Inspector's Report

312981-22

Development	Construction of an agricultural fertiliser facility, and additional port operational use of the jetty to facilitate cargo vessels and associated site works. A Natura Impact Statement (NIS) and Environmental Impact Statement accompanied the planning application. The proposed development comprises the provision of an establishment to which the Major Accident Directive applies.
Location	Belvelly Port Facility, Marino (Townland), Marino Point, Cobh, Co. Cork..
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	206955
Applicant	Goulding Chemical Ltd.
Type of Application	Permission
Planning Authority Decision	Grant permission subject to conditions
Type of Appeal	Third Party v Decision to Grant First party v S.48 condition

Appellants	Eoin Bell
	Madeline Roberts
	Cllr. Marcia D'Alton
	Goulding Chemicals Ltd.
Observers	Eugene Sheehan
	Galen Moloney
	Rob McLaughlin
	Eibhlin Fitzgerald
	Deridre Fitzgerald
	Billy Cotter
	David Doherty
	Ian Fitzgerald + Others
	Eithne Farr
	Paul La Roque
	M. La Roque
	Joe Hunter
	Sean F Durcan
	Sandra Farr
	Denise and Aiden Lee
Date of Site Inspections	4th August 2023, 7th September 2024
Inspector	Suzanne Kehely

1.0 Site Location and Description

1.1. The site is located to the north west of Great Island in Cork Harbour, Europe's largest natural harbour, which is described in statutory plans as being a special character area and a strategic asset. The Harbour hosts multiple port activities, strategic employment uses, marine research, energy generation, tourism, heritage and residential communities in an environment with sensitive ecosystems and natural amenities.

1.2. The site of c.7.6 ha is part of a larger area of some 46 hectares of industrial lands located in the peninsular setting known as Marino Point which incorporates Marino Point jetty as part of the Belvelly Port Facility site. The lands are in the townland of Marino whereas Belvelly is an adjacent townland but 'Belvelly' is used as part of the registered company name Belvelly Marino Development Company. BMDC is a public private partnership between Lanber Holdings and Port of Cork Company (POCC). Most of the subject site is for the proposed Gouldings Chemical Ltd facility whereas the jetty area which serves the site and part of the Port Facility lands is approx. 240m x 20m with a shore access viaduct.

1.3. The site is 5km northwest of Cobh and is accessed by road off the R624 regional route and from the mainland via Belvelly bridge which is the sole vehicular access between the Great Island and the mainland. The Cork-Cobh Rail line also traverses the site at two points. The main vehicular access to Marino Point/Port facility is via a bridge over the railway and this is not part of the subject application site. The entrance was however part of the previous site subject of infrastructural works for the entire industrial area. (File attached with box) There is a second emergency access to the north east onto the R624.

1.4. The site contains several derelict former IFI buildings and structures and redundant services and utilities that are inadequate for existing activities and allow no potential for future development. Since the closure of the Irish Fertiliser Industries facility in 2002 at Marino Point, apart from the jetty operations, the site has been largely derelict, although the industrial use of the site was not abandoned. A Section 5 declaration D/240/18 by Cork County Council determined that modifications of the cargo handling system at the existing jetty and the open storage of certain dry bulk cargo were exempted development and established that there is a continued

industrial use of the wider Marino Point site, now known as Belvelly Port Facility, outside that associated with the Marinochem operations which is to the north west of the site on a leased site of 2.7ha. Marinochem, is classified as an Upper Tier Seveso site due to the presence of quantities of listed dangerous substances including methanol and formaldehyde. It receives these substances among others via a service pipe from the jetty at rate of 1-2 shipment per week (chapter 15 of EIAR) . Marinochem has a 1 kilometre consultation distance covering the whole of the Belvelly Port Facility site and as a result any proposed development on the site is required to be subject to consultations with the Health and Safety Authority.

1.5. The nearest concentration of dwellings is in Passage West across the harbour at a distance of c 500m across the water (Lough Mahon) from the jetty. The population of this settlement is in the order of 5800. Toureen Terrace/Cork St. comprises an extensive terrace of 3 bay two storey dwellings fronting onto the coast with direct views of the jetty and its peninsular backdrop. The jetty and taller structures are visually prominent from Passage West on the opposite side of the harbour. At the southern side of Belvelly Bridge there is a small residential cluster comprising a mix of old properties including Belvelly Castle on the local road to the east and a newer in-depth housing development close to the junction . To the west there is an almost continuous 700m frontage of housing development on the southern side of the R264 to Belvelly Bridge at about 900m north east of the site boundary and 1.7km from the jetty at its nearest. There are a few one off houses along the R624 and also a cluster at Marion Terrace off the R624 to the south ranging in distances at around 400m from the site boundary at the nearest point and c 1.2km from the jetty. The lands on the opposite side of the R624 from the site are farmland and amenity space -namely Cork Golf Club. Fota Island entrance is to the north of Belvelly Bridge.

1.6. The site is part of regeneration lands identified as Marino Point in the current development plan and described accordingly: Marino Point : In volume 4 of the current Cork County Development Plan (CDP) for South Cork it states ‘The plan recognises areas of Cobh which are currently identified as Industry but merit additional guidance in the event of the opportunity to redevelop them arises during the term of this plan. This site comprises the redundant infrastructure of IFI but excludes the currently operating Marinochem (Dynea Ireland) Ltd. industrial development (Seveso III Directive site). The site is largely degraded and vacant.

Development on this site should be port-related or utilise the existing industrial installations and should be of a scale and form appropriate to this prominent site. Marino House is a Recorded Monument (RMP No. CO075-13) along with the Orangery (RMP No CO075-076) and landscape feature (RMP No. CO075-027). Any development in this area will be required to protect the buildings and their setting and will require an Archaeological & Architectural Assessment. Development should be sensitively designed and planned to provide for the protection of adjoining nature conservation areas. The mature trees and woodland on the site are to be protected as far as possible. Any such development shall ensure that all existing infrastructure on the site which serves the adjoining Marinochem (Dynea Ireland) Ltd. site shall be protected.'

1.7. The port facility is referred to in the CDP as Marino Point Terminal – (Belvelly Port Facility Marino Point Terminal) is described as including an area of approximately 46 hectares. Belvelly Marino Development Company (BMDC) purchased Marino Point in June 2017 with the objective of developing the site in line with the existing port-related industrial zoning objective. It is envisaged that Marino Point will become an integral part of the PoCC infrastructure.

1.8. A Marino Point Masterplan was finalised by Belvelly Marino Development Company (BMDC) and enabling works for the whole area were grant permission by Cork County Council (CC) and subsequently by An Bord Pleanála (ABP) in February 2021 (ABP-307938- 20). The site is part of these lands.

2.0 Proposed Development

2.1. **Goulding Chemicals Ltd. wishes to relocate its operations from the City Docks to Marino Point. In parallel with the relocation of Goulding's operations, BMDC is proposing additional use of the existing jetty at the Belvelly Port Facility for general dry cargo vessels.** Permission is sought for the construction of a new agricultural fertiliser facility for use by Goulding chemicals limited which involves the importation by ship of bulk granular fertiliser at the existing jetty.

2.2. The **new build elements** are located in the expansive part of the southern side of site to the north of Marino point where it abuts the coastal frontage. A small structure is to be demolished and new structures are at the southern side of this tract

whereas the product storage areas are to the north in the existing car park/circulation areas. The elements include:

- a bulk storage warehouse c. 150m at its longest by 70m at its deepest and alongside an internal road to the south of the site.
- a bag store building and an adjoining bagging hall building extending 59 x 39m approx. 10m north of the main storage building
- A weighbridge office and substation rooms with an staff car park and flanked by vehicular entrances on each side to the site compound.
- A vehicle store adjacent to the site g and palletizing facility also incorporating staff facilities
- An office building to support customer service and Weybridge operations which includes an ESB substation and switch room
- A surface water attenuation tank to the north
- The paved area is proposed for product storage area in various sized areas concentrated along the coastal frontage to the north of the site with an intervening surface water collection channel to drain the yard area .
- Fencing is proposed along the site frontage outside the channel route and with 5 entrances gates excluding the car park area
  Outside paved storage area weighbridges access control and security facilities
- Surface water layout – augmenting the existing system with filters
- Foul sewer to connect to the upgraded system as permitted (under ABP ref 307938)

2.3. **Additional port operational use** of the jetty is proposed to facilitate cargo vessels.

- Projected average number of ships using the existing jetty for **importation of bulk fertiliser will be approximately 50 ships per year.**
- It is also explained that the jetty at the Belvelly Port Facility is currently used to handle dry cargo (wooden logs/wood chip), the importation of methanol for Marinochem, as a standby berth for Port work vessels and to moor occasional vessels for lay-by or minor maintenance work. The proposed additional port operational use of the jetty will consist of servicing other cargo vessels which will include the relocation of vessels displaced from the Cork City quays. The additional cargo types proposed will include wood chip, marine machinery parts,

deep sea maintenance and exploratory vessel engineering cargo and other miscellaneous dry cargo. **Approximately 40 additional port related cargo ships will berth at the jetty each year**. The size and frequency of cargo vessels will be variable and subject to various customer needs. On average, ships will be berthed from one to two days to offload load cargo but may be longer depending on size and weather conditions.

- The potential cumulative impacts of the overlap of the site enabling works and the construction phases of the Goulding facility have been considered fully in the EIAR. A traffic and transportation assessment has been completed which provides and assessment of the potential traffic impacts of the proposal on the R624 and national road network.

2.4. The application documentation includes:

- Planning Statement
- An EIAR in three Volumes
- Quantitative Risk Assessment for Seveso land use planning purposes. (Revised in further information appendix B of the response document and submitted as Revision 5c in unsolicited information on 11th November 2021.)
- Photomontages as appended in appendix A of further information.
- Drawings received on the 8th of October 2021
    - Auto track drawings and mitigation measures along the R624 – road signs
    - Jetty works – drawing no. POC02-MWP-ST-ZZ-DR-C-5008 (showing proposed drainage and concrete upstand details. Note this drawing shows the lands that are outlined in blue as being outlined also in red – this area includes the Jetty Storm water retention tank with valve chambers and pump chambers.
- Nature Impact Statement - revised in further information
- Infrastructure report

2.5. The application form confirms that the proposed development does not relate to an activity requiring an Integrated Pollution Control Licence, (EPA), an Industrial Emission Directive Licence (EPA) or a waste licence (EPA).

2.6. Further information.(FI)

- FI was received on 8th October 2021.

- Unsolicited further information was also received on 15th October in respect of typo on p.18 of FI.
- Revised site notice and FI regarding additional technical detail (letter and report) were received on 13th December 2021 regarding
  - jetty surface water drainage and management details - drawings attached.
  - unloading procedure with prevention of pollution procedures and attached letter from Goulding's outlining product details and chemical properties.

3.0 Planning Authority Decision

3.1. Following a request for information and submission of satisfactory details by reference to inter departmental and consultee reports, the planning authority decided to grant permission subject to 30 conditions.

- Condition no. 2. Relates to mitigation measures
- Condition 8. Restricts materials accepted at the jetty to those only listed within the further information response.
- Condition 10 relates to an environmental management system to be agreed.
- Condition 13 requires no tonal or impulsive noises should emanate from the site at nighttime.
- Condition 24 requires details of the operation of the proposed operation traffic management plan as outlined in the further information to be agreed in writing in relation to management systems monitoring arrangements reporting arrangements and review arrangements. All freight vehicles using the port facilities should be included in the vehicle booking system that forms part of the OTMP and all costs to be borne by the developer.
- Condition 27 requires that the facility shall not become operational until the relevant infrastructure permitted under planning reference 196783 ABP ref 307938 is developed.
- Condition 28 : **Special contribution of €1,0794,58** in respect of works proposed to be carried out for the provision of a pedestrian cyclist route on the R624 at Belvelly, pavement replacement/ resurfacing on the R624 interim upgrade works the Cobh Cross N25 interchange.

- Condition 29 section 48 contribution of €59,640 in respect of public infrastructure and facilities benefiting the development.
- Condition 30 a supplementary contribution of €247,080 in respect of the Cove Middleton blarney suburban rail project in accordance with the council's supplementary development contribution scheme

3.2. Planning Authority Reports

3.2.1. Further information was sought in respect of an extensive range of issues including the need for an amened NIS and updated EIAR. Information related to ecology, Risk assessment and emergency, intensification of jetty use, bird surveys, noise, cargo type and handling, traffic and transportation and procedural.

3.2.2. **Summary table of issues:**

Further Information Issues	**Information review and issues arising**
1 Phasing and procedural context of outstanding permission 307938.	The permission (307938) addresses this.
2 Absence of view from a scenic route R264	Photomontages submitted clearly visible from the R624 (V15) but PA accept it would not have a negative impact . It is also noted that removal of existing structures will have a positive impact.
3 Identifying potential Major accidents given the dangerous substances on site and potential risk of storage of agricultural fertiliser (Ammonium Nitrate) a hazardous substance with potential explosion risks	An updated QRA report has been submitted to the HSA also who consider it satisfactory. No further issues.
4 Need to demonstrate no increase in risk to the railway east of the site as a	The QRA as updated includes 3 scenarios of trains /breakdown personnel and risk figure is low.

consequence of proposed storage building.	Consultation with Irish Rail regarding emergency notification to be included in the emergency plan as agreed.
Ecology/AA	
5 Mapping of bird count areas.	Maps provided and NIS updated and clarified to the satisfaction of PA
6 Intensification of use (jetty and associated noise and activity) more data on birds (gulls and cormorants/roosting etc) and in combination impact. assessment/ Mitigation e.g. alt roost site where sig impact. Addendum to NIS required	NIS updated as requested with an estimate of % of harbour populations of gulls and cormorants. Section 5 now includes an in combination assessment re these species (Ecology officer notes extensive surveys)
7 Noise at both construction and operational peak hours of 7am-midnihgt impact on sci of spa using estuary outside wintering period. Species specific assessments required – Particularly for those close to site and with appro mitigation. In combination with activities assoc with construction as permitted / nighttime roost sites. Timing of construction may be needed e.g. for piling and excavation	Updated assessment both the construction and additional port operation uses will not to be a significant cumulative effect in terms of displacing or disturbance of QI birds. Works permitted are temporary and no sig ongoing cumulative impact. 65dB marginally exceeded alongside lagoon during high intensity periods. But as short term and continuous nature, sig. disturbance related effects are not expected. To the north of site, having regard to existing noise levels associated with traffic and rail and due to proposed screening, no increase in noise levels predicted. Ecology officer satisfied - with mitigation (hoarding and timing) will prevent impact on Common Tern and does not pose risk of sig adverse impact on this species.

8 Lighting 3 x 25m masts and light spill into estuary and disturbance to SPA QI. Assessment of change in intensity and duration for mudflats north – avoid light spillage recommended	Section 5.2.4 of NIS updated re light intensity and comparison with previous industrial use. Fig 9 reflects updated design/ lux level at boundary < 1 lux plus boundary treatment already permitted. Lighting will not significantly affect population trends or distribution of QIs
9 Transportation of Cargo more specific about cargo type and impacts as part of NIS	Misc.dry cargo primarily dry bulk and break bulk material – logs, woodchip, machinery parts, deep sea maintenance and exploratory vessel engineering cargo other misc. – solid clean and dry - no liquids, oil, dissolvable components or other materially harmful material on water quality. No neg impact. Acceptable subject to no open storage of woodchip or other loose material continuous sweeping and covering hauling
10 Processing implication and effect of accidental spillages of raw material on estuarine water and associated habitats and species drawings required and description for procedures to prevent such spillages.	Following meeting post FI request – agreed to have an operating environmental management plan to be agreed prior to construction works commence. OEMP will address range of control and management/audit issues. Noted that heavy granular nature of loose material not easily prone to wind dispersion. Satisfied gap between dock and ship will be filled with material (to be cleaned) - as part of OEMP

	Losse material should be subject to agreement in the absence of vacuum hopper.
11 Emergency Procedures ch 15 of EIAR refers to risks and preparation of HSA plan but not actually submitted.	A final grant has been reviewed by the HSA - no objection to permission on grounds of health and safety. The NIS has been updated to consider in-combination effects. Acceptable to both the Environmental and Ecology officers in terms of risk (flooding, fire and explosion, traffic related risk) and contamination all considered and mitigation in place to prevent sig adverse effects.
12 Interactions/cumulative or in-combination effects: Need to update NIS and Biodiversity Chapter 5 of the EIAR to updated to consider potential for cumulative Lack of assessment of cumulative effects in chapter 16 re biodiversity and other chapters in EIAR. Also cumulative impact with other permitted site development works needs to be addressed. Where carried out at same time	Overlap of 4 months anticipated for preparation works and subject application with noise increase range estimate of 1-2 dB. Hoarding and timing to prevent impact on Common Tern does not pose risk to SPA or SAC to satisfaction of Ecology officer. Chapter 5 of the EIAR and section 5.5 of updated NIS address potential cumulative impacts.

13 Otter breeding ground in lagoon north of the site mitigation needed ensuring hoarding does not cut off adjoining estuary from the lagoon to allow continued movement for otter and other species between the shoreline and the lagoon.	The otter holt is outside the site boundary within which the hoarding is to be contained and will not therefore impede otter movement. Section 6.3 of the NIS and Figure 10 updated to reflect this and is to the satisfaction of the ecology officer.
Environment	The Env officer report refers to the concerns about air pollution and impact of fertiliser as a nutrient potentially entering Cork Harbour . Some of the claims by the applicant are disputed. Noise nuisance to environment and local area - need mitigation. Meetings were held and refers to the need for OEMP for handling granular fertiliser/cargo.
14 Confirmation of ownership of jetty and whether a separate wastewater discharge license will be applicable to the jetty and fertiliser plant	Applicant confirms only clean sw will discharge from jetty and yard. No process effluent and no license for wastewater required.
15 If attenuation tank and fire water tank the same? Details of flood water retention and controlled discharge, route of contaminated surface water from fertilise r plant/disposal/decontamination Will tank take sw from jetty if cargo at risk of contamination. Details re management.	Fire water retention tank and sw retention tank are one and same – 3100 cubic metres above ground. All sw will be monitored and if contaminated will be diverted to the retention tank. It can be diluted or tinkered off site – it can be managed. (OEMP)
16 Jetty unloading and risk of contamination. will storm water be diverted to a retention tank. Is all loose	No risk of contamination due to use of oil interceptor, sweeping up of lose material and in event of contamination

material factored into sw risk? Will ship be delayed inf tank full?	sw will be diverted to a retention tank and tested as provide for in OEMP FI states POC should have regard to retention tank capacity when scheduling shipping. It should be available for high risk (bulk fertiliser) cargo
17 Managing spillage from the crane grab. E.g. will a vacuum hopper be used clean up regime? Disposal of waste?	FI explains vacuum hopper usage not suitable but granular size and properties of load material will not blow easily and there will be no gap between ship and jetty . POC are noted to have agreed to make material to fill gap and to be cleaned with all details to be agreed in the OEMP Any loose material to be agreed with the PA in the absence of vacuum hopper. Nutrient loading will be managed though cleaning, monitoring, testing as agreed in OEMP.
18 Managing unloading woodchip and dust – steps of transfer, catching small pieces of wood and exporting from site – if so, storage and covering ?	Woodchip to be offloaded using a clam grab and does not pose a risk loading or unloading. CC Env Dep disagree. The woodchip is to be stored on a clean hardstanding on the jetty for a short time before exporting/departure. Open storage would be problematic (dust)
19 What other products to be exported and how will they be gathered, stored e.g. if loose material. Will noisy machinery necessary?	Most products large and handle by crane - not problematic. Additional products particularly loose material may be problematic and should be addressed in the OEMP and offloading conditions agreed with the PA. prior to be introduced to port.

20 Management of spillages in the fertiliser yard – a sweeper unlikely to collect all material.	Yard spillage infrequent. A main source of fertiliser in yard is at truck unloading stage where a sweeper is continuously operating. Noted to be inside a shed. All sw to be monitored and diverted where necessary to attenuation tank.
21 7am- midnight peak demand working hours are noted in the EIAR. Details of noise mitigation in the evenings/night and how will tonal and impulsive noises be eliminated. Will there be unloading of material at the jetty in the evening time. Also?	No tonal or impulsive noise expected. Reverse alarms but flat spectrum alarms will eliminate tonal noise. Needs to be managed through OEMP. While noting the post commissioning monitoring after 2 months, the PA specifies times (tonal a between 7pm-1200) to ensure tonal are eliminated at nighttime in line with EPA guidance.
Traffic and transportation	
22 Analysis of R624 required - to quantify impact on this road from south of Cobh Cross to the development site access.	The analysis quantifies impact of proposed development on design life of R624 – would significantly reduce lifespan and on-going associated costs. Special contribution towards its lifespan recommended by Roads. Table 5 quantifies /breaks down traffic impact. Proposal accounts for 38% % of HGV south to Marino from Belvelly bridge and 21% in reverse direction. - increased risk to cyclists/vulnerable users mitigation in excess of signage required. A segregated route from Cobh Cross to Cobh Tow (cycling and CMATS) is progressing as alternative to R624

23 Analysis of same to road to quantify road alignment deficiencies for HGVs and provide design mitigation measures.	Based on analysis (FI) submitted the proposed increase in heavy vehicle volumes is likely to increase vehicle impact and delays – further compounded by restricted pedestrian cycle passing and associated risk to user is raised as a concern by T+T. T+T recommend additional mitigation € toward boardwalk to free up bridge (remove geometric restrictions.) on basis of the increase HGV % submitted by the applicant over the design life of 20 years , 21.4% of the estimated cost of infrastructure is €596938.5. this does not cover the overall route from Belvelly to Marino Point. But is appropriate.
24 traffic management - to include proposal for using same road outside peak hours to reduce impact	Proposals in FI for off peak use of R264 in accordance with an agreed operational Traffic Management Plan.
25 Provision for a Traffic Management System to minimise HGVS arriving in areas of restricted geometry during peak times until such restrictions resolved.	Proposed verifiable Traffic Management System – considered adequate by T+T subject o details of the OTMP as outlined in section 2.6 of FI being agreed

3.2.7. In the final assessment the planning authority is satisfied with the information and that:

- the matter of dependence on permission PL04.307938 relating to necessary infrastructural and demolition works has been addressed by way of permission on foot of decision order dated 17th February 2021.
- while Visual Impact is evident from photomontage submitted the visibility is not considered a serious negative impact given removal of structures as permitted for.

- QRA: updated and HSA consider satisfactory – no further issues.

3.2.8. In conclusion as stated from the outset: ‘At a strategic planning level the relocation of Gouldings from the city is critical to realising significant development objectives in the city as the use is a SEVESO activity. In terms of the regional spatial strategy and NPF this is therefore a highly significant development proposal. The county development plan expresses the council's commitment to relocating port activities to Marino Point and Ringaskiddy. At the local planning level, the development fully aligns with the site’s zoning objectives in land use terms for port related industry. Furthermore this is a brownfield site whose redevelopment is consistent with sustainable development objectives. The principle of development is therefore supported at all levels of the planning system. EIAR as amended is considered adequate in describing the effects and restitution measures are considered acceptable.

3.2.9. Financial Contributions:

General Scheme: Based on floor area of 10650 sq.m.and applying €5.60 /sq.m. => €59,640

Supplementary: (being within 1km of Suburban Rail line) Based on €23.20 /sqm => €247,080

Special Contribution of €477520 towards pavement costs as per Road Design Office report on FI

Marino Point to L2989 - €226632.

L-2989 to Interchange - €230888.

Additional signage at Belvelly Bridge €20000

3.3. **Other internal technical reports**

Environment: No objection subject to conditions

Ecology/AA: with mitigation in place no adverse effects on Cork Harbour SAC or Great Island channel SPA or any other Natura 2000 site alone or in combination with other developments

Traffic and Transport: No objection subject to conditions regarding operation traffic Management system for further agreement and ongoing monitoring.. Special Contribution for Bridge works is €**596,938.50**

In the initial report reference is made to the capacity limits of the R624 in terms of catering for any intensive use of port or otherwise. Extensive upgrades would be needed to accommodate any large scale develops. While the N25 corridor scheme is being progressed it does not include the R624

Further information was sought in respect of the R624 in view of the LAP stating that it would not be sufficient to cater for any traffic intensive use port or otherwise and requiring extensive upgrading in both directions including the Belvelly and Slatty bridges. Cork cycle network plan also includes route from Rushbrook to South of Cobh cross providing an alternative route for these vulnerable road users

The alignment of the R624 is restrictive at a number of locations in particular at the junction of the South side of Belvelly Bridge. Belvelly /POCC to enhance the R624 / L2989 junction south of Belvelly bridge as part of the previous application 19 67835. 'The works to enhance the junction do not include significant construction'.

The use of the R624 including cyclists to access Great Island and Cobh town would be impacted by the proposal. Development traffic will form 38% of heavy vehicle traffic along the section from the bridge to Marino point and 21% of heavy vehicles north of the L2989 at the bridge over the design life. the increased risk to users is of concern. This requires mitigation in excess of the signage and road markings as proposed by the applicant in further information

The analysis of the road alignment deficiencies of the R624 noted that there is one quantified deficiency at the bridge. There are four locations along the route where heavy vehicles are shown to be within 300mm when passing. This is less clearance than provided in the standard 6 metre wide road. At six locations heavy vehicles are within 400mm when passing including the bridge where they cannot pass without yielding. This alignment is considered to result in potential for vehicle impact and delays. This is the basis for the boardwalk for pedestrian cycling infrastructure along the Belvelly bridge and allowing improved carriageway width on the basis of the increased heavy vehicle percentage submitted by the applicant over a design life of 20 years 21.8% of the estimated cost of the infrastructure is €**596,938.50**.

The opportunities for passing pedestrians and cyclists along the route are limited which would further decrease the level of service.

In response to the operational traffic management plan, the applicants RFI is noted…

> that additional BMDC uses of the jetty will not generate any HGV along the R624 during peak hours. This will eliminate 6 hourly HGVs from the R624 during peak traffic hours in the low season for continuous business and eliminate 2 hourly HGVs in the high season among the R624 peak traffickers. This is different to the information in the EIAR. The proposal is also submitted to reduce the hourly HGV's generated by the proposed operational development from 11 HGVs to an average of five HGVs. This is a 55% reduction during the morning peak hours of 8 to 9 AM from May to January. the proposal would be reduced the hourly HGVs generated by the proposed operational development along the R 624 up to an average of 11 HGV's referenced in the EIA or up to an average of five HGVs during the evening traffic hours of 4:00 to 6:00 PM -a 55% reduction Gouldings low business activities normally may to January. If the proposed reduced the RHB generated by the proposed operational developments during peak hours along the R624 from 8:00 to 9:00 and from 4:00 to 6:00 from 10 HGV to an average of 8 during peak traffic hours the license.

In the context of other requirements by the traffic and transport division this OTP as outlined is acceptable subject to further agreement in writing with the planning authority at least six months prior to commencement of the operational development.

In terms of traffic management, systems are proposed to significantly reduce hourly HGV's generated by the proposed operational development along the R624 during peak hours from 8:00 to 9:00a.m. and from 4:00 to 6:00p.m. compared to that proposed in the EIAR which will reduce the likelihood of two-way HGV's coinciding at arrival and departure times which will be recorded and submitted to the council. This can be reviewed in light of new road works. This is considered acceptable. It is concluded that the traffic and transport section has concerns regarding the capacity of the R624 bridge to accommodate the proposed development particularly given the clearly identified capacity issues outlined in the original LAP 2017, the carriageway

width to accommodate HGV movements in particular and the need for extensive upgrading of the road to accommodate any large scale development proposals. on balance having regard to the further information and in particular to the proposed operational traffic management and the reduction of HGV's at peak periods on the R624 as advanced in further information, the proposed development is considered acceptable.

3.4. **Third Party Submissions:**

Objections to FI relate to removal of debris from IFI prior to construction and increase of haulage over the Belvelly Bridge. Also objections to visual impact from water and road.

3.5. **Prescribed Bodies**

EPA: General context comments to the PA concerning the full decommissioning of activities requiring an Integrated Pollution Control licence by the previous occupant of the site - Irish Fertilisers Industries. This letter is dated 19th October 2019 and is date stamped 16th Feb 2021 by the Planning Department

EPA: in response to a request by ABP the EPA confirms that it is not possible to determine from the documentation if the facility needs a licence. The applicant has not contacted the Agency for a determination nor has it received an application. The applicant should be advised to contact the EPA for clarification.

Health and Safety Authority: required further information in relation to its role as the competent authority under the Chemicals Act in relation to siting and development of new establishments, modifications and associated transport routes, locations of public use and residential areas in the context of risk of a major accident. In its further submission to the PA, no objections on foot of further information.

