Inspector's Report
ABP-313328-22

Development	Construction of new purpose-built research facility. An EIAR and NIS accompany this application.
Location	University College Cork, Distillery Fields, North Mall, Cork
Planning Authority	Cork City Council
Planning Authority Reg. Ref.	2140068
Applicant(s)	University College Cork and Tyndall National Institute
Type of Application	Planning Permission
Planning Authority Decision	Grant with Conditions
Type of Appeal	Third Party Appeal
Appellant(s)	Patrick Crowley
Observer(s)	None
Date of Site Inspection	14th October 2022
Inspector	Susan Clarke

Contents

1.0 Introduction

1.1. This Third-Party Appeal relates to the expansion of the Tyndall National Institute (TNI) with the construction of a new research facility on the Distillery Lands/North Mall Campus located on the banks of the northern channel of the River Lee.

1.2. A separate concurrent planning application (CCC Reg. Ref. 21/40116) was lodged with Cork City Council for a pedestrian bridge to link the proposed research facility with TNI's existing campus located on the Lee Maltings site on the southern side of the northern channel of the River Lee. However, the application for the bridge was subsequently withdrawn.

1.3. Whilst the two applications are independent, the EIAR and NIS for the proposed research facility make reference to the bridge.

2.0 Site Location and Description

2.1. The subject site is located at University College Cork, Distillery Fields, North Mall in Cork City on a site measuring 3.17ha. The Applicant advises that the western portion of the site was purchased by UCC in 1998 and the balance of the site was purchased by UCC and Mercy University Hospital (MUH – a teaching facility associated with UCC) jointly in 2004 for the purposes of development of academic and healthcare facilities in a campus masterplan.

2.2. The site, which comprises two large, single storey, detached, industrial style buildings, a surface car park, an amenity walkway (the Lee Walkway), and overgrown open areas, forms part of the City formerly known as the Distillery Lands. It is located on the edge of the city centre. In more present times, the site has been referred to as UCC's North Mall Campus. UCC's Butler Building and School of Biological Earth and Environmental Sciences and School of Applied Psychology are located north-west of the site. As stated above, the TNI's existing campus is located on the southern side of the northern channel of the River Lee on the Lee Malting's site, adjacent to the MUH. Notwithstanding the site's urban location, it sits within a mature landscape. The Lee Walkway, which contains a number of mature trees and vegetation, extends from the Alderman Reilly Bridge and connects with the Mardyke Bridge to the west outside the site area. This part of the site was ceded to the Local Authority and forms part of the

Cork Walks – University Walk. A number of the trees on the site have Tree Protection Orders. Sunday's Well Road (R846) is located to the north of the site on a high escarpment. The properties along this Road are predominantly residential in nature. The existing site is relatively flat and at levels of between 3-4m AOD. There is a general fall in levels towards the River Lee towards the south of the site.

2.2.1. The larger southern building (6,360 sq m) known as the Bottling Plant was designed by renowned Cork based architect Frank Murphy and constructed in 1960s. The single storey building is characterised by a bright yellow glazed brick façade and tall chimney. The building is referenced (20500774) in the National Inventory Architectural Heritage's publication "*An Introduction to the Architectural Heritage of Cork City*" as an example of 20th century industrial architecture. The building was in use by Cork Distillers Co. until 2007 when the facility was closed. It is currently used for storage. The northern building, The Cooperage Building, is listed on the NIAH website (Reg. No. 20500776). The Alderman Reilly Bridge, a double-arch stone road bridge, located in the northeast corner of the site at Wise's Quay, is a designated Protected Structure (Ref. PS814). To the west of the bridge is a mill race basin, part of a watercourse which had historically been used as a mill race channel for a mill associated with the Franciscan Abbey, that was located in the area to the northeast of the site. There are a number of Protected Structures in the vicinity of the site including the former Distillery House and the base of the chimney (PS813) (located at the entrance to the Campus) and St. Vincent Roman Catholic Church and Seminary (PS797) (located northwest of the site). Furthermore, a small pocket of the north-eastern corner of the site, essentially comprising the entrance to the Campus, is located in the North Mall/The Marsh ACA.

