



Sellafield Ltd

North Transfers Facility

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DESIGN AND ACCESS STATEMENT

[North Transfers]

Site Location	The proposed location for the building is within the central area of the wider Sellafield site, entirely away from any public facing parts of the site.
Existing Site	<p>The proposed location for the building is a constrained site within an existing secure area. It is bound by an existing building and link corridor, a service trench, fences, and gates.</p> <p>From the existing topographical survey which covers this area, the existing ground level of the site is flat at around 22.70m AOD. The useable part of the site is presently vacant and is covered in tarmac, concrete, and gravelled areas.</p> <p>The adjacent buildings are clad in red/orange brickwork and range from single storey to several storeys in height.</p> <p>Please see drawing BE3125731.</p>
Proposed Development	<p>There is a requirement to transfer materials from existing facilities across the site to newer facilities. Currently, these material transfers are carried out on an intermittent and ad-hoc basis. In the future, there is a need to increase the number of transfers and, therefore, a fit-for-purpose transfer facility is required in order to provide a safe and secure operating area in which the materials can be moved out of their current storage area and loaded into transport vehicles, ready to be moved across the site.</p> <p>The scheme seeks permission to erect a small, single-storey industrial building which is to be physically linked to an existing main building.</p>
Design Considerations	The design process for nuclear development is complex and goes far beyond aesthetic considerations. That's not to say the visual attractiveness of development is not important; however, it is vital to understand the interplay between various technical matters which must be factored into the design process from the very beginning to ensure nuclear facilities are safe and fit for purpose. Often the main considerations underpinning the design of nuclear development relates to matters of nuclear safety and security, conventional safety, structural integrity, seismic qualification, and

	durability/maintenance. Alongside site-specific constraints, these nuclear design requirements are interwoven with the more conventional "good design" principles to achieve the best possible design outcome for the proposed development.
Detailed Design:	
➤ Use	The function of the proposal is to provide a robust building to facilitate the export of packages from the adjoining buildings to elsewhere on site. This entails the storage of packages within the building before they are loaded into a truck and exported.
➤ Amount	The overall gross external area of the new building is circa 305sqm, while the overall gross internal area, including the new circulation areas is circa 270sqm. Please see drawing BE3125735.
➤ Layout	The new North Transfer facility is accessed from the South and the building has been arranged to connect directly into an existing link corridor between two existing buildings. Please see drawing BE3125735.
➤ Scale	The building has a ridge height of approximately 6.5m, a suitable scale for the context within which it will be built. A roof gantry and roof vents increase the overall height by 1300mm, making the highest and most visible parts of the building almost 8m. The size of each building elements is driven by specific functional requirements, e.g. a minimum height of around 4.2m for supporting infrastructure/equipment. Please see drawings BE3125735 & BE3125736
➤ Landscaping	There is little in the way of landscaping to reference. The site is presently made up of areas of asphalt and gravel chippings, which will be replicated in the proposed site. Please see drawings BE3125731 & BE3125735.
➤ Appearance	The requirements for the external building materials is that they need to be robust and able to satisfy their design life in a coastal environment. The building also needs to be erected efficiently to minimise disruption to the flow of items between buildings. The external envelope will be finished with a uniform material, with the walls and roof being a continuation of each other. The cladding is to be an aluminium standing seam cladding with a stucco embossed finish. It is anticipated that the cladding will weather

	<p>within the first two years. All other finishes to external envelope will be treated to be compatible with a coastal environment, with a similar finish to the weathered finish of the cladding. Ground and roof mounted gantry, and roof access ladder to be natural aluminium finish, suitable to coastal environment.</p> <p>Please see drawings BE3125735 & BE3125736.</p>
➤ Access	<p>There is presently level access into the topographically flat site for both pedestrians and vehicles; this will be unchanged. The existing connection to the internal road network will remain unchanged and will be the only method of vehicles accessing the site. There will be no parking within the site with works vehicles only picking up and dropping off.</p> <p>Please see drawing BE3125735</p>
Other:	
➤ Noise	<p>The new facility provides means for operations to be carried out internally and therefore it will have no detrimental impact to noise in the area.</p>
➤ Flood Risk	<p>Based on existing data at the current stage, flood risk to the existing site is considered low and would not increase due to proposed site development in the case of coastal and river, drainage network or groundwater flooding.</p> <p>Assessment of surface water flood risk based on the 1 in 100 year return period plus 40% climate change event predicts surface water flooding within the southwest corner of the North Transfers Facility site. It is noted that the climate change uplift used is greater than the recommended central allowance uplift of 35% appropriate for the North Transfers Facility, which has an end of design life earlier than 2100.</p> <p>In order to determine the final risk level for surface water flooding due to the North Transfers Facility the revised site layout will be incorporated into the site wide flood risk model during the detailed design phase. This flood risk model will be used to determine any change in the extent of localised flooding and confirm any additional or modified mitigation measures required to protect the North Transfers Facility and adjacent buildings.</p>

DRAWING REGISTER

BE3125731	Site Plans as Existing and Proposed - Planning	A
BE3125735	Architectural Plans as Proposed - Planning	A

BE3125736	Architectural Elevations as Proposed - Planning	A