Iarnród Eireann: In the initial letter dated 3rd February observations are made in respect of the onus of the applicant under the Railway Safety Act 2005 to ensure there is no risk to the railway. This arises due to hazardous nature of material and potential explosion if detonation conditions prevail and release of NOX gases . In the absence of documentary evidence of addressing this, Iarnród Eireann state an

objection. All proposed services that are required to cross along over or under the railway property must be subject of a Licence with Iarnród Eireann. Light also need to be addressed so as to avoid glare. Vehicular movements need to be planned due to height restriction at crossings. No objections on foot of further information.

Gas Networks No objections on foot of further information .

Inland Fisheries Ireland: Not consulted on this application – In the previous application (ABP307938) a submission was made about the need for surface water management. The EAIR also refers to concerns expressed about unloading/loading of cargo and escapement of fertiliser into waters as well as from general site run-off. Page 5-2 of the updated EIAR chapter 5 refers.

4.0 Planning History

4.1. The site

4.1.1. **ABP 307938** – (attached with EIAR and documents in large box) grant on permission on 23rd Feb 2021 for site infrastructure and improvement to stabilise an existing larger site (37 hectares) at the Belvelly Port Facility. This was undecided by the Board prior to the decision by Cork County Council in the subject case

4.1.2. **Planning authority reference D/240/18**: (File documentation sought from PA by inspector and attached in pouch in file box). A Section 5 Declaration was issued to Belvelly Marino Development Company in respect modification of cargo unloading system from a conveyor system to a crane and grab system and the open storage of dry bulk cargo within the curtilage of an existing industrial building. It determined that such was exempted development.

The planning authority report in 2018 sets out the rational for declaring the exemption. There was a considerable volume of material for such a case. I refer to the AA screening report and traffic study submitted by the referrer and technical reports from the planning authority ecologist, scientist and engineers informing the planning assessment. I note that the issue of abandonment was considered, and consideration was given to a number of issues including:

- the relative extent of operation being considerably less than peak operations less than 16 years ago and estimated at 2.5 times 2018 levels was not exempted.
- the screening out of the need for AA – ecologists report
- the limits set by the 1974 permission (table attached with summary of conditions) – this was for the original plant for the manufacture of ammonia and urea
- other information including traffic volumes and nature – not abnormal loads, outside peak hours and management system, capacity of the R264 /Belvelly Bridge
- The nature of the cargo such as logs and woodchip and no requirement for bunding due to no risk for contamination from run-off
- The basis for the declaration on exemption for a change from covered conveyor system to a more open and simplified crane and grab handling system of loads was on the basis of the nature of the cargo being wood logs and of a nature suitable to this. The continuance of operations was also exempt on the basis of a significantly reduced activity on site from the peak operations of the facility originally permitted in 1974.

Other information of note includes description of the operations, cargo and cargo handling that was pertinent to the exemption. The cover letter by the planning agent states the previous industrial activity associated with 1523/74 has ceased industrial use but has not been abandoned. Use of the port dock is an industrial purpose and no material change of use by intensification has occurred as result of road traffic or otherwise. Dock associated works are of an industrial nature.

The operation area described: the jetty is used for delivery of methanol via a service pipe to the Dynea compound north of the site . The conveyor belt is described as being used formerly to unload fertiliser and ceased to operate in 2002. The revised cargo unloading is pictorially illustrated and consists of a small crane and grab with a maximum height of 10-12m and subject to an operational management plan. The cargo is mainly treelogs and bark. Unloading is estimated at 20 ships per annum. Docking at Marino Point with an associated 50 HGVs per ship. Historically there were 50 ships per annum at Marino Point – 2.5times the current proposal.

It is stated 'Traffic management provision shall ensure that there is no material impact on the R624 route to Marino Point and that HGV activity at Marino Point would take place between 9am and 4pm. Simultaneously loading on the R624 will be avoided. The Traffic Study by Systra finds that daily traffic volumes with the proposed development in place will be significantly below the capacity of the R624 and that the proposed development does not constitute a safety risk or any obstruction to road users.

Condition 15 stated that conveyor systems within the site and on the jetty used for the transportation of intermediate or finished products shall be totally enclosed and be provided with facilities to eliminate dust nuisance and for collecting any unavoidable spillage. The receiving hoppers bulk solids delivery shall be covered and enclosed to ensure that any dust generated is contained and collected. The declaration sought the removal of this conveyor system and its replacement with the crane and grab system for unloading of dry bulk cargo. The modified cargo handling system was stated to not result in any dust nuisance as detailed in the attached operational management plan.

4.2. Other Cork Harbour decisions

4.2.1. **PL04.0035** May 2015 ABP granted 10 year permission to PoCC for the redevelopment of existing port facilities at Ringaskiddy. Required to alleviate existing constraints in handling larger vessels so as to future proof Cork as an international trading port. Condition 8. Noise levels emanating from the proposed development, when measured at noise sensitive locations, shall not exceed: 55dBA (30 minute LAR), between 0700 – 1900 hours 50dBA (30 minute LAR), between 1900 – 2300 hours 45dBA (15 minute LAeq), between 2300 – 0700 hours Measurements shall be carried out in accordance with ISO recommendation R1996 parts 1, 2 & 3 "Description and Measurement of Environmental Noise, Part 1: Basic Quantities and Procedures". Reason: To protect the amenities of the area by controlling noise emissions.

4.2.2. **ABP ref. PL04.PA0003** Permission was refused by the Board to the Port of Cork Co. for the redevelopment of Ringaskiddy Port, including the construction of a container terminal and a multipurpose ro-ro berth, comprising approx. 480m of new berths and

a Ro-Ro berth of 182m, along with 18ha of reclamation and replacement of the public pier and slipway to the east of the site. The reason for refusal was as follows:

- The proposed development entails the relocation of commercial freight activities of the Port of Cork from its existing location at Tivoli Docks, which is served by a railway line and has reasonably direct access to the national road network, to a location to the south-east of Cork City at Ringaskiddy which is not connected to the national rail system and would be totally reliant on road-based transport. While the Board accepts that there is a need to move port activities from Tivoli Docks and expand at other location(s) within the Cork Harbour area, it is considered that the proposed development would: (a) result in much of the port related traffic traversing the city road network which would adversely impact on the carrying capacity of the strategic road network in and around Cork city and in particular the carrying capacity of the strategic interchanges at Bloomfield, Dunkettle and Kinsale Road and the Jack Lynch Tunnel which it is necessary to preserve; the proposed development would exacerbate serious traffic congestion at these strategic interchanges; and (b) be unable to make use of rail freight carrying facilities in the future and would, therefore, represent a retrograde step in terms of sustainable transport planning (noting references to the potential for rail freight in the Regional Planning Guidelines for the South West Region 2004-2020 and the Cork Area Strategic Plan 2001- 2020). The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

4.2.3. **Section 5 Declaration PL 04.RL3231**: The Board concluded that in respect of question as to whether (a) the importation and storage of urea for later distribution by road, and the intensification of same, (b) the importation and storage of animal feed for later distribution by road, and the intensification of same, (c) the importation and storage of salt for later distribution by road, and the intensification of same, (d) the landing of fish on site, and (e) the intensification of road traffic entering and exiting the site; all at Cork Dockyard Holdings Limited, **Rushbrooke**, Cobh, County Cork are or are not development or are or are not exempted development was exempted development having regard to:(a) the use of the site for the importation and storage of urea, animal feed and salt, and which includes processing as described, for later

distribution by road comes within the scope of an “industrial process” as defined in Article 5(1) of the Planning and Development Regulations 2001, (b) the activities referred to (a) come within the scope of the established industrial use of the site and, therefore, no material change of use has occurred, (c) having regard to the established use of the site as a dockyard, being in part at least a harbour or port installation as defined in the Seventh Schedule to the Planning and Development Act 2000, as amended, the landing of fish on the site, as described, does not constitute a material change of use, and on the basis of the evidence provided by the parties, no material change of use by reason of intensification has occurred, as a result of road traffic or otherwise, having regard to the established use of the site for industrial purposes and specifically, for shipbuilding and ship repair, and maintenance on a significant scale:

5.0 Policy and Legislative Context

5.1. **Port of Cork Masterplan 2050 (non-statutory but framed within context of statutory plan and framework agreements and policies).**

5.1.1. This plan required as part of the National Ports Policy and is advised to be in line with International best practice. This presents a vision for how the Port of Cork can adapt and grow in accordance with the Climate Action Plan 2023 aims to achieve net zero greenhouse emissions by 2050. It assists in the preparation of local authority development plans. It provides for shifting Cork Quay and Tivoli operations in the inner harbour in the city area to the outer areas in the sea. Marino Point is identified as part of the existing and future port infrastructure in which the PoCC has an interest along with Ringaskiddy, Cobh and Bantry .

5.1.2. The role of Marino Point can be seen in the following summary table:

PoCC Port facility→ Shipping mode↓	City Quays	Tivoli	**Marino**	Cobh	Ringaskiddy (East and West)
Dry Bulk	short-term	Moving from quays	Continuing to 2040 and beyond		Continuing in west to 2040 and beyond

		ceasing 2040			
Containers		Continuing through 2030- ceasing 2040			Continuing in west to 2040 and beyond
Liquid Bulk Emerging as future cargoes as part of new energy sector		Short term	Moving from Tivoli by 2030 and continuing to 2040 +beyond		Continuing in west to 2040 and beyond and commencing in East 2040
Project Cargoes			From 2030 to 2040 and beyond		Continuing in west to 2040 and beyond and commencing in East 2040
RoRo					Continuing in west to 2040 and beyond
Trade Cars					Continuing in west to 2040 and beyond
Cruises				Cont. to 2040 + beyon d	
passengers					Continuing in west to 2040 and beyond

There are also other private facilities at Passage West Rushbrooke and Whitegate.

5.1.3. The strategic goals are aligned with sustainability goals which includes caring for the environment and heritage and fulfil social responsibilities to the local community.

5.1.4. Shipping industry trends are set out in relation to shorter trading routes and larger vessel size requiring deeper drifts, wider channels and spacious terminal. The model relies on brief times in the port and minimal port calls.

5.1.5. To support the Offshore Renewable Energy (ORE) sector, ports will require greater industrialisation of infrastructure and landside facilities, including, for example: • On-dock landside facilities, which will be required to provide laydown and assembly areas for turbines. • Heavy-duty quay structures, needed to cater for large wind

turbine installations and support vessels. This industrialisation will put added strain on port land availability, drafts, and port-city traffic interfaces, making hinterland transport modes even more critical.

5.1.6. To facilitate Marino Point as a port facility, planned access improvements are highlighted:

- Upgrading of R624 including enhanced bridge at Belvelly (no date for this at time of plan)
- Upgrading rail access and include an additional station adjacent to Marino Point which may facilitate rail freight options and complement the European Rail Traffic Management System.
- Minimising damage to the environment and reduce road congestion.

However constraints such as the delivery of the R624 link road from Marino Point to the N25 and necessary consent processes.

5.2. Section 9.2.1 sets out the rail freight strategy for Marino Point. The upgrading of rail services with fast, reliable services at national, suburban, and city level is seen as intrinsic to the reduction of road traffic and increases in the use of public transport. The current CMATS objective to deliver enhanced suburban rail services aims to maximise development opportunities offered by existing railway lines. This objective includes a plan to intensify housing, employment, and educational development within the Cobh catchment area. New railway stations are proposed along this corridor at the following locations to facilitate this growth: • Midleton/Cobh to Cork Line • Tivoli Docks • Dunkettle • Water Rock • Ballynoe • Carrigtwohill West Furthermore, the potential of rail freight has been recognised within CMATS. Therefore, there may be scope to propose an additional station adjacent to Marino Point to facilitate these objectives. Any such developments would complement the European Rail Traffic Management System (ERTMS), a horizontal priority to the TEN-T, which aims to make rail transport safer and more competitive.

5.3. In terms of Cork harbour traffic, there is a planning condition on CCT that limits the operational capacity to 322kTEU/y until the M28 has been completed. In the medium term, the PoCC will need to operate dual operations at CCT and Tivoli to facilitate container volumes. With a new layout in the Master plan the terminal will be able to

satisfy demand and traffic up to 2030, including up to 50,000 RoRo units, 50,000 Trade Cars, and 19,000 ConRo units a year.

5.4. The spatial layout for Marino Point 2050 is illustrated in Figure 8. The site aligns with the designated ‘dry bulks’ area.

5.4.1. There are currently 46 hectares (ha) of land available for development at Marino Point. Some commodities and cargoes will be relocated to Marino Point following the vacation of City Docks. Upgrades to infrastructure and equipment will allow the facility to handle dry bulks and project cargoes. Due to increasing volumes and storage space limits at Ringaskiddy West, some commodities may need to be relocated to Marino Point by 2040.

5.4.2. PoCC envisages liquid bulks, possibly in the form of biofuels or green hydrogen, could be future cargoes supported at this location, which also has potential for the energy and cruise industries. The PoCC acknowledges that significant environmental considerations would need to be assessed due to the site’s proximity to the Special Protection Area (SPA) and Special Area of Conservation (SAC)

5.4.3. Future land requirements are flagged for fuel in longer term objectives. In the medium term the objective is to grow Marino Port as a bulk port facility while also exploring rail freight, energy and cruise options.

5.4.4. SDG 3: Ensure healthy lives and promote well-being for all at all ages The PoCC is certified to ISO 14001 and ISO 50001. This ensures compliance with the relevant environmental standards in relation to air quality, climate change, energy efficiency, noise, community relations, ship waste, water quality, port waste, and dredging.

5.4.5. The harbour landscape is recognised as a place for living and working and has evolved to respond to the needs of the community over time. Traditional heavy industries have waned since the late 20th century with the closure of IFI in Marino Point, Irish Steel in Haulbowline Island, and ship-building at Verolme Dockyard in Rushbrooke.

5.5. Cork county Development Plan 2022-2028

5.5.1. The site is within the South Cork area and following points are pertinent to the site.

5.5.2. Cobh, as a large town in Metropolitan Cork, at top Cork County Employment Hierarchy. Chapter 8 Economy and Employment refers to availability of suitable land for development as a key factors in attracting potential investment and employment to Cobh.

5.5.3. Section 2.5.42: The 2014 County Development Plan identified Cobh (including Marino Point) as one of a number of principal employment locations within the Cork Gateway harbour area where the overall strategy includes providing a choice of sites for large, medium and small-scale enterprise/business and industrial uses.

5.5.4. Section 2.5.43 The 2016 census shows that Cobh has a relatively low rate of jobs to resident workers (0.281).

5.5.5. Section 2.5.44 The majority of employment in Cobh in 2016 fell within two categories of industrial group: 'Wholesale, Retail Trade, Transportation and Storage, Accommodation and Food Service Activities'; and 'Education, Human Health and Social Work Activities'.

5.5.6. Section 2.5.45 The main location of employment in the town is within the town centre itself and at Rushbrooke Dockyard which provides a strategic, specialized facility with deep water access, graving dock and dry docks used for repairs and maintenance of local, national and international vessels. This facility is the only facility of its kind in the state. Beneficiaries of the facility include the Naval Service, offshore industry and pollution response vessels. The dry dock facility is a strategic asset for the region and enhances the overall attractiveness of the Port of Cork and it is desirable that it be retained. The dockyard also includes large scale manufacturing halls, workshops and marine engineering facilities. Much of the site is currently underutilised and a range of small businesses are accommodated within the existing structures on site.

5.5.7. Section 2.5.46 It would be prudent to retain and develop the site as a dockyard in view of the strategic and specialised nature of its infrastructure and to facilitate the development of complementary marine related industrial uses. It may also have a role as a service hub for the offshore marine energy sector subject to environmental assessment and upgrade of R624. Part of the site is also considered to be suitable for the provision of a park and ride facility to serve Rushbrooke Train Station.

5.5.8. **Section 2.5.47 Marino Point**, a largely brownfield industrial area located approximately 5km north of Cobh adjacent to the Cork-Cobh rail line, forms part of the employment land supply within Metropolitan Cork and for Great Island. The area comprises approximately 41 ha, of which c.3ha is occupied by a currently functioning hazardous industrious installation (Marino Chem (Dynea Ireland) Ltd)). The remainder of the site is primarily degraded and vacant since the closure of the IFI plant. There is a deep water wharf at the site and it is served by high capacity water, gas and electricity supplies. Marino Point was identified as an 'Other Location' in the 2017 Local Area Plan and was subject to a Special Policy Area zoning objective to facilitate the development of the area for port-related industrial development. In this plan itis identified as a Specialist Employment Centre and is also subject to a Special Policy Area zoning objective. Development and future activity at this location will need to be carefully planned and controlled given its sensitive location proximate to Cork Harbour Special Protection Area and Great Island Channel SAC.

5.5.9. **Objective x-01 special policy area**

- To facilitate the development of this site for port related industrial development. The following considerations will apply to any proposals for development:

  • Development will be confined to the existing reclaimed area and to activities which are **port-related** or which use **the existing industrial installations**. **Any new berthing /unloading facilities would be limited**.

  • A detailed **Traffic Impact Assessment** is required prior to any development to assess the impact on the existing road network.

  • Improved road access between N25 and Cobh subject to full ecological assessment.

  • Existing recorded monuments on site shall be protected.

  • In permitting development, regard shall be had to mitigating potential adverse impacts, particularly for the adjacent residential settlement of Passage West.

  • Marino Point is located immediately adjacent to the Great Island Channel SAC and Cork Harbour SPA and it contains Annex 1 habitats of large shallow inlets and bays. Development in this location will only be permitted where it is shown

that it is compatible with the requirements of the Habitats and Birds Directive and with the protection of these sites.

5.5.10. Section 12.20 of the CDP deals exclusively with the Port of Cork. development of port-related facilities at Marino Point is planned and supports the redevelopment of rail-based port freight transport infrastructure. Part b. of “County Development Plan Objective TM 12.13: Freight” commits to: “Protect the potential for rail-freight facilities to the former IFI plant at Marino Point and North Esk in Glounthaune.”

5.5.11. Objective TM 12.14: Port of Cork and Other Ports” is key to the development of the Port of Cork, and it states commitments to:

• "Ensure that the strategic port facilities at Ringaskiddy, Whitegate and Marino Point have appropriate road transport capacity to facilitate their sustainable development in future years."

• "Ensure delivery of the upgrading and realignment of the N28 Cork to Ringaskiddy Road and the upgrading of the R624 Regional Road linking N25 to Marino Point and Cobh and designation to National Road Status to provide appropriate road transport capacity to facilitate sustainable development of port facilities at Ringaskiddy, Whitegate and Marino Point."

• "Support the landside capacity of Port of Cork subject to consideration of environmental concerns including water quality, flood risks, human health, natural and built heritage."

• "Support the relocation of port activities and other industry away from the upper harbour on the eastern approaches to the city”

• "Support Ringaskiddy as the preferred location for the relocation of the majority of port related activities having regard to the need for a significant improvement to the road network. Also recognising the key role that Marino Point can play in providing an alternative relocation option for some of the port related uses that could best be served by rail transport taking account of residential amenity, tourism, recreation and renewable energy. The Council is committed to engage with the Port of Cork and other relevant stakeholders in achieving this objective."

• "Future expansion or intensification of Port activities will have regard to environmental, nature conservation and broader heritage considerations at design, construction and implementation stages."

5.6. **Section 8.7.3** identifies Marino Point as specialist Employment centre enabling the regeneration of the site but is not included as a strategic employment centre

Marino Point is identified as a Specialist Employment Centre. It is well placed to play a key strategic enabler role for the NPF/RSES in providing for the relocation of existing industrial uses from docklands and other strategic urban sites within the Cork Metropolitan Area in order to facilitate regeneration and redevelopment of such sites to deliver compact growth and placemaking. Development in Marino Point will have regard to the close proximity of the settlement of Passage West as well as any future development potential of the town. The proximity of Marino Point to the Great Island Channel SAC and the Cork Harbour SPA will also need to be considered when planning new development in this zone.

County Development Plan Objective EC: 8-3 Strategic Employment Locations
a) Promote the development of Strategic Employment Locations suitable for large scale industrial developments at Carrigtwohill, Little Island, Ringaskiddy, and Whitegate where any such development must be sensitively designed and planned to provide for the protection of any designated sites. Any development must be compatible with relevant environment, nature and landscape protection policies as they apply around Cork Harbour and the protection of residential amenity.
b) Protect lands in these areas from inappropriate development which may undermine their suitability as Strategic Employment locations.

Rail freight Section 12.18 potential to develop this type of facility at Marino Point
TM12-14 Freight objective

a) Create an efficient freight network that operates in harmony with other transport users and the residents of the Cork area.
b) Protect the potential for rail-freight facilities to the former IFI plant at Marino Point and North Esk in Glounthaune.

c) Support the development of a Framework for Sustainable Freight Distribution for the County.

d) Encourage development that is heavily dependent on road freight to locate where goods vehicles can access the national road network without traversing urban areas.

e) Support the use of the existing rail system for the transport of appropriate materials where feasible.

f) The use of low emission vehicles such as electric vehicles, or cargo bikes, is to be considered where appropriate

Section 12.20.3 restates the protection of the site for rail cargo: ' Development of port related facilities at Marino Point is also planned and disused port facilities at Marino Point are protected so that their potential to accommodate rail cargo can be developed in the future if required. '

5.6.1. **Port of Cork Context** Section 12.20 refers to Marino Point in the context of Port of Cork the second most significant port in the state. 'Disused facilities at Marino Point, a Specialist Employment Centre, has potential to handle bulk cargos transported to or from the port by rail. Handling non-rail cargos at this location will require the upgrading of the R624 linking the site to the N25 '

5.7. TM12-15: Port of Cork and other ports.

a) Ensure that the strategic port facilities at Ringaskiddy, Whitegate and Marino Point have appropriate road transport capacity to facilitate their sustainable development in future years.

b) Ensure delivery of the upgrading and realignment of the N28 Cork to Ringaskiddy Road and the upgrading of the R624 Regional Road linking N25 to Marino Point and Cobh and designation to National Road Status to provide appropriate road transport capacity to facilitate sustainable development of port facilities at Ringaskiddy, Whitegate and Marino Point. (see also TM 12-13 e) & TM 12-13 footnote)

c) Support the landside capacity of Port of Cork subject to consideration of environmental concerns including water quality, flood risks, human health, natural and built heritage.

d) Support the relocation of port activities and other industry away from the upper harbour on the eastern approaches to the city.

e) Support Ringaskiddy as the preferred location for the relocation of the majority of port related activities having regard to the need for a significant improvement to the road network. Also recognising the key role that Marino Point can play in providing an alternative relocation option for some of the port related uses that could best be served by rail transport taking account of residential amenity, tourism, recreation and renewable energy. The Council is committed to engage with the Port of Cork and other relevant stakeholders in achieving this objective.

f) Future expansion or intensification of Port activities will have regard to environmental, nature conservation and broader heritage considerations at design, construction and implementation stages.

5.8. Cork City Development 2022 – 2028

5.8.1. This set out detailed strategic plans for the development of the City Docks and Tivoli Docks as vibrant living quarters in the city. Vol 2 Map 1 : maps the objectives for the existing Goulding Chemicals site in the city centre/docklands area. The site is designated as ZO-02 New residential neighbourhoods as part of extensive landbank for the use and in addition to mixed and other uses in this part of the city south of the river. This part of the strategic aim of compact growth and developing a city of neighbourhoods and communities based on the 15 minute city concept ensuring place making, accessibility and safety are at the heart of all development. This aligns with the RSES and MASP framework for guiding development and achieving compact liveable growth and in particular supporting Best practice regeneration of City and Tivoli Docks to deliver compact metropolitan growth;

5.8.2. It is a Seveso site – lower tier (section 9.3 of Volume 1)

5.8.3. overarching objectives for the management of freight movement in the Cork Metropolitan Area, which include re-directing the through movement of freight from densely populated areas and unsuitable local roads to the strategic road network and examining the potential for rail freight movement.

5.9. Cork Metropolitan Area Transport Strategy 2040 (2020)

5.9.1. CMATS states that the “relocation of the Port of Cork, coupled with the upgrade of the N28 to Motorway standard (M28) will reduce some localised HGV impacts within

the city and reinforce the transfer of strategic freight to the National Road Network." In this regard, Chapter 14 of CMATS notes that rail-based freight movement would likely necessitate a new link between the relocated Port of Cork in Marino Point and the Cork Suburban Rail network

5.10. **Cork Metropolitan Area Strategic Plan (MASP)**

5.10.1. Employment & Enterprise: Strategic locations and drivers for economic growth in the metropolitan area will include intensification of employment in the city centre, docklands, city suburban areas, Higher Education Institutes (UCC and CIT) and international centres of research and innovation such as Tyndall, Rubicon, MaREI, Cork Science and Technology Park, Mahon, Ringaskiddy, Marino Point, Carrigtwohill, Little Island and Whitegate. Strategic assets include Tier 1 Port of Cork, Cork Airport, health infrastructure and Cork University Hospital. The special role of Cork Harbour reflecting its natural and historic heritage, industry, maritime economy, tourism and communities, as a unique driver for the Region is recognised and will be subject to an integrated framework plan

5.11. **Ongoing Roads and Transportation projects – Cork county council website :**

5.11.1. Great Island Connectivity Scheme (R624 Cobh Road)

The R624 is the only road connection to Great Island and Cobh the second largest urban centre in Cork county. The Local Area Plan states that the R624 has 'serious capacity issues at peak times, it is poorly aligned in many parts and contends with flooding problems at Belvelly Bridge' and that the R624 requires significant improvement to facilitate development in Great Island and Cobh. Cork County Council has been allocated grant funding by the Department of Transport to develop a project to address issues relating to the R624. A Strategic Assessment Report was submitted to the Department of Transport in 2022. Subject to approval of the Strategic Assessment Report, Cork County Council will develop a Preliminary Business Case in 2023.

5.11.2. March 24 written answers in Dail debates: The Minister for transport provided an update on funding of projects including the R624. 'regarding the R624 Cobh Road, Cork County Council submitted an initial project appraisal to the Department in 2019

regarding the upgrade of the R624 Cobh Road. The project, as submitted, includes upgrading the existing N25-R624 interchange, the provision of a dual carriageway from the interchange to Marino Point, widening of Slatty Bridge, the provision of a new bridge crossing to Great Island at Belvelly and upgrading the existing R624 from Marino Point to Cobh. The estimated cost of this scheme was more than €100 million, with possible staged implementation. In line with Government requirements Cork County Council also produced a Strategic Assessment Report (SAR) for the Great Island Connectivity Scheme and a draft was forwarded to the Department in November 2022. Cork County Council has indicated that the submission of the POD to the Department is imminent. Subject to the submission of the POD, the next steps for the Council will be to commence the work on the Preliminary Business Case. On 15th February, the 2024 Regional and Local Roads Grants were announced with an allocation of €150,000 made available to Cork County Council as part of the to assist in the development of the Preliminary Business Case.

5.12. **Other Roads objective in the CDP**

- CDP TM12 -13 National , Regional and Local Road Network
  (e) Support key regional and local road projects identified in the RSES as strategic regional priorities to achieve NSO Enhanced Regional Accessibility: • Upgrade of the R624 Regional Road linking N25 to Marino Point and Cobh and designation to National Road Status. See also TM 12.13 footnote
  Note: The upgrading of the R624 may require the development of a new crossing of the Belvelly Channel as well as road widening in a sensitive location relative to the Cork Harbour SPA and the Great Island Channel SAC. In addition to natural heritage considerations, there are significant built and archaeological heritage sensitivities at this location. All of these constraints will need to be considered carefully at design stage and construction stages. The proposed project will be subject to all necessary environmental, ecological (including Appropriate Assessment) and built heritage assessments as part of the consenting process. The project will only proceed if it is assessed to be compatible with the requirements of EU environmental directives and the principles of proper planning and sustainable development.

Table D2: Settlement Specific Key Infrastructure for Cobh-Ballynoe Valley UEA

Water supply	wastewater	transport	Other
Watermain replacement, upgrade & extension required	. - Sewer network extension or upgrade to service Ballynoe UEA lands. - New foul sewers and pumping station/rising main required at Ballynoe. - New foul sewers and pumping station/rising main	- Tay Road L2993 upgrade as per UEA requirements to DMURS standard. - Improved access between N25 and Cobh town (R624 upgrade to national road. - Improved pedestrian and cycle connectivity to town centre/rail station. - Improved connectivity between development sites and the town centre/ rail station. - Footpath upgrades - Local Road improvements (approach road between Belvelly Bridge and Cobh Cross, the L-2989-30 and Tay Road); - Public transport improvements (CMATS) connecting Cobh to Cork City/ Little Island. - Belvelly Bridge upgrade and/or new bridge.	- Sustainable Urban Drainage Strategy

5.13. Planning and Development Act 2000 as amended

5.13.1. Section 48 (12) applies:

> Where payment of a special contribution is required in accordance with *subsection (2) (c)*, the following provisions shall apply—
>
> *(a)* the condition shall specify the particular works carried out, or proposed to be carried out, by any local authority to which the contribution relates,
>
> (*b*) where the works in question—
>
> (i) are not commenced within 5 years of the date of payment to the authority of the contribution (or final instalment thereof, if paid by phased payment under *subsection (15)(a)*),
>
> (ii) have commenced, but have not been completed within 7 years of the date of payment to the authority of the contribution (or final instalment thereof, if paid by phased payment under *subsection (15)(a)*), or**]**
>
> (iii) where the local authority decides not to proceed with the proposed works or part thereof.
>
> the contribution shall, subject to *paragraph (c)*, be refunded to the applicant together with any interest that may have accrued over the period while held by the local authority,
>
> (*c*) where under *subparagraph (ii)* or *(iii)* of *paragraph (b)*, any local authority has incurred expenditure within the required period in respect of a proportion of the works proposed to be carried out, any refund shall be in proportion to those proposed works which have not been carried out.