2.3. Vehicular access to the North Mall site is via Upper Winters Hill, which forms a junction with Sunday Wells Road in the north-eastern corner of the site. At the entrance to the site Upper Winters Hill forms a private road, which is controlled by a gated access with associated control room, leading to the main campus access road. The car parking facilities within the site and on the wider North Campus site are used by UCC staff and Mercy University Hospital staff. The main pedestrian route into the campus is via a narrow footway which connects to the banks-of-the Lee riverside/ greenway along the riverbank, to the south of the Bottling Plant building. There are two pedestrian bridges near the site; St Vincent's bridge to the east of the site entrance which provides a

connection towards Mercy Hospital and TNI; and Mardyke Bridge as mentioned above.

3.0 Proposed Development

3.1. The application was lodged with the Planning Authority on 9th April 2021. Further plans and details were submitted 10th December 2021 following a request for further information (FI) dated 3rd June 2021. Revised public notices were received 13th January 2022.

3.2. The proposed development consists of:

- Demolition of the former Bottling Plant building, associated parking, hard standing and existing utility buildings.
- Construction of a new purpose-built research facility comprising of approximately 16,135 sqm (GIA) rising from 4 storeys at the east to 7 storeys at the west. The facility will include laboratories, office accommodation, collaboration spaces, start-up incubation and amenity spaces, exhibition space, seminar room and a public café.
- Construction of a separate stand-alone two storey utilities building of approximately 190 sqm which incorporates a new sub-station.
- Construction of a new walled enclosure to contain a central gas store, water tanks, bins and general storage areas.
- Construction of two single storey secure bike parking structures, 60.5 sqm and 80.5 sqm.
- Relocation and rationalisation of the existing 154 car parking spaces into a new central car park.
- Alterations to the site services including the relocation of ESB sub-station.
- The development will involve works adjacent to Alderman Reilly's Bridge (PS814) and will be within the curtilage of the Distillery House and Chimney (PS813), which are protected structures.

The equipment, processes and operations in the new laboratory building will be subject to a Trade Effluent Licence and biannual testing on emissions to

atmosphere for several parameters. This will be an extension of TNI's current licensing agreements.

The new facility is designed to accommodate a doubling in size of TNI over the next ten years. The proposed new facility will allow for an increase in TNI's staff up to 250 post-graduate students (currently at circa 125) and 750 staff (currently circa 325).

3.3. Amendments to Original Scheme Proposed as Part of an RFI Response

The original scheme was significantly amended on foot of a Request for Further Information (RFI) (dated 3rd June 2021). The key amendments included:

- Retention and integration of part of the southern façade, including the chimney and loading bay canopies, of the former Bottling Plant building into the proposed design. The main processing hall of the Bottling Plant building will be demolished.
- Reduction in the scale and massing of the proposed facility and façade redesigns including alterations to the fenestration and use of materials.
- Omission of one storey from the proposed research facility, resulting in a part 4/5/6 storey building (16,750 sqm).
- Relocation of the proposed facility in a northern direction away from the Lee Walkway, at a greater distance than the original proposal.
- Provision of a new basement level containing services and staff facilities.
- Provision of a roof terrace at first floor level along the southern elevation.
- Omission of the safety railing at rooftop level.
- Replacement of the proposed two bike structures with one large structure (124 sqm) to provide a total of 108 No. bicycle spaces.
- Relocation of the main access to the site in a northerly direction and alterations to the site layout in terms of landscaping, pedestrian/cyclist routes and car parking configuration.

The RFI Response also included a revised masterplan for the lands.

The proposed facility has a gross floor area of 16,750 sq m.

