

20 SUMMARY OF RESIDUAL IMPACTS

20.1 Introduction

This chapter of the EIAR collates the predicted residual impacts on the environment as identified in chapters 5 to 17, arising from the Proposed Development, during Construction and Operational Phases. Residual Impacts, according to the Draft EPA Guidelines (2017, p.3) are: -

“The final or intended effects which occur after the proposed mitigation measures have been implemented.”

A summary of the Proposed Mitigation Measures are outlined under Chapter 18: Summary of Mitigation Measures.

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20.1.1 Population & Human Health (Chapter 5)

20.1.1.1 Proposed Development

Construction Phase

Effects on population and health during the Construction Phase are expected under different environmental topics and will be mitigated as described in the other relevant chapters throughout this EIAR. Once mitigation measures have been implemented the residual effects are expected to be limited to minor or insignificant levels as described in other associated residual impacts sections relating to the Construction Phase.

Operational Phase

The effects for an increase in population as a result of the Operational Phase are expected to be positive, long term and significant. No mitigation measures are expected during operation of the Proposed Development that would alter the anticipated impacts therefore they remain as described.

As above, potential effects to human health are considered elsewhere in this EIAR and the discussion will not be repeated in this chapter. Following the implementation of the mitigation measures described in the respective chapters, the operational effects on human health are not expected to be significant.

Worst Case

The precautionary principle has been applied throughout this assessment and as such the worst-case scenario has been accounted for.

20.1.2 Biodiversity (Chapter 6)

20.1.2.1 Proposed Development

Construction Phase

During the Construction Phase there will be a limited loss of feeding within the site for bats and birds and a loss of nesting areas for birds. Vegetation will establish over time and these losses will be reduced considerably. There will still be less cover for birds following all mitigation. There will be

very limited (negligible to slight negative) impact upon bats within the site given the low level of bat activity noted. There will be limited or no loss of roost potential as the site develops and with the provision of bat boxes.

Operational Phase

Overall, although the Proposed Development may have some temporary negative impacts at the local level, these impacts will be fully mitigated through the implementation of the landscaping scheme. Once the development is operational and over time these impacts will be rendered negligible.

20.1.2.2 Cumulative

Neither the development proposed, nor any other developments will give rise to any significant impacts on biodiversity and there are no predicted cumulative impacts in relation to biodiversity, for example in terms of habitat loss or disturbance to protected species, as a result of the Proposed Development in combination with existing / proposed plans or projects.

Worst Case Impact

The predicted overall residual impact of the proposed cumulative development on biodiversity during the Construction and Operational Phases will be imperceptible.

20.1.3 Land, Soils and Geology (Chapter 7)

20.1.3.1 Construction Phase

The predicted overall residual impact of the Proposed Development land soils and hydrogeology during the Construction Phase will be neutral imperceptible.

Source	Impact / Path	Potential Receptor	Significance
Earthworks	Excavation and Removal	Land, Soils Geology LI Aquifer	Imperceptible
			Imperceptible
Accidental Spillages	Filtration	LI Aquifer	Imperceptible

Table 20.1: Summary of Residual Impacts of the Proposed Development – Construction Phase.

Operational Phase

The predicted overall residual impact of the Proposed Development land soils and hydrogeology during the Operational Phase will be neutral imperceptible.

Source	Impact / Path	Potential Receptor	Significance
Economic Geology	Sterilize Area against Quarrying	Quarry Reserves	Imperceptible
Reduction in Recharge	Increase in Impermeable Area	LI Aquifer	Imperceptible

Table 20.2: Summary of Residual Impacts of the Proposed Development – Operational Phase.

20.1.3.2 Cumulative

The predicted overall residual impact of the cumulative development on hydrogeology and geology during the Construction and Operational Phases will be imperceptible.

20.1.4 Water (Chapter 8)

20.1.4.1 Proposed Development

Construction Phase

With the introduction of the proposed mitigation measures, the significance of the potential impacts are considered to reduce as follows: -

Source	Path	Potential Receptor	Significance
Earthworks	Combined with Runoff – drain network, ditches, overland	Baldoyle / Mayne Estuary, Mayne River Sluice River	Imperceptible
			Imperceptible
			Imperceptible
Oils, Fuels, Chemicals	Direct to or combined with Runoff – drain network, ditches, overland	Baldoyle / Mayne Estuary, Mayne River Sluice River	Imperceptible
			Imperceptible
			Imperceptible
Concreting Operations	Combined with Runoff – drain network, ditches	Baldoyle / Mayne Estuary, Mayne River Sluice River	Imperceptible
			Imperceptible
			Imperceptible

Table 20.3: Significance of Potential Impacts of the Proposed Development – Construction Phase with Mitigation.