5.14. Development Management Guidelines

5.14.1. Section 7.12 refers to conditions requiring development contributions (sections 48 and 49 of the Planning Act). Development contribution conditions may only be attached if they accord with the provisions of either section 48 or section 49 of the

Planning Act and these are based on the application of the terms of one or more development contribution schemes which have been formulated and adopted in accordance with those sections of the Act, **or on the need for a special financial contribution**.

5.15. **Development Contributions Guidelines for Planning Authorities**

5.15.1. Section 1 clarifies the use of special development contributions: 'A special development contribution may be imposed under section 48(2)(c) where specific exceptional costs, which are not covered by the general contribution scheme, are incurred by a local authority in the provision of public infrastructure or facilities which benefit very specific requirements for the proposed development, such as a new road junction or the relocation of piped services. The particular works should be specified in the condition. Only developments that will benefit from the public infrastructure or facility in question should be liable to pay the development contribution. Section 2 supporting Economic Development states that planning authorities are required to include a range of measures in accordance with overriding principles of proper planning and development. This includes a range of waivers and avoiding double charging which is contrary to the spirit of capturing planning gain.

5.16. **The Cork County Council S.48 and S.49 Development Contribution Scheme 2004**

5.16.1. The General Scheme is part of Development Contribution Schemes Cork County Council adopted by the County Council on 23rd February 2004 as provided for in Section 48, Planning & Development Act, 2000, (as amended). The most recent rates as published by the County Council date back to 2014 wherein it states that these are the rates until further notice and that Indexation continues to be suspended for the period 1/1/2014 to 31/12/2014.

5.16.2. This General Scheme sets out the basis for determination of the scheme.

5.16.3. These rates were updated in 2014: Table G6 is revised under the heading Non-Residential Development Contributions for CASP and N & WCSP Areas (excluding within 1km of rail line)

Type	Form 1st Jan 2009 – 31st Dec 2010 € per sq.m.	1st January 2014 until further notice € per sq.m.
Office and Retail	134.69	48.97
Other non- residential	102.04	16.32
Non-residential uses specific – warehousing	n/a	16.32
horticulture enclosed development /intensive animal husbandry rates	n/a	9.17

5.33.1. Developments which are liable for supplementary contribution towards the Suburban Rail Project are eligible for 75% reduction in the roads component of the contributions to be levied under the Council's General scheme of contributions, though may be still liable to special contributions for roads purposes. This reflects the expected lower car usage generated by land uses accessible to a good rail service.

5.34. **Supplementary Scheme**

5.34.1. The scheme sets out the areas to which this scheme applies and refers to it applying to areas within 1km of the Cork-Cobh lines and in the functional area of Cork County Council. It excludes agricultural developments. Table S2 sets out the initial rates and defined 'Office type' as office-based industry, banks, 3rd level education hospitals and surgeries and 'retail type' to include bars and restaurants. The rates were revised with a reduced level for offices from €92.82 to €52

Type of development	Form 1st Jan 2009 – 31st Dec 2010 € per sq.m.	1s January 2014 until further notice € per sq.m.
residential	26.88	26.88
Office with 1k and retail within 0.5km	92.82	52.00 office 92.82 retail
Other non-residential		23.20

5.34.2. Special Contribution s are referred to in general terms on page 9 and Appendix .

5.35. **Natural Heritage Designations**

5.35.1. The relevant sites are Cork Harbour SPA and Great Island Channel SAC. These are assessed under Appropriate Assessment. The EIAR also addresses Natural Heritage Areas in the catchment area.

6.0 The Appeal

6.1. **Third Party Grounds of Appeal**

6.1.1. Madeline Roberts: The EIAR is too vague. The **intensification of the jetty by** 40 further vessels **is of serious concern having regard to the current noise** arising (and its tonal or impulsive nature) particularly from the ship generators during the night and impact of this on residents of Passage West which is 500m across the River. Noise and vibration assessments are meaningless in the absence of suggested clarifications:

- When and why questions in context of electricity supply on land :
    - "When ships are berthed at Marino Point jetty, will the ships' generators run at nighttime and for what purpose?
    - What will the level of noise and vibrations emanating from the ships berthed at the Jetty (day and night) including those from the tug boats?
    - How can the impact of levels of the noise and vibration emanating from the ships berthed at the Jetty be minimised for the residents of Passage west
- Will there be curfews/timing restriction on ship engine noise and vibration caused by ship generators at the Jetty and tug boats used to manoeuvre ships?"
- The appended submission to the PA refers to the amphitheatre effect on elevated houses and also the specific incident of a tanker at Marino point when its engines and pumps ran day and night

6.1.2. Eoin Bell: The grounds of appeal elaborate on the objections made to the planning authority as it is submitted that there were not taken on board. The issues relate to:

- **Port name,** Belvelly is incorrect as it is a separate townland . Belvelly is a distinct village of heritage significance - a separate area which includes the Belvelly bridge and Belvelly Castle. Marino Point is the correct address and the site is within the townland of Marino. It is suggested that the use of Belvelly is an attempt to deflect the historical association of the Marino with environmental complaints and historic reputation of former industries. It should be Marino Point Port Facility and not Belvelly Port Facility.
- **road condition and traffic impact and safety**: Perilous condition of R624 -t he proposed additional HGVs will endanger public safety by reason of traffic hazard. Seek the board to order the soundproofing of residences in Belvelly

  How the initial HGV volume has reduced in the RFI yet cargo quantity the same
- **recreational amenity, noise, dust and PM emissions,** and public safety.

  seeks measures to protect environment within the context of protection of rural communities under NDP. Need to include residents in emergency plans

  The intensification of HGV impacts dwellings along the R624 due to noise and vibration – house has cracks and it is submitted that the houses should be compensated for impacts by soundproofing.

  Noise: concern about the baseline noise of traffic by road port and air being used for evening traffic.

  Cites examples of condition used by the Board eg. 302580 Leq, 1 hour value 55dB(A) 8am-10pm and a Leq,15min value of 45 dB(A) at any other time and no tonal component. (this was for housing and childcare)

  Other example of DAA 217429 requiring a voluntary noise insulation scheme falling within the contour of 63 dB LAeq 16 hours

  Concern about amphitheatre effect of Lough Mahon on noise levels for residents. Concern about amplification due to water surface.

  The EPA does not permit nighttime tonal noise yet the fork lifting operation and generator for cargo vessels may cumulatively breach this.
- **Consultation and monitoring:** It is requested that the Belvelly residents s be identified as sensitive receptors in noise regulation and monitoring

- **Visual**

  R624 - S53 from **Belvelly Bridge** to the centre of the town is a designated **scenic route. O**lder plans and current CDP are cited in respect of sea views and preserving character and impact on Belvelly Bridge:

  Allegation of project splitting, Altering historical monument without appropriate consent The associated but separate intended pedestrian works with Belvelly bridge are submitted to be a form of project splitting. How can a private developer can make alteration to this monument without public consultation. pages15-25 describes the Bridge in detail and flag concerns about inadequate assessment of impact by reference to this and best practice as set out in p16.

- The tourism industry in Cobh and indirect impact on same is also set out by reference to relevant strategies and sectoral plans for the area.

- The project is submitted by reason of prematurity of transport infrastructure to undermine the vitality and viability of the port and Cobh town

- Safety : concerned about domino effect of Seveso site .

  Dust Fumes and particulate matter : The area is free from these at the moment and the intro of same will impact downwind and impact o the scenic area of Belvelly and it residents. Photos on Pages 29-31 of 'Clam Shell Grab' on a normal calm day illustrate typical expelling in the atmosphere. It is requested that Belvelly Residents be included as sensitive receptor to airborne PM and that air quality monitoring be conducted regularly by the EPA and not by the applicant.

- The statement by the senior planner that all outstanding issues have been addressed as a basis for permission is questioned on the basis of balancing the development with protection of the amenity and safety of Belvelly residents in a rural type area and by reference to the NPF among other docs. (p33-34)

- **Will endanger public safety by reason of traffic hazard**. The Port of Cork relies heavily on road infrastructure. The Cobh MD LAP is cited in respect of the road limitations for intense development. (p35-36). The CMATS also acknowledges the limitation and need for upgrading for the island particular concern about safety of vulnerable road users. Pedestrians and cyclists.. Pages

46, 49, 52, 53, 57 and others illustrates HGV and coaches breaching centre, line passing /capacity. p.47 illustrates the vehicles in use at the Goulding facility

- concern about lack of independence of an assessment of the safety and traffic studies. Lack of road safety report. Is it up to standard as part of a TEN-T corridor network port
- An alternative route in the previous CASP is referenced and cited in its description to the exceedance of capacity of the road network. The vulnerability of the residents of the island is also emphasised in the event of anything happing the bridge which provides sole vehicular access. (p.66)
- Photos of wall damage also illustrates limitation of road alignment. P81-84

6.1.3. Cllr. Marcia D'Alton: This appeal is also on behalf of residents of Passage West and refers to:

- Constitutes incremental in intensification of site as part of major port and industrial development with significant impacts
- Lack of certainty of responsibility and accountability for environmental care. Individual operators is complicated. BMDC should be fully accountable and contactable.
- Insufficient regard to residential amenities as required by the Development plan. There is a need for mitigating potential adverse impacts for residents of Passage west in relation to development at Marino Point in accordance with the Cobh LAP. Having regard to the nature and scale of adjacent residential development in this area, the issues are:
  - **Impact of noise**, (particularly night-time) from the proposed industry on residential amenity,
  - The proposed industry poses an unacceptable **risk to water quality** in Lough Mahon and threatens the integrity of Natura 2000 sites.
  - No consideration of **alternatives** for a development that is premature at this location

6.2. Observations on appeal

There is a total of 14 observing parties to the appeal and they are, in the main local residents in Belvelly, along the R624 and across the Lough in Passage West mostly within a 500m -1kilometre range of the site. They support the appeals, with different residents having different experiences depending on relationship with site and activities generated. Concerns relate to:

- Amenities of Passage West community -a designated settlement in very close proximity not fully considered. resident experience sleep disturbance due to port operations
- Noise - tugs or no tugs- during night with 24/7 year round operations and using hydraulic gantries and generators,
- Dispute claim of impact not seriously injuring residential amenity
- Electricity should be from land and not generators.
- Health and safety
- Nead to evaluate mitigation and enforce – monitoring and liaison is essential
- Water quality of Lough Mahon with history of IFI polluting.
- Dust and pollutants having regard to experience with existing and past port operations.
- Risk of explosion

6.3. First Party Appeal

The applicant is appealing under section 48(13)(a) against a condition 28 of permission requiring **a special financial contribution of €1,079,458.00**. It is submitted that the contributions required towards the road works relate to objectives in the development plan which should be funded by the general contribution scheme. It is further stated that the planning authority fails to provide specific breakdown of cost justifying the amount of contributions required.
Wholesale price index rather Consumer Price Index is requested be applied in line with Government guidance in event financial contributions.

6.4. First Party Response

6.4.1. The applicant has responded (8th June 2022) to the grounds of appeal by Cllr Marcia D'Alton and Eoin Bell. The submission has been prepared in collaboration with Malachy Walsh and Partners in relation to traffic, dust and surface water management and with Damien Brosnan Acoustics in relation to noise impacts.

6.4.2. The submission addresses, noise impacts, traffic impacts, Seveso, dust Impacts, Surface water Management, alternatives and planning policy.

Noise

6.4.3. Generator noise impacts from overnighting vessels: it is acknowledged that vessel onboard generators will be required to provide power for crew facilities and lighting. However, surveys indicate that noise emissions from onboard generators on vessels such as those intended to use the proposed jetty are in most cases inaudible beyond 100 meters. For example general cargo vessels which regularly dock at the Ringaskiddy deep water berth are typically inaudible within the Ringaskiddy terminal during nighttime hours. this is also the case at the Tivoli container terminal and receptors across the river at Blackrock as surveyed by Damian Brosnan acoustics during nighttime hours. A Similar situation is therefore expected at the proposed jetty for the majority of vessels would you expect it to be inaudible beyond 100 meters and therefore inaudible at Belvelly or across the river at patch passage West. Many vessels will not require power while docked such as tugs and other small vessels as they will not require generators on board. Emissions that might be audible beyond 100 meters are typical due to older vessel design or increased onboard its. Taking for example a relatively large axillary engine operating at full load the sound parallels go for a range of octave bound levels range from 65 DB to 99 DB and this informed the noise model developed for the proposed facility to predict noise levels

6.4.4. the highest LA EQ tea levels received a chore front properties at passage W will be 33 DB. Levels will quickly fall to below 30 DB on the hillside above at the nearest dwellings to the southeast levels will reach 28 DB at their highest #4 below 25 GB further north when two vessels are birthed to simultaneously predicted levels will increase by three DB in all cases levels will remain markedly below the 45 DB night time criterion recommended by the duck World Health Organization and the EPA it is no such thing in assessing night time impacts associated with generators on docked

vessels night time measurements were carried out at passage West while the vessel Finola M was moored at the Marina point Jetty Table 2 on page three of the report submitted as response submission shows that noise levels at all locations were considerably lower than the 45 DB nighttime criterion for example steam packet Hanks shows A36GB left LAEQT it is explained that vessels such as the Feno lamb being a different type of vessel and an older design with minimal nose noise attending and operating an aging generator these would be rarely expected at the jetty. The vast majority of vessels would be of a newer design with quiet onboard generators and noise mitigation factored into the design from the outset just further noted that while two MAEOSK anchor handling supply vessels HTTPS were docked at the Marina point cherry both are high-powered vessels and were reported to generate higher than normal noise emissions while docked the emission level was recorded as 39 to 40 TB at points B&C car parkers car park of steam packet hangs and passage W beauty arch these levels are considered to represent an entirely worst case scenario with two high-powered vessel generators operating simultaneously both giving rise to higher than normal emissions nonetheless noise levels remained comfortably below the 45 DB criterion at all positions it is also pointed out that the onshore power supply as part of the European Green Deal proposed fit for 55 legislative package is an obligation in certain circumstances at ports and was under discussion at the time of the application port of cork is however committed to implementing OPS in line with the policy legislation.

6.4.5. Noise impacts from pilot tugs: noise emissions will arise while tugs assist in vessel docking and departure tugs to not require power for onboard equipment while duck talked I'm a lonely generation noise vessel arrival departure and when talks themselves talk and leave noise event is typically 5 to 15 minutes that's the note as the Turk approaches the jetty which parts the highest levels and a QT predicted at passage W shorefront will be 38 DB levels at the nearest reception receptors to the southeast of jetty reached 33 DB at horsehead where the appellant rock resides toggle noise levels would be 34 DB or less during nighttime hours the levels would be significantly lower than the 45 DB nighttime criteria at all receptors.

6.4.6. Night time vessel low frequency noise impacts: the vessel main engines typically contain a frequency range of 20-100Hz and engines are audible when passing manoeuvres but are not typically tonal when assessed using a one third octave

band objective analysis. This is based on surveys in the vicinity of Ringaskiddy, Monkstown, Passage West and Tivoli.

6.4.7. Traffic Impacts: Disputes 'already unsafe' by reference to Road Safety Authority data on accidents and collisions and the 60kph status. The design mitigation measures and Operation Traffic Management system are acceptable to the PA.

6.4.8. Seveso: QRA details compliance with requirements of HAS.

6.4.9. Dust: Physical properties of granular raw material will not generate dust. Detailed OEMP and SOP to address dust minimization. Risk of impact is unlikely.

6.4.10. Alternatives considered which had regard to deep waters, sheltered environment, part of network and planning policy compliance.

6.5. Third Party Response

6.5.1. Remains of the view that permission should be refused on grounds of public health, traffic safety, residential amenity and private property rights

6.6. Planning Authority Response

6.6.1. The appellant concerns relate to intensification of heavy vehicles on a substandard network with capacity constraints, conflict with local traffic and obstruction of key access route In its response to correspondence issued by the Board on 11th March 15th March and 16th March 2022 the PA in its letter received on 6th April 2022 the PA sets out the justification for the financial contribution towards road improvement works for the Cobh Cross Interchange at the N25. It is described as a significant project as it is the sole vehicular access to Great Island and will assist in the realising of the development objectives for Great Island. The project is being carried out pursuant to Part 8 and works are estimate at 4.5m excluding land and required funding solely by development contributions. the €5000 contribution is stated to be 'very modest'

6.6.2. An environmental report is also attached and is by the same engineer as the initial environmental appraisal. It is stated that all details have been examined and that

there were numerous consultations with the applicant. It is emphasised that it is critical that the planning conditions of the OEMP (Operating Environmental Management Procedure) be included in the event of permission. The mitigation measures regarding noise limits mitigation and on going monitoring will substantially address the appellant concerns in this regard. The OEMP will deal with all the air noise surface water, lighting and other environmental impacts. the monitoring of same will be agreed in this document subject to BAT prior to substantial completion of site construction. The condition is emphasised and states that

- The development should operate in accordance with an environmental management system certified 2ISO1400 or standard agreed with the planning authority and shall be agreed between parties before substantial site construction commences and children include the following
  a) proposals for the suppression of dust on site
  b) proposals for the control of on-site noise especially in the evenings and night time
  c) measures to control the quality of surface water discharges including Value limits for contamination of surface water
  d) monitoring program to include all relevant environmental parameters (including noise, dust, continuous ambient air monitoring for $PM_{2.5}$ and PM_{10} and surface water monitoring
  e) process for notifying and agreeing new loose materials at the site not previously detailed in the planning application especially in relation to loading and unloading of goods
  f) proposals for the covering of bulk goods leaving the site
  g) Measures to minimize light pollution including minimizing lighting throughout the facility
  h) scheduled nighttime working should be notified in advance to the planning authority and appropriate monitoring of noise emissions shall be undertaken as required by the planning authority
  i) details of emergency action in the event of accidental spillage /emission
  j) details of site manager contact numbers (including Out of hours) and public information signs at the entrance to the facility

k) procedures to record and respond to public complaints reporting requirements to the planning authority including an annual audit.

The annual audit report should be made publicly available to the requirement of the planning authority.

7.0 Environmental Impact Assessment

7.1. Statutory Provisions

7.1.1. The proposed development comprises redevelopment and intensification of use on a 7 hectare site that forms part of c. 37ha of lands that were previously subject to an EIA (ABP ref 307938) by reason of the site size and nature and accordingly falling primarily within a class under section 10(a) of Part 2 of Schedule 5.The applicant has taken the position that development in this case by itself does not fall within a class, but, in view of the degree of overlap, there is potential for cumulative impact and has forgone the EIA screening process as per Schedule 7 and voluntarily prepared an EIAR. Article 102 of the Planning and Development Regulations 2001 as amended in 2018 states that where a planning application for sub-threshold development is accompanied by an EIAR, the application should be dealt with as if the EIAR had been submitted in accordance with section 172 (1) of the Act. Section 172(1). This effectively places the proposal as that falling under prescribed classes of development requiring EIA as provided for in section 176.

7.1.2. Notwithstanding, I consider some comment on the classes development is useful in the EIA process and I make the following observations.

7.1.3. The previous proposal related to the wider industrial site in excess of the 15 hectares threshold and comprised enabling works to facilitate its continued industrial and jetty use.

7.1.4. In this case the proposal relates to part of that 37ha site but is subthreshold by itself. Given the nature of the proposal as described in this report and notably involving handling and storage of chemicals, its proximity to a methanol processing plant on Seveso 1 site and which receives methanol via pipeline from the subject jetty area and its scale and nature, it could potentially be considered as requiring EIA as a type

of ‘chemical industry’ under section 6 and as ‘industrial estate’ development (subthreshold) under section 10 (a). The proposal involves an intensification of the jetty facilities for importing raw fertiliser materials by sea and mixing, packing and distribution by road of fertiliser products and could be viewed as ‘intermodal transhipment facility not included in part 1 but subthreshold.’ The intensification of jetty use as a port for loading/unloading could also render the development to be classed within Part 1 section 8 (b), although to be mandatory, the cargo vessels catered for in this class of use are 1350 tonnes or over. This vessel information is not fully clear- reference throughout the EIAR is made to tonnage capacity and also the noise assessment refers to engines of vessels of 5000-20000t for worst case scenario predictions. The applicant however does not hold the view that the EIAR is mandatory. In the context of the 37 ha site and changing the nature of use, the other class of development for consideration falls under section 13 of Part 1 and includes ‘changes, extension of development and testing’ In this regard I note the scope of the previous EIAR and EIA in that nature and intensification of use was left for future assessment.

7.1.5. On balance I consider that having regard to the nature, scale and context of the proposed development and the likelihood of significant effects on the environment I have no reason to dispute the submission of the EIAR and that an EIA is appropriate. In any event Art 102 applies. Accordingly, I consider it appropriate to assess the submission of the EIAR in accordance with s.172 of the PDA, 2000 as amended.

7.2. EIA Structure

7.2.1. Section 171 of the Planning and Development Act, 2000 (as amended) defines EIA as:

> a. consisting of the preparation of an EIAR by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and
> b. includes an examination, analysis and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters

and the interaction of these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

7.2.2. This EIA section of the report is therefore divided into two sections. The first section assesses compliance with Article 94. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- population and human health,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- land, soil, water, air and climate,
- material assets, cultural heritage and the landscape,
- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

7.3. Issues Raised in Respect of EIA

7.3.1. Adequacy of the planning authority EIA : The PA sought further information in respect of a comprehensive range of environmental issues all pertaining to the EIAR. These are summarised in the further information summary in section 3 of this report. These matters relate to visual impact on a scenic route, safety, bird counts and mapping and ecology data, water quality, noise impact cumulative impacts, quantification of traffic impact on road infrastructure

7.3.2. Appellants and observers raise issues re

- Inadequate mitigation in the EIAR for fugitive dust and noise are the main concerns raised in respect of operational impacts on local environment and residents.
- existing noise levels a future cumulative noise levels inadequately described and assessed. Other scenarios and contexts not fully assessed. Residents in Belvelly should be identified as sensitive receptors in regulating and monitoring. Insufficient mitigation

- Traffic data queried – HGVs volume reduced in further information yet cargo the same
- Pollution Concerns about air quality and Dust, Fumes and PM downwind form site. Belvelly should be identified as sensitive receptors in regulating and monitoring
- Safety: Domino effect of Seveso site
- Impact on Belvelly Bridge – cannot be fully assessed in absence of consent. If works permitted by this consent the public have been excluded.
- Impact on tourism
- Visual impact

7.4. Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations 2001

7.4.1. The EIAR is presented as three volumes:

• Volume I – Non-Technical Summary (NTS)

• Volume II – Proposed Developments Environmental Impact Assessment Report (EIAR). With amended chapter 5 and 16 in Further Information.

• Volume III – Appendices

7.4.2. I assess below compliance with the requirements of Article 94 and Schedule 6 of the Regulations.

Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 1)	
A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development (including the additional information referred to under section 94(b).	A description of the proposed development is contained in detail Chapter 2 of the EIAR and includes details on the existing operation to be relocated and details on site context, site history, location, design and size of the development, arrangements for access and construction methodology, and jetty operations In each technical chapter the EIAR, details are provided on use of natural resources and the production of emissions and/or waste (where

	relevant). It is noted that the proposal does not involve demolition works as these are provide for already in an extant permission (ABP ref 307938). The nature and extent of cumulative shipping traffic is not fully clear but the information provided in the PA section 5 case informs a baseline. Approx. 40 additional port related cargo ships will berth at the jetty in additional to the fertiliser facility which is estimated at 50 shipments per annum. Neither the description nor drawings include the crane infrastructure at the jetty although images are included in the photomontages.
A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b).	An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the technical chapters of the EIAR as updated and augmented by further information and specialist reports. I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information	The EIAR includes designed in mitigation measures and measures to address potential adverse effects identified in technical studies. These, and arrangements for monitoring, are in chapter 17 (Summary of Mitigation Measures), Appendix D of the Further Information OEMP. Mitigation measures are also contained in the NIS. (Appendix C of Further Information) The further information includes specific operation measures to handle fertiliser materials while unloading

referred to under section 94(b).	
A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b).	A description of the alternatives considered is contained in Chapter 3 of the EIAR. The alternatives considered include sites and site lays under the scenarios of 'do nothing', site selection, alternative layout It is further explained in the first party appeal response, The main reasons for opting for the current proposal were based on complying with strategic land use for the city and port, the existing infrastructure and the geography of the area considering environmental effects. I am satisfied, therefore, that the applicant has studied reasonable alternatives in assessing the proposed development and has outlined the main reasons for opting for the current proposal before the Board and in doing so the applicant has taken into account the potential impacts on the environment.
Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).	
A description of the baseline environment and likely evolution in the absence of the development.	This is this addressed in each of the technical chapters. I have also examined the planning history, that I reference, to assist in understanding the information provided.
A description of the forecasting methods or evidence used to identify and assess the significant	The methodology employed in carrying out the EIA, including the forecasting methods is set

effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved	out, in each of the individual chapters assessing the environmental effects. The applicant has indicated in the different chapters of the where difficulties have been encountered in compiling the information to carry out EIA. I comment on these, where necessary in the technical assessment below and am otherwise satisfied that forecasting methods are adequate of likely effects .
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.	This issue is specifically dealt with in chapter 15 of the EIAR. The Specific risks have been identified in relation to the project's vulnerability relative to a Seveso 1 site. The qualitative risk assessment was also updated in FI. These risks are reasonable and are assessed in my report having regard to the HSA comments. I have flagged an issue of vehicular containment at the bridge entrance over the railway and addressed this my assessment.
Article 94 (c) A summary of the information in non-technical language.	This information has been submitted as a separate standalone document (Vol 1). I have read this document, and I am satisfied that the document is concise and comprehensive and is written in a language that is easily understood by a lay member of the public.
Article 94 (d) Sources used for the description and the assessments used in the report	The sources used to inform the description, and the assessment of the potential environmental impact are set out at the end of each chapter. I consider the sources relied upon are generally appropriate and sufficient.
Article 94 (e) A list of the experts who contributed to	A list of the various experts who contributed to the report are set out in section 1-1 in Chapter 1 of the Report and where relevant, the

the preparation of the report	introductory section of each of the chapters also details the individual's expertise, qualifications which demonstrates the competence of the person in preparation of the individual chapters within the EIAR.

Consultations

7.4.3. The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) in respect of public notices. In addition, the applicant has carried out public consultation by way of publicly accessible information and as was appropriate during the Covid pandemic. The applicant engaged with statutory bodies during the EIAR preparation and also had regard to parameters set out in the previous EIAR and planning conditions. Submissions have been received from statutory bodies and third parties and are considered in this report, in advance of decision making.

7.4.4. I am satisfied, therefore, that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development advance of decision making.

Compliance

7.4.5. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and supplementary information provided by the developer is sufficient to comply with article 94 of the Planning and Development Regulations, 2001. and meets requirements on the contents of an EIAR as set out in Schedule 6. Matters of detail are considered in my assessment of likely significant effects, below.

7.5. Assessment of Likely Significant Effects

7.5.1. This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out Section 171A of the Planning and Development Act 2000, as amended:

- Population and human health.

- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively).
- Land, soil, water, air and climate.
- Material assets, cultural heritage and the landscape.
- The interaction between these factors.

7.5.2. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised in the appeal/application.
- Examination, analysis and evaluation of the EIAR.
- The Assessment: Direct and indirect effects.
- Conclusion: Direct and indirect effects.

7.6. Population and Human Health

7.6.1. Issues Raised

Local residents both from Belvelly townland/coast road and from Passage west area are particularly concerned about impact of air quality and noise on public health, the main source being from the jetty operations in terms of cargo vessels generating noise and handling of cargo that is a source of dust. Traffic hazard and congestion is raised in the context of connectivity of island. The PA sought further information in respect of these issues. The issue of cumulative impact with a Seveso site is also a public health and safety concern and the HSA have made submissions in this regard.

Examination, analysis and evaluation of the EIAR

7.6.2. Context and Baseline

Chapter 4 describes the population settlement patterns, employment locations and amenities travel patterns, health data of the districts in the vicinity of the site and

identifies key receptors. This is done by reference to official statistics, Development Plan objectives and site activities.

It has been prepared by a assessor qualified in planning and ecology and by reference to Government and EPA guidance.