3.4. Documentation Submitted with Planning Application

3.4.1. In addition to a Planning Application Form and Statutory Notices, the application included supporting documents (in association with architectural, engineering and landscaping drawings) as follows:

- EIAR, 30th March 2021
- Architectural Design Statement, 26th March 2021
- Photomontages, 25th March 2021
- Landscape Design Statement, 24th March 2021
- Urban Design Framework, 29th March 2021
- Basis of Design Report, 29th January 2021
- Structural & Civil Engineering Stage 2a & Stage 2 Report, 25th March 2021
- Energy & Sustainability Report, 26th March 2021
- Engineering Report, 26th March 2021
- Flood Risk Assessment, 26th March 2021
- Traffic and Transport Assessment, 25th March 2021
- Arboricultural Assessment & Impact Report, 11th March 2021
- Natura Impact Statement, 30th March 2021
- Screening for Appropriate Assessment, March 2021

3.4.2. Following the **RFI,** the Applicant submitted further documentation:

- EIAR, 8th December 2021
- Screening for Appropriate Assessment Report (Revised) and Natura Impact Statement (Revised), December 2021
- Architectural Design Statement, 6th December 2021
- Further Information Request Responses, not dated (Architectural)
- Photomontages, 6th December 2021
- Structural & Civil Engineering Stage 2a & Stage 2 Report, 3rd December 2021

- Landscape Design Statement, 24th November 2021
- Arboricultural Assessment & Impact Report, 4th December 2021
- Preliminary North Mall Campus Masterplan
- Outline Conservation Works, November 2021
- Visual Structural Condition Survey, 6th August 2021
- Heritage Significance Report, August 2021
- Independent Architectural Assessment Report, December 2021
- Energy & Sustainability Report, 3rd December 2021
- Engineering Report, 3rd December 2021
- Site Utilities Report – MEP Inputs, 3rd December 2021
- Outdoor Lighting Report, 3rd December 2021
- Flood Risk Assessment, 3rd December 2021
- Traffic and Transport Assessment, 7th December 2021.

4.0 Planning Authority Decision

4.1. Decision

4.1.1. The Local Authority issued a Notification of Decision to Grant Permission on 21st March 2022, subject to 36 No. conditions.

4.2. Planning Authority Reports

4.2.1. Planning Reports

Planning Policy - Senior Planner (28th May 2021): Highlights Policy Objective 2 for the Cork Metropolitan Area Strategic Plan in the RSES for the Southern Region, that to support investment in and the expansion of the TNI; and Objective 3.1 of the Cork City Development Plan 2015, which seeks to support innovation. Notes that from a strategic planning perspective, the expansion of the TNI aligns with strategic policy objectives, including the National Development Plan 2018-2027.

Assistant Planner and Senior Executive Planner Reports, both dated 2nd June 2021: Key points to note from these reports include:

- Considers the key issue in respect of the application is conservation matters, due to the proposal to demolish the Bottling Plant in its entirety and the impact this would have on the industrial heritage and setting of the former Distillery Fields lands.
- The 'Alternatives' section of the EIAR has not fully, or appropriately, outlined the consideration of alternative layout designs whilst taking into account the effects of the project on the environment.
- The design does not adequately outline why the Bottling Plant building's 160m long façade could not be incorporated into the proposed development, other than to suggest any proposed development would be required to be higher, would limit development potential, or would have impacts in respect to flood mitigation measures.
- Additional photomontages required in the environs of Sunday's Well Road.
- Advises that the EIAR is adequate, with the exception of the following chapters: Alternatives, Landscape & Visual Impacts, Traffic & Transport, Biodiversity, Cultural Heritage, and Summary of Mitigation Measures. Recommends that further information is sought in accordance with the recommendations from the Local Authority's internal referral reports relating to these chapters (see Section 4.2.2 below).
- Recommends that further information in relation to the NIS be sought in accordance with Heritage Officer's report, dated 25th May 2021 (see Section 4.2.2 below).
- Concludes by recommending a Request for Further Information is sought.

Senior Planner (2nd June 2021) Concurs with Assistant Planner and Senior Executive Planner's recommendations for requesting further information.