The predicted overall residual impact of the Proposed Development on hydrology during Construction Phase will be imperceptible.

Operational Phase

With the incorporation of the proposed design features and mitigation measures, the significance of the potential impacts are considered to reduce as follows: -

Source	Path	Potential Receptor	Significance
Flooding	Combined with flood waters – drain network, ditches, overland	Baldoyle/Mayne Estuary, Sluice River/Mayne River Development Vulnerability	Imperceptible
			Imperceptible
			Imperceptible
Oils and Fuels	Direct to or combined with Runoff – drainage network.	Baldoyle/Mayne Estuary, Mayne River	Imperceptible
			Imperceptible
Emergency Foul Overflows	Combined with Surface Water – drain network, ditches, overland	Baldoyle/Mayne Estuary, Mayne River Sluice River	Imperceptible
			Imperceptible
			Imperceptible

Table 20.4: Significance of Potential Impacts of the Proposed Development – Operational Phase with Mitigation.

The predicted overall residual impact of the Proposed Development on hydrology during the Operational Phase will be imperceptible.

20.1.4.2 Cumulative

The predicted overall residual impact of the proposed cumulative development on hydrology during the Construction and Operational Phases will be imperceptible.

20.1.5 Air Quality and Climate (Chapter 9)

20.1.5.1 Proposed Development

Construction Phase

Air Quality

Once the dust minimisation measures outlined in Section 9.7 and Appendix 9.2 are implemented, the impact of the Proposed Development in terms of dust soiling will be short-term, localised, negative and imperceptible at nearby receptors.

Climate

Based on the scale and short-term nature of the construction works and the intermittent use of equipment, the potential impact on climate change and transboundary pollution from the Proposed Development is deemed to be neutral, short-term and imperceptible in relation to Ireland's obligations under the EU 2030 target.

Human Health

Best practice mitigation measures are proposed for the Construction Phase of the Proposed Development which will focus on the pro-active control of dust and other air pollutants to minimise generation of emissions at source. The mitigation measures that will be put in place during construction of the Proposed Development will ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health. Therefore, the impact of construction of the Proposed Development is likely to be negative, short-term, localised and imperceptible with respect to human health.

Operational Phase

Air dispersion modelling of operational traffic and Operational Phase CO₂ emissions as a result of the traffic associated with the Proposed Development were scoped out of this assessment. As a result the impact of the Proposed Development on air quality, climate and human health is considered long-term, neutral and imperceptible.

Worst Case Impact

Conservative background concentrations were used in order to ensure a robust assessment. Thus, the predicted results of the Construction and Operational Phase assessment are worst-case and will not cause a significant impact on either air quality or climate.

20.1.5.2 Cumulative

Construction Phase

According to the IAQM guidance (2014) should the Construction Phase of the Proposed Development coincide with the Construction Phase of any other development within 350m then there is the potential for cumulative construction dust impacts. However, best practice dust mitigation measures will be implemented across the site which will avoid significant dust emissions. Provided these mitigation measures are in place for the duration of the Construction Phase cumulative dust related impacts to nearby sensitive receptors are not predicted to be significant. Cumulative impacts to air quality will be short-term, localised, negative, and imperceptible.

Due to the short-term duration of the Construction Phase and the low potential for significant CO₂ and N₂O emissions cumulative impacts to climate are considered neutral.

Operational Phase

The traffic data reviewed for the Operational Phase impacts to air quality and climate included the cumulative traffic associated with other existing and permitted developments in the local area. Therefore, the cumulative impact is included within the Operational Phase impact for the Proposed Development. The impact is predicted to be long-term, neutral, and imperceptible with regards to air quality and climate.

20.1.6 Climate (Daylight & Sunlight) (Chapter 10)

20.1.6.1 Proposed Development

Construction Phase

As no ameliorative, remedial, or reductive development is proposed, the residual impact of the Proposed Development on sunlight access is predicted to be as described under Section 10.5.1.1 above.

Operational Phase

As no ameliorative, remedial, or reductive development is proposed, the residual impact of the Proposed Development on sunlight access is predicted to be as described under Section 10.5.1.2 above.

Worst Case Impact

As no ameliorative, remedial, or reductive development is proposed, the residual impact of the Proposed Development on sunlight access is predicted to be as described under Section 10.5.1.3 above.