Cobh is a main settlement - both Cobh and Monkstown within which Passage west is located, are Metropolitan towns. The R624 is identified as a key route for Cobh residents accessing to centres of education and employment. Car usage in Cobh is slightly lower than Cork County but with 8.4% of urban Cobh residents using train as mode of transport.

The General health of the pollution of Cobh and Monkstown EDs are examined in the context of the state and is in keeping with Cork County level and higher than the state. Cobh urban and Cork City residents identify having poorer health . the site is in an designated employment area and adjacent to existing chemical factory MarinoChem - a Seveso site.

7.6.3. Potential Effects

Likely significant effects of the development, as identified in the EIAR, are summarised in Table below.

Table : Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Fertiliser facility : neutral effect on site but negative economic effect on Cork city from where facility is being relocated • Jetty Use compromising Cork city and Tivoli development
Construction	<u>Fertiliser facility</u>: • positive economic effect. • No significant noise and vibration effect due to background noise of traffic • Slight to moderate impact due to construction traffic conflicting with commuting traffic and tourism traffic • detailed effect described in Chapters 9, 14 and 11 regarding Air Quality and Climate, Noise and Vibration and LVI

	• health and safety risk
Operation	Fertiliser facility: • positive economic effect at Marino Point and in Cork City • Slight to moderate effects on roads and access • Potential pollutants from processing (mixing handling bagging)fertiliser raw materials and chemicals • Noise not significant due to Normal hours 7am to 5pm mostly – seasonal operations to midnight d 55db at all receptors • 10% increase in number of ships currently docking in Port of Cork will have negligible effect in air quality • Air quality in vicinity of current operation at Cork City has no reported air quality issues and is within 40m of residential housing. • Jetty Use: • No significant noise effects • No emissions to air anticipated • No significant impacts to surface water • Slight to moderate effects on roads and access – this modified by a traffic management plan/off-peak hours • Significant positive economic effect 0 Supports further port development in line with CDP and Master Plan and city development • Moderate visual impact
Cumulative	• Fertiliser facility: traffic impact due overlap at construction phase with other projects in table 4.8 • Jetty Use: not likely

7.6.4. **Mitigation**

Mitigation measures are set out in different chapters of the EIAR. Measures are quite extensive and include those proposed under the chapter headings Noise and

Vibration, Landscape and Visual Resource, Traffic and Transportation, Ari Quality and Climate, Land and Soils, Hydrology and Hydrogeology and also in hydrology and hydrogeology as well as those in the Construction Environmental Management Plan and OEMP. Other notable measures are in a Quantitative Risk Assessment as updated in further information.

7.6.5. Residual Effects

Following mitigation measures some residual impacts relating to

- **Noise** impacts which are rated neutral to slight at construction stage and neutral to slight negative at operational stage.
- **traffic** impact which is rated as short term, slight to moderate negative at construction stage and operational stages due to traffic patterns

7.6.6. The Assessment: Direct and Indirect Effects

- At a broader level I agree that there are potential economic benefits of adhering to the spatial land-use plans (CDP/POC) and I also note the HSA comments in this regard in the context of its remit under COMAH and the siting of hazardous facilities away from centres of population.
- I concur with the nature of the effects identified. However, for reasons set out in the following sections I do not agree with the magnitude of the impact as described, in particular in terms of traffic impacts and consequent risk of potential congestion.
- I also consider the effects without mitigation have not been adequately described in particular in relation to dust. I do not consider the ‘not anticipated’ expectation in terms of impacts on human health to be sufficient to determine residual impacts. However I do note the PA has haddressed this issue in detail through further information. This is addressed later in the report.

7.7. Conclusion: Direct and Indirect Effects on Population and Human Health

7.7.1. Having regard to the examination of environmental information in respect of population and health in particular the EIAR and the other related chapters and supplementary information provided by the applicant and the submission from the planning authority, prescribed bodies and third parties in the course of the application it is considered that the main significant direct and indirect effects on population and health are traffic noise and dust and will be mitigated by measures outlined in the respective chapters. The applicant proposes mitigation measures to address these predicted effects. However, for the reasons set out in the subsequent section of this EIA, I am not satisfied that it has been demonstrated that such measures can fully mitigate effects and significant effects on the environment will arise.

7.8. Biodiversity

7.8.1. Issues Raised

The PA required an updated chapter on biodiversity (as well as NIS) having regard to the need to assess:

- The survey data on bird species with mapping of area
- The impact of intensification of jetty activity - an estimate of % of harbour populations of gulls and cormorants
- The impact of noise at construction and operation stages
- The impact of lighting
- The processing implications and risk of spillages and impacts on marine environment
- Impact of stie works fencing on otters

General issue of concern on impact on marine environment and wildlife expressed by third parties.

Examination, analysis and evaluation of the EIAR

7.8.2. Context and baseline

Chapter 5 of the EIAR was revised and submitted as further information and deals with Biodiversity. The updated chapter is contained in Appendix F of the Further Information. It is based on a desk survey and field surveys of habitats/waterbodies, bats, mammals and wintering and breeding birds.
The habitats are summarised in table 5-9 and mapped in Figure 5-3. The site is a brownfield with large open bare paved areas with peripheral woodland habitat and as the footprint of the develop is within the developed area, the more natural habitat and woodland edge is largely unaffected by the proposed development. No rare or protected plat species were recorded within the works area. The scrub habitat in the development area is of poor quality and dominated by no -native species in comparison to similar habitats in the wider landscape

Table 5-44 lists birds species recorded
Key ecological indictor (fauna are listed in Table 5-46 - bat species, otter. Badger, harbour seal,
Key avian species are in Table 47.

This revised chapter is appended with:

- Ecological surveys (Appendix 5.1),
- ecological assessment guidelines (Appendix 5.2),
- ecological report (Appendix 5.3) in which the locations of birds of conservation interest are identified on the aerial photograph in fig 3 .
- Marino Point Winter Bird Survey 2018/19 (Appendix 5.4)
- Marino Point Winter Bird Survey 2020/21 (Appendix 5.5) which is appended with
    - Appendix 1 Count Dates, Times and Tidal Conditions
    - Appendix 2 Count Locations
    - Appendix 3 Mean and Peak Counts for Waterbirds recorded.
    - Appendix 4 Relevant Planning conditions 4 and 6 [of extant permission] - relating to ecological protection procedures and to minimise impacts of the development on biodiversity

The Ecological report surveys were undertaken by an ecologist CIEEM and having due regard to best practice guidance as cited. Methodology is set out in section 4

for the respective area/species. Constraints are set out in section 5. Section 7summarises the species of conservation significance, top of this being of country importance (I assume the word ‘county’ in the table is a typo.) are the Common Tern, Peregrine and Otter.

The assessment in chapter 5 is by reference to a number of recognise guidelines (section 5.1.2 and evaluation is based on the NRA guidelines appended. Also regard had to the context of permission to demolish structures and comply with ecology related conditions.

7.8.3. Potential Effects

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Not stated but acknowledge enhancement measures as part of extant permission for site infrastructure.

Construction	• Habitats: Table 5 evaluates impact on each habit within the site. All are lower value local importance and potential impact is permanent but either imperceptible or not significant
	• Potential disturbance to Confirmed Breeding Tern
	• Otters
	  ○ Potential Barrier to foraging area
	  ○ Disturbance (lighting and noise) of resting (rather than breeding) area and foraging areas identified in Figure 7 of Ecological report . Holt ap 70m north of jetty not in regular use. But limited due to number ad adaptability and temporary nature of works
	  ○ Contamination of foraging areas in wetland areas
	• Badgers: foraging disruption/displacement but temporary - no significant impact due to peripheral location and limited use
	• Bats: suitable roosting habitat not available within site and fragmented foraging not a significant source - short imperceptible impact
	• Harbour seal low number sightings – temporary and not significant

	• aquatic – potential significant if sedimentation due to silt in run-off and impact on fish species gills - obstruction in adult fish could be effected by silt . change in silt could change macro-invertebrate species composition favour less diverse assemblages and impacting on sensitive species but deposition of sediments is a natural process and there is no change in hydrological regime. Estuarine and marine environment very unlikely to be effected due to dilution and fluctuating silt . significant silt unlikely given scale of development • Birds Displacement and Disturbance ○ A total of 34 bird species recorded in overall study area 63 species recorded in wintering survey : Of note: Peregrine and Common Tern • Limited evidence of breeding birds on site (section 4.4.6.5)
Operation	• Habitats: No further impact with environmental controls and surface control as described in 5.3.3.2 of chapter 5 (revised) and which take account of the FRA and QRA. • Otters: slight disturbance with increased jetty operations, which are largely daytime and nocturnal nature of otters long term imperceptible impact. • Badgers: foraging disruption/displacement. Permanent but imperceptible • Bats: no loss of foraging but Lighting may impact but not a significant area and so permanent but imperceptible impact • Harbour seal: risk of collision limited due to existing human activity and slow movement shipping • Marine environment : long-term imperceptible impact in light measures and volume of marine waters • Aquatic: die to mitigation in 5.3.3.2 will not result in poor water quality impacts of aquatic fauna will be long-term imperceptible. • Birds

	<u>Habitat loss(Construction and operational)</u> o Shire and waterbirds: No permanent loss of foraging and roosting areas. Existing surrounding habitats do not have natural value over surrounding habitats for these species. Habitat loss within the site will result in permanent imperceptible impacts o Birds of Prey surrounding habits can support peregrines – a pair of which were recorded on site no nesting opportunity in site. Permanent imperceptible impact. o Passerines/Pigeons/Game Birds: Existing surrounding habitats do not have natural value over surrounding habitats for these species. Habitat loss within the site will result in permanent not significant impacts <u>Displacement and disturbance (Construction and operational)</u> o Shore and Waterbirds: visual and nose disturbance along northern shores near where Gouldings facility is proposed o Moderate impact due to noise but within acceptable limits for waterbirds Construction impact short term and not significant o The tree planting and screen as part of the landscaping in the extant permission will mitigate impacts as will the set back of the facility for the shore unlikely significant impact during operational phase. o Lighting during dusk dawn and night can effect birds through predation o Low number of roosting birds o Chapter 14 noise assessment explained how operation will not materially increase noise levels due to background traffic noise. o Permanent not significant impact

	○ Birds of Prey: potential disturbance to foraging birds of prey
Cumulative	• Section 4.6 list relevant plans and projects ad section 5.3.9 discuss cumulative impacts and notably refers to diffuse sources of pollution. The potential for cumulative impact of noise during overlap of construction with site infrastructure works. • Surface water measure ensure no cumulative impacts Build up contamination in water

7.8.4. Mitigation

Section 5.4 describes the mitigation measures which include: a project ecologist, fencing of habitats , removal of vegetation outside bird breeding season

- Tailoring measures for wintering birds and bird protection during breeding eg. Suitable vegetation, Design of lighting. Fot the Common Terns works need to be underway by April – between March to September for minimal disturbance breeding site pontoon or colony at Martello Tower. For the Peregrine species, works should similarity be under way by April
- Further rotter surveys pre-construction
- CEMP to ensure water quality controls
- Invasive Species control
- Bio-security
- Bird Monitoring.
- Measures in 5.3.3.2 ensure non contaminants. Noise disturbance will be permanent not significant
- Other measure relate to the extant permission e.g. enhancement of site for bird – Biodiversity plan - Section 5.3.1.1.2

7.8.5. Residual Effects

Section 5.5 deals with the applicant's conclusions in respect of likely residual effects, after the application of mitigation measures. The effects range from permanent slight to imperceptible negative subject to appropriate mitigation measure being implemented.

7.8.6. The Assessment: Direct and Indirect Effects

I have visited the site and examined, analysed and evaluated the revised Chapter 5 Vol 2 of the EIAR, and all of the associated documentation as listed in 7.8.2 including the additional surveys. I have inspected the application site and the surrounding area. The assessment is undertaken having regard to the requirements for the protection of habitats, species and biodiversity, as set out in international, European, national legislation and national and local policy, and government and industry guidelines for environmental impact assessment and ecological impact assessment. The assessment methodology includes site surveys, desk top survey on the ecological baseline of the proposed landholding and surrounding area as mapped in the appendix 5.1 (ecological surveys) and extends over the wider landholding and surrounding lands. Some limitations were encountered with Golf activities, private residences, dense habitats and also Covid and bad weather which delayed some of the survey and it is noted to be a partial explanation of the drop in bird species since 2019. Data sources included the National Biodiversity Database Centre (NBDC). Site surveys are comprehensive and include Habitat surveys and survey of avian and mammal species.

I consider the effects of water contamination to be significant having regard to presence of an extensive range of bird species which include 10 Annex 1 species as listed in Table 3 Summary Results of Breeding Bird Survey in the Ecological Survey report (2019) appended to the revised Chapter 5. While I consider the effect arising from water contamination from the handling of the fertiliser materials can be contained on the site through an upgraded surface water system and enclosed operational areas, I am not satisfied that it can be adequately managed in the jetty area. In this regard I note the concerns of the Environment Division about the risk of cargo handling and what I consider to be a complex system with key elements

outstanding, e/g/ the design and management of the inflatable mat between the jetty and vessel.

The limitations are noted in regard to the 2020 survey and are likely, I accept to explain a drop in numbers but in view of the habitat surveys over different years. I would accept that together they are unlikely to have been a significant impediment to the assessment of likely effects of the development on biodiversity.

7.8.7. Conclusion: Direct and Indirect Effects

Having regard to the examination of environmental information in respect of bird species in particular the EIAR and supplementary information provided by the applicant and the submissions from the planning authority, in the course of the application),and also to what I consider to be significant weaknesses in the cargo handling system for this sensitive marine environment I consider that the main significant direct and indirect effects on biodiversity are:

- Contamination of water and prey biomass having regard to the risk of dispersion and depositing of pollutant dust associated with the raw materials for the fertiliser industry and the nature of transportation and handling systems in the loading/unloading of cargo at the jetty.

The applicant proposes mitigation measures to address these predicted effects. However, for the reasons stated above, I am not satisfied that it has been demonstrated that such measures can fully mitigate effects and significant effects on the environment will arise.

7.9. Land and Soil

7.9.1. Issues Raised

Concern about historic contamination associated with previous use. No other substantive issues raised.

Examination, analysis and evaluation of the EIAR

7.9.2. Context and baseline

Chapter 6 of the EIAR deals with Land and soil.

The information provided was prepared by a competent environmental engineers who consulted recognised geological data sources and engaged specialist ground investigation works . The EPA was consulted regarding completion of site remediation in relation to the IPPC licence for former activities associated with IFI on site. A conceptual model was developed in accordance with IGI guidelines. The site is noted to be low lying at c.10m above sea level and 3.5m OD and includes reclaimed land to the north.

7.9.3. Potential Effects

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Not considered
Construction	• No significant change in topography, Current ground levels retained except for buildings . • excavation works of made ground and fill at depth 1-3m bgl. • Soil and subsoil risings from piling • 12000m3 to removed from site causing stockpiling, and sedimentation from run-off • Stockpiling of standard construction materials
Operation	• surface water run-off and release of chemicals leaching into soil, • accidental spillage from fuels/oils from machinery or HGVs travelling through the site

7.9.4. Mitigation

The mitigation measures form part the design as part surface water drainage, testing and management, buffer compounds for machinery and use of and good construction practice. Appendix 2.3 contains the detailed CEMP.

7.9.5. Residual Effects

No residual impact on soil or land subject to mitigation measures in place and strict supervision.

7.9.6. The Assessment: Direct and Indirect Effects

I have visited the site and examined, analysed and evaluated Chapter 6 Vol 2 of the EIAR, and all of the associated documentation including the comments by the EPA that I am satisfied rules out historic contamination issues and effects. I am satisfied that the proposed development will not result any significant effects on the soil or land in this industrialised location. I am satisfied that the mitigation measures subject to strict control are sufficient to avoid effects and to manage effects in the event of accidental spillage on ground. I also consider that the connecting of the site to an upgraded drainage system with facilities to catch contaminated water is potentially a positive measure in terms of ongoing land and soil management.

7.9.7. **Conclusion: Direct and Indirect Effects**

Having reviewed the EIAR and the comments from the EPA, the planning authority, and Planning Documentation I am satisfied that the proposed development would not have any significant adverse impacts on land or soil within the site.

7.10. Hydrology

7.10.1. Issues Raised

Concern about flooding, surface water management and water quality of receiving waters due to construction phase and also operational run-off associated with the proposed industry. Particular concern is raised regarding accidental spill and dust emission from cargo handling operations at the jetty. There is also concern about the foul effluent discharging to Lough Mahon and consequent impact on the marine environment.

Examination, analysis and evaluation of the EIAR

7.10.2. **Context and baseline**

Chapter 7 of the EIAR deals with Hydrology.

The information provided was prepared by competent environmental engineers as listed in Table 1.1 of the EIAR. It is based on desk based studies, site visits and qualitative assessment of impacts by reference to relevant guidelines, EC water quality standards and regulations for drinking water, Surface Water, Pearl Mussel, Salmonid Water and Urban Waste water within the context of the Water Framework Directive. The river basin catchment and marine context is described in section 7.2.2 with the main feature being Lough Mahon estuary water surrounding the site. Within the site there are no hydrological features. The manmade lagoon to the north with tidal ingress through an outfall pipe, is noted as are the permitted work to partly infill this as a wetland habitat. The existing foul and waste water system (septic tanks and bio-treatment plant) and surface water drainage network is noted as is the upgraded surface water system as augmented by the subject application (I note the further information in this regard and also that the extant permission provides for flood protection revetment and a new foul effluent drainage system.) The water body status classifies Lough Mahon as being of moderate status and at risk. The North Channel is also moderate and at risk of not achieving good status. Surface water result from the lagoon indicates elevated dissolved oxygen and Dissolved Inorganic Oxygen. Cadmium, Nickel and Lead also breach acceptable levels in either the drain or the lagoon.

The issue of flood risk is also addressed in a separate chapter.

In terms of raw materials to be handled, the applicant provides a breakdown:

Fertiser type	components
N Based	CAN 27%N, ASN 26% N Urea 46%N, Sulfate of Ammonia 20%N
P Based	DAP 20% P (+18% N), Granuphos 11.5% P, TSP 20%P
K Based	Muriate of Potash 50%K Sulfate of Potash 42%K

7.10.3. **Potential Effects**

Table: Summary of Potential Effects

Project Phase	**Potential Direct, Indirect and Cumulative Effects**

Do Nothing	• Surface water would continue to discharge through the old degraded system without an interceptor to the lagoon
Construction	• Potential impairment of surface water quality due to run-off and de-watering during excavation, mobilisation of sedimentation and contaminants, accidental spillages lubricant fuels and oils. Low risk given scale and duration of works and CEMP (Appendix 2.3) Low risk of contamination due to measures due to design and assimilative capacity of tidal waters and duration of construction.
Operation	Fertiliser facility • Risk of reduced water quality in Lough Mahon due to storm water and wastewater discharge. However, surface water run-off reduced by development and managed though a dedicated system for the site and release to lagoon following interception, (CCC licensed discharge) (details of this is also provided in further information) infiltration of surface water will be reduced. Jetty • Surface water managed through its own storm water system as detailed in extant permission. Where no contamination, s.w. will be passed to pumping station via an interceptor. Potential contamination will be diverted to a retention tank for testing and disposal off site if contaminated. Detailed measures set out in further information and in unsol. FI which illustrates the jetty drainage retention tank for the extant permission but which outside the subject site but connecting to the proposed system. • Risk of pollutants and spillages during Cargo handling is addressed in item 10 of the further information. It refers to an Operational Environmental Management Plan - in Appendix D of further information. Items 14, 15 and 16, 17 and 18 refer - E.g. Operational policy to not unload cargo such as fertiliser materials during wet weather. Section 5.2.1.2.2 of the revised

	NIS (appendix C of the further information) also contains mitigation measures for handling of raw materials. This is further supplemented with unsol. FI. • Wastewater treatment plant will be constructed as permitted and will incorporate secondary treatment and will be buffered to prevent release of partially treated or untreated effluent. Discharge by CCC license to lough Mahon south west of the site. • Risk of Pollutants arising from accidents and hazards having regard to nature of material and chemical on site is addressed in chapter 15 of the EIAR and item 11 of Further information. No significant adverse impact on the hydrological regime and water quality of Lough Mahon
cumulative	All sites within the Belvelly Port Facility will pre-treat stormwater before discharging to the amin stormwater collection system and therefore controlled on case-by-case basis With compliance with Best Practice Procedure (CEMP) no cumulative impact likely during concurrent works.

7.10.4. **Mitigation**

Construction phase: The mitigation measures are based on good construction practice and a site specific manual. A silt collection pond will allow for settlement of suspended solids at excavation stage. Soil will be stockpiled and tested. A drainage and sediment control system, in line with industry guidance, will also be provided. Other measures rely on management of waste, temporary construction compound, storage and stockpiling, refuelling and construction wheel wash. Appendix 2.3 contains the detailed CEMP and is more detailed in further information.

Operational Phase: The mitigation measures are integrated into the design as part of surface water drainage and wastewater discharge. Operational procedures for cargo handling will be controlled through management plans and include

measures for containment of potential pollutant sources, site specific emergency response and management of surface water. S.7.4.2.1 describes the range of manual type systems regarding unloading and handling of granular fertiliser so as to minimise potential for contaminated run-off. Further details of jetty drainage are set out in section 7.4.2.1. In response to concerns about cargo handling raised initially by the environment section of the planning authority, further details are provided in Section 5.2.1.2.2 of the revised NIS (appendix C of the further information) which also contain mitigation measures for handling of raw materials. This is further supplemented with unsol. FI

7.10.5. Residual Effects

Long term moderate positive impact on surface water environment due to installation of upgraded storm water system with interceptors and a monitored diversion system.

7.10.6. Assessment: Direct and Indirect Effects

I have visited the site and examined, analysed and evaluated Chapter 7 Vol 2 of the EIAR, and all of the associated documentation including the comments by the EPA. I am satisfied that the surface water management mitigation measure for the site at large at both construction and operational phases can be implemented and managed in respect of the agricultural fertiliser facilities and that the system is an improvement on the current system that is now degraded. I am not however satisfied that the cargo handling operations are sufficiently robust to prevent adverse impacts on Lough Mahon having regard to its status and aims for such under the WFD. The deposition of contaminants as already raised in the Air Quality assessment is of particular concern having regard to the designation of the Lough and Great Island Channel. This is addressed in more detail in the Appropriate Assessment. In summary, I consider the measures proposed Section 5.2.1.2.2 of the NIS are complex and open to human error at multiple operational stages and at a level that I do not consider practicable. The system is also vulnerable to weather in terms of potential extreme events and trying to balance with timing of loading and management of docking and berthing within in a seasonal period.

The environment section of the planning authority raised concerns initially about the clam shell grab and hopper in the handling of fertiliser raw materials during unloading from the jetty. The claims that there would be no gap between the vessel and the jetty or that there will not be loose material is disputed. The solution of an inflatable mat to be cleaned is subject to further agreement as are extensive operational measures including the detailed monitoring of products.

7.10.7. Conclusion: Direct and Indirect Effects

Having reviewed the EIAR and the comments from the planning authority, and Planning Documentation I am not satisfied that the proposed development would not have any significant adverse impacts on the hydrology and marine environment in the vicinity of the site.

7.11. Hydrogeology

7.11.1. Issues Raised

There are concerns about the former use of the site by Irish Fertilisers Industries and contamination of land and waters. There is also concern about timing of construction in the absence of the upgrading effluent treatment plant.

Examination, analysis and evaluation of the EIAR

7.11.2. Context and baseline

Chapter 8 of the EIAR deals with Hydrogeology.

The information provided was prepared by competent experts listed in Table 1.1 of the EIAR. It is based on a desk-based studies, site surveys and use of data loggers in the lagoon as well as historic investigative data associated with the expired EPA licence and periodic monitoring of groundwater and soil for closure audits since cessation of IFI operations. The qualitative assessment of impacts is by reference to relevant guidelines, within the context of the Water Framework Directive.

The underlying bedrock is classified as being Locally Important Aquifer which is moderately productive and groundwater vulnerability is high. The site-specific

Groundwater data is available from several historical monitoring wells and provides useful time series data. There are no Group water scheme or public supply source protection areas. The site-specific hydrogeology is described in section 8.2.5. GW flows north -northwest which is in the direction of the harbour water and discharges to Lough Mahon from the bedrock sub-tidally and through overlying silts in the intertidal area. Tidal influence varies between wells. A summary of results of water quality is in Table 8.3. GW conductivity varied across area reflecting varied levels of salinity. The most significant presence is DIN (Dissolved Inorganic Nitrogen) relating to historic use. Ammonia is the most dominant of these nitrates. concentrations of DIN have decreased significantly over time. More alkaline conditions in the west Figure 8.1 maps the groundwater levels as part of the FRA. Appendix 8.2 includes lab results of water sampling. Appendix 8.3 has photographs of monitoring wells.

The concentration of DIN is expected to remain high. The remaining residual nitrogen constitutes a very small diminishing risk to the status of Lough Mahon and the EPA is satisfied the contamination will be effectively diminished over time through natural attenuation. The EPA have requested that GW monitoring be continued at approximately 3-year intervals.

7.11.3. **Potential Effects**

Some pages appear to be missing in Volume 2 in terms of detailed effects. The impacts and effects are clearly summarised in Volume 1 and are supported by the data presented in Appendices in Volume 3. Mitigation is included in the NIS. In view of the limited depth of excavation and foundation works and depth of groundwater I am satisfied that the material on file is sufficient for the purposes of EIA. I further note the continued involvement by the EPA in this regard with respect to complying with requirement for site remediation in line with the licence obligations**.**

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• DIN contamination will be effectively diminished over time through natural attenuation
Construction	• Contamination during excavation and dewatering due to mobilisation of sediment and contaminated water, and accidental spills of lubricants,, oils or fuel. But GW is unlikely to be encountered and existing contamination diminishing. • Changes to gw flow will be local and temporary • the NIS refers to the need to protect groundwater form contamination through CEMP.
Operation	• contamination of gw from fuels spills etc • No likely adverse impact on the underlying hydrogeology
cumulative	• Dewatering impact Imperceptible due to rebounding of gw post construction without changes to gw flow or movement of dissolved constituents. With compliance with Best Practice Procedure during excavation (CEMP) and during operations OEMP no cumulative impact likely during concurrent works. • Reduction in leaching of residential nitrogen in the unsaturated zone is considered to be a positive impact in the DIN concentration will diminish in the long term

7.11.4. **Mitigation**

Through design: The development will reduce permeable surface area and decrease infiltration and leaching of contamination subject to the improved surface water drainage system.

Operational Phase: The mitigation measures are integrated into the design as part of surface water drainage and wastewater discharge. Operational procedures for cargo handling will be controlled through management plans and include measures for containment of potential pollutant sources, site specific emergency response and management of surface water. S.7.4.2.1 describes the of manual

type systems regarding unloading and handling of granular fertiliser so as to minimise potential for contaminated run-off. Further details of jetty drainage is set out in section 7.4.2.1. In response to concerns about cargo handling raised initially by the environment section of the planning authority further details are provided in Section 5.2.1.2.2 of the revised NIS (appendix C of the further information) also contain mitigation measures for handling of raw materials. This is further supplemented with unsol. FI

7.11.5. **Residual Effects**

Not clearly stated but by reference to the data trends and EPA comments, there is unlikely to be adverse effect due to construction earthworks and as in the case of the Long term moderate positive impact on water quality due to surface water management and installation of upgraded storm water system with interceptors and a monitored diversion system, there is likely to be long term positive impact during site operations subject to avoidance of large scale spillages of pollutants.

7.11.6. **Conclusion: Direct and Indirect Effects**

I have visited the site and examined, analysed and evaluated Chapter 8 Vol 2 of the EIAR, and all of the associated documentation including the comments by the EPA. I am satisfied that having regard to the ongoing EPA monitoring and improved ground water quality that the surface water management mitigation measures for the site at large at both construction and operational phases can be implemented and managed in respect of the agricultural fertiliser facilities and that the system is an improvement on the current system and that it is unlikely to result in adverse effects. Having reviewed the EIAR and the comments from the EPA as cited in the EIAR and Planning Documentation I am satisfied that the proposed development would not have any significant adverse impacts on the hydrogeology of the site or its environs.

7.12. Air Quality and Climate

7.12.1. Issues Raised

Concern about dust from toxic substances associated with fertiliser industry and based on experience of dust cloud at Cork Quays and historically from site. Particular concern is raised regarding accidental spill and dust emission from cargo handling operations at the jetty and proximity of houses nearby and downwind. I note the applicant comments that the dust clouds identified in a third-party submission relate to non-fertiliser materials. It does however illustrate an inadequate capture of dust.