4.2.2. A Request for Further Information (RFI) was issued on 3rd June 2021 in relation to 14 No. points (with multiple subsections). The points requiring additional information related to *inter alia*: alternative layout designs, photomontages, traffic movements, biodiversity surveys, cultural heritage significance of the Bottling Plant and integration

of this building into the proposal, offsetting mitigation measures, confirmation that no trees with a TPO are to be removed, preparation of a historic building assessment, a masterplan and an arboricultural report, repositioning of the building to reduce overshadowing, elevational alterations, car parking provision, public lighting, site access arrangement, confirmation if a café is to be provided, relationship between the proposed application and Ref. 21/40116 for a proposed pedestrian/cyclist bridge and café, Mill Street walk, and water main layout details. The Applicant was requested to revise and update the EIAR and NIS to take account of the above items.

The RFI was issued on 3rd June 2021. The Applicant sought an extension to the statutory six-month response period on 4th November 2021. The Local Authority facilitated an extension of time to 11th March 2022. However, the RFI Response was submitted on 13th January 2022.

Executive Planner (16th March 2022): I note the following from the Executive Planner's Report, which was prepared on receipt of the RFI Response by the Local Authority on 13th January 2022 subsequent to the readvertisement of the Statutory Notices:

- The revised RFI proposal retains a meaningful portion of the original building. Detailed mitigation measures are set out to ensure that a detailed record of the section of the Bottling Plant building to be demolished is recorded, the remaining structures of note will not be accidently damaged during construction and all excavations and ground works are monitored.
- The additional photomontages demonstrate that the proposal is acceptable from a visual impact perspective.
- Welcomes the revised design in terms of massing, form and use of materials.
- Appropriate mitigation measures have been proposed to protect biodiversity, including downstream impacts upon Natura 2000 sites. These include measures to prevent contamination of the adjacent watercourse.
- Satisfied that the revised NIS and supporting documentation provides adequate information in respect to baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. The proposal

would not adversely affect the integrity of the Cork Harbour SPA or Great Island Channel SAC in view of the conservation objectives for these sites.

- Recommends permission be granted in accordance with the conditions attached to the Notification of Decision to Grant Permission.

Senior Planner (21st March 2021): Concurs with Assistant Planner and Executive Planner's recommendations to grant permission subject to conditions.

4.2.3. Other Technical Reports

Conservation Report (26th May 2021, 28th May 2021 and 16th March 2022): There are two Conservation Officer reports from Ciara O'Flynn and Pat Ruane respectively, on file in relation to the original development, both of which recommend that permission be refused. The third conservation report prepared, by Ashleigh Murray, in respect of the RFI Response recommends that permission be granted.

Ciara O'Flynn's report (dated 26th May 2021) highlights that the Bottling Plant was surveyed and assessed as part of a systematic study of the 20th century building stock of the city centre. Having considered the preliminary assessment of the structure and being informed by its findings, Ms O'Flynn advises that the building is of significance and recommends that it is placed on the RPS. She highlights that the building is listed on the NIAH and is described as an excellent example of this type of structure. Ms O'Flynn states that the proposal (originally submitted to the Local Authority) would be contrary to the objectives and policies of the Development Plan that encourages development to respect the landscape character and built and natural heritage, and recommends permission be refused.

Similarly, Mr Ruane states in his report dated 28th May 2021 that the Applicant failed to properly assess the significance of the place, in particular its built heritage and landscape setting, and that the proposal will have a very negative direct impact on architectural heritage and will impede the realisation of the full potential of the redevelopment of the Distillery site.