20.1.7 Air (Noise and Vibration) (Chapter 11)

20.1.7.1 Proposed Development

Construction Phase

During the Construction Phase of the project there will be a short-term noise impact on nearby noise sensitive properties from site activities and the close proximity of adjacent buildings. The application of binding noise limits, hours of operation, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration are kept to minimised. For the nearest noise sensitive locations within 50m of the Proposed Development, negative, significant and temporary effects are likely.

For the majority of noise sensitive locations at greater distances from the Proposed Development, negative, moderate and short-term effects are likely.

Operational Phase

Additional Traffic on Surrounding Roads

The predicted change noise levels associated with additional traffic is predicted to be of imperceptible impact along the existing road network. In the context of the existing noise environment, the overall effects from noise contribution of increased traffic is considered to be of neutral, imperceptible and permanent effect to nearby noise sensitive locations.

Building Services Plant

With the application of mitigation measures for building services noise as described in Section 6.2.1, the range of potential noise levels is not expected to add significantly to the existing noise environment. The resultant noise effect from this source will be of neutral, not significant, permanent impact.

Worst Case Impact

Impact on nearby noise sensitive properties from site activities and the close proximity of adjacent buildings if all items of plant assessed will be in operational simultaneously. However, this would only be during the worst case and would be temporary in nature.

20.1.7.2 Cumulative

Construction Phase

As per Section 11.7.1.1.

Operational Phase

As per Section 11.7.1.2.

Worst Case Impact

As per Section 11.7.1.3.

20.1.8 Landscape and Visual Impact (Chapter 12)

20.1.8.1 Proposed Development

Construction Phase

Any development will give rise to some degree of landscape and visual impact. The greatest impacts tend to occur during the temporary / short-term Construction Phase when site disturbance associated with stripping of soils and movement of machinery maybe unfamiliar and draws particular visual attention to the Site.

The Construction Phase will involve removal of short sections of hedgerows for provision of road, footpath, cycleway and service connections. However, the vast majority of the existing hedgerows will be protected and retained within proposed linear parks and on the boundary of Skylark Park.

The Phase 1D Site is limited in extent and in part has been previously disturbed by construction and related works associated with Phase 1C. Construction works will be most be most visible from properties within the adjoining Phase 1A, 1B and 1C at St. Marnock's Bay and to a lesser degree from Moynes Lodge located on lower slopes south of the Proposed Development.

The Construction Phase will not give rise to significant landscape or visual effects on open space / buffer lands to the south or east of the residential zoned lands or on views from coast road or areas surrounding the estuary.

The sensitivity of the receiving landscape environment is assessed as being Low and the Magnitude of Change is considered Medium. The landscape impact of the Construction Phase is assessed as being of Slight to Moderate Negative Short-term Significance.

The sensitivity of the receiving visual environment and the Magnitude of Change are considered Medium. The visual impact of the Construction Phase is assessed as being of Moderate Negative Short-term Significance.

Operational Phase

On completion of the Construction Phase a new development will establish its presence on the environmental, physical and visual character of its environs. In this regard landscape and visual impacts must also be considered within the context of existing, planned, emerging and likely future development proposals for the area. The Phase 1D development is being provided in accordance with the approach and principles established in the Portmarnock South LAP. The LAP provides a detailed analysis of the area and provides a development framework for the lands, identifying development zones, as well as open spaces, green networks, connections and linkages, etc. The previous phases (1A, 1B and 1C) and the current Proposed Development (Phase 1D) are provided in accordance with these requirements.

Landscape Impact

It is considered that the proposed development is appropriately sited, designed and laid out so as to be capable of being fully integrated into the new emerging residential character of the wider area. This integration is underpinned by the architectural approach and by the landscape masterplan and landscape strategy that acknowledges and builds on the requirements of the LAP and the emerging character and finishes established in Phases 1A, 1B and 1C.

Therefore, the Proposed Development will have a positive impact on the emerging local character, and will not adversely impact on sensitive landscape characteristics, e.g. coastal setting and character or views to and from this landscape. It is considered that the Operational Phase of the development will make a continued positive contribution to the emerging residential community of the wider area.

The sensitivity of the receiving landscape environment is assessed as being Low and the Magnitude of Change is considered Medium. The landscape impact of the Operation Phase is assessed as being of Slight to Moderate Positive Medium to Long-term Significance.