Examination, analysis and evaluation of the EIAR

7.12.2. Context and baseline

Chapter 9 of the EIAR deals with Air Quality and Climate

The information provided was prepared by competent environmental engineers listed in Table 1.1 of the EIAR. It is based on a desk top review of information notably including EPA monitoring data (nearest in Cobh) and satellite imagery, construction methodology and applicant's cargo handling procedures manual. Qualitative assessment of impacts is by reference to relevant regulatory e.g. EPA - Ireland's Air Dispersion Modelling Guidance Note, among other guidance and EU based policies and objectives. Main sources of atmospheric emissions are local traffic, CO_2, NO_x, shipping traffic agriculture, the Marinochem facility and other industrial facilities as well as the existing wastewater treatment plant and urban areas. Sensitive receptors include local populations and ecologically sensitive sies.

The site as mapped in Figure 9.2 is in air quality management zone D, (under CAFE Directive) whereas Passage West along with Cork City and environs is in Zone B. Levels of air pollutants are well below the air quality criteria defined in the CAFE Directive and Air Quality Standard Regulation 2011. Particulate Matter in Cobh where the monitoring station is 3.5k from the site is recorded at levels well below acceptable limits.

7.12.3. **Potential Effects**

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Not stated
Construction	• Dust emission will cause dust soiling and nuisance to sensitive residential receptors. This is stated to be unlikely due to the separation distance of the fertiliser plant site for the nearest residents at more than 500m. Any impact is short-term • Dust deposition on the Great Island Channel SAC and Cork Harbour SPA. • Greenhouse emission will be insignificant and short term.
Operation	Fertiliser facility • Combustion emissions for plant and machinery and vehicular traffic are not any magnitude to have an adverse impact. The shipping traffic will be minimal in context of Port of Cork activity – comprising 10% of such and as a source of emissions comprise a small fraction. • Emission of contaminants from the facility are minimal and unlikely to cause adverse impact on sensitive receptors due to operations in 9.4.2.1 and the baseline air quality in Zone D and zone B and distance of over 500m from residents. • Greenhouse gas is negligible due to decommissioning of facility with a neutral net effect. • Transport related activity will be comparable to existing with neutral impact on Greenhouse Gas emissions. Jetty No stated significant adverse impact on the hydrological regime and water quality of Lough Mahon

cumulative	Due to background air quality additional emission and control and abatement measure the cumulative impact will be negligible

7.12.4. **Mitigation**

Construction phase: The mitigation measures are based on good construction practice and more intense controls to areas within 100m of the Natura sites such as frequent dust monitoring, haul road watering and fencing location and materials. Other measures rely on the CEMP. Appendix 2.3 contains the detailed CEMP and is more detailed in further information and further controlled by detailed conditions of permission as recommended by the Planning Authority- Environmental Section. Operational Phase: The mitigation measures are integrated into the design as part of surface water drainage and wastewater discharge. Operational procedures for cargo handling will be controlled through management plans and include measures for containment of potential pollutant sources, site specific emergency response and management of surface water. S.7.4.2.1 describes the manual type systems regarding unloading and handling of granular fertiliser so as to minimise potential for contaminated run-off. Further details of jetty drainage are set out in section 7.4.2.1. In response to concerns about cargo handling raised initially by the environment section of the planning authority further details are provided in Section 5.2.1.2.2 of the revised NIS (appendix C of the further information) this also contains mitigation measures for handling of raw materials. This is further supplemented with unsolicited FI lodged to planning authority on 13/12/21 and re-affirmed in item 4 of the applicant's response on 8/6/22.

7.12.5. **Residual Effects**

Long term moderate positive impact on surface water environment due to installation of upgraded storm water system with interceptors and a monitored diversion system.

7.12.6. **Assessment: Direct and Indirect Effects**

I have visited the site and examined, analysed and evaluated Chapter 9 Vol 2 of the EIAR, and all of the associated documentation including the comments by the

PA and the planning history in respect of dust control. I am satisfied that the mitigation measures for the site of the agricultural fertiliser facility proposed, are, at large adequate for controlling dust at both construction and operational phases within the contained areas set back from the shore, (e.g. the sorting, blending and bagging) and can be implemented and managed. I am not however satisfied that the cargo handling operations at the jetty are sufficiently robust to sufficiently eliminate the risk of dust generated from nitrate based raw materials associated with the facility and its deposition at sensitive receptors such as Lough Mahon. The issue is of particular concern having regard the designation of the Lough and Great Island Channel and is accordingly addressed in more detail in the Appropriate Assessment. In summary, I consider the measures proposed in Section 5.2.1.2.2 of the NIS are open at multiple operational stages to human error. Where there is reliance on the individual operator for compliance (section 7.3.3) this is a considerable level of delegation of duty of critical functions. The system is also vulnerable to weather in terms of potential extreme events and trying to balance with time-tabling of loading and management of berthing within in limited jetty and during seasonal periods. Accordingly, handling of peak-time worst case logistical scenario is difficult to determine based on the information provided. As I have already referred to, the environment section of the planning authority raised concerns initially about the use of a clam shell grab and hopper in the handling of fertiliser raw materials during unloading from the jetty. The claims by the applicant that there would be no gap between the vessel and the jetty or that there will be no loose material were disputed by the planning authority and subject of subsequent meetings between eh applicant and CCC. What appears to be a compromise arrangement -the solution of an inflatable mat to be cleaned is intended to be subject of even further agreement as are extensive operational agreements including the detailed monitoring of products. I would further note that this is not entirely clear, although details of materials are appended to unsolicited further information addendum to the applicant's response to further information to PA.

In terms of impacts on residents, while I note the jetty is nearer than the bagging area, I consider the separation distances to be of a range that dust dispersion is likely to be managed and would not have a significant adverse impact subject to mitigation.

7.12.7. Conclusion: Direct and Indirect Effects

Having reviewed the EIAR and the comments from the planning authority, and Planning Documentation, I am not satisfied that the proposed development would not have any significant adverse impacts on the local air quality and marine environment in the vicinity of the site.

7.13. Archaeology, Cultural Heritage and Architectural Heritage

7.13.1. Issues Raised

The appellant concerns relate to impact on Belvelly in terms of its townland name, and the Belvelly Bridge and the general permanency of industrialisation of a scenic area. The impact on tourism in the Cobh Area and environs of the site are also raised.

Examination, analysis and evaluation of the EIAR

7.13.2. Context and baseline

Chapter 10 of the EIAR deals with the archaeological, cultural and architectural heritage and this is supplemented by a chronological account of archaeological heritage within Appendix 10.1 and cultural heritage maps in Appendix 10.2 in vol. 3.

The information provided is based on a comprehensive review of the recognised inventories and national and local records of relevant heritage sites of interest in or near the site and was prepared by experienced archaeologists having due regard to best practice guidance.

I am satisfied that the sites reviewed convey extent and importance of the local heritage in the area.

There is no evidence of above ground archaeological material. The northern part of the is part of reclaimed lands. There may be undisturbed material beneath the reclaimed fill.

Fig 10.1 plots the NIAH and RMP sites in the landholding. Fig/ 10.2 plots the wider context. Marino House and Orangery are on the southern end of the Marino Point peninsula outside the development site and buggered by trees. The landscape

amenities and features such as a tennis court in attendant grounds date from mid-20th Century [probably 19th C] and were removed as part of the IFI development. In the wider area there are 28 recorded sites in a 2 km radius.

7.13.3. **Potential Effects**

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Archaeological material below ground would remain.
Construction	• Piling and excavation to 3.m depth below ground. This ground construction may have a moderate impact on any potential archaeological material that may survive below surface in underlying mud beneath reclaimed overburden.
Operation	• none
Visual	No impact on Marino House and Orangery (outside site) due to redevelopment nature of work in former attendant grounds
Cumulative	• additional site preparation works for utilities and services associated with permission on the 37-ha site in crease risk of disruption.

Views from and to Marino House to the north across Lough Mahon where cycle ways are included in the current plan have not been included but given the proposed landscaping in the extant permission for site preparation works, the visual assimilation with Marinochem and set back from the northern shore, I do not consider this to have any material change in the description of the impacts and effects.

7.13.4. **Mitigation**

Given the brownfield nature and reclaimed fill depth of 2.5m archaeological material is not anticipated. Intermittent monitoring is proposed. This should be by a licenced archaeologist.

7.13.5. **Residual Effects**

No residual impacts.

7.13.6. **The Assessment: Direct and Indirect Effects**

I have visited the site and examined, analysed and evaluated Chapter 10 Vol 2 of the EIAR, and all of the associated documentation including. I have inspected the application site, the surrounding area. I have also had regard to Belvelly Bridge as a key feature in the area. It is not a protected structure but is in included in the National Built Heritage Service inventory where it is described as

> 'a Triple-arch hump-back road bridge, built 1803, over Belvelly Channel. [It is of] rubble limestone construction, comprising three-centred arch flanked by round-headed arches and series of diminishing blind round-headed arches, all having ashlar voussoirs, some with dropped cut limestone keystones. Dressed limestone copings to parapet walls and tooled cut limestone V-cutwaters to both elevations. It is a historic bridge connecting Cobh with Foaty Island and the mainland. Finely executed, the elegant articulation of the arches together with their flanking walls alludes to a continuous arcade marching across the channel. This attention to detail and aesthetic composition points to the highly skilled construction methods employed in the eighteenth century.'

In respect of the structural integrity and safety of users, the planning authority has addressed this through quantifying wear and tear through traffic analysis and determining financial contributions accordingly. Works, depending on extent, to the bridge would be subject to a separate consent process and are not part of a consent under the subject application. I have however considered the impacts primarily in terms of strategic access as a planning policy issue in the planning assessment. In terms of traffic, this is dealt with in chapter 13. In the absence of drawings and inclusion in the site I cannot comment on the nature of works other than to state without prejudice that it is a sensitive context.

The issue of the use of the townland name of Belvelly in Marino has not been addressed and the place-naming and numbering is normally a matter for the planning authority to agree by way of condition in order to retain the historic identity associated with ancient placenames. As it relates to an entire facility it would have been more in the scope of the extant permission. I am otherwise satisfied that the

proposed development will not result in any significant effects on the archaeological, cultural or architectural heritage of the area. I am satisfied that the mitigation measures by way of archaeological supervision are adequate to identify and manage subterranean material subject to a condition of appropriate methodology. I do not consider there to be any material significance in terms impact on tourism amenities. This issue of congestion is addressed in the following section.

7.13.7. Conclusion: Direct and Indirect Effects

Having reviewed the EIAR and the submission from the planning authority, and Planning Documentation I am satisfied that the proposed development subject to mitigation conditions would not have any significant adverse impacts on the archaeological, cultural or architectural heritage of the site, the locality or its wider environs.

7.14. Landscape and Visual Impact

7.14.1. Issues Raised

The appellant concerns relate to visual obtrusiveness of the proposed development as viewed from residential areas and scenic routes in the area. In its appraisal, the PA sought additional photomontages from the R624 to illustrate the impact.

Examination, analysis and evaluation of the EIAR

7.14.2. Context and baseline

Chapter 11 of the EIAR deals with the landscape and visual impact and this is supplemented by photomontage in Appendix 11.2 in vol. 3. Additional photomontages are provided as part of the Further information in a pouch on the file. The information provided was prepared by a competent landscape architect having due regard to best practice guidance as cited in section 11.1.1.1. It also refers to the high value landscape and scenic routes in the 2014 CDP which I note are the same in the current CDP in the vicinity of the site. It also refers to the ACA in Passage West and to the Greenway. The more recent development plan also includes cycle routes across the channel to the west through passage west and north at

Garrigrenan. The assessment also has regard to the context of permission to demolish structures and carry out landscaping.

The photographs and montages are from a range of vantage point along the road frontage and from across the water channel and illustrate the site in its current state as compared to the state with demolished structures (as permitted) and incorporating the proposed development.

The assessment separately assesses the building elements for the fertiliser facility within the development site as distinct from the jetty area at operational stage. Each view is rated in terms of sensitivity of view, magnitude of change and significance of visual effect. I am satisfied that the vantage points are representative of the sensitive receptors such as residential areas and scenic amenity areas in terms of localised and mid distance views in an estuarine context.

7.14.3. **Potential Effects**

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Deterioration of existing but maturing vegetation negligible landscape and visual effect.
Construction	• AG Fertiliser facility site prep – short term landscape and visual effect with vegetation removal and earthworks, • Jetty area – short term moderate to high adverse effects due to machinery in open estuarine context
Operation	• AG Fertiliser facility – moderate to neutral landscape and visual effects due to existing built environment and retention and plant of boundary vegetation • Jetty use – none
Cumulative	• Low moderate adverse and long term

Section 11.3 summarises the impacts and effects on the landscape with each viewpoint rated in terms of sensitivity, magnitude of change and significance of visual effect. Photomontage 12 identifies views from Patrick Murphy Park in Passage west and medium high sensitivity and that there will be a moderate change. The building

facility is stated to have no significant impact, but the Jetty use will be slight to moderate, neutral and intermittent.

The development within an existing industrial site is key landscape design mitigation measure with a low-to moderate impact in term so the siting massing and bulk of the structures. The operational use of jetty with the crane installation places the impact on the landscape as moderate with the most effected receptors being residents on the coastal edge and higher ground at passage west. I consider this to be an accurate and reasonable appraisal, as summarised in table 11.4.

The views from the north across Lough Mahon where cycle ways are included int the current plan have not been included but given the proposed landscaping in the permission for site preparation works and the visual assimilation with Marinochem structures and set back from the northern shore I do not consider this to have any material change in describing the impacts and effects.

7.14.4. **Mitigation**

Design- in an industrialised area and retention and augmentation of vegetation and on going landscaping as the site develops.

7.14.5. **Residual Effects**

Section 11.5 of the EIAR deals with the applicant's conclusions in respect of likely residual effects, after the application of mitigation measures. The effects range from low to moderate and the most significant is a moderate visual effect from the jetty use as viewed by the cyclists and walkers and from houses in Passage west (coastal and higher ground) and from along the R624. The moderate rating is however qualified as 'slight to moderate, neutral, intermittent.'

7.14.6. **The Assessment: Direct and Indirect Effects**

I have visited the site and examined, analysed and evaluated Chapter 11 Vol 2 of the EIAR, and all of the associated documentation including the additional Photomontages. I have inspected the application site, the surrounding area, and the associated photomontages. I have also had regard to landscape character and sensitivity as set out in the in the Cork County Development Plans and the sensitive receptors in the area. I am satisfied that the proposed development will not result any significant effects on the landscape or sensitive visual area, over that which has

already exists in this industrialised location. I am satisfied that this design mitigation measures together with the boundary treatment as permitted is sufficient to minimise effect. The re-use of the site also contributes to its remediation and protect existing greenfield undeveloped lands in the area .

7.14.7. Conclusion: Direct and Indirect Effects

Having reviewed the EIAR supplementary information provided by the applicant and the submission from the planning authority, and Planning Documentation I am satisfied that the proposed development would not have any significant adverse impacts on the landscape or visual amenities of the locality or its wider environs. The issue of low to moderate impact on residential amenity is addressed in the planning assessment.

7.15. Noise and vibration

7.15.1. Issues Raised

7.15.1.1. Most objections relate to noise. Residents from Passage West are particularly concerned about the noise and vibrations, and particularly tonal or impulsive noise associated with intensification of jetty use and its amplification across the water. Noise sources of concern are associated with unloading and associated machinery and generator noise for overnighting vessel. Traffic noise and vibration generated by heavy vehicles is also of concern for residents along the transportation routes such as along the R624**.**

Examination, analysis and evaluation of the EIAR

7.15.2. Context and Baseline

7.15.2.1. Chapter 14 assesses the potential impacts associated with predicted noise and vibration levels at a range of sensitive receptors. I am satisfied it has been prepared by competent acoustic consultants and by reference to relevant standards and guidance. The methodology is by reference to standard international practice where there is no specific and directly relevant national guidance which is reasonable.

Baseline Survey data is cited in respect of the existing industry on site and background noise at a range of noise sensitive locations on both sides of the River Lee. A baseline survey was carried out using 9 survey locations on both sides of the river channel including residential locations in Passage West to the west and dwellings along the R624 and includes areas at various heights as well as the shoreline at the SPA boundary.

7.15.2.2. The detailed survey data is contained in Appendices 14.1- 14.6 inclusive.

7.15.2.3. Noise assessment criteria for the construction phase is based on British Standards BS 5228-1:2009+A1:2014. One hour interval $L_{Aeq\ 1h}$ based parameters are attributed to site operations and applied to dwelling receptors for day, evening and nighttime hours. The freefield and façade limits reflect different outdoor context for residence are listed table 14.1.

7.15.2.4. The recommended vibration limits are based on a range of building types modern and old house and a range of commercial type buildings. At operational stage, WHO guidance informs operational phase noise. 55dB is a de facto daytime limit, but local practice applies shorter time intervals. 15 minute, 30 minute 1 hour intervals are typical criterion e.g. for nighttime limit of 45dB$A_{Laeq1hr}$ to prevent disturbance rather than the night time upper limit of 40dBA over a longer time interval through a whole year - as referenced by WHO.

7.15.2.5. Criteria limits throughout a 24 hour period are set out in Table 14.5.

7.15.2.6. The magnitude of impact is based on BS4142:2014 which is based on context, and this is used to quantify and describe impact and is considered appropriate for dwellings. Reference is also made to CCC Noise Action Plan 2018-2023. There are no strategic noise maps due to low level but the background noise is described as elevated with sources from a commercial ship dock, a railway and the regional road fronting the site with continuous traffic at times. Other noise sources are the industrial plant 24/7, utilities compounds, wildlife and distant traffic at night time.

7.15.2.7. Methanol unload 1-2 times a month.

7.15.2.8. The assessment examines the assumption of worst case scenario and noise contour maps depict the range of noise in a range of noise level bands emanating from different source point which starts at 99db to 0.

In the applicant response to the grounds of appeal further clarification is provided.

7.15.3. Potential Effects

Likely significant effects of the development, as identified in the EIAR, are summarised in Table below.

Table: Summary of Potential Effects

Project Phase	**Potential Noise sources**	**Direct, Indirect and Cumulative Effects based on 7 scenarios summarised individually and cumulatively in table 14.23**
Do Nothing	Existing noise to continue – likely tat land will be developed and sound will gradually evolve	
Construction	Noise : Fertiliser facility: • Audibly tonal noise in residences south east – piling being main source and but lower than the 65dB level for construction Vibration: highly unlikely to have excessive PPV levels due to: • Vibro-roller: not likely to be significant PP levels at 300m <0.1mm/s	

	• Asphalt breaking is not low frequency thereby minimising impact • Rock breaking not expected to be discernible at sensitive receptors	
Operation	<u>Fertiliser facility:</u> • Noise at sources are listed (over 5 min) in table 14.16 range 83dB down to 71dB from machinery • Reverberant noise in the processing area is 77-82dB <u>Jetty Use</u>: • The hopper noise is 70dB LAeqT at 10metres as measured Ringaskiddy • Crane noise estimated from LiebherrLH60 specification given - 103dB surround noise 12 hour unloading event 7-1900 Mon-Sat • Road sweeper 83dB at 2metres • Cargo vessels • Fertiliser vessels typically 3000-6000tonnes capacity and typical general cargo vessel 2000-5000t has sound power	<u>Fertiliser facility</u> • Highest noise when Gouldings operations measured with unloading cranes and hoppers and sweeper trucks all operating simultaneously will be 38-44dB Criterion will not be exceeded as considerably lower than 55dB • No night time emission with shutting down of berthed vessels. Unlikely to hit L_{AFmax} limit of 60db at night. • $L_{AF90\ 15min}$ daytime background levels 35dB at Horsehead to 53dB along waterfront at Passage West and 37-50 in evening lowest on hillside. Night - fell to 27-46dB

	level of 98dB. Larger vessels are at 106dB <u>Traffic on site</u>: • Peak of 50 truck loads per day, 8 trucks per hour in worst case. 50-60 car and van movements at peak. Negligible impact <u>Other BMPD traffic</u> • Up to 6 trucks per hour <u>Traffic off-site</u> • Peak hours 50 car movement per hour 6trucks per hour deliveries - traffic has a negligible increase => no increase in road traffic noise along R624. • Other: minimal traffic with negligible noise increase.	• Due to ambient noise and by BS 4142 criterion impacts negligible at receptors. <u>Other BMPD</u> • Due to ambient noise and by BS 4142 criterion impacts negligible at receptors • Emphasis on industrial waterfront heritage and maritime tradition • No increase of significance – imperceptible or slight <u>Impact on SPA /SAC</u> • No noise increases due to traffic dominated soundscape • No tonal or impulsive noise expected • Traffic requires doubling to increase 3dB and this is not forecast. Appeal response calculates a 0.1 dB increase in traffic noise associated it the 1% increase in traffic volume.
Cumulative	<u>Fertiliser facility:</u>	<u>Construction</u>:

	• traffic impact due overlap at construction phase with other projects in table 4.8 <u>Jetty Use</u>: • not likely	• 4 month overlap with extant permission with demolition works and machinery and plant as listed in section 14.3.3.1 frequency and emission combined such that $L_{Aeq\ 1\ h}$ level unlikely to effected • Worst case - 65db at all receptors relates to extant permission. <u>Operational</u> • WWTP 43dB not audible outside boundary other noise emission -negligible • simultaneous unloading at Passage West but daytime fig. 14.15 predicts levels remain below 55dB criterion <u>Other Jetty use</u> • simultaneous unloading at passage west but daytime fig 14.16 predicts levels remain below 55dB criterion

7.15.4. **Potential effect from particular sources in appeal: Pages 2-10 of applicant's appeal response address noise sources of concern:**

- Generator noise – only slightly audible beyond 100m. The 99dB noise level was used to predict and with two berthed vessels the increase by 3dB still leaves cumulative level within an acceptable level. A nighttime survey was carried out on 5/3/21 while the Finola M was moored. Table 2 shows a record of specific levels at 6 SNLs and 36 dB is highest.
- Noise impacts from tugs: will operate over short term 5-15minute duration and at level of up to 34dB at Horsehead but will be significantly lower than the 45dB Night time criterion.
- Night-time low frequency noise impact: Folling extensive survey, vessels Typically not tonal using the one third octave band analysis as supported by the recording for Finola M with a 4dB increase in energy whereas 15dB is required to be tonal. Effect likely to be even less with modern vessels.
- Impact form Night-time tones and impulses: No tonal nighttime noise likely as explained. Impulsive noise tends to be for container operation which are daytime activities.

7.15.5. **Mitigation**

While no specific mitigation measures are required, they are set out in section 14.4 of the EIAR. Measures are based on construction management in the Construction Environmental Management Plan and good practice for machinery care and handling. Elements include:

- A complaints procedure is proposed.
- At operational stage good management practices are listed in 14.4.2. e.g. Use of horns, hammering of metal, hours of operation, site noise management plan and a complaints procedure.
- A system for vibration monitoring is also proposed at nearest receptors – not marked.
- Noise monitoring at intervals in accordance with a permission at for day, evening and night at Passage West and r624.

- Use of flat spectrum alarms in reversing plat at fertiliser facility and jetty, but unlikely activity at night.
- Noise from HGVs on R624 1% increase in traffic volume corresponds to .1dB in traffic noise levels. => negligible to neutral impact
- On the matter of methodology:
    - It is confirms that the jetty was assessed in the EIAR and in all cases impacts will be neutral at distance receptors increase to slight adverse during evening or night-time arrival /departure of vessels but will comply with EPA and industry best practice.
    - The modelling software assume bodies of water as acoustically hard surface with 0 ground absorption factor in line with International Standard ISO 9313-3-1996 Acoustic Attenuation of Sound During Propagation Outdoor – Part 2 General Method of Calculation (1996) . However nearest receptors are .5km for the jetty emission will therefore attenuation due to geometric divergence. Emissions will also be attenuation by atmospheric absorption.

7.15.6. **Residual Effects**

The effects are summarised in tables 14.25 and 14.26 for construction and operational phases having regard to quality, significance, extent, context, probability, duration, frequency and reversibility. Construction has an overall neutral to slight negative and temporary effect whereas the operational phase has an overall neutral effect.

7.15.7. **The Assessment: Direct and Indirect Effects**

I concur with the nature of the effects identified. A representative range of scenarios and receptors have been considered in describing the effects, as well as the sources of noises. There is a degree of uncertainty with the types of vessels as I have referred in the outset of this assessment, but I accept the use of larger engine at full capacity for prediction is useful. (The nature and degree of cargo vessels in terms of altering the nature of the jetty facility is matter of planning control – there is

natural restriction however by virtue of the jetty size and the calculation of two vessels is a realistic upper limit.) I note the PA specifies times (tonal a between 7pm- 1200) to ensure tonal are eliminated at nighttime in line with EPA guidance. I further note the reversibility of the impacts and the recommended environmental management system by the planning authority which provides for control of on-site noise in the evening and night-time, a schedule for night time working to require notification and agreement with monitoring provision and complaint and audit procedure which is to be public which together facilitate on-going mitigation where necessary.

I am satisfied that it has been demonstrated that such measures can fully mitigate effects and significant effects on the environment that will arise.

7.15.8. Conclusion: Direct and Indirect Effects

Having regard to the examination of environmental information in respect of noise and vibration in the EIAR and the other related chapters and supplementary information provided by the applicant and the submission from the planning authority, and third parties in the course of the application it is considered that the main significant direct and indirect effects on noise and vibration will be mitigated by measures outlined.

7.16. Material Assets

7.16.1. Issues Raised

The appellant concerns relate primarily to impact on the road network, in terms of access to the island, road capacity and traffic safety particular at the Belvelly Bridge. The PA sought further information on wear and tear of road. There is concern about noise of vessel generators and reference by the applicant to power being supplied at the jetty. Iarnrod Eireann were consulted about safety of rail interface near site.

Examination, analysis and evaluation of the EIAR

7.16.2. Context and baseline

Chapter 12 of the EIAR deals with Material Assets and the categories covered are roads and shipping traffic, built services and waste management and cross references are made to the related chapters on Traffic, Air quality and Climate, Cultural Heritage, Lands and Soil, Hydrology and Hydrogeology. The categories assessed are

- Electricity which is inadequate and no permanent supply to site at present.
- Gas existing infrastructure on site which serves Marinochem and domestic dwellings – to be retained.
- Water supply infrastructure which is adequate
- Wastewater infrastructure is presently inadequate and is to be upgraded
- Materials management and resource use
- Rail which is retained
- Methanol Pipe which serves Marinochem form the jetty to the north west edge of the site
- Other utilities
- Where utilities are inadequate, they are being upgraded as part of the extant permission and the proposed facility ties in with this.
- At construction stage temporary water demand will be low but a fire water attenuation is proposed. The WWTP will provide for a 50PE equivalent and capacity to expand and with discharge under license. A temporary facility will be provided at construction.
- Waste will be managed in accordance with a recognised hierarchy and in line with a CEMP and best practice guidance. Packaging and pallet waste at facility but no operational waste with additional port use
- Materials to be imported for construction are estimated and listed in Table 12.3
- The information provided is based on a comprehensive review of utilities as clarified in further information.

7.16.3. Potential Effects

Table: Summary of Potential Effects

Infrastructure	Potential Direct, Indirect and Cumulative Effects
electricity	• At construction stage generators will be used where no available power • No adverse impact on local power infrastructure
gas	• No impact as no gas required and no interference with infrastructure
Water supply	• Use Existing supply at construction stage and 10-20m3 pd which within capacity No adverse impact.
Wastewater	• With upgrade system compliant with Urban Wastewater Directive no significant impact
Material management	• Based on management plan no adverse impacts
Cumulative	• No cumulative impact as Adequate supply of water and power for the permitted and proposed development and
Roads, natural resources and cultural assets	• As addressed in the respective chapter 13 in the EIAR and further information.

7.16.4. Mitigation

Contractor will be required to ensure no impact on existing services. CEMP also provides measures.
Mitigation of wear and tear of roads though financial contribution towards repair and maintenance.

7.16.5. Residual Effects

No residual impacts over the long-term as no significant increase in demand for major utilities.

7.16.6. The Assessment: Direct and Indirect Effects

I have visited the site and surrounding area and examined, analysed and evaluated Chapter 12 Vol 2 of the EIAR, and all of the associated documentation and I also note the PA requirement of details which were submitted to its satisfaction in terms

of phasing and integration of the proposed development with relevant works subject of the extant permission.

I have also had regard to the rail and road networks being a key material Assets potentially impacted. There is no direct risk to the rail in its day-to-day operations however the safety issues have been addressed in detail in Chapter 15. The strategic impacts on this have not been fully addressed other than saying other users of the railway will not be restricted with new rail connection in the future as clarified in applicant's response to appellants on 22/6/22. This is addressed in assessment in context of planning policy.

The proposal is considered by the PA to significantly reduce the life of the roads. Notwithstanding road upgrades as part of the extant permission, the planning authority sought further information on the wear and tear in terms of quantifying impact on the lifespan of the R624 . A sweep analysis and traffic management were submitted as part of mitigation, and in terms of safety this is addressed in the Traffic and Transport topic. The planning policy in this regard is also addressed in the planning assessment. Subject to the mitigation measures primarily through funding of works and the upgrading go of the infrastructure on the site at large, I am satisfied that the proposed development will not result any significant effects on the utilities of the area.

