

# Fingal County Council Baldoyle Community Centre





# Outline Construction Management Plan

BCC-ROD-00-XX-RP-C-0002-OCMP P04





## **Baldoyle Community Centre**

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#### 1. INTRODUCTION

This document sets out the Outline Construction Management Plan (OCMP) for the construction of the proposed Community Centre at Racecourse Park in Baldoyle, Co. Dublin on behalf of Fingal County Council (FCC). This OCMP applies to all works associated with the construction of the Community Centre. The Community Centre will be constructed by the same contractor (by framework agreement) as is currently completing a similar facility for the FCC in Meakstown, who will further develop and commit to the OCMP prior to commencement of site works. The appointed contractor will consult with all relevant stakeholders with respect to the developed OCMP. The OCMP and any associated and supporting documents provide the construction and traffic management framework for the appointed PSCS/Contractor and Sub-contractors as they incorporate any principles to ensure that the work is carried out with minimal impact on the environment. construction management staff as well as Contractor's and Sub-contractor's staff must comply with the requirements and constraints set forth in the OCMP in site-specific Construction Management Plan (CMP). The developing their implementation of the requirements of the OCMP will ensure that the construction phase of the project is carried out in accordance with the commitments in the various application processes for the development. Once commenced the CMP is considered a live document that will be updated according to changing circumstances on the project and to reflect current construction activities. The CMP must be reviewed and monitored on an on-going basis the construction process and will include information on the review procedures.

#### 2. DESCRIPTION OF PROJECT

The project consists of the construction of a new Community Centre on a brownfield site and associated site works, including the demolition of existing derelict changing facilities.



**Baldoyle Community Centre – Location Plan** 

The construction of the proposed development will require a variety of construction methodologies. The anticipated phasing of constructionn will be as follows:

- Site preparation;
- Establishing site offices, compounds and security;
- Development of site services, surface water drainage, foul drainage, water mains etc;
- Development of substructure, i.e., excavation of foundations, pouring concrete;
- Development of tanks, petrol interceptors, surface water attenuation and firefighting underground storage tanks;
- Construction of building superstructure;
- Finishing to surfaces and landscaping.

#### 2.1 Site Preparation

Preliminary site clearance will be carried out on the brownfield site. Scrub and vegetation removal will be required as part of site preparation. Vegetation cleared from the site to facilitate construction works will be collected and stored on site wherever possible. For any non-reusable vegetation this will be disposed of at an appropriately licensed waste facility. This site clearance will be carried out on a phase bases, as detailed in table below. Prior to the site clearance/preparation an Ecological Clerk of Works will inspect the site.

Table 2.1: Phasing of Site Clearance (1 month)

Phase	Time Frame	Description of Works
Phase a	Week 1	Removal of trees & scrub within confines of site
Phase b	Week 2	General Site clearance over the area of the site
Phase c	Week 3 - 4	Demolition of existing changing facilities

#### 2.2 Site Construction Compound

A main site construction compound will be required during the construction phase to provide office, canteen, washroom and toilet facilities. The compound will also provide facilities for materials and plant storage and the maintenance of same. The principal site construction compound will be established at the commencement of the contract and remain in place throughout the construction period. It is intended that the site for the compound will be to the north of the proposed building, within the existing car parking area. There are existing foul drainage, surface water drainage and watermain connections on the site. The exact location and mode of operation of the site compounds will be selected by the contractor with regard to relevant guidelines of the Statutory Authority and the relevant agencies. Solid hoarding will be required for health & safety, due to the proximity of local housing areas.

There will be an early consideration of location of material stockpiles, which will be covered with geotextile or similar to prevent mobilisation of suspended solids. Stockpiles must not be located within 10m of an open gully. There will be no dirt, mud and material permitted to enter the surface water drainage system.

Furthermore, the sites of the compounds will be cleared, reinstated and landscaped upon completion of the works to the satisfaction of the Statutory Authority.

#### 3. PROJECT PROGRAMME

The envisaged project programme will be developed during the detailed design stage and will be incorporated into the Preliminary S&H Plan. The Baldoyle Community Centre will be constructed by the same contractor (by framework agreement) as is currently completing a similar facility for FCC in Meakstown. Significant efficiencies in programme are anticipated, as all significant sub-contractors and suppliers are already in place. It is intended that the projected can be completed within 14 months. The construction project is programmed to begin in April 2024, with demolitions and piling complete by mid-June. The concrete frame, ground floor walls, roof framework structure will be complete by end August 2024. Completions to progress through the winter months. Building handover is scheduled for June 2025.

