Sellafield Ltd

Two Storey Modular Building

Construction Statement, Transport and Waste Plan

1.Introduction

This minor planning application is for a two-storey modular building which will be known as the Calder Hall Site Emergency Assembly Point (SEAP). The building will provide welfare facilities and some office space to service the needs of site-based personnel. The building will be designated as a Site Emergency Assembly Point for both Site Emergency Exercises and in the event of a Site Emergency and will be available for this purpose 24 hours of the day.

2. Requirement

The Nuclear Installations Act (1965) requires a suite of conditions to be imposed upon a Nuclear Licensed site. The provision of SEAP shelter arrangements is a requirement under Site License Condition 11: Emergency Arrangements.

One of the current Site Emergency Assembly Points (SEAP's) for Calder Hall is located within the Administration building, which is planned to be demolished to make way for future developments. The other existing SEAPs at Calder Hall are unable to accommodate the full capacity required and it has been confirmed by Sellafield Ltd's Emergency Planning Team that there are no existing facilities in the surrounding area that meet the needs of the additional SEAP requirement.

Failure to make an alternative SEAP provision would halt works on the Calder part of the Sellafield site, and would significantly impact high hazard reduction delivery plans. Therefore, it has been identified that a new SEAP facility must be provided, with capacity for approximately 300 people, with associated welfare and office space.

3. Description

The proposed development site covers approximately 1300m² and will be occupied by a two-storey modular building consisting of 28 modules in total. These will be arranged in a configuration of 11 modules wide (max), with 3 of the modules 2 deep. The building footprint will be approximately 36 m x 16 m overall (max dimensions), providing a total floorspace of approximately 790m^2 across 2 levels. There will be a rainwater harvesting system to collect and re-use rainwater for flushing toilets.

The main elements of the construction will be works to ground levels and an embankment, installation of concrete foundations and support works to the embankment. Followed by the installation of the modular units and connection to existing services and completion.

4. Personnel Numbers

Construction personnel will predominately be drawn from the existing work force across the Sellafield site with the exception of the modular build specialist sub-contractors. The number of construction personnel is expected to range from 10 to 20 individuals throughout the project and hence these low numbers will not materially affect the numbers of personnel travelling to and from the site.

Once the facility becomes operational, there will be no additional personnel working on the Sellafield site as people will be relocated from other facilities.

5. Location

The new modular building will be built on the Calder Hall area of the Sellafield site. The works will also include some physical ground works including trenches for services, levelling the ground and foundations work. The modular units will be manufactured off-site and brought to site via road transportation along the A66 and A595 to the Sellafield Main Gate. They will then be installed on site.

Design works will mainly be undertaken in offices based off-site and personnel will use video conferencing and other remote working techniques to reduce the number of visits to site.

6. Travel to the Sellafield Site

Travel demands will vary during the construction project. Personnel required to attend site during construction will travel to/from the site in accordance with Sellafield Ltd's Travel Plan (January 2022) i.e. by bus, train, car-sharing, motorcycle or bicycle. As such, changes to the number of vehicles on the local highway should be insignificant.

Once the building becomes operational, there should be no change to the numbers of vehicles on the local road network as personnel will be relocating from other buildings on the site. Vehicle movements will be in line with the SL Travel Plan.

7. Excavation of ground works

Characterisation

Land characterisation will take place to determine the soil type and any contaminants to determine the most suitable place for re-use or disposal in accordance with Sellafield Ltd's procedures and the Environmental Protection Regulations.

Excavated volumes

The excavated volumes are estimated to be approximately 3,000 Tonnes.

Material types

The material types that are expected to be excavated are soil, clay, tarmac and concrete.

Waste hierarchy

The most efficient methods of constructing the facility have been determined. These methods will contribute towards minimising potential wastes i.e. reduction in the use of raw materials and the reduction in the transportation of goods.

a. Reduce

Through utilising the on-site concrete batching plant for all concrete requirements including the foundations of the facility, this will reduce the need to transport the concrete from batching plants off-site.

b. Re-use

The project is employing best practice with regards to managing excavated material by using the CL:AIRE Developed Industry Definition of Waste Code of Practice to determine whether the excavated material should be classified as a waste.

c. Re-cycle

A recycling facility will be used to process the clean material which cannot be re-used on site.

d. Disposal

Any disposals off-site will be characterised and disposed of at suitable off-site licensed facilities.

8. Construction Materials Delivered

Materials

The building will be mainly constructed by modular units built off-site then brought to site and placed on concrete foundations. The building will require civil, mechanical (including HVAC) and electrical fit-out. All deliveries will be managed via the Delivery Management System (DMS). The DMS is an online computer based commercial vehicle booking and management system. The DMS uses delivery times between 8.30am and 3pm to avoid peak travel times.

Use of the on-site concrete batching plant

The project plans to utilise the on-site batching plant to avoid adding to road traffic. Off-site facilities will only be used as a contingency, should the batching plant not be available.

9. Equipment

It is envisaged that a crane will be required to lift and place the modular units onto the site. The works will be programmed to bring the crane to site once so that it can off load and place the modular units in position then leave the site once all the lifting works are completed.

10. Dispatch of Vehicles from the Sellafield Site

All the material leaving the Sellafield site will be subject to the relevant clearance procedures under the supervision of the Local Clearance Coordinator and Waste Advisor. The readings from the load cells on the wagons will be recorded by the contractor prior to removing any material from the site. This will be kept as a record to monitor the volume of waste leaving the site.

11. Summary

This proposed development is for a relatively modest-sized modular building which will be constructed over a relatively short timescale, requiring a small number of road transports. Therefore, the construction activities associated with the proposed development is anticipated to have a minimal adverse effect on the local road network.