

Transport Assessment: Addendum

Proposed Port Development (B2 & B8 Use) at Alexandra Docks, Newport

Our Ref: 230613/TAA/01 – 23rd May 2025 – Planning Ref: 25/0069

Introduction and Background

1. SCP are retained by Stephenson Halliday to provide transport consultancy services in connection with a planning application for the “*Construction And Operation Of A Mill Including Storage Of Raw Materials, To Produce 'Green' Cement From Recycled, Non-Hazardous, Waste Materials, Storage Of The Product And Onward Distribution*”.
2. A planning application for the scheme was submitted in January and validated in March 2025 under Newport City Council (NCC) reference 25/0069, including a Transport Assessment prepared by SCP.
3. NCC’s highway officer subsequently provided a consultation response in April and subsequent discussions have taken place with the officer via email. This Transport Assessment Addendum (TAA) has been prepared in order to provide the requested additional information, with particular regard to the anticipated trip generation associated with the proposed scheme

Proposed Operations

Phase 1

4. Phase 1 will include site preparation, connection to services, security fencing and the provision of foundations.
5. Phase 1 has a duration of approximately 3 months.

Phase 2

6. Phase 2 will include the importation, storage, and onward distribution of 100,000 tonnes per annum of cement substitute. This cement substitute is a finished product which is undergoing the normal consented operation of being unloaded and distributed from the site in smaller quantities.
7. Phase 2 has an installation period of 3 months for silos and specific unloading equipment followed by a minimum 12 months of operation.
8. The general operations associated with Phase 2 are anticipated to take place over 24 hours Monday to Sunday, however deliveries are likely to take place on an 18-hour basis (03:00 to 21:00) depending on independent operators.

Phase 3

9. Whilst Phase 2 is operational, Phase 3 will be constructed.
10. Phase 3 will include the importation of up to 1,000,000 tonnes per annum of raw materials and clinker/granulated blast furnace slag; construction and operation of the mill for processing, manufacture of cement, cement substitute and onward distribution; the slag can be stored externally on the dockside but other materials, such as the clinker, have to be stored under cover; a substation will be installed and hydrogen storage is proposed as a future use.
11. Delivery vehicles intended for road use will approach the site entrance and be guided to the area located beneath a silo. A secure connection will be established, allowing a 30-ton load to be transferred into the vehicle. The weighing process is automated, and once decoupled, the vehicle will exit the site and proceed to its delivery location. The receptor sites will consist of smaller silos that cater to concrete batching plants situated on industrial premises or designated construction sites.
12. Phase 3 will comprise the long term operation with no specific time duration.
13. Similar to Phase 2, the general operations in Phase 3 are anticipated to take place over 24 hours Monday to Sunday, however deliveries are likely to take place on an 18-hour basis (03:00 to 21:00) depending on independent operators.
14. Phase 3 will include three shifts for operating and maintaining the mill/distribution processes and using the standard timings of 06:00 to 14:00, 14:00 to 22:00 and 22:00 to 06:00. Shifts will require 3 personnel at a time which requires 15 FTE staff cover for annual leave and training/illness absences. Assuming that all staff will drive, the operations will result in 6 light vehicle (LV) trips (3 arrivals and 3 departures) at each shift changeover or a combined total of 18 two-way trips per working day.
15. There will be a separate shift for loading from the dockside and maintenance operations which will run from 07:00 to 17:00. On a seven-day basis this will provide an additional 6 FTE posts
16. Office staff will add a further five personnel working between 08:00 and 17:00.
17. The number of staff on site during the busiest daytime period will therefore be 17 allowing for two shifts being present as they turnover.

Vehicular Access to the Site

18. Vehicular Access to the site for delivery vehicles is provided via the A48 trunk road and East Way Road and the main site entrance which is shared with other users located further to the west.
19. The staff and visitors access is also located off East Way Road, 150m further to the south in order to avoid conflict between heavy vehicles and other users.
20. East Way Road is a privately maintained dock estate road and includes a dock security point. It is understood that a new reception area and relocation of the security checkpoint will be undertaken by Associated British Ports to ensure that there is no opportunity for vehicles seeking access to the port to queue back up along East Way Road towards the junction with the A48.

21. The heavy goods vehicles (HGV) will approach the silos and registered using an internal ANPR system. Once loaded, using an automatic weighing system, they will move off in forward gear to the departure control point. All vehicles will be fitted with integrated load cells to ensure that they are not overloaded, and they will then depart along East Way Road to join the A48.
22. Light goods and staff traffic will enter the site via the existing access to the car park. The car parking provision includes two disabled parking bays and three electrical vehicle charging points included within the proposed 27no. spaces, which is sufficient for the peak demand. Secure, covered cycle parking will provided adjacent to the car parking spaces and includes 5no. spaces.
23. There will be no public access to the site and the port restricts access to those with port-related functions. There are no public rights of way within the site and access to this section of the port is restricted to those who have undergone strict familiarisation and health/safety awareness training.

Trip Generation

Phase 1

24. Phase 1 does not involve regular transport although will incur deliveries of fencing supplies. As a result, the associated number of vehicular trips are anticipated to be minimal and significantly less than Phases 2 and 3.