In respect of the RFI Response, Ashleigh Murray (Conservation Officer) states she did not agree with the general assessment of the Applicant's Heritage Significance Report, which suggests that the Bottling Plant building is not significant enough to deem it worthy of inclusion on the record of Protected Structures. She considers that the

Bottling Plant building is of regional architectural and historical significance and notes Dr Tom Spalding's description of the building as being unusually design for its time. Notwithstanding this, Ms Murray had no objection to the proposed development (submitted at RFI stage to the Local Authority), subject to the attachment of conditions, as the revised design includes the "*retention of a meaningful portion of the original bottling plant and this is very much welcomed*". She recommends that the entry stairs to the walkway be retained and that the front railings be refurbished and kept in situ in their design location. The Officer states "*the proposed through-way opening on the south façade is disruptive to the front façade, particularly as there is a more comfortable location for this to the west, in the existing large open of the loading bay*". She accepted that the existing aluminium windows can be replaced provided that they are preplaced with like-for-like materials and detailing especially with regard to pane size. She noted the need for concrete specialists and recommended that all specifications and methodologies should be discussed with the Conservation Officer prior to works commencing. She recommended three conditions be attached requiring details to be agreed with the Planning Authority prior to the commencement of development (see Condition Nos. 4, 5 and 6 attached to the Notification of Decision to Grant).

City Architect (21st May 2021 and 15th March 2022): In his first report, the City Architect recommended reconfiguring the proposal to acknowledge the existing Bottling Plant building. In respect of the RFI Response, the City Architect stated that the proposed building is an elegant example of contemporary architecture, which is very well integrated into the ground floor of the offices and canteen of the former Bottling Plant Building.

Urban Roads and Street Design (19th May 2021 and 15th March 2022): The initial report recommends that additional information be sought in relation to pedestrian access, including accessible access, and proposed additional car parking on the spine road leading to the car park. Following the submission of the RFI response, the Engineer had no objection to the proposal, subject to condition.

Archaeology (26th May 2021 and 15th March 2022): Initially recommended that a building assessment of the Bottling Plant be prepared. Following the submission of the RFI response, the Archaeologist had no objection to the proposal, subject to condition.

Heritage (25th May 2021 and 15th March 2022): Initial concerns raised in relation to the proximity of the development to the river, impact on trees, surveys periods and questions the justification for a new bridge. Following the submission of the RFI response, the Officer had no objection to the proposal, subject to condition.

Transport and Mobility (20th May 2021 and 14th March 2022): The initial report recommends that additional information be sought in relation to the car parking status on the North Mall Campus, request that car parking be provided in accordance with the Development Plan's standard for Zone 3, confirmation on parking provision for the proposed building, and details of public lighting required. Following the submission of the RFI response, the Engineer had no objection to the proposal, subject to condition.

Water Services (11th March 2022): No objection subject to condition.

Parks - Environment Report (29th May 2021 and 11th March 2022): Originally suggested that car parking be provided underground to protect the site's sylvan character and questioned the need to remove trees along the riverbank. Satisfied with landscape proposal. Following the submission of the RFI response, the Officer had no objection to the proposal, subject to condition.

Drainage (Senior Executive Engineer) (27th May 2021 and 8th March 2022): No objection subject to condition.

Contributions (25th May 2021 and 3rd March 2022): No objection subject to condition.

Environment Report (11th May 2021 and 1st February 2022): No objection subject to condition.

Chief Fire Officer (6th July 2021): Planning application does not provide sufficient detail for an in-depth analysis. Concerns raised regarding the protection of the upper storeys from the effects of heat and smoke in the event of a fire at lower levels, and the of the labs is not clear.

4.3. Prescribed Bodies

An Taisce (26th May 2021): Concerns regarding the demolition of the Bottling Plant as a rare example of modernist-style industrial architecture, and the excessive scale and visual impact of the proposed new building. Minimum disruption during the construction and retention of the natural setting along the river is recommended.

Department of Tourism, Culture, Arts, Gaeltacht, Sports and Media (14th May 2021): Proposed demolition of the existing building is not supported having regard to its architectural and cultural heritage significance, the undermining of the significance of industrial archaeology, the impact of the scale of the proposed development on the historic river's amenity, mature setting and views towards the proposed facility from the city, and the loss of embodied energy. The Department recommends that the reuse of the former Bottling Plant building should be reconsidered as part of the diversity of uses within the site and that key aspects of the building are worthy of incorporation into a new facility where the project approach is revaluated.