#### 4. CONTROL OF WATER POLLUTION ON SITE

The following sources of water may be susceptible to pollution:

- Rainwater: Run-off or flooding from rainwater can absorb pollutants or suspended solids from stored materials and convey these to the storm water network. Materials should be properly stored on site and is expected that the Contractor will plan site activities accordingly and will postpone excavation works during adverse weather conditions.
- 2. <u>Surface Water:</u> There are no open bodies of water or watercourses within the site. Run-off or surface water that is generated within the site will be discharged to the existing storm water network rather than to open watercourses. The existing storm network is in the ownership of FCC and the Contractor will be required to apply comply with the requirements of any Discharge License granted by FCC. Silt collection/management will be implemented by the Contractor to remove silts from surface water prior to discharging to the public sewer. It is anticipated that the Contractor will discharge to the public sewer/manhole in Red Arches Road via the existing storm pipe that serves the existing car park.
- 3. **Groundwater:** Ground investigation works have been carried out on the site and these confirm that groundwater is at a depth of 3.0 3.4m below ground level. Works below this level will be limited to piling and the envisaged driven pile solution will reduce the risk of impacts on groundwater. The adopted design will have a much lower impact on groundwater than an alternative option of deep trench fill to depths of 4m.

Potential causes of water pollution that need to be guarded against include:

- Accidental spillage of pollutants (oils & hydrocarbons).
- Dirt, mud and other materials being dropped from lorries and plant or spread onto approach roads and carparking areas by traffic travelling to and from the site.
- Run-off from concrete and cement products.

The following protection measures will be followed to ensure water quality discharged from site is maintained:

- All machinery will be refuelled from mobile tankers on the local/access/haul/site roads.
- Mobile storage facilities, such as fuel bowsers, will be bunded to 110% capacity to prevent spills. Tanks for bowsers and generators will be double skinned.
- When not in use, all valves and fuel trigger guns from fuel storage containers will be locked.
- Only dedicated trained and competent personnel will carry out refuelling operations. A spill kit and drip tray will be on site at all times and available for all refuelling operations. Equipment will not be left unattended during refuelling. All pipework from containers to pump nozzles will have anti siphon valves fitted.
- Strict procedures for plant inspection, maintenance and repairs will be detailed in the contractor's method statements and machinery will be checked for leaks before arrival on site.
- All site plant will be inspected at the beginning of each day prior to use.
   Defective plant will not be used until the defect is satisfactorily fixed.
- All major repair and maintenance operations will take place off site.
- Care will be taken at all times to avoid contamination of the environment with contaminants other than hydrocarbons, such as uncured concrete and other chemicals.
- Surface water from the site will undergo silt management as noted above.

#### 5. WASTE MANAGEMENT

The Contractor will be required to comply with all waste management statutory requirements and will be required to develop and submit a Construction Waste Management Plan prior to the commencement of works. The Waste Management Plan will be a live document and revisions to this will be reported by the Contractor at regular Progress Meetings.

The Contractor will store C&D waste separately on the site and will use separate receptacles of bays for recyclable and non-recyclable materials. Waste generated on site during construction shall be disposed of offsite to licenced waste disposal facilities by licenced disposal contractors in accordance with the Planning Acts.

The Contractor will maintain a file containing all records, dockets & permits relating to the waste generation & movements. This file will be kept on site and will be made available for audits throughout the project.

In terms of excavated material, a Waste Characterisation Assessment has been procured and the Contractor will refer to this during the planning of the works. This report includes waste management or landfill options for excavated material. A foundation approach has been adopted to reduce the amount of excavated material and consequently the amount of material being sent to landfill.

#### 6. TRAFFIC MANAGEMENT

Typical construction associated traffic would include operatives travelling to and from work and deliveries and removal of materials.

All Traffic Management proposals shall be agreed with Fingal County Council, An Garda Síochána and the Employer's Representative prior to construction of the

development. Any temporary barriers placed around the working area should be clearly defined by temporary road markings, signage and coning as specified in the Traffic Signs Manual. The PSCS/ Contractor must carry out a risk assessment before commencement of works on site, to determine the type of barriers (if any), and cones most suitable for the works.

It is envisaged that advance traffic information on traffic proposals will be communicated to the public via local radio and newspapers. It is also envisaged that the Contractor will erect Variable Message Signs (VMS) at key locations around the site.

All Construction Stage Traffic Management must comply with the following:

- Department of the Environment Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Signs for Road Works, and
- Department of the Environment Guidance for the Control and Management of Traffic at Road Works.

#### 6.1 Temporary Traffic Management Road Safety Audit

The PSCS's/Contractor's Construction Stage Traffic Management Plan including all construction accesses, merges and diversions will be reviewed by the design team and FCC Traffic Department.

The Construction Stage Traffic Management Plan must include:

- Construction vehicle accesses
- Location and details of all temporary roadworks signage including mobile VMS and road markings
- Location and details of all temporary safety barriers
- Details of works deliveries and storage of materials
- Risk Assessments for design and construction of temporary traffic management where relevant
- Details of any proposed construction phasing and associated temporary traffic management measures.