7.16.7. Conclusion: Direct and Indirect Effects

Having reviewed the EIAR and supplementary information provided by the applicant and the submission from the planning authority, and Planning Documentation I am satisfied that the proposed development would not have any significant adverse impacts on the utilities of the site or area.

7.17. Traffic and Transportation

7.17.1. Issues Raised

In its appraisal, the PA sought additional information on traffic and road capacity along the R624 and junction south of Belvelly Bridge. The appellant concerns relate

to intensification of heavy vehicles on a substandard network with capacity constraints, conflict with local traffic and obstruction of key access route

Examination, analysis and evaluation of the EIAR

7.17.2. **Context and baseline**

Chapter 13 of the EIAR deals with the traffic and transport and this is supplemented by data as part of further information. Appendix G in respect of R624 provides Traffic data and percentage of HGVs in order to describe traffic characteristics.
The information provided was prepared by a competent engineer with transport experience. Figure 13.1 illustrates the key road network routes and junctions,
The assessment focuses on the riad network and all its users and has regard to best practice guidance and strategic and local spatial transport planning as cited in section 13.1.2. Traffic counts are based on official traffic count (CCC and TII). Road safety is by reference to formal recorded sources -the Road Safety Authority and DMURS classification .
The alignments of key section of the R624 and Bevlelly Bridge are highlighted as are the interface points with the railway.
The predicted 2023, 2028 and 2038 suburban road link off-peak volume/capacity ratios for the R624 within its 60km/hour suburban speed limit zone at Belvelly Bridge are provided. The R624 at Belvelly Bridge would continue to operate within tis calculated suburban road link capacity during off-peak hours (9am-4pm) with overlap of all HGVs. in Tables 13.24, 13.25 and 13.26 with the TII predicted high sensitivity growth scenarios. Equivalent rations for proposed operation staff travel hours of 7-8am and 6-7pm are shown in table 13.27.

Empirical data from current operations also informs data.
Belvelly is a critical point in terms of alignment and traffic.. The recorded traffic at Belvelly Bridge (1344 at peak AM and 1347 at peak PM with 30 HGVs at the peak AM) is significantly higher than the R624 traffic south of its junction with the local road (by the Castle to the east) indicated high level of use of L2989 as an alternative to the R624. The majority of HGVs use the R624. HGVs Peak traffic times to be reduced as stated in FI.

In terms of capacity in context of traffic volume, speed limit (60KPH) and road classification The R624 is operating in excess of its capacity south of the Belvelly Bridge at peak hours. 120% at AM and 113 at PM.and by reference to the UK Traffic Capacity of Urban Roads the road network is operating within tis capacity at these point during its peak hours 9-4. The more strategic national route network is subject to planned upgrades

7.17.3. **Potential Effects**

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Based on TII predicted high sensitivity growth scenario: • R624 south of Belvelly Bridge/L2989 junction would continue to operate within its capacity • The R624 at Belvelly Bridge would continue to operate in excess of its capacity up to 141% AM northbound in 2038 • The R624 at Cobh Cross withing suburban link road capacity would be within capacity (96%)

Construction	• Slight to moderate short-term negative traffic effect. This is based on:
	  • Permitted Demolition 5 x 20 tonne trucks in and out
	  • Permitted construction of infrastructure 8 x 20 tonnes trucks in and out
	  • Four month overlap with proposed works if permitted
	  • Total traffic for construction phases is set out in Table 13.31 total 18month period - car before 8 and after 6 and truck 9-4
	  • Total traffic volumes by hour and with HGVs identified in Table 13.32
	  • Predicted R624 2022 Daily Traffic Volumes with simultaneous construction of all element gives a 2.4% change south of Belvelly Bridge junction and half this at Belvely Bridge and .8% at Cobh Cross

	• Predicted highest increase j peak traffic hours and daily traffic volumes on existing local road network sig. less than 5% volumetric threshold (TII guide for sensitive areas.) • Capacity of access /route e.g. increased instances of informal stopping and yielding
Operation	• 50ship per year – peak distribution feb, march April 47 HGV per day (I read this as 94 movements) and 20 movement per day in off peak . Fig. 13.38 and 13.39, 13.40 and 13.41 predict traffic in operational peak phase and demonstrate marginal percentage changes of overall traffic . but substantially comprising HGV traffic. On the R624 • The peak period traffic on the wider national road network when of setting existing traffic at Cork City facility • Proposed Access – highest traffic volumes relatively and facilitated by the ghost island avoiding significant queuing or delays.
Cumulative	Other housing developments in Cobh which will use the R624 – The growth scenario has been factored in but at time of writing such growth unlikely with Covid restrictions and economic impact.

7.17.4. **Mitigation**

- Measures are clarified in the applicant response of 8/6/22. Design and traffic management by way of formalising the yield system at Belvelly bridge and road works in accordance with Department of Traffic Signs Manual .
- Traffic management at source by way of off-peak usage by BMDC of R624 and OTMP to be agreed for HGV activities by Gouldings which will be based on their customer data, operations and baseline conditions and subject to review pending road improvements.
- The T and T Division of the PA considers these measures are inadequate in addressing vehicle impact and delay due to 'restrictions' and delays e.g. further

limits on opportunities for passing pedestrians and cyclists would decrease level of service. Further mitigation needed to provide alternative for Cyclists and pedestrians and funding sought. The alternative is a boardwalk alongside the Belvelly Bridge as previously suggested by the application in the case of the extant permission. (see item 23 of planners FI assessment – page 116 of 177) . In terms of traffic management, Operational Traffic Management (OTMP) requires further agreement.

7.17.5. **Residual Effects**

Section 13.5 of the EIAR deals with the applicant's conclusions in respect of likely residual effects, after the application of mitigation measures. The effects range from slight to moderate and the most significant relating to heavy traffic movements.

7.17.6. **The Assessment: Direct and Indirect Effects**

I have visited the site and examined, analysed, and evaluated Chapter 13 Vol 2 of the EIAR, and all of the associated documentation including the further information. I have inspected the application site, the surrounding road network on two occassions. I also had regard to transport objectives for the area as set out in the in the Cork County Development Plan. Having considered the concerns of the traffic/road design engineers of CCC, I am not satisfied that the proposed development will not result in any significant effects on the traffic congestion along the local road network. I am not satisfied that the road works as mitigation measures together with traffic management measuress which are to be subject to further condition are sufficient to minimise effects on a local network that has restrictions.

7.17.7. **Conclusion: Direct and Indirect Effects**

Having reviewed the EIAR and supplementary information provided by the applicant and the transportation reports in the submission from the planning authority, I am not satisfied that the proposed development, by reason intensification of heavy goods vehicles would not have any significant adverse impacts on the traffic and transportation network in the locality. The strategic issues and impact on the island community are addressed in the planning assessment.

7.18. Risk of Major Accidents and Disasters

7.18.1. Issues Raised

7.18.1.1. The proposed development involves a low tier Seveso facility due to the materials. There is a risk associated with storage of agricultural fertiliser raw materials and chemicals such as ammonium nitrate which is a hazardous substance with explosion risks and domino effect with the Marinochem facility which receives methonal by a service pipe at the jetty and stores and processes this methanol.

7.18.1.2. As this is an application for a new establishment under the Chemicals Act (Control of Major Accidents involving Dangerous Substances) Regulation 2015, the HSA was consulted . A revised QRA identifying potential major accidents relating to the application was sought for HSA review and no further issues raised on review of this by the HSA

7.18.1.3. Marinochem the nearest neighbour raised concerns with the planning authority. The HSA required the applicant to consultant with Marinochem.

Examination, analysis and evaluation of the EIAR

7.18.2. Context and baseline

Chapter 15 of the EIAR deals with Risk of Major Accidents and Disasters. The information provided was prepared by a competent engineers listed in Table 1.1 of the EIAR having regard to the EPA guidelines. Risks are identified based on phase and classed in terms of likelihood of risk having regard to the CEMP. A description of the risk of accidents is provided having regard to the substances used and its proximity to Marinochem. It identifies risks to human health, cultural heritage and the environment.

This should be read in conjunction with the QRA. HSA required the applicant to consult with Marinochem and this has informed the scope of emergency planning. The HSA is satisfied that it meets the spatial land-use planning criteria based on the

QRA in response to further information. The QRA refers to specialist design by international engineering firm Ove Arup.

7.18.3. Potential Effects

Table: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Not stated
Construction	Identified In EIAR • No catastrophic risks • Extremely unlikely Minor Flood risk causing risk to safety of works, contamination of surface water and damage to materials • Unlikely Serious Fire risk causing risk to safety of works, contamination of surface water, damage to materials and machinery, atmospheric pollution, Marinochem incident • Unlikely very serious risk of explosion risk causing risk to safety of works, contamination of surface water, damage to materials and machinery, atmospheric pollution, Marinochem incident, hearing damage, material damage to property • Likely serious risk of traffic accidents causing health and safety issues for workers and local community. • Likely limited risk of spillages, leaks release of contaminants causing health and safety risk to human and flora and fauna.
Operational	Identified In EIAR • No catastrophic risks • No flood risk caused by development • Very unlikely Minor Flood risk causing risk to safety of works, contamination of surface water and damage to materials • Unlikely very Serious Fire risk causing risk to safety of works, contamination of surface water, damage to materials and

	machinery, atmospheric pollution, Marinochem incident, Gouldings incident. • Unlikely very serious risk of explosion risk causing risk to safety of works, contamination of surface water, damage to materials and machinery, atmospheric pollution, Marinochem incident, Goulding's incident hearing damage, material damage to property • Limited serious risk of traffic accidents causing health and safety issues for workers and local community. • Very unlikely serious risk of spillages, leaks release of contaminants causing health and safety risk to human and flora and fauna. Contact with hazardous fertiliser material, spill of coating oil into marine environment.
Jetty operation	• Very unlikely minor flood risk causing health and safety risk to workers, contamination of surface water for hazardous materials, damage to materials and machinery, • very unlikely limited fire risk casing health and safety risk to cargo crew, jetty works, contamination of surface water, damage to materials/machinery, atmospheric pollution and nuisance to residents • Unlikely very serious explosion risk cause as above in addition to hearing damage and damage to property on jetty and vessels. • Limited serious risk of traffic accidents causing health and safety issues for workers and local community. • Unlikely very serious risk of collision of vessels causing health and safety risk to cargo crew, jetty works, contamination of surface water, damage to materials/machinery, atmospheric pollution and nuisance to residents/traffic • Very unlikely limited spillage/leaks risk cause health and safety risk to worker and flora and fauna form contact with

	hazardous material and release of contaminants to surface water.
QRA	Identified type of risk in QRA • Vehicle fire in bulk store bay • Vehicle fire in bulk store bay leading to detonation • Vehicle detonation during transport on site • Deisel or coating oil – environmental effect to harbour*- very low likelihood of reaching sensitive receptor. • Fire run-off - environmental effect to harbour.- fire water retention system designed by Ove Arup and Partners – fire water tank is also a surface water tank and tidal sure has been considered and designed into an isolation system • Domino effects form MarinoChem • Natech None of these scenarios would cause fatalities at the nearest residential neighbour (Marian Terrace 615m away). The 1% fatality from a vehicle fire in the bulk store is 85metres. The bulk store detonation and the transport detonation events would potential cause fatalities at the nearest no-residential neighbour. The likely hood of event such as bulk store detonation etc was based on the HSAs suggested event frequencies but this is conservative as site specific factors will substantially reduce risk The event frequencies are shown in table 14-1. Overall the HSA's risk based assessment of the land use is met for no presenting of a risk of fatality of greater than 5 x 10^{-6}/year to current non-residential neighbour or a risk of fatality of 1 x 10^{-6}/year to current residential neighbour * Detailed design of storage tanks is not available at planning stage and so analysis is based on estimated delivery frequencies and planned controls. Scale unlikely to mee

	Seveso criteria => spill would be a serious event rather than major

In summary the bulk store detonation scenario will not contribute to individual risk at nearest residential neighbour but will contribute to the individual risk at Marinochem a non-residential neighbour that adjoins the site and the railway and is include in the risk calculation.

7.18.4. Mitigation

Mitigation measures are summarised for each risk event in Table 15.3 of the EIAR The mitigation measures are based on good construction practice and CEMP , suitable drainage, Health and Safety Plan and training, detailing construction traffic plan, An Emergency Management Plan by BMDC and there are procedures for oil spill , handling procedures, staff training, product storage management, double wrapping etc, following integrated design based features such oil interceptors, bunding. (section 15.3.2.2)
Section 15 of the QRA also includes a detailed schedule of procedures and standard precautions to avoid or minimise hazardous risks.

7.18.5. Residual Effects

Table 15.3 rates the likelihood and severity of residual risk for each possible risk event. The most likely are traffic related events which are rated as 'limited' in severity but 'unlikely' . Explosion events are rated as serious but very unlikely. Spillages are rated as limited and very unlikely at construction stage but extremely unlikely at operation stage

7.18.6. Assessment: Direct and Indirect Effects

I have visited the site and examined, analysed and evaluated Chapter 15 of the EIAR, and the QRA and all of the associated documentation including the comments by the PA and HSA. I note it is confirmed that it is not planned to store any COMAH qualifying material in the yard area and no bulk gas tanks or natural gas will be

provided on site and so the bagging plant (a separate building that receiving the blended final product) or yard were excluded from the analysis.
I note the reference to a 615m distance frpm a residence at Marian Terrace to the south east however there are two dwellings fronting the R624 north of this terrace but the distance is marginal. There is also a dwelling to the north east along the R624 which is of a comparable distance. In the event of permission, it is important that the layout be within the safety limits and that no revisions are required or permitted that would increase risk to these properties.

I also consider the issue of intensification of the HGVs using the Port facility entrance that bridges over the railway has not been fully considered. While I note upgrading works in terms of the junction at the port entrance on the R624 entrance and provision for turning have been provided for in the extant permission, the matter of containment of HGVs is not evident. It should I consider be demonstrated that the railings at the entrance along the bridge can provide for containment appropriate and proportionate to the type of vehicular traffic and cargo consequent on this application. The scope of the comments by Iarnród Eireann do not appear to cover this safety aspect.

I am otherwise satisfied that the risk of major accidents and hazards has been identified and that there is no likelihood of a catastrophic event associated with the proposed development. The residual risks are reliant on extensive compliance which if adhered to will not result in any significant effects arising from such risk. I am however not satisfied that the mitigation measures subject to strict control and extensive range of personnel are sufficient to avoid effects and to manage effects in the event of incidental or accidental spillage while unloading. This however relate to a risk to extremely sensitive habitats and species (which is addressed in the Appropriate Assessment) rather than being of a magnitude that would be hazardous to the public. I also consider the alignment of the road and nature of loading is vulnerable to collision and would question the feasibility of measures to manage the cargo movements however this is addressed under the topic of traffic and at planning policy level.

7.18.7. Conclusion: Direct and Indirect Effects

Having regard to the examination of environmental information in respect of Risk of Major Accidents and Disasters in the EIAR and the other related QRA and comments provided by the applicant and the submissions from the HSA, and third parties in the course of the application it is considered that the main significant direct and indirect effects will be mitigated by measures outlined.

7.19. Interactions

Chapter 16 of the EIAR as updated to reflect the revised Biodiversity Chapter evaluates the potential interaction of effects described within the EIAR.

The direct links between all key environmental aspects are identified. Biodiversity is common to most. Key interactions are identified between

- Biodiversity +land and soils + hydrology
- noise and vibration + biodiversity
- population and human health + air quality and climate + traffic and transportation landscape and visual + population and human health
- noise and vibration + population and human health + traffic and transportation
- biodiversity +traffic and transportation
- traffic + transportation and hydrology
- hydrology and population health

The interactions and suitability of mitigation measures have been considered and discussed in this EIAR including the noise impact and interaction with biodiversity having regard to the updated surveys and cumulative construction works.
The potential to negatively impact and directly alter the hydrology of the surrounding area through means of pollution or sedimentation which in turn could impact on biodiversity has been considered through to mitigation post decision.
I have considered the interactions and interrelationships between environmental effects and am not satisfied that significant impacts in relation to hydrology and

aspects of biodoversity can be sufficiently avoided, managed and mitigated by the measures contained within the EIAR or any recommended planning conditions.

7.20. **Reasoned Conclusions**

Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant, and the submissions from the planning authority, prescribed bodies, the submission by the third parties and the planning history all submitted to the Board in the course of the appeal, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows*:*

- Air Quality/Hydrology/ Biodiversity: During Operation: Risk of contamination and irreversible impact on marine environment for which mitigation has not been sufficiently demonstrated as being achievable.
- During construction, there will be temporary negative Population and Human Health effects relating to noise, dust and traffic. This will be mitigated by the implementation of the final CEMP
- Landscape: Long term intrusion of jetty cargo handling machinery into open marine landscape which is partially mitigated by its siting at existing jetty.
- Long-term intrusion of buildings in an open landscape which is partially mitigated by existing and proposed natural vegetation and landscaping
- Material assets:
    - Short term direct effects on the local road network for the construction phase of the development, which will be mitigated by a detailed Traffic Management Plan and contribution towards maintenance and repair.
    - Long term direct effects on the local road network for the operational phase of the development, which will be mitigated detailed by funding of repair a Traffic Management Plan.

Having regard to the examination of environmental information in respect of bird species in particular the EIAR and supplementary information provided by the applicant and the submissions from the planning authority,) in the course of the application),and also to what I consider to be significant weaknesses in the cargo

handling system for this sensitive marine environment I consider that the main significant direct and indirect effects on biodiversity are:

- Contamination of water and prey biomass having regard to the risk of dispersion and depositing of pollutant dust associated with the raw materials for the fertiliser industry and the nature of transportation and handling systems in the loading/unloading of cargo at the jetty.

The applicant proposes mitigation measures to address these predicted effects. However, for the reasons stated above, I am not satisfied that it has been demonstrated that such measures can fully mitigate effects and significant effects on the environment will arise.

8.0 Assessment

8.1. Scope of issues

8.1.1. The proposal is for a new agricultural fertiliser facility in a brownfield site at Marino Point, for use by Goulding Chemicals Ltd. so as to provide for its relocation from Cork City (south Quays area). It is also proposed to intensify port operational use of the existing jetty to facilitate the proposed site, in addition to other cargo handling and port uses including that associated with maintenance of cargo vessels.

8.1.2. The site is part of the industrial lands known commercially as the Belvelly Port facility and for which permission has been granted for infrastructure works to facilitate future redevelopment. The assessment in that case was for a static site and did not factor in future intensification of uses. it is clear from the inspector's report in that case that assessment of such uses was considered to fall within the parameters of future proposals on a case-by-case basis. There is an existing licensed Marinochem plant which adjoins the site. Otherwise, the subject application is the first application for a new industrial type use and intensification of the jetty facility by association with the facility and by itself.

8.1.3. Having reviewed the submissions on file together with the relevant strategies and plans for Cork Harbour, in addition to statutory guidance and having inspected the site and its environs, I consider the key issues fall under the following headings:

- Principle of development
- Visual Impact
- Traffic

- Residential amenities: noise and dust
- Pollution and ecology
- Public Health and Safety
- Development contributions
- Appropriate Assessment

8.2. Principle of development

8.2.1. The facility comprises a bulk storage facility for granular fertiliser, a building for bagging and palletising fertiliser and staff facilities, external paved storage area for bagged fertiliser, weighbridge, ESB substation and switch room, office building, vehicular store, surface water drainage system and water retention tank, truck and car parking, fertiliser waste storage tank and ancillary site works.

8.2.2. I consider the principle of redevelopment of a brownfield industrialised area where lands are designated as a specialist employment area in an identified regeneration area in the current Cork County Development Plan, 2022-2028 (CDP), to be acceptable for many reasons and note the strategic support by the planning authority in this regard in its concluding assessment. The proposed use is compatible with the industrial use of the wider area. At a strategic level, the port dependant redevelopment complies in many respects with both statutory based and non-statutory shipping and business objectives for Marino Point in both a regionally local context as part of South Cork where Cobh is identified as having a relatively low ratio of jobs and in the context of Cork Harbour, wherein the Port of Cork seeks to develop the port infrastructure at this location. The basis for this was advanced with the permission in February 2021 by the Board for the site infrastructure for the entire

lands owned by Belvelly Marino Development Company so to allow for comprehensive future industrial development.

8.2.3. In terms of the strategic harbour development, I have examined the Port of Cork Masterplan 2050 which is a non-statutory plan but is framed with regard to the statutory plans among other related policies. Marino Point is identified as part of the existing and future port infrastructure. Each decade sees a shift from the more centrally located upper harbour City based sites and Tivoli , to more outer harbour areas. Ringaskiddy is at the top of the hierarchy in terms of handling the shipping vessels and cargo whereas Marino Point is at the lower end of the hierarchy into the future. The masterplan identifies particular uses and a spatial plan (figure 8) identifies the subject site as being for 'Dry Bulks' with the balance of the lands as catering for liquid bulks.

8.2.4. In the Masterplan, Marino Point is seen as continuing to 2040 and beyond in its role as handling Dry Bulk, as such related shipping activities are moved from the city quays. By 2030, Liquid Bulk is identified as emerging more as a future cargo as part of the energy sector trends and moving such associated shipping from Tivoli to Marino Point is intended by 2030. It then identifies project cargoes as a long term jetty use at Marino Point from 2030 to 2040 and beyond This is all in line with the shipping trends of shorter trade routes and minimum port calls. Such objectives in the Masterplan are reflected in the current county development plan. The Marino Point site has been identified as a suitable location to complement the facilities in Ringaskiddy with an existing 237m jetty with 10m draft, a Seveso designation and Rail connectivity.

8.2.5. The previous municipal district plan also recognised the redevelopment potential of Marino Point. This aligns with the settlement and redevelopment objectives for the existing City Quay lands where the subject applicant is located and from where it seeks to relocate. In Vol 2 of the Cork City Development Plan, the Goulding Chemicals site and lands (Seveso site) are identified and are in close proximity to the eastern side of the city centre . Their site is zoned 'New Residential Neighbourhoods' as part of an extensive tract of other residential, mixed use and mixed-use lands.

8.2.6. The subject site is, in many respects, a good fit in so far as it provides for cargo deliveries by sea, has deep waters, is in a relatively sheltered setting with proximity to a network of ports in addition to its brownfield status. It is also in a relatively contained industrial area where Irish Fertilisers Industry previously operated and is removed from more dense centres of population areas. In this regard I note the raw materials being handled.

8.2.7. In all the plans for the area however, the intensification of the Marino Point Lands is predicated on the provision of improved connectivity by way of road and rail while also having due regard to the sensitive location proximate to Cork Harbour SPA and Great Chanel Island SAC. I do not consider any of the key criteria have been adequately met in that there is :

- No significant improvement in road connectivity
- No rail use is proposed
- And the integrity of European sites is potentially threatened by the proposed activities.

8.2.8. The most salient current development plan objective being X-01 for the 40.56 hectares at Marino Point which includes the jetty and all peninsula lands and which designates the area as a Special Policy Area. The development plan identifies the regeneration site as a Specialist Employment Centre but subject to a range of criteria. This objective requires, inter alia, that:

- Development will be confined to the existing reclaimed area and to activities which are **port-related** or which use **the existing industrial installations**. **Any new berthing /unloading facilities would be limited**.
- Improved road access between N25 and Cobh subject to full ecological assessment.

8.2.9. While the proposal is port related, it involves what I consider to be a significant expansion for berthing/unloading use, although exact figures on existing and projected cumulative shipping is not fully apparent. My reading of the information is that operations associated with Gouldings are expected to require 50 ships per annum (1 per week on average) and approx. 40 additional port related cargo ships (as distinct from Gouldings) per annum (section 13.3.4.1 and 13.3.4.2 of Vol.2, EIAR) . I note the Noise chapter refers to 1-2 cargo deliveries per month for Marinochem. I

further note baseline data for other cargo was estimated at 20 ships per annum in the information provided in the section 5 case which gives an indication of baseline scenario from which to determine the magnitude of intensification. The 2018 statement of shipping/traffic projects that 'Unloading is estimated at 20 ships per annum. (Docking at Marino Point with an associated 50 HGVs per ship)… Historically there were 50 ships per annum at Marino Point – 2.5times the current proposal' (as at 2018). In light of this significant increase and the size of the jetty, 12 hour unloading times, multiple nights of berthing and stricter weather dependant loading criteria for raw materials particular during seasonal peak time and opportunity to increase business all would present logistical constraints resulting in either challenging compliance with the OEMP or possibly requiring additional berthing facilities in the near future. I consider the level of intensification is likely to give rise to demand for facilities beyond the capacity of the jetty as anticipated in the site specific CDP objective x-01.

8.2.10. Section 12.20 of the CDP refers to the Port of Cork and states that import related facilities at Marino Point are planned and support the redevelopment of rail-based port facilities whereas in fact the proposal is not rail based. I consider this to be a major deficiency in the proposal. The applicant in this regard confirms in the response submission to the 3rd party submission that the distribution base is not served by rail and so the proposal is wholly reliant on road infrastructure for the sale and distribution of its outputs. Objective TM12-13 commits to protection of potential for freight facilities to the former IFI plant and where I accept that the proposal does not directly preclude other businesses and uses in the vicinity availing of this, it would appear, the justification for the location is considerably weakened by the deficiency in road infrastructure which has been raised as an issue in previous plans as well as the current CDP. Critically, while supporting relocation from the Upper Harbour, objective TM12-14 refers to a commitment to ensuring delivery of the upgrading of the R624 Regional Road linking N25 to Marino Point and its designation to a National Road status so as to provide appropriate road transport capacity to facilitate sustainable development of port facilities at Ringaskiddy, Whitegate and Marino Point. I do not consider the measures in terms of road markings and signs and traffic management measures amount to the provision of

what can be reasonably considered as ‘appropriate road transport capacity’. I refer the Board to the comments in the reports of the Traffic and Transport Division.

8.2.11. The premises of the initial CCC Traffic and Transport assessment referenced the Cobh MD LAP statement that ‘existing road access to Marino Point is via the R264 regional road and the capacity of this road would not be sufficient to cater for any traffic intensive use, port or otherwise. Extensive upgrading of the road in both the direction of Carrigtwohill and the N25 including the Belvelly and Slatty Bridges and back to Cobh would need to be carried out to accommodate any larger scale development proposals. I do not consider the nature and extent of road works amount to ‘extensive upgrading’.

8.2.12. I have also noted the relatively significant increase in port activities. The proposed development site involves the processing of up to 150000 tonnes of materials which ultimately feed into and out of the site whether as raw material, product or waste and which also generates ancillary servicing and traffic. This, together with the addition al other port use – existing and proposed constitutes, in my view, a considerable scale of traffic loads and traffic movements relative to the geometric road capacity – an issue identified as being in need of significant improvement. At the same time there is no provision for the use of rail for freight deliveries of materials or products nor is there likely potential for this for this particular business serving an agricultural market. The application does not appear to advance this aspect of transport modes, and in fact rules it our, despite the explicit policy aims. I note the POC Masterplan 2050 in section 9.21 proposes rail freight from Marino Point. And while I accept the development does not preclude access to rail for other sites it seems a missed opportunity on such a large site to not avail of such infrastructure. I say this in the context of the Climate Action Plan and the emphasis on sustainable transport options and also in the context of sustainable transport modes as required by EU regulation 2024/1670 (Union Guidelines for the development of the trans-European transport network in achieving climate neutrality by 2050 reducing greenhouse gas emission) and the commission publication ‘Sustainability and Smart Mobility Strategy’, 2020 which envisages rail freight traffic increasing in addition to sea shipping . Notably the aim is to achieve transformation of the transport sector into a truly multimodal system of sustainable and smart mobility services, including rail services for passengers and freight. Accordingly, I consider the proposed

development to not be in compliance with the development plan objectives in this regard. Such a view, I consider is supported by European policy on sustainable transportation in principle.

8.2.13. While the Development plan aims to have appropriate road capacity to facilitate sustainable development, the advancement of such delivery is not evident in any meaningful way. There is no evidence of an identified road realignment or new bridge works being at any advanced stage of implementation. (See Traffic and Transport engineers report.) I note in the Dail question and answers, a matter of public record, that the €100 million costing for the Coch Connectivity Scheme is subject to further reports. I also refer to the CCC ongoing projects update on its webpage and that the strategic upgrading works, to connect Cobh to the mainland and within this, upgrading the R624 to National Route state and thereby linking the site to the national road network, are not even at business proposal stage. At a strategic level Marino Point is s identified as at the lower tier of harbour activities – whereas Ringaskiddy for example is at the top tier and is at an advanced stage in terms of its networked infrastructure. Marino point is identified as having a niche type role identified as a specialist employment centre. It is also has potential to develop freight rail thus taking pressure off the road network. In this regard the extant permission for site infrastructure in the wider Port facility includes development of a new railway connection along the eastern boundary and restoration of the former rail siding at the northeast of the site.