Department of Housing, Local Government, and Heritage (11th May 2021): Recommends redesigning the proposal to incorporate the existing building with an added intervention to accommodate the needs of the research facility.

TII (6th May 2021 and 8th February 2022): No objection subject to condition.

IAA (12th May 2021 and 2nd February 2022): No objection subject to condition.

Irish Water (31st May 2021): No objection subject to condition.

Inland Fisheries Ireland (11th May 2021): Request Irish Water to confirm if there is sufficient capacity to dispose of all effluent from the development to the public sewer.

4.4. Third Party Observations

A number of third-party observations were made to the Local Authority in respect of the proposed development, one of which is accompanied with approximately 1,800 signatures from an online petition to protect the Bottling Plant building. One further observation was made subsequent to the Statutory Notices being readvertised at RFI stage. The key points from the Observations can be summarised as follows:

- Expansion of UCC's facilities and TNI is welcomed in principle.
- Reusing and adaption of the Bottling Plant building is required.
- The Bottling Plant is listed on the NIAH and the focus of many theses.
- Bottling Plant should be designated a Protected Structure. It is considered a Proposed Protected Structure until the Local Authority confirm otherwise.

- The Bottling Plant was designed by an important Cork architect, Frank Murphy. The building is his largest commission and one of his finest examples of work.
- Proposal is contrary to Development Plan policy to respect the landscape character, built and natural heritage of sites and the amenities of adjoining uses.
- Loss of a culturally significant building.
- Carbon emissions resulting from the demolition of the existing building and construction of a new building. Reuse provides a more environmentally sustainable solution than demolition.
- Inadequate justification for demolition and contrary to UCC's green campus policy.
- Negative biodiversity impact.
- The level of mitigation provided for each of the various areas of concern is worrying, especially in relation to views, landscape and built heritage.
- The proposal will have a negative impact on the skyline and protected views in the surrounding area.
- The proposal is excessive and overbearing.
- Alternative uses for cultural facilities or educational facilities with a mix of other uses could be catered for within the existing development.
- All trees on site should be maintained.
- The proposal may be detrimental to the existing scenic green route.
- Proposal will result in significant increase in road traffic.
- Noise impacts
- Overlooking

5.0 Planning History

5.1. **CCC Reg. Ref. 1737503:** Permission granted subject to condition in October 2017 for alterations to existing site entrance comprising: 1) demolition of existing security wall and hut; 2) demolition of part of existing wall to provide wall ope with access gate for

pedestrian access; and 3) replacement of existing security gate with wider access gate.

5.2. **CCC Reg. Ref. TP19/38327:** Permission granted subject to condition in July 2019 for a single storey extension consisting of offices and a store, and alterations to existing flood wall to east elevation of existing Rotunda to UCC's School of Biological Earth and Environmental Sciences.

5.3. **CCC Reg. Ref. 2140116**: Planning application withdrawn in June 2021 for a pedestrian and cycle bridge at Lee Maltings, Dyke Parade, Cork.

5.4. **ABP Ref: 303247 - Lower Lee Flood Relief Scheme**: The Board granted permission in June 2020 for the LLFRS which comprises a combination of flood walls, embankments, regrading of road and pavement sections, bridge construction, flow control measures and pen stock construction, culverting, and other minor works.

The flood relief works for the North Mall Distillery site will consist of a number of measures including:

• Flood defence walls

• Sections of demountable flood defence (various types)

• Regrading of ground levels

• Flood defence embankment

• Surcharge bridge culvert (to the Mill Basin - Alderman Reilly's Bridge).

The development has since been judicially reviewed to the High Court. The Applicant has confirmed that the elements of that development that relate to the subject site, will remain unaffected by the proposal.