#### 6.2 Vehicular Access to Site

Deliveries and general HGV traffic will access the site from Red Arches Road using the existing vehicular entrance. HGV's will be directed to an appropriate location and an appropriate member of staff from the contractor will be notified to meet the delivery and arrange offloading. Security of the site will be the responsibility of the Contractor and particular attention must be given to the proximity of Racecourse Park and adjacent playground areas. Pedestrian safety barriers will be erected at the entrance to the site to permit safe passage for pedestrians across the access to the development, segregating members of the public from HGV's and other vehicles entering the development.

#### 6.3 Construction Traffic

During the construction phase the project will generate a range of traffic, which can be broken down into the main phases of construction as outlined below.

#### 6.3.1 Site Clearance and Set-up

Earthworks plant will be required to prepare the compound area and install services. Portacabins will be required for the site compounds, as well as portable toilets/welfare facilities, and lock-up containers.

#### 6.3.2 Proposed Development

The commencement of the main construction work will require significant additional construction plant. Regular deliveries of materials and ready mixed concrete will take place during these works. There will also be an increase in the construction workforce resulting in more cars and vans accessing the site.

All HGV's will access the site from Red Arches Road. Safe access must be facilitated to construction traffic with additional specific measures employed to ensure safe access during darkness.

Sufficient space must be allocated to allow construction vehicles to turn around safely on-site to avoid vehicles reversing out of site access points.

#### 6.3.3 Craneage

A crane will be required for the erection of the roof structure and the roof cladding of the sports hall. The roof structure of the sports hall comprises of a series of welded steel portal frames and a profiled metal deck. The primary roof members over the sports hall will be circa. 18m long. The Contractor will develop a proposal for the delivery of the roof members and will agree this with the Local Authority and An Garda Síochána. If required, the delivery of these members could be restricted to outside of peak hours.

The size of the crane will be determined by the Contractor in relation to their overall use for it, but it is likely that its primary use will be for the installation of the roof elements and therefore will be dependent on the size and weight of the roof members. The Contractor will select the type of crane that will be used and will develop a site-specific lifting plan showing details of the size and location for the crane on this specific site.

The installation of the roof members is anticipated to take approximately 10 working days with a further 10 days to complete the installation of the metal deck and to seal the building.

#### 7. NOISE, DUST & VIBRATION

#### **7.1** Dust

Dust is a nuisance and can be damaging to humans, machinery, plants and animals. All workers on site are to consider the nuisance caused by the impacts of dust. The effects of dust will be minimised using the following techniques;

- Avoid creating unnecessary dust.
- Cover materials which could create dust when windy.
- Dampen down dust in operations which create dust.
- Ensure that vehicles leaving site do not leave mud on the road.

Activity-specific Method Statements will be prepared by the Contractor and reviewed by the Design Team & FCC. Dust monitoring will be addressed with the Contractor on an ongoing basis and will be reported at regular Progress Meetings.

#### 7.1.1 Maintenance of Public Roads

There will be potential for delivery vehicles and other site traffic to carry mud and silt onto the public roads when exiting the site. In order to prevent this, a wheel wash facility will be utilised on site. This will be used as required to wash down vehicles prior to leaving the site. A road sweeper should also be deployed on the accesses to the site to keep this clean and prevent vehicles carrying mud onto the public roads and publicly used carparks. Roadside gullies will need to be maintained by the road sweeper contractor. Road line markings will require to be monitored and markings that require replacement throughout the duration of the project will be replaced by a specialist contractor. Close supervision of haul vehicle loading must be carried out on a full time basis by the PSCS/Contractor personnel to ensure there is no over-loading of vehicles.

#### 7.2 Noise & Vibration

The Contractor will comply with all statutory regulations governing the control of noise & vibration. The Contractor will comply with (as a minimum) the British Standard 5228 Part 1 & 2. It is anticipated that the Contractor will fit all noise compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools and vehicles. The Contractor shall ensure that the noise level from all mechanical appliances is kept to a minimum and shall provide where necessary noise reducing aids. Cranes, piling rigs and other machinery will be shut down during work periods / throttled to minimum when not in use. Noise from the construction of the development shall not give rise to the sound pressure levels (LeQ 15 minutes) measured at noise sensitive locations which exceed the following limits: 55db (A). The Contractor shall employ a vibration monitoring system. The Contractor will nominate a point of contact who will be available during the works at all times. If exceedances are recorded, the contractor will be required to adopt alternative construction methodologies and measures to ensure that the limits are complied with. Noise & vibration monitoring will be reported on by the Contractor at regular Progress Meetings.

#### 8. SUMMARY

This <u>Outline</u> CMP is indicative only, however, it is expected that the final CMP will be prepared by the PSCS/Contractor will incorporate the items outlined above and ensure that all requirements identified as part of the planning consents will be included in the CMP.