Visual Impact

The Proposed Development is situated south of the existing Phase 1A, Phase 1B and Phase 1C (under construction) and is primarily located to the west of the townland boundary hedgerow. The townland hedgerow will be incorporated within public open space 'Skylark Park' and associated linear parks.

Therefore, this is one of the least visible areas of the LAP development lands – with views confined to properties within Phase 1A, Phase 1B and Phase 1C to the north as well as from the lands (agricultural, landscape buffer areas) immediately south of the Phase 1D area.

Development proposed to the east of the townland boundary / Skylark Park is located in a visually more open setting. However, these residential properties will be eventually subsumed into the build-out of the wider masterplan for the residential zoned lands. Properties, which define the southern limited of the Phase 1D residential development will be more visible from the south and have been specifically designed as 'edge properties' with a distinctive design and material finish. The southern

leading edge of the Phase 1D development will be visible from Moyne Road in the vicinity of the proposed permanent road connection, and in views north from lands further south of Moyne Road, including Racecourse Park.

The Proposed Development, including the road connection to Moyne Road, is fully consistent with the objectives and requirements of the Portmarnock South LAP.

The sensitivity of the receiving visual environment and the Magnitude of Change are considered Medium. The visual impact of the Construction Phase is assessed as being of Moderate Positive Medium to Long-term Significance.

Photomontages

Photomontages of the proposed development have been prepared and included in Appendix 12.1 of the EIAR. Each view is presented in an 'As Existing' and 'As Proposed' version. The location of the Photomontage Views are shown on Figure 12.4. The views have been selected on the basis that they present the highest potential for visual impact within the existing landscape.



Figure 20.1: Location of Photomontages (extract from Figure 1.0 Photomontages booklet, BSM, 2021).

View 1: Golf Links Road opposite Strandmill Road, Portmarnock

The existing view is expansive and wide-ranging across the flat saltmarsh landscape of the northern end of Baldoye Bay. The view runs from existing development at Portmarnock and Portmarnock South (Phase 1A, B & C) to the Dublin Mountains in the background further south.

The proposed view sees the continuation south of existing residential development at St. Marnock's Bay. The proposed view is in-keeping with the character of existing and emerging nature of development in the area. The Phase 1D development does not impact on the sensitivity or significance of landscape or visual characteristics in the area.

View 2: Golf Links Road opposite Public Carpark, Portmarnock

The existing view is expansive and wide-ranging across the flat saltmarsh landscape of Baldoyle Bay. The view runs from existing development at Portmarnock and Portmarnock South (Phase 1A, B & C) to the Dublin Mountains further south (out of view on left-hand side).

The proposed view sees the continuation south of existing residential development at St. Marnock's Bay. The proposed view is in-keeping with the character of existing and emerging nature of development in the area and the Phase 1D development does not impact on the sensitivity or significance of landscape or visual characteristics in the area.

View 3: Baldoyle to Portmarnock Greenway, Portmarnock South

The existing view is west from the recently completed Baldoyle to Portmarnock Greenway located on open space lands to the immediate east of the residential zoned lands at St. Marnock's Bay. The view includes existing residential development and on-going construction works at Portmarnock South (Phase 1A, B & C).

The proposed view sees the continuation south of residential development at St. Marnock's Bay. While the rear of the houses proposed on the eastern side of the townland boundary are more visible in this view the future phases at St. Marnock's Bay will see the development of appropriate frontage (including appropriate landscaping) to integrate with the new greenway. Notwithstanding, the proposed view is in-keeping with the character of existing and emerging nature of development in the area.

View 4: Moyne Road east of Moyne Lodge

The existing view is north / northwest from Moyne Road towards the Phase 1D development area. The view is from the vicinity of where a previously permitted temporary haul route (FCC Ref.: F20A/0700) is to be constructed off Moyne Road.

The proposed view sees the conversion of what will be a temporary haul route (permitted) into a permanent road connection serving St. Marnock's Bay. Residential development within the proposed Phase 1D area is located in the background on what will be the southern edge of residential development as set out in the Portmarnock South LAP.

View 5: R106 Coast Road, south of junction with Moyne Road

The existing view is north along the R106 Coast Road from south of the junction with Moyne Road. Existing residential development in St. Marnock's Bay (Phase 1A, 1B and 1C) is not visible.

The Phase 1D will not be visible the proposed view. However, a red outline of the Phase 1D development is provided for ease of referencing.