6.0 Policy Context

6.1. National Policy

6.1.1. National Planning Framework

Section 3.4 (Southern Region) - The biggest challenge for this region in the period to 2040 will be to position its cities as more significantly scaled, while also more compact and attractive, acting as metropolitan drivers for the region as a whole and as effective complements to the economic strength of Dublin.

National Policy Objective 5 – develop cities and towns of sufficient scale and quality to compete internationally and to be drivers of national and regional growth, investment and prosperity.

National Policy Objective 11 – in meeting urban development requirements, there will be a presumption in favour of developments that can encourage more people and generate more jobs and activity within existing cities, towns and villages, subject to development meeting appropriate planning standards and achieving targeted growth.

6.1.2. National Development Plan 2018-2027

The NDP includes for the upgrade and expansion of Tyndall National Institute to respond to evolving ICT-related technology opportunities.

6.1.3. Section 28 Ministerial Guidelines

The following list of section 28 Ministerial Guidelines are considered to be relevant to the proposed development. Specific policies and objectives are referenced within the assessment where appropriate.

- Architectural Heritage Protection – Guidelines for Planning Authorities (2011).
- Urban Development and Building Heights – Guidelines for Planning Authorities (2018).
- The Planning System and Flood Risk Management (2009).
- Design Manual for Urban Roads and Streets (2019).

6.2. Regional Policy

Regional Spatial and Economic Strategy for the Southern Region

Cork Metropolitan Area Strategic Plan (MASP) Policy Objective 1

a. To strengthen the role of the Cork Metropolitan Area as an international location of scale, a complement to Dublin and a primary driver of economic and population growth in the Southern Region.

Cork MASP Policy Objective 2

Seek the delivery of the following, subject to the required appraisal, planning and environmental assessment processes:

a. To strengthen the consolidation and regeneration of Cork City Centre to drive its role as a vibrant living, retailing and working city, the economic, social and cultural heart of the Cork Metropolitan Area and Region.

f. Seek to achieve High Quality Design to reflect a high-quality architectural building stock in all urban quarters.

k. Support investment in strategic national innovation enabling assets within the city, specifically the expansion of Tyndall National Institute to the North Mall and the development of UCC's new Cork University Business School in the city centre.

6.3. **Local Policy**

6.3.1. **Cork City Development Plan 2022-2028**

6.3.2. Since the Local Authority issued a Notification of Decision to Grant Permission for the proposed development, a new development plan has been prepared and adopted for the City. The relevant development plan to this assessment is the Cork City Development Plan 2022-2028, which was adopted on 27th June 2022 and came into effect on 8th August 2022. There are a number of differences between the former and current Development Plan that are of relevance to the site. For example, the site was partially zoned 'Residential Local Services and Institutional Uses' in the former plan but is now zoned Institutions and Community in the current Plan. The balance of the site remains zoned Landscape Preservation Zones**.** In addition, the new Development Plan includes a building height and density spatial strategy, which outlines the prevailing height and target heights for various areas of the City. The policy context set out below is in relation to the current Development Plan (2022-2028). For ease of reference see Image 3 attached with this Report for an extract from Map 3 Central –

Suburbs of the Cork City Development Plan 2022-2028, which illustrates the objectives applicable to the site.

Tyndall National Institute

The subject site forms part of the Cork Smart Gateway whereby where traditional services are improved or made more efficient by the application of new innovations or digital technologies for the benefit of citizens and businesses.

Objective 3.25c and Objective 7.3d aim to support investment in strategic national innovation enabling assets within the city, specifically the expansion of Tyndall National Institute to the North Mall.

Land Use Zoning

The site has two applicable land use zoning objectives:

- **ZO 13 Institutions and Community** which has the objective *To provide for and protect institutional and community uses*. The development Plan highlights that this zone *generally applies to large educational, healthcare and other institutions and community facilities. These are generally locally or nationally important, long-established uses with a variety of characteristics and built forms, and they play an important role in providing key strategic services for communities across