • Project Manager; • Environmental Manager; and • Construction Manager.