8.2.14. In this context, the proposed development which is reliant on intensification of R624 and Belvelly Bridge, in the absence of any material evidence of significant upgrading, is I consider premature.

8.2.15. Further to the request by the planning authority, there are a range of measures proposed to upgrade the R624 as clarified in further information and some of which are provided for in the extant permission. The nature of the works involves road markings and signage, and also as required as an additional measure, the provision of a boardwalk along the Belvelly Bridge so as to segregate non-vehicular from vehicular traffic and to facilitate some footpath realignment . The works for this are reliant on funding by way of a special contribution in Condition 28 (which is under appeal). The works to Belvelly Bridge are minor in scale in terms of alignment, as judged by the roads engineers of CCC and it is also not clear what consents are in

place to carry out such works having regard to its character and location. In my judgement, I do not consider the works proposed are adequate to mitigate road alignment constraints in order to meet with the development plan criteria . I refer in particular to the 5.9m-6m carriageway widths and the width of large trucks with full loads and constraints on passing vehicles. While I note the traffic management plans and the restriction to 9am-4pm off-peak hours and this may alleviate some congestion at peak hours, I note that this measure was proposed in the section 5 case but there is little evidence on file of this system in place and being monitored. Ultimately, I would have concerns about the practicality and enforceability of this system.

8.2.16. The other matter in principle, relates to the environmental sensitivity of the site which also shapes the development objectives for the site, such as for example Objective TM 12-14 which requires regard to the environmental considerations; 'Future expansion or intensification of Port activities will have regard to environmental, nature conservation and broader heritage considerations at design, construction and implementation stages' However, this would not appear to be prioritised in the planned operational systems at the jetty, an approach which could be argued to run count to the Port Masterplan which seeks to align with sustainability agendas in caring to the environment. I refer to what I consider to be an inadequate cargo handling facility for the nature of material required in the fertiliser business as compared to previous systems required and used at the jetty.

8.2.17. In response to queries from the Environment Division about using a vacuum hopper to address dust in a sensitive area, the applicant explains that a vacuum or any other enclosed system has been considered for transportation of material for loading/unloading , however, it is "not considered feasible as it would limit the relocation of other port activities due to space requirements for such a system." In view of the environmental sensitivity of the site, I do not consider this is a sufficient reason. In fact, I would hold the view that such reasoning underlines the limitations of the site for the nature of materials involved.

8.2.18. Historically the site was developed as a facility for Irish Fertilisers Industries and this was subject to a number of conditions in addition to being subject to regulation by the EPA who I note are satisfied with the progress of decontamination of the site. One condition of note in the original permission of 1974 was the provision of vacuum

hopper and an enclosed conveyor system to ensure the safe handling of fertiliser related cargo. This was subsequently removed on the basis that the industry had ceased operation and that the only cargo being handled was wood related and dry bulk – such as logs, as explained in the Section 5 case in which detailed information was provided on the cargo and its handling and volumes of material and traffic. The removal of this handling system as required by condition of permission was accordingly determined to be exempted development. In this case, the previous vacuum and conveyor system is not being reinstated, the argument being that the raw material is granular in nature and not prone to dispersion. The environment division of CCC expressed concern and the applicant submitted a multi- stage process of cargo unloading. One element involves an inflatable mat but to be agreed, to fill the gap between the vessel and the jetty and then be cleaned. I consider the system is complex and exposed to human error at numerous stages of the handling process from vessel to jetty. There is also an issue of responsibility given that the system relies on each jetty user being responsible. I consider this to constitute a retrograde step in environmental protection as compared to the previous system and in this way conflicts with the objectives seeking to protect the sensitive environment.

8.2.19. Accordingly in view of the failure to meet with key criteria for developing the site, I consider there is a strong basis to refuse permission on grounds of conflict with development plan policy.

8.3. Visual Impact

8.3.1. The site is in a high value landscape and the R624 is a designated scenic route. The residents in the area raised concerns about the visual impact locally and across the Harbour. Residents in Passage west at elevated points of Church Hill or nearby for example have uninterrupted views of the site.

8.3.2. As determined in the EIA, the proposed development, most significantly, will have a moderate visual impact for residents and users of the Cork Harbour Greenway, both in terms of near and distant views along and across the harbour. In terms of planning policy, when considering the context of this brownfield site where industrial type structures are present and in a state of degradation and the zoning of land for industrial and enterprise use, the principle of redevelopment of industrial type

buildings is reasonable. The bulk and massing is less obtrusive in its setting as compared to the historic taller structures. The retention of vegetation will also mitigate the impact. Many views from the scenic routes in the area will be substantially unaltered and improved in my judgment with the removal of existing structures on site and replacement with new buildings. The landscape character and visual amenity of this area of Cork Harbour will, essentially not be materially altered. While I accept that the local residents and those on higher ground across the channel will potentially have uninterrupted views of the site, the panoramic view of the Harbour will be maintained albeit with new structures – It is not reasonable to prohibit the nature of the development on grounds of impact on private views. On balance, I consider the visual impact of the structure proposed to be acceptable when viewed from the public realm having regard to the provisions of the development plan.

8.3.3. In terms of the cranes and gantries, I note that the photomontages depict such that appear larger scaled than on site or than that shown in the 2018 information. They are not shown in the drawings and an increase in such could potentially contribute to clutter and visual obtrusiveness particularly as loads increase. While I accept it is an integral part of the port handling facilities, the nature of the equipment and its duration association with the level of shipping suggest that it is permanent and active feature in the landscape. If the Board is of a mind to grant permission I consider this element demands planning control given its visual prominence and wider scenic context. This I consider, could be addressed, where necessary, by requiring permission separately.

8.4. Traffic Safety

8.4.1. The applicant disputes that the R624 is unsafe by reference to official accident and collision data and road classification as a 60kph zone. The TIA estimates that the projected increase is marginal in statistical terms by reference to recognised TII sensitivity analysis and in various scenarios including the peak periods of distribution Jan to April in the agricultural industry. While I accept that traffic counts can present a statistical volumetric traffic capacity it does not overcome the alignment issues and constraints on the nature of traffic. This I consider is well illustrated by the photographic evidence of large vehicles breaching the centre line of the R624. The

fact remains that the requirements to upgrade the R624 due to capacity concerns was identified in the Local Area Plan at the time of the application and the Traffic and Transport engineers have identified the volume of HGVs is such that the design life of the road will be significantly reduced. The PA refers to the status as restricted. I consider the roads-based criteria in the development plan objectives that are required to be met to facilitate development on the site, underlines how traffic safety is a critical issue.

8.4.2. At a strategic level I note the Masterplan addresses vehicular access and that the regional road is identified as being in need of upgrading. The county development plan places considerable emphasis on the need to upgrade vehicular access with appropriate road transport capacity so as to facilitate sustainable development of port facilities such as Marino Port e.g. the upgrading of the R624 regional route linking the N25 to Marino Point and Cobh and its designation to National Road status as referred to in CDP objective TM12-15 and also TM12-13 and the footnote to these which predicates the expansion of facilities on road upgrading.

8.4.3. The applicant has made efforts to address traffic safety and congestion concerns in response to the PA request for measures to mitigate the intensification of traffic on the R624. This includes as range of road marking and sign to manage traffic in addition to the management of traffic flow. These have been further augmented by the requirement of financial contributions for additional works to facilitate the development. While measures are an improvement, having regard to the reservations expressed in the Traffic and Transportation reports, I am not satisfied that the intensification particularly by the HGVs generated by the proposed development on the road network serving the site that is restricted would not give rise to congestion. Even operating at off-peak hours there is the matter of the nature and seasonality of the traffic and unpredictable events that may be associated with weather, loading logistics, or commercial pressure together with the range of activities and expanding residential development on the island.

8.4.4. I am not satisfied that a traffic management system is or has been sufficiently workable. While I note the traffic management scheme and provision for on-going agreement, I have serious reservations about the practicality of this

8.4.5. I further note the photographic evidence of third parties who live locally and it would suggest that risk of collision is an issue. This could, I agree be very serious for the community and its accessibility, particularly in emergency situations in that there is no alternative vehicular route across the Belvelly Bridge. During my one of site inspection of the area when leaving the island, I encountered traffic congestion due a truck carrying logs having difficulty passing oncoming traffic. While not part of a survey, it does give credence to the evidence of congestion and delays due to HGVs, that is currently experienced.

8.5. **Residential amenities: noise and dust**

8.5.1. The strongest objections relate to noise form the cargo loading/unloading and intensification of such activities. The applicant makes the case that hours are generally 7 am- 7pm with some operations extending to midnight during seasonal activity associated with the agricultural fertiliser industry. I note that shipping levels are estimated at 40 for additional port related cargo ships berthing each at variable intervals and berthing for 1-2 nights or longer depending on cargo size and weather conditions. With a baseline of 20 cargo ships as of 2018 data this gives a figure of around 60 ships. This would amount to berthing at a rate of anything from 60 – 120 nights which is significant increase in activity from stated levels associated with the wood shipments.

8.5.2. I note in the Noise chapter of the EIAR that reference is made to Marinochem shipment per month and 12 hour unloading duration. The EIAR on page 9-11 states that one ship will dock per week and on average four ships carrying bulk and break cargo will dock each month and the maximum docking based on these activities will be 100 per annum. This therefore appears to exclude the current tree log activities. To put intensification into context the shipping associated with IFI was at 50 vessels per annum (section 5 case) . There potentially a doubling of activities with larger vessels. There is no information on the category of cargo vessels but it would appear to be demand driven - Chapter 12-1 of the EIAR refers to this being variable depending on customer needs. In view of shipping trends it is reasonable to assume larger vessel with larger loads and more extended unloading times. Although the preclusion from a mandatory EIAR supports a case that vessels are under 1350 tonnes and likely therefore to be less than 200m in length, While low in the context of

the Cork Harbour (the CSO data in the EIAR refers to 1487 ships in the Port of Cork in 2018), it is nevertheless a significant and noticeable activity for the residents particularly across the water in Passage west. The development plan, as already cited, supports the industrial use of the site subject to criteria and The Port of Cork master plan recognises the harbour landscape as a living and working community. It acknowledges that the heavy industries associated with the former IFI facility and ship building at Rushbrook have 'waned' and SDG 3 seeks to ensure health lives and promotes well-being for all-ages. The Port of Cork Company is notably certified to IO 14001 and ISO 50001 ensuring compliance with relevant environmental standards in relation air and water quality - this includes noise among other emissions.

8.5.3. In terms of achieving reasonable noise levels, I note that the nighttime measurements carried out by Damien Brosnan acoustics consultants at Passage West in March 2021 while the Finola M vessel was moored, measured considerably below the 45 dB nighttime limit recommended by the WHO and the EPA. It is also clarified that the recorded vessels are old (1988) with minimal noise attenuation and ageing generators as compared to the more typical newer noise attenuated designs. Another survey of the two Maersk anchor handling supply vessels was recorded at up to 40 DB at the shorefront but this is classed as a worst case scenario. The third-party submissions however demonstrate a considerable degree of upset by the nighttime noise disturbance at c.400 meters from the dwellings. This is I note a settlement of considerable size - in the order of 6000 persons - where many houses are also compromised in terms of noise insulation by single glazing windows in an architectural conservation area and where I note there is a clustering of protected structures. (With respect to requests for new windows, the provision of such a measure by condition is not within the scope of the Planning Acts.) The applicant however has demonstrated how the vessels can substantially comply with the international standards for noise limits. Information on the level of shipping operations is not fully clear in terms of demonstrating the level of intensification of activity. However, I note the levels provided in the 2018 declaration case wherein it was stated that the maximum number of ships were 50 per annum and dropped to 20 with the new cargo type associated with reconfigured and simplified crane and grab loading facility. I also however note in this case that the additional levels now

anticipated to be in the order of 40 vessels per annum. I also note in the shipping records on the port of cork website record only one vessel berthed at Marino point indicating a degree of quite low activity.

8.5.4. Having regard to the continued shipping, nature and history of land use and the port facility infrastructure at a strategic site with rail infrastructure, it is not reasonable to inhibit continued shipping. As a percentage of overall shipping activity in the Harbour, it is a relatively small operation. The applicant has demonstrated by way of survey, nature of vessels and noise mitigation that typically noise limits can be contained within acceptable limits. By the applicant own determination, the class of use is not one where a mandatory EIAR is required and therefore It is not unreasonable to interpret that the proposed port operations are for sub 1325t vessels. This could however be addressed in a condition of permission for clarity. I also note that the onshore power supply is likely to have a material benefit in terms of noise levels. I consider this matter can be regulated by condition and concur with the approach of the planning authority generally in this regard. It must however be operated in a more transparent manner in respect reporting and monitoring noise levels. As this is the first intensification application on Marino Point lands it does serve as an opportunity to comprehensively regulate the operations of the port facility in terms of shipping types, times and volumes. Ultimately, I do not consider it reasonable to refuse permission on grounds of noise.

8.5.5. With respect to impact on air quality, dust is main source of emission that could effect the local ambient environment. It is potentially airborne and in an open marine environment in certain weather conditions could I accept be a nuisance for residents downwind. The applicant has addressed this in detailed mitigation measures which I consider are comprehensive and acceptable having regard to the distances between the relatively remote site and residential development.

8.5.6. In view of the foregoing and consideration of visual impact, I do not consider impact on ambient residential amenities to constitute grounds for refusal of permission

8.6. Public Health and Safety

8.6.1. At a strategic safety level, the proposal is favourable in that it facilitates the relocation of Goulding Chemicals operations (fertiliser blending, storage and

distribution) from a populated city centre location to a purpose built facility in an industrial location that is segregated from populated areas by water, land and rail. However given the nature of the proposal and nature of materials being handled there is concern about the potentially hazardous substances and domino effect with other industry and release of pollutants into the wider environment.

8.6.2. The Quantitative Risk Assessment for Land Use Planning Purposes as required by the HSA for new COMAH establishments has examined a range of scenarios and risks posed to nearest receptors. One of the risks addressed is the domino effect with Marinochem. Reference is made to a dialogue between Gouldings and Marinochem, its neighbour at Marino Point, in the QRA submitted as further information. This is further elaborated upon in unsolicited additional information submitted on 11th November 2021. I also note a Marinochem's letter of support is subject to conditions relating to its safe operation and there does not appear to be dispute in this regard.

8.6.3. The scenario when expanding the neighbouring sites and domino effect is presented on page 48 (Rev.c) This examines potential impacts from spills of a range of substances such as methanol , formaldehyde and toxic dispersion from the jetty pipeline to Marinochem as well as a resin reactor explosion and impact on Gouldings and risk of detonation. It is concluded that the toxic dispersion scenarios will potentially affect personnel in Goulding's but will not cause a domino effect. However a sheltered location is identified as needing to be provided in the Internal Emergency Plan. It is identified that flash fire arising from the Methanol Tanks TK401 where there is overspill of the bund radiates high heat to the bulk store which is house high AN fertiliser. While it is categorised as an unlikely event, measures are proposed that I see no issue with in terms of site layout. I refer to a full height fire wall on the side of the bulk store facing the Marinochem site.

8.6.4. In applying the standards used by HSA in a risk-based approach to land use planning, it is noted that the stated nearest residential property (north end of Marion Terrace to the south/SE is 612m away and well outside the 1% fatality effect zone. MarinoChem is the nearest and has no near residential neighbour. However, detailed frequency analysis showed the risks of spills of coating oil to be extremely unlikely. Fire water retention is be provided which will provide tertiary containment for diesel and oil spill. Accordingly, taking into account the measures recommended, the

requirements of the HSA can be met for such an establishment proposed at this location.

8.6.5. Section 15 summarises the recommendations with an update to confirm that the surface water system will pick up coating oil also as well as the aforementioned fire wall. This is additional to standard precautionary measures that are operational at the current Goulding site.

8.6.6. The applicant in the unsolicited information submitted to the planning authority as supplementary information to the response previously submitted (on foot of the request for additional information) provides detailed information on the specification of fertiliser raw materials in what is expected to amount to >90% or throughput at Marino Point facility.

8.6.7. The use is note I not subject to IPPC as stated by the applicant on the basis that that there is no water based processing and that a bespoke drainage system provides for managing potential release of contaminants and disposal off site where required. I note that the release of pollutants has been addressed by the environment and ecology divisions of the planning authority. I am satisfied that subject to mitigation measures that dust does not pose a risk to public health.

8.6.8. Safety at Junction bridge over Railway: I am satisfied that the junction capacity at the site entrance, in term of sightlines and provision for turning has been addressed and I note the provision for a Road Safety Audit also. However, having regard to the nature of the traffic generated by the development and the need to cross over a railway with a frequent passenger rail service, I consider there is a safety risk that I am not satisfied has been fully addressed. I note the relatively low height and condition of the railings over the bridge extending along corners at the junction with the R624 and would question the capacity for containment in the event of collision at the site entrance to the port facility where it bridges over the railway. I note the considerations and conditions of permission in 307938 in regard to the railway and it would appear that they do not specifically address this matter, possibly as it was not considering any significant intensification of heavy vehicles. Iarnród Eireann was invited to comment in this case but as the entrance is outside the subject site, comments were confined to the proximity of the railway to proposed land use and risk of explosion as well as lighting to avoid glare and load heights due to restriction

at crossings. While the Railway Safety Act makes provision for safety, I consider the issue of containment should be addressed in the event of permission so as to ensure it does not fall between the scopes of the Railway Safety Act and other safety related provisions.

8.7. Other matters

8.7.1. The use of the townland name Belvelly for the port facility in Marino Point is criticised in terms being incorrect and having consequences for accuracy of placenames and for cultural heritage and identity. The planning authority has a role in regulating placename and addresses, for example in housing or commercial estates, and I see no reason why the address of the site should not be regulated in this case by the planning authority in the event of permission. It has no control however in changing a company name. The address could be the subject of agreement with the planning authority, by way of condition.

8.8. Development contributions

8.8.1. The applicant is appealing under section 48(13)(a) against a condition 28 of permission requiring **a special financial contribution of €1,079,458.00**.

8.8.2. The general development contribution scheme is applied by the planning authority and is based on a gross floor and there is no dispute on this.

8.8.3. The first party issue relates to the special contribution only. There is no objection to the principle of contributing to infrastructure benefiting the development but the case is made that works are already accounted for. It is submitted that the contributions required towards the road works relate to objectives in the development plan which should be funded by the general contribution scheme. It is further stated that the planning authority fails to provide specific breakdown of cost justifying the amount of contributions required.

8.8.4. A breakdown of the costs for road works for which the special contribution of €477,520 is sought is set out in the Road Design Office Report as provided in the most recent correspondence on the matter from the planning authority (March 2022).

It is envisaged that based on traffic loading generated by the proposed development there will be significant additional pavement replacement required for the R624 and based on 20 year restoration cycle and the projected loading the additional cost is estimated as follows:

Marino Point to L-2989

	Marino Point to L-2989	**L-2989 to Cobh Cross Interchange**
Length	1.42km	3.1km
Average width	6m	7m
Area	8,529 m^2	21,700 m^2
Cost of Resurfacing / m^2	70/ m^2	70/ m^2
Pavement Replacement cost	€596,400	€1,519,000
HGV loading by proposed development (RFI)	38%	15.2%
Attributable cost	€226632	€230888
Signage and maintenance at Belvelly Bridge	€20000	
Total Road Special contribution	€477520	

8.8.5. Having regard to the nature of traffic likely to be generated by the proposed development and the reliance on road infrastructure I consider these works qualify as additional and specific exceptional costs for works that would benefit the development. A break down of cost has been provided by the Road Design Office and I consider this meets with the requirement for attaching such a condition. I consider this financial contribution to be reasonable and see no basis therefore for its omission.

8.8.6. Belvelly Bridge: The traffic and transport division identify multiple locations along the route, including Belvelly Bridge where there is restricted passing. This alignment is considered to result in potential for vehicle impact and delays. This is the basis for

the boardwalk for pedestrian cycling infrastructure along the Belvelly bridge and allowing improved carriageway width. Accordingly, on the basis of the increased heavy vehicle percentage submitted by the applicant over a design life of 20 years 21.8% of the estimated cost of the infrastructure is calculated at **€596,938.50**. While it is clearly a specific exceptional cost towards works that benefit the proposed development, the planning authority do not provide any breakdown of costs as compared to the footpaths which I consider should be provided. I refer to the Development Contribution Guidance which states that the 'particular works should be specified in the condition'. There is however no breakdown. As it is non-standard it cannot be estimated from the figure provided. Accordingly, in the event of permission I would recommend that condition 28 be amended to omit this part.

8.8.7. The request to use Wholesale price index rather Consumer Price Index in line with Government guidance is reasonable.

8.9. **Appropriate Assessment**

8.9.1. Following an examination and evaluation of the NIS, and associated material submitted as part of the planning appeal, taking into account of submissions and in light of the assessment carried out as contained in Appendix II of this report, I am not satisfied that the proposed development individually, would not adversely affect the integrity of European site(s) Cork Harbour SPA and The Great Island Channel SAC in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting permission.

9.0 Recommendation

I recommend that permission be refused for the proposed development based on the following reasons and considerations.

10.0 Reasons and Considerations

1) The proposed development is for a fertiliser facility that is entirely reliant on a road network for its distribution of outputs yet entails the relocation of such

freight activities from Cork Docklands area, which has reasonable access to the national road network, to a location to the south-east of Cork City at Marino Point, Great Island which has poor road connectivity and the development of which is identified as being subject to significant road improvements in the Cork County Development Plan, 2022-2028 . While the Board accepts that there is a need to move port related and industrial type activities from zoned residential areas in the City and expand at other locations within the Cork Harbour area, it is considered that the proposed development at Marino Point which has no opportunities to make-use of the rail resource at Marino Point for rail based freight distribution and which by the nature of heavy vehicles required for distribution would adversely impact on the carrying capacity of the road network serving Cobh and its hinterland and in particular the carrying capacity of Belvelly Bridge which is restricted in its alignment and which is the sole means of vehicular access for Great Island. Furthermore, notwithstanding the road works and measures to improve the carriageway and signage along the R624, the Board is not satisfied that these are proportionate to the nature of traffic likely to be generated and that the proposed development would not exacerbate traffic congestion at Belvelly Bridge and be prejudicial to public safety by reason of traffic hazard. It Is accordingly considered that the proposed development of such a road dependant facility would be premature pending significant road improvements and would be contrary to the provisions of the Cork County Development Plan 2022-2028 in respect of the criteria for development of lands at Marino Point as contained in objective x-01 special policy area and objective TM 12.14 which is committed to ensuring that port facilities at Marino Point have appropriate road transport capacity and to ensuring the upgrading of the R624 and its designation to National Road Status to provide appropriate transport capacity while also recognising that Marino Point can provide an alternative to Ringaskiddy for port related uses that could be best served by rail transport. It is therefore considered that the proposed development would be contrary to the proper planning and sustainable development of the area.

2) The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the proposed development, it was concluded that it would be likely to have a significant effect on Great Island Channel SAC (site code 1058) and Cork Harbour Bay SPA (site code 004031). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives. Following an Appropriate Assessment, it was be determined that it could not be concluded that the proposed development would not adversely affect the integrity of these European sites, in view of the sites' Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and that reasonable doubt cannot be ruled in respect of significant risk posed by the cargo handling systems for the loading/unloading of the fertiliser materials and there would be an absence of adverse effects.

Accordingly, on the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, the Board is not satisfied that the proposed development would not adversely affect the integrity of European sites, Cork Harbour SAC in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Suzanne Kehely
Senior Planning Inspector
October 2024

Appendix 1

Form 2

EIA Preliminary Examination

An Bord Pleanála Case Reference	ABP-320267-	
Proposed Development Summary	Agricultural Fertiliser facility and increase in port use	
Development Address	Belvelly Port Facility, Marino (Townland), Marino Point, Cork	
The Board carried out a preliminary examination [ref. Art. 109(2)(a), Planning and Development regulations 2001, as amended] of at least the nature, size or location of the proposed development, having regard to the criteria set out in Schedule 7 of the Regulations. This preliminary examination should be read with, and in the light of, the rest of the Inspector's Report attached herewith.		
	Examination	Significant Effects Likely Yes / No / Uncertain
Nature of the Development. Is the nature of the proposed development exceptional in the context of the existing environment. Will the development result in the production of any significant waste, emissions or pollutants?	 No Yes	Yes
Size of the Development Is the size of the proposed development exceptional in the context of the existing environment? Are there significant cumulative considerations having regard to other existing and / or permitted projects?	No Yes	yes

Location of the Development Is the proposed development located on, in, adjoining, or does it have the potential to significantly impact on an ecologically sensitive site or location, or protected species?	yes	Yes
Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area, including any protected structure?	yes	

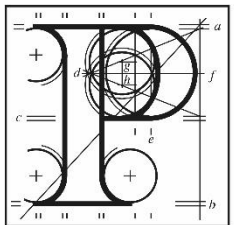
Conclusion		
There is no real likelihood of significant effects on the environment. EIA is not required.	There is significant and realistic doubt regarding the likelihood of significant effects on the environment. Schedule 7A Information required to enable a Screening Determination to be carried out.	There is a real likelihood of significant effects on the environment. Yes* EIAR required.

*The applicant has submitted an EIAR voluntarily so in accordance with Art 102 it is treated as being effectively required and on this basis it is reasonable to conclude that there is a real likelihood of significant effects on the environment.

Inspector: Date:

DP/ADP: _____ Date: _____

(only where Schedule 7A information or EIAR required



An Bord Pleanála

Appendix II

Appropriate Assessment

312981-22

Development	Construction of an agricultural fertiliser facility and additional port operational use of the jetty to facilitate cargo vessels and associated site works.
Type of Application	Normal Planning Appeal
Topic:	Appropriate Assessment
Lead Planning Inspector	Suzanne Kehely

11.0 Appropriate Assessment

11.1. Scope of Report

11.1.1. This appendix report comprises a detailed examination and analysis of the information provided by the applicant for the purpose of Appropriate Assessment (AA) under the provisions of Article 6(3) of the Habitats Directive and the Planning and Development Act 2000 (as amended). The AA determination is based on the scientific information provided in the revised Natura Impact Statement (NIS) and also taking account of the additional information, third-party submissions and technical reports from the planning authority and other statutory bodies.

11.2. Proposed Development

11.2.1. A detailed description of the proposed development is provided in my main inspector's report and a general description of the proposed development is provided in section 4.5 of the NIS (revised version). The stated aim of the proposal is to redevelop a brownfield industrial site as agricultural fertiliser facility and to increase port operation use of a jetty at Marino Point to facilitate cargo vessels. This will provide for the relocation of Gouldings Chemicals the south docklands in Cork City Centre and also facilitate the relocation of port activities in the wider Cork Harbour..

11.2.2. Part of the proposed development site is within an area of made ground to the north where the land was reclaimed and is adjacent to Cork-Cobh railway. The site is largely covered I manmade structures /surface. There is belt of trees along the shorefront outside the site boundary to the west southwest flanking the access to the jetty .

11.2.3. **Additional port operational use** of the jetty is proposed to facilitate cargo vessels.

- Projected average number of ships using the existing jetty for importation of bulk fertiliser will be approximately 50 ships per year. Raw materials shipped into the jetty at a rate of 1 ship per week on average that is 3000 tons of raw material per week or a Max of 150,000 tons per annum.

- Raw materials transported by ship will include urea, calcium, ammonium, nitrate, potash and diammonium phosphate. Trace materials such as boron, zinc, manganese, magnesium copper and selenium for use as trace material and finished products will be imported by road. Max. oil imported will be 500 cubic meters per annum transported by rd.
- Approximately 30,000 litres of oil transported by road to fuel machinery on site which will be stored in diesel tanks in a bunded area on site.
- 2 mobile LH60 material handling machine cranes installed at the jetty to offload raw material by way of clamshell grab attachments. Offloading to take place in dry weather only. Spill plates installed to avoid windborne loss of material.

11.3. Background on planning- as relevant to AA

11.3.1. The main inspectors report considers all planning issues in relation to the proposed development. The site is very sensitive ecologically having regard to its waterside location and proximity to the Cork Harbour SPA and Great Island Channel SAC and the potential for impact associated with environmental emissions and disturbance not only to qualifying interests of the site but also to other protected habitats and species. Notably, Cork County Council (CCC) requested additional information in relation to potential impacts on European Sites and a revised NIS was submitted by the applicant in response. The applicant confirms that the proposal is not by itself subject to EPA license. CCC was satisfied with the further information submitted and completed an AA based on the revised NIS.

11.3.2. Issues considered and updated in the revised NIS included:

- Detailed analysis of potential impacts in line with best scientific knowledge in the field
- Mapping of bird count areas
- Assessment of intensification of use (jetty and associated noise and activity) with more data on gulls and cormorants, roosting and in combination impact assessment on section 5.. Mitigation e.g. alternative roost site where significant impact. Addendum to NIS required.