View 6: Southern end of Baldoyle to Portmarnock Greenway (close to Red Arches Road junction with R106 Coast Road)

The existing view is north along the recently completed greenway, which parallels the R106 Coast Road. Existing residential development in St. Marnock's Bay (Phase 1A, 1B and 1C) is barely visible.

The Phase 1D development will be slightly more visible as it moves further south on the ridge – but in the context of wide-ranging view does not impact on the sensitivity or significance of any landscape or visual characteristics in the area.

Worst Case Impact

In a scenario where mitigation measures were not implemented or failed the worst-case landscape and visual impact of the Construction Phase is assessed as being of Significant Negative Short-term Significance.

In a scenario where mitigation measures were not implemented or failed the worst-case landscape and visual impact of the Operational Phase is assessed as being of Moderate Negative Medium to Long-term Significance.

20.1.8.2 Cumulative

Construction Phase

The sensitivity of the receiving wider landscape and visual environment is assessed as being Medium and the Magnitude of Change is considered Medium. The cumulative landscape and visual impact of the Construction Phase is assessed as being of Moderate Negative Short-term Significance.

Operational Phase

The sensitivity of the receiving wider landscape and visual environment is assessed as being Medium and the Magnitude of Change is considered Medium. The cumulative landscape and visual impact of the Operation Phase is assessed as being of Moderate Positive Medium to Long-term Significance.

Worst Case Impact

In a scenario where mitigation measures were not implemented or failed the worst-case cumulative landscape and visual impact of the Construction Phase is assessed as being of Significant Negative Short-term Significance.

In a scenario where mitigation measures were not implemented or failed the worst-case cumulative landscape and visual impact of the Operational Phase is assessed as being of Moderate Negative Short to Medium-term Significance.

20.1.9 Material Assets (Transport) (Chapter 13)

20.1.9.1 Proposed Development

Construction Phase

There will be minor impacts on the safety or operation of the road network as a result of the construction phase of all phases of the Portmarnock Development. Having consideration for the mitigation measures outlined above, any impacts during the construction phase will be negligible. All construction related traffic will be outside the morning and evening peak hours and will not have a significant impact the operation of the adjoining junctions.

Operational Phase

The traffic analysis demonstrated that Junction 1) Station Road / Drumnigh Road R124 and Junction 2) Strand Road / Coast Road / Station Road will exceed the normal design threshold during the morning and evening peak hours considered. This is the case both for the “without” and “with” development scenarios. This concurs with the observations made on site. Any future traffic growth, irrespective of the subject development, will therefore result in an impact to the operation of these junctions.

However, it is clear from the analysis that Phase 1D development will help, albeit to a minor extent, the performance of Junctions 1 and 2. During the “with” Phase 1D development scenario, the new primary access road to Moyne Road will be constructed. This new access road going south onto

Moyne Road will cater for a proportion of trips generated from the 1A, 1B, 1C and 1D developments. A high percentage of these trips will likely travel south avoiding Junction 1 and 2 entirely and improving the current traffic situation at these junctions.

When the cumulative Entire Development is complete, Junction 3: Moyne Road/Coast Road will also exceed the normal design threshold during the morning and evening peak hours considered.

The residual impacts from both the Proposed Development and background traffic growth will be mitigated with the improvements of the public transport network (DART and BusConnects) and cycling infrastructure throughout Dublin. The Proposed Development will provide adequate pedestrian and cycle linkages to both existing and future sustainable travel facilities and modes which will encourage a greater number of Portmarnock residents to choose sustainable transport modes.

Worst Case Impact

It is noted that the junction analysis for the Entire Development is a robust and conservative analysis. The Entire Development 2038 Stress Test assumes that little additional transport interventions have been applied to the road network in the Fingal area and presents a “worst-case” situation where the full impact of population growth and employment distribution is assigned to the existing road network. Several committed road schemes and junction upgrades in the Fingal / North Dublin City area are to be implemented in the coming years.

It is difficult to quantify the exact impact these upgrades will have on the surrounding road network, but it is clear it will be positive. These road/junction upgrades will likely take traffic away from the smaller junctions around the St. Marnock’s Bay site.

The analysis does not consider that by 2038 further sustainable transport improvements in the Fingal area such as improved DART services, Bus Connects, cycle schemes and additional government initiatives will all have a positive effect on the modal split, reducing the impact of surrounding junctions.

20.1.9.2 Cumulative Development

Construction Phase

As per Section 13.7.1.1.

Operational Phase

As per Section 13.7.1.2.

Worst Case Impact

As per Section 13.7.1.3.