Phases 2 and 3

Operational Trips

25. The trip generation has been derived using the total tonnes per annum (as detailed previously) which are to be delivered by vehicles with an approximate 30t payload.
26. The trip generation analysis for the HGV trips associated with Phases 2 and 3 is presented in **Table 1** below.

Table 1 – Trip Generation Summary for HGV Trips										
Phase	Payload Tonnage (t)	Tonnes per Annum:	Total Trips per Annum:		Weekly Average Trips (Based on 52 working weeks)		Daily Average Traffic Movements (Based on 7 working days per week)		Traffic Movements per Hour (Based on 18 operational hours per working day)	
	One-Way		One-Way	Two-Way	One-Way	Two-Way	One-Way	Two-Way	One-Way	Two-Way
2	30	100000	3333	6667	64	128	9	18	1	1
3	30	1000000	33333	66667	641	1282	92	183	5	10

27. The site already has consent to import 500,000t. The proposals would not constitute a change of use and that the transport operations would be on a similar scale to what is currently permitted. Given the site already having consent for half of the proposed volume of materials sought, the analysis demonstrates that the proposed scheme will provide a net increase of 5 HGV movements per hour.
28. Whilst there is some potential for the timing of trips to fluctuate according to destination and travel times, the total number of deliveries per annum is derived from the maximum output and any slight peaks and troughs will be caused by demand. Notwithstanding this, the number of HGVs will be reasonably fixed because they are a specialised piece of equipment that needs to accept and deliver the product in the absence of moisture. These are not items that can be readily sourced or converted from other road-going stock and, conversely, being expensive equipment, it is not viable for vehicles to be sitting idle during the trough periods.
29. Both the final product imported in Phase 2 and the raw materials for Phase 3 will be imported by ship. These journeys will displace other shipments that would otherwise occur through mineral/coal imports at the same location. The draft at the dock dictates the size of shipment that can be accommodated and, hence, the number of journeys, which are anticipated to be between 20 and 35 deliveries per annum or a maximum of around 2 trips per month. As a result, the associated trips will be minimal/infrequent and have been excluded from the trip generation analysis.

Staff Trips

30. A summary of the total staff trip generation outlined based on the shift information provided previously is shown in **Table 2** below.

		Table 2 - Staff Trip Generation Summary	
		Arrivals	Departures
Staff Shift	00:00		
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00	3	3
	07:00	6	
	08:00	5	
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00	3	3
	15:00		
	16:00		
	17:00		8
	18:00		
	19:00		
	20:00		
	21:00		
	22:00	3	3
	23:00		
Total		20	20

Peak Hour Trip Generation

31. The gross peak hour would therefore be 1700-1800 when the site generates 10 HGV trips (5 arrivals and 5 departures) and 14 staff departure trips, resulting in a total of 24 movements in the hour, equating to a movement every 2-3 minutes.
32. Given the application site is located in an existing dockside and accommodates mainly shift workers, there will be limited scope for sustainable transport to and from the site. The trip generation analysis presented in this report assumes that staff would travel separately by car and is therefore considered robust. Furthermore the generation set out above make no allowance for the existing consent for half of the annual tonnage sought, which effectively halves the increase in trip generation.

Highway Impact

33. At the time of writing this report there is no information on the location of suppliers / where the material will be sourced and therefore no information to determine the potential distribution of construction traffic. Notwithstanding this, it is likely that deliveries will route via East Way Road and the A48.
34. Traffic data has been obtained from the Department for Transport for point 664 which is located along the A48 to the north-west of the site. A summary of the data for Point 664 and resultant highway impact is provided below:-

Table 3 - Highway Impact						
DfT Count Ref.	Year	Total Vehicles (AADT)	Total Daily HGV Trips (Two-Way)	Total Daily Staff Trips (Two-Way)	Total Daily Trips (Two-Way)	% Impact
664	2023	29504	183	40	223	0.76%

35. Table 2 demonstrates that there will be a maximum impact of 0.76% along the A48 which cannot be considered significant. It should be noted that the above analysis assumes that all development related traffic will route via point 664 in order to provide a robust analysis in addition to the already robust assumptions made in calculating the traffic generation, detailed earlier.

Summary

36. This Transport Assessment Addendum has been prepared in order to provide the requested additional information associated with application ref 25/0069, with particular regard to the proposed trip generation.
37. It is anticipated that Phase 1 will only generate minimal trips associated with the removal of existing redundant temporary buildings, scrub and the provision of temporary welfare facilities. The general operations associated with both Phases 2 and 3 are anticipated to take place over 24 hours Monday to Sunday, however deliveries are likely to take place on an 18-hour basis depending on independent operators. As a result, most of the proposed trip generation will occur outside of the peak hours and trip generation associated with staff/smaller deliveries etc. will be minimal.
38. The highway impact analysis in this report demonstrates that there will be a maximum impact of 0.76% along the A48 which cannot be considered significant.
39. Given the application site is located in an existing dockside and accommodates mainly shift workers, there will be limited scope for sustainable transport to and from the site. The trip generation analysis presented in this report assumes that staff would travel by car and is therefore considered robust.
40. The comments from the local highway authority consultation response have therefore been addressed and the conclusion from the Transport Assessment remains that from a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval. On this basis, the traffic impacts of the development are considered acceptable and no further detailed assessments are required.