- Noise at both construction and operational peak and hours of 7am-midnihgt and impact on sci of spa using estuary outside wintering period. In species(those close to the site in particular) specific assessments, the NIS concluded that both the construction and additional port operation uses will not have a significant cumulative effect (eg. taking account of background traffic and rail to the north) in terms of displacing or disturbance of QI birds. Noise mitigation through hoarding and timing.
- In combination with activities associated with construction as permitted / nighttime roost sites. Timing of construction may be needed e.g. for piling and excavation
- Examination of transportation of cargo types and use of crane grab
- Processing implications and effect of accidental spillages
- Emergency procedures and in combination effects (flooding, fire explosion traffic)
- Impacts to otter
- Examination of light spillage relative to previous uses
- Expanded cumulative impact assessment and consideration of overlap of works for extant permission on site

11.3.3. As competent authority for the AA, CCC concurred with the conclusions of the NIS and determined that the proposed development does not pose a risk of adversely affecting the integrity of European Sites alone or in combination with other developments subject to full mitigation measures being in place.

This was based on :

- No direct interventions are proposed within the SAC or the SPA. No removal of or damage to estuarine habitats is proposed
- All construction works are to be carried out in accordance with the OCEMP. the plan has been assessed and is considered to be sufficiently robust to ensure that subject to full implementation under appropriate supervision there is limited risk of impacts to the foreshore where the estuarine environment.

- Post construction surface water and wastewater disposal proposals have been assessed by the environment department of the planning authority and are deemed to be acceptable.
- Predicted noise levels do not meet a threshold at which significant disturbance could be caused by any of the SCI species. mitigation measures proposed to be implemented to minimize risk of causing disturbance to qualifying interest to species of birds known to occur in areas around this site in both the construction and post construction stages are deemed to be acceptable.
- Emergency and hazard related risks adequately considered measures are in place to prevent significant adverse effects on the SPA and SAC

11.4. Third party Appeals /Submissions

11.4.1. **Objections** to the proposed development are on grounds primarily relating to impact on amenity and safety such as generated by nature of traffic and port operations and dust and noise with reference to experience of previous port operation and risks and disturbances associated with fertiliser plant. Concern is expressed in more general terms about impact on local ecology and Natural sites in the harbour. The concerns about the removal of the structures and related works associated with the former form of the works for which there is an extant permission 19/6783 as part of the wider site preparatory works. The grounds of the third-party appeals and submissions in relation to the proposed development refer to:

- water quality due to dispersion of dust and nature of materials to be handled on site. E.g. photographic evidence of dust plumes.
- Dust and light pollution and impact on air quality noise and vibration impact including piling on site Belvelly port activities and potential for cumulative effects
- landscaping and protection of biodiversity the NIS does not cover impact of construction and operational noise and disturbance on mammals
- flooding major incidents and emergencies
- use of jetty and compatibility of Marinochem offloading methanol

- compliance with EPA license - reassurance that Marinochem's ability to meet responsibilities not be impacted adversely in any way during the construction of the ongoing operational phases
- impact on Cork Harbour SPA and Great Island Channel SAC
- recent fire at Ringaskiddy demonstrated that port of corks that major emergency plan does not prevent environmental pollution
- dusty cargo types handled at the city quays not identified and detailed in EIAR
- noise from ships' generators at nighttime not addressed

11.4.2. First Party Response to third party submissions

It is submitted that the proposed development has been adequately assessed in terms of potential impacts on the environment and that the risk of pollution can be addressed adequately by the measures proposed and under the OEMP

- Water and air pollution concerns are responded to in detail by way of dust control measures, surface water management and explanation of nature of noise by an expert Acoustics consultant
- Dust: the safety measures for handling nature and type of raw materials is stated so as to prevent dust e.g. Granular nature and unloading and transport procedures. The photos of plumes relate to mineral products not a fertiliser product – although not clarified if this mineral will be handled.
- The NIS is cited with reference to environmental controls and the OEMP and unlikely impact on the Cork Harbour SPA
- Safety: the applicant complies with Health and Safety Authority
- Traffic has been safety audited and no accidents with heavy vehicles.
- In the context of the EIAR scope and alternatives it is explained that the proposed site does not represent a fundamental conflict with planning policy or environmentally sensitive areas.

11.5. Consultation

The NIS refers to consultation with NPWS, CCC, HSA and Inland Fisheries Ireland.

11.6. Consideration of the Likely Significant Effects on a European Site

11.6.1. Article 6(3) of the Habitats Directive

The requirements of Article 6(3) as related to appropriate assessment are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Screening for appropriate assessment
- Appropriate assessment of implications of the proposed development on the integrity each European site

For the avoidance of doubt, the assessment is of the Revised NIS (Cork County Council in 2021 in response to a request for further information) and associated responses to the Board as part of the appeal.

In their AA of the proposed development, informed by the NIS (2021), Cork County Council found that the proposed development would not be likely to have significant effects on any European site in view of the conservation objectives and qualifying interest of such sites and therefore adverse effects on site integrity could be excluded.

11.6.2. Compliance with Article 6(3) of the EU Habitats Directive:

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the sites conservation objectives. The competent authority must be satisfied that the proposal

will not adversely affect the integrity of the European site before consent can be given.

11.6.3. The Natura Impact Statement

The NIS as revised, prepared by Malachy Walsh and Partner, (September 2021) provides a detailed description of the proposed development, the application site and the surrounding area.

The NIS takes account of the request for further information made by Cork County Council in their initial consideration of the planning application as set out above.

The receiving environment is described, and results of field surveys are presented in section 4.4 of the NIS. Section 4.4.6 presents the survey findings in respect of habitats, bats, mammals, wintering birds breeding birds. This also supplemented with an amended chapter of the EIAR in respect of Biodiversity and with appended bird and mammal surveys.

The proposed development site features:

- The predominant habitat is Buildings and Artificial Surfaces (BL3). Other habitats identified included recolonizing bare ground, scrub, tree lines , dry meadows and grassy verges , sea walls Piers and jetties all of local importance and 'estuaries' being of international importance areas (being within an SAC/SPA) to local importance. The sea walls, piers and jetties habitat is described within the site as being in a section of the river Lee in which the jetty is located situated along the northern western and southern boundaries of the bell valley port facility site
- Mammal Otter activity at edge of site more activity in winter early sprig the manmade lagoon to the north west of the site is part of a breeding site. no breeding badgers, limited evidence of feeding at periphery. Red fox and other mammal life not of significance to the relevant Natura sites was recorded.
- Bird survey: The aim of surveys in 2020 to 2021 was to comply with conditions 4 and six of planning reference 19/ 06783 and to ensure the implementation of mitigation measures in the related EIAR which stated 'Bird monitoring will be undertaken prior to construction works commencing during construction work and following completion of the construction works. The survey design should be developed by a suitably qualified ecologist.' As seen from Tables 6 and 7, three

species were recorded as occurring in nationally important numbers during the winter survey. **Shelduck , Shoveler and Dunlin**. However **no survey area, including the Belvelly port facility site itself, supports a substantial proportion of the Cork Harbour's total populations of a particular species during the high tide counts**. In conclusion data collected during the winter birds surveys indicates that the species previously recorded at the site are still present, yielding no significant change to the species composition or habitats utilized.

- Bat survey and assessment concludes buildings do not support any roosts and no significant linear features could function as commuting or feeding areas.

The scientific basis to inform AA is presented in sections 5 of NIS.. This section provides a scientific rationale for potentially significant effects by way of identifying the pathways having regard to the characteristics and vulnerabilities of each QI . Table 19 identifies qualifying features (and rationale) of Great Island Channel SAC with potential for significant impacts. These are: **mud flats and sand flats not covered by sea water at low tide** and **Atlantic salt meadows.** The rationale for these qualifying interests is set out. Table 20 similarly identifies species of conservation interest of the Cork Harbour SPA with potential for significant impacts. the bird species as listed in Table 1 below.

Mitigation measures are detailed in section 6 and in the operational environmental management plan which was attached to the further information along with the Quantitative Risk Assessment and land use planning report.

The NIS concludes (page 1 summary) that subject to the implementation of the recommended mitigation measures, 'significant impacts' [effects] on Cork Harbour SPA and Great Island Channel SAC are not expected and therefore adverse impact [effects] on the integrity Natura 2000 site us 'not expected'.

As a point of clarification on the scope of my assessment I note On page 132 the conclusion refers to the proposed development as the new Goulding Chemical Limited facility and additional port operational uses to facilitate passenger and cargo vessels at Marino Point. Given the descriptions in the application which do not refer to passenger vessels I consider this to be a typographical error based on my assessment on the detailed descriptions and in the planning notice.

11.6.4. Screening for Appropriate Assessment

The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site, in which case the development is 'screened in' for further detailed assessment- appropriate assessment (stage 2).

The NIS prepared by Mulcahy Walsh and Partners on behalf of the applicant, included screening for AA (stage 1) which concluded that the possibility of significant effects could not be ruled out in view of the conservation objectives of four European sites and thus the proposed development must proceed to (stage 2) Appropriate Assessment (NIS Table 2.4 screening matrix).

European Sites part of the Natura 2000 network:

- Cork Harbour SPA 004030
- Great Island Channel SAC (001058)

In determining the potential for significant effects of the proposed development, a catchment of 15km was reviewed for European Sites. Having regard to the nature scope, scale and location of work, this list was identified as only including the above-mentioned sites. Potential impact mechanisms throughout the documentation that has been considered and can, I consider, be categorised as follows:

- Mechanism 1: Noise at construction stage such as from plant and machinery giving rise to Disturbance and/or displacement
- Mechanism 2 Noise at operational stage with effect of: Disturbance associated with cargo handling, activities
- Mechanism 3: release of pollutants at construction stage such as sediment,) particularly contaminated) dust, accidental spill of fuels, oils, chemicals effecting water quality and marine natural environment
- Mechanism 4 release of pollutants at operational stage of fertilizer blending and bagging into surface or via foul effluent in yard area such as dust, accidental spill of fuels, oils, fertilizer /chemicals
- Mechanism 5 release of pollutants at operational stage in jetty area as part of cargo handling, vessels intensification and generation of such as dust accidental spill of fuels, oils, fertiliser /chemicals

- Mechanism 6 illumination at construction and operation stages.

Table 1. Summary of European Sites for which the likelihood of significant effects could not be ruled out (Applicant).

Cork Harbour SPA (Site Code 004030)	**Boundary located adjacent to the site -30m** **Possible effects from Impact Mechanisms 1-6**
Bird species of Special conservation Interest (SCI): Little Grebe (Tachybaptus ruficollis) [A004] Great Crested Grebe (Podiceps cristatus) [A005] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Common Tern (Sterna hirundo) [A193]	
Habitat area	

Wetlands and waterbirds [A999] (obj: To maintain the favourable conservation condition of the wetland habitat in Cork Harbour SPA as a resource for the regularly occurring migratory waterbirds that utilise it. This is defined by a range of attributes and targets)	
Great Island Channel SAC (Site Code 001058)	**Boundary located adjacent to the site -30m** **Possible effects from Impact Mechanisms 3-5**
Habitats Mudflats and sandflats not covered by seawater at low tide and Atlantic salt meadows (Glauco-Puccinellietalia maritimae),(1330)	
Species None	

In-combination effects with other plans and projects were considered at the screening stage and no additional potentially significant effects from other development were identified in the AA screening report, section 4.6. 5.

11.6.5. Screening Determination

Having regard to the information presented in the AA Screening Report, the NIS, submissions, the nature of the site within an extensive industrial brownfield area and likely indirect and cumulative effects, I consider that there is a low probability of impacts of such magnitude that would result in significant effects on European Sites which would be beyond the 15km catchment considered for the site. However, given the location of the site along the shoreline and its proximity being within 30m of the Cork Harbour SPA and the Great Island Channel SAC, the potential impacts and the hydrological connection between the development site and the SAC and SPA due to jetty operations and also via surface water and through existing drainage, the prevention of any construction (and operational)related emissions would be required. There are also issues of disturbance to SCI through noise, visibility and illumination, the management of which would also be required.

The SCI and known threats and pressures to the sites are summarised in section 4.4.3 of the AA Screening report and are as listed on the NPWS website. Threats

include industrial or commercial, shipping lanes, dispersed habitation, urbanised areas, human habitation roads and motorways fertilization and port areas among other human activities.

Given that mitigation measures are prescribed with the clear intent to prevent any impacts to European Sites, notwithstanding that many of the measures are standard for any construction site and best operational practice, I consider that both of the sites should be screened in for AA. I note that the screening report emphasises the construction stage as a potential source of impact and makes limited reference to the operational phase in terms of effects and impact. This is notwithstanding the nature of the operational materials and cargo handling risks as flagged by CCC in consideration of the environmental and ecological risks of the proposed development.

The applicant has included mitigation measures to apply to prevent adverse effects to this European site and therefore it is reasonable to screen the proposal in for further assessment.

In summary, the potential for significant effects cannot be excluded for Cork Harbour SPA and the Great Channel Island SAC and therefore Appropriate Assessment is required.

The potential for significant effects on other European sites in the wider area, alone or in combination with other plans and projects within the wider area can be excluded.

11.7. Appropriate Assessment

11.7.1. **Relevant European sites:** Following on from screening, the following sites are taken forward for AA due to the requirement for mitigation measures to avoid significant effects or that the significance of effects are uncertain and require further assessment.

- Cork Harbour SPA and
- The Great Island Channel SAC

11.7.2. A description of the sites and their Conservation Objectives and Qualifying Interests/Special Conservation Interests, including relevant attributes and targets are set out in the NIS and summarised in this report as part of my assessment. The

scientific information provided by the applicant further expands on the assessment of significant effects based on the best available scientific information referencing peer reviewed papers and documents in addition to species specific bird surveys and evidence of bird behaviour at Ringaskiddy, (in particular for the SCI bird species and wetland habitat of the SPA site). (section 3.2 lists sources in desk study) I am satisfied that the applicant has had due regard to the conservation status of all relevant species and habitats and documented threats and pressures although I have some concerns about the impact on water quality and consequent effects . I have also examined the Conservation Objectives Supporting Documents for these sites, available through the NPWS website (**www.npws.ie**).

Tables 2-3 below summarise the information considered for the Appropriate Assessment and site integrity test. I have taken this information from that provided in the NIS and supporting documentation on file.

Table 2: AA summary matrix for Cork Harbour **SPA**

Cork Harbour Bay SPA (site code 004031)

Summary of Key issues that could give rise to adverse effects: (Indirect)
Mechanism 1: Noise at construction stage giving rise to Disturbance and/or displacement
Mechanism 2 Noise at operational stage with effect of: Disturbance associated with cargo handling, activities
Mechanism 3: release of pollutants at construction stage such as sediment,) particularly contaminated) dust, accidental spill of fuels, oils, chemicals effecting water quality and marine natural environment
Mechanism 4 release of pollutants at operational stage of fertilizer blending and bagging into surface run-off in yard area such as dust , accidental spill of fuels, oils, fertilizer /chemicals or via foul effluent discharge
Mechanism 5 release of pollutants at operational stage in jetty area as part of cargo handling, vessels intensification and generation of such as dust accidental spill of fuels, oils, fertilizer /chemicals
Mechanism 6 illumination at construction and operation stages.

Detailed Conservation Objectives available (NPWS):			
		Summary of Appropriate Assessment	
Qualifying interest	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Bird species of Special conservation Interest (SCI): Little Grebe (Tachybaptus ruficollis) [A004] Great Crested Grebe (Podiceps cristatus) [A005] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130]	To maintain favourable conservation condition as defined by: Long term population trend stable or increasing No significant decrease in the range, timing or intensity of use of areas by the SCI birds other than that occurring from natural patterns of variation	A risk assessment was undertaken for all species taking account of disturbance, population sensitivity, habitat suitability of development site and habitat flexibility of the species (eg. Roosting alternative in Cork Harbour for Herons) : Moderate impact on multiple species (e.g. shelduck) due to disturbance (visual and noise level of impact: *Context of cork Harbour being a highly disturbed area and railway allows for quick habituation to noise.* Section 5.4.3 identifies impact on wetlands and prey abundance Other indirect effect of water quality deterioration due to pollution identified.	Timing of vegetation removal outside bird breeding season in section 6.2 for species identified Noise mitigation including noise screens during construction in section 6.3 Water quality control measures to maintain existing status of Lough Mahon are provided in 6.5 and relate to construction and best

Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183]		E.g. Table 20 identifies potential water quality effects on the bird species. The oystercatcher is not consider in the NIS t (5.4.1.13) to be potentially impact by way water quality notwithstanding the prevalence of oysterbeds in the vicinity **Moderate to potentially significant adverse effects cannot be ruled out due to cargo handling** between at jetty . I do not concur with the negligible categorisation of adverse effects in the NIS	practice measures. Water quality measures also in Section 6.6 in relation to stockpiling excavated material. Cargo handling measures/additional jetty use measures in 5.2.1.2.2
Common Tern (Sterna hirundo) [A193]	To maintain favourable conservation condition as defined by: Nio increase in barriers No sig. decline in breeding population,	Section 5.4.1.24 identifies impact on Breeding Common Terns from prey biomass in polluted waters.	

	productivity rate, prey biomass Human activities at levels that do not adversely affect the population		
Wetlands and Waterbirds [A999]	To maintain permanent extent of Habitat area:	No direct impact on habitat area. Section 5.4.3 identifies impact on wetlands and prey abundance Potential adverse impact due to risk of water pollution at operational stage.	

Overall conclusion: Integrity test

The applicant concluded that following a detailed assessment of potential significant effects arising from the proposed development alone or in combination with other plans and projects, the risk of significant adverse impacts [effects] on the QI of the site are not expected and therefore it is not expected that the proposal will have an adverse impact on the integrity of the Natura 2000 sites.

While I concur with the NIS conclusion in so far as there is no likelihood of adverse effects on the site integrity by way of mechanisms 1-4 and 6 taking into account the conservation objectives of Cork Harbour SPA, I have reservations about the robustness of mitigation measures for mechanism 5. I refer to the concerns highlighted by Environment Department and to the risk of spill in the cargo handling of fertiliser related raw materials while having regard to the nature of measures in section 5.2.1.2.2. I do not consider the risk of pollution of water and effects on prey and foraging species as identified in (e.g. Table 20) the NIS can be regarded as be being negligible and it cannot therefore be ruled out that there will be no significant effect on the wetlands habitat and water dependant birds that are of SCI in this area.

Table 3: AA summary matrix for Great Island Channel SAC site code 1058

Great Island Channel SAC

Summary of Key issues that could give rise to adverse effects:

Summary of Key issues that could give rise to adverse effects: (Indirect)

Mechanism 1: release of pollutants at construction stage such as sediment, particularly contaminated) dust, accidental spill of fuels, oils, chemicals effecting water quality and marine natural environment

Mechanism 2: release of pollutants at operational stage of fertilizer blending and bagging into surface run-off in yard area such as dust, accidental spill of fuels, oils, fertilizer /chemicals or via foul effluent discharge

Mechanism 3: release of pollutants at operational stage in jetty area as part of cargo handling, vessels intensification and generation of such as dust accidental spill of fuels, oils, fertiliser /chemicals

Detailed Conservation Objectives available (NPWS)

		Summary of Appropriate Assessment	
Qualifying Interest feature *priority habitat Annex I	**Conservation Objectives Targets and attributes (summary-inserted)**	**Potential adverse effects**	**Mitigation measures**
Mudflats and sandflats not covered by seawater at low tide, [1140] (Map 4 in Conservation objectives document in NPWS website shows this to almost bound the site.	Permanent habitat is stable/increasing Conserve following community types in natural condition: mixed sediment to sandy mud with polychaetes and oligochaetes community complex.	• pollutants to enter marine environment during the construction and negatively impact water quality. • altered receiving marine waters within the SAC as a result of the ingress of pollutants (hydrocarbons, chemicals or	Pollution control measures in section 6.6 in addition to: • operational stage foul water effluent discharge meeting required standards for the WWTP on site and the

	Intertidal sandy mud community complex; and Intertidal sand community complex.	sediments) during construction phase • indirectly affects the distribution and abundance of the benthic community. • impacts on this community complex in Lough Mahon from operational WWTP discharge with nutrient enrichment could undermine the conditions required for maintaining or restoring favourable conservation condition	surface water systems (oil interceptor and attenuation tanks for potential additional testing and disposal. • Construction phase surface water management plan has been developed to ensure the construction works will not deteriorate with the water quality and will safeguard status of the adjacent lough. Further mitigation has been included with regard to water quality monitoring control of concrete washout and fuel management on site.
Atlantic Salt meadows [1330] (map 5 in Conservation objectives document in NPWS website shows this to a few 100m north of site.			
		.	

Overall conclusion: Integrity test

The applicant concluded that following a detailed assessment of potential significant effects arising from the proposed development alone or in combination with other plans and projects, the risk of significant adverse impacts [effects] on the QI of the site are not expected and therefore it is not expected that the proposal will have an adverse impact on the integrity of the Natura 2000 sites.

While I concur with the NIS conclusion in so far as there is no likelihood of adverse effects on the site integrity by way of mechanisms 1 and 2 taking into account the conservation objectives of **Great Island Channel SAC**, I have reservations about the robustness of mitigation measures for mechanism 3. I again refer to the risk of spill in the handling of fertiliser related cargo in the jetty area having regard to the nature of measures in section 5.2.1.2.2 to protect water quality at operational stage. I do not consider the risk of pollution of water and effects on the marine environment as identified in (e.g. Table 19) the NIS can be regarded as being negligible and it cannot therefore be ruled out that there will be no adverse effect on the benthic community and community complex of the 'Mudflats and sandflats not covered by seawater at low tide' habitat that is of SCI in this area.
I do not consider it can be concluded that there will no adverse effects on site integrity of **Great Island Channel SAC**. Notwithstanding the application of mitigation measures proposed it cannot be concluded that there will be no risk of contamination from operational related emissions and that the conservation objectives of maintaining or restoring favourable conservation condition will not be undermined or delayed.

11.7.3. In-combination effects

The NIS (in section 4.6.) identifies a range of other projects, plans and activities in the Cork Harbour area, some of which are noted to have been subject of AA. The key pressures on the Harbour arise from the WWTP, industrial licensed sites and ongoing activities with potential for significant cumulative impact. There is possibly a case to be made that the transfer of cargo handling activities from one part of the harbour, being Cork Quays in the Upper harbour, to an outer area is a positive benefit in managing the harbour environment, I would however consider the existing City Quay location as compared to the context and role of Marino Point and its immediate environs, including proximity to Lough Mahon, the mudflats and bird activity as surveyed, to be a materially different situation. The NIS does not review this. However, in a wider strategic context, the AA of the Cork County Development Plan refers to an overarching objective arising from the Natura Impact Report which sought the insertion into the County Metropolitan Cork Strategic Planning Area as

follows: To sustainably manage future development within this planning area, taking account of its environmental, ecological, heritage and landscape values, particularly within the Cork Harbour area. It was further recommended that the strategy for Marino Point be amended to acknowledge its sensitive location within the harbour adjoining the Great Island SAC and Cork Harbour SPA as follows: Marino Point is well placed to play a key strategic enabler role for the NPF/RSES in providing for the relocation of existing industrial uses from docklands and other strategic urban sites within the Cork Metropolitan Area in order to facilitate regeneration and redevelopment of such sites to help deliver compact growth and placemaking - subject to the provisions of the Habitats and Birds Directive and to the Seveso III Directive. It does not go as far to identify the site as a means of managing the marine environment but instead emphasises the subject site/area sensitivity.

The NIS in this case focuses on the potential effects at the construction phase of the proposal and refers to the construction Phase Management Plan for Surface Water as set in detail in the Appendix 2.3 of the EIAR. the NIS also refer to the analysis done in the preparation for the EIAR for the extant permitted development at the Belvelly Port Facility (File attached) which refers to the construction phase and ongoing management of surface water and the assimilative capacity of the reeving waters in a range of scenarios

I note however that the permitted development (307938) excludes intensification of operations most notably in the jetty area.

As I have concluded that the cargo handling at the jetty at operational stages of the proposal by itself poses significant risks to water quality, it is reasonable to conclude that the in-combination effect with other plans none of which address mitigation for such operations, adverse effects cannot be ruled out.

Overall, for the above reason, I am not satisfied that the proposed development alone or in combination with other developments will not pose a risk of significant effects to European Sites in terms of potential risk of pollution of the marine environment.

11.8. **Mitigation Measures**

11.8.1. A summary of mitigation measures is presented in the tables above. Details are provided in Section 6 of the NIS) in respect of

- Project ecologist
- Management of vegetation removal
- Use of screening
- Management of works in context of breeding common tern
- Water quality controls
- Concrete residue
- Wheel wash
- Construction compound
- Refuelling
- storage of materials/excavation materials, stockpiling
- Invasive species control
- Bird monitoring

11.8.2. Section 5.2.1 also sets out water quality protection measures as part of the construction and operational phases. Measures proposed include the following:

- Pollution prevention:
  - Construction Phase Surface Water Management Plan,
  - Measures to minimise risk of significant impacts on water quality at the jetty include
  - Shipping of raw materials to jetty and handling of such with a view to reducing emissions at operational stage on site as far as practicable and increasing awareness among personnel of this need.
  - Standard operating procedures (SOP) regarding harbour crane operation
  - Ensuring crane working properly and does not leak fertiliser or dust when full
  - When grabbing fertiliser grab shall not be lifted clear if hold until excess fertiliser has fallen or been shaken off
  - Avoid overfilling grabs
  - Lower grab into hopper as much as possible before opening
  - Take care does not to spill fertiliser over edges of hopper
  - Do not overfill hopper
  - Hold grab on top of hopper in open position as required to minimise dust:

- Ensure hopper is as close to jetty as possible to minimise crane movement and maximise distance to facility boundary
- Ensure screen on hopper or positioned correctly and curtains are checked for integrity
- Position trucks centrally under hopper
- Communicate with driver to move as required
- Avoid fully emptying hopper
- Trucks shall not be overfilled and avoid spillages
- When truck full to be instructed to move immediately
- SOPs for truck operation and housekeeping regarding spills and clean-up.
- Environmental controls to include a road sweeper a the jetty due to unloading and installation of rubber mats over gullies and drains
- No process water will be produced and best practice measures will be used for diesel tank and coating oil tank operations .
- No emission to ground/groundwater.

- In worst case if the crane clamshell misses unloading into hopper raw material would be released to jetty deck and the road sweeper would clean up by present personnel.
- The storm water system will divert contaminated water and managed by way of interception or disposal off site.
- The high kerb provides an extra safeguard.
- The materials are sensitive to moisture and cannot be unloaded in wet weather.
- MARPOL governs pollution from vessels from operational or accidental causes.
- SOP for Hopper operation

Other measures are stated in relation to impacts on bird species and include noise prevention and mitigation and illumination, design and management. These were addressed in more detail in the amended NIS.

11.8.3. I am not satisfied that the measures proposed as pollution prevention measures can be implemented and managed effectively with the sufficient level of certainty required so as to avoid ingress of raw material for fertiliser use and resultant pollutants into the marine environment connected to the European sites in the

vicinity. I have had regard to the Environment Officers report and concerns about air pollution and the handling of fertiliser to ensure against nutrients entering the harbour and the reliance on further agreement on detail of an OEMP as matters remain unresolved. I also have concerns about the feasibility of enforcing and monitoring a system that puts responsibility on jetty users to maintain critical steps.

11.9. Appropriate Assessment Conclusion: Integrity Test

11.9.1. In screening the need for Appropriate Assessment, it was determined that in the absence of mitigation measures, the proposed development at Marino Point could result in significant effects on two European sites, Cork Harbour SPA and The Great Island Channel SAC and that Appropriate Assessment was required. The possibility of significant effects on any other European site was excluded.

11.9.2. Following an examination and evaluation of the NIS, and associated material submitted as part of the planning appeal, taking into account of submissions and in light of the foregoing assessment carried out above, I am not satisfied that the proposed development individually, would not adversely affect the integrity of European site(s) Cork Harbour SPA and The Great Island Channel SAC in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting permission.

This conclusion is based on the following:

- Detailed assessment of all aspects of the proposed development that could result in significant effects or adverse effects on European Sites within a zone of influence of the development site.
- Consideration of the conservation objectives and conservation status of qualifying interest species and habitats
- A full assessment of risks to special conservation interest bird species and habitats in the marine environment
- Application of design and process measures, mitigation measures designed to avoid adverse effects on site integrity
- The proposed development may undermine the favourable conservation condition of a qualifying interest feature such as

- bird species, most significantly, the Breeding Common Tern[A193], by way of prey biomass in polluted waters and
- habitats that are a qualifying interest (wetlands [A999] and Mudflats and sandflats not covered by seawater at low tide [1140]) that are vulnerable to water pollutants

or delay the attainment of favourable conservation condition for these European sites.