20.1.10 Material Assets (Waste) (Chapter 14)

20.1.10.1 Proposed Development

The implementation of the mitigation measures outlined in Section 14.6 will ensure that high rates of reuse, recovery and recycling are achieved at the Site of the Proposed Development during the Construction and Operational Phases. It will also ensure that European, National and Regional legislative waste requirements with regard to waste are met and that associated targets for the management of waste are achieved.

Construction Phase

A carefully planned approach to waste management as set out in Section 14.6.1.1 and adherence to the C&D WMP during the Construction Phase will ensure that the predicted effect on the environment will be short-term, imperceptible and neutral.

Operational Phase

During the Operational Phase, a structured approach to waste management as set out in Section 14.6.1.2 and adherence to the OWMP will promote resource efficiency and waste minimisation. Provided the mitigation measures are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted effect of the Operational Phase on the environment will be long-term, imperceptible and neutral.

Worst Case Impact

In a worst-case scenario, if no mitigation measures found in section 14.6 are followed, poor onsite waste management, non-permitted waste contractors or unauthorised waste facilities could give rise to inappropriate management of waste offsite and result in negative environmental impacts or pollution as shown in section 14.5.

20.1.10.2 Cumulative

Construction Phase

During the Construction Phase waste management will be carefully managed as set out in Section 14.6. Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will minimise/mitigate any potential cumulative impacts associated with waste generation and waste management. As such it is considered that the cumulative effect relating to waste management will be short-term, imperceptible and neutral.

Operational Phase

During the Operational Phase waste management will be carefully managed as set out in Section 14.6. Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will minimise/mitigate any potential cumulative impacts associated with waste generation and waste management. As such it is considered that the cumulative effect relating to waste management will be long-term, imperceptible and neutral.

Worst Case Impact

As per Section 14.7.1.3.

20.1.11 Material Assets (Utilities) (Chapter 15)

20.1.11.1 Proposed Development

Construction Phase

Implementation of the measures outlined in Section 15.6 will ensure that the potential impacts of the proposed development on the site's material assets do not occur during the Construction Phase and that any residual impacts will be short term.

Operational Phase

The demand on power supply, water services, telecommunications and broadband will all increase due to the development of the lands. The development of the lands is expected to be finalised in Q2 2024.

Residual impacts will be permanent and imperceptible.

20.1.12 Cultural Heritage (Archaeological & Architectural) (Chapter 16)

20.1.12.1 Proposed Development

Construction Phase

No residual effects during construction phase were identified during the course of the assessment on archaeological or cultural heritage. Should any archaeological remains be uncovered, they will be fully resolved prior to the main Construction Phase (as detailed in Section 16.6.1.1).

Operational Phase

No residual effects were identified during Operation Phase.

Worst Case Impact

Within the worst case scenario an archaeological site would be removed without full recording taking place and there would be no record or archive of the site. Archaeological monitoring mitigates against scenario from occurring.

20.1.12.2 Cumulative

Construction Phase

When taken in conjunction with Phase 1D, a number of archaeological monuments have been preserved insitu while other newly identified sites with no surface visibility have been excavated under licence to the DHLGH. Within Phase 1A, a D shaped enclosure and burnt spread was identified and excavated. Phase 1B has preserved in situ, a mound, DU015-014 and provided interpretive signage as to the archaeological and cultural heritage significance of the area. An enclosure, burnt spread and part of a medieval settlement have been excavated as part of Phase 1B works. Within Phase 1C, a double ditched enclosure was identified and excavated. DU015-055, an enclosure in Maynetown shall be preserved in situ within future phases of the Portmarnock LAP lands.

Within the assessments undertaken for Phase 1D, no features of an archaeological significance have been identified. Also, there are no features of a built heritage interest within the lands. The townland boundaries which are of cultural heritage interest will be largely preserved in situ across all development phases including Phase 1D.

There are no significant residual, cumulative impacts anticipated to archaeological, built heritage and cultural heritage assets as a result of the construction of Phase 1D.

Operational Phase

No cumulative mitigation measures were identified in relation Phase 1D during the Operational Phase.

Worst Case Impact

Within the worst case scenario an archaeological site would be removed without full recording taking place and there would be no record or archive of the site. Archaeological monitoring mitigates against scenario from occurring.

20.1.13 Risk Management (Major Accidents & Disasters) (Chapter 17)

The risk of a major accident and / or disaster during the Construction Phase of the Proposed Development is considered low.

The risk of a major accident and / or disaster during the Operational Phase of the Proposed Development is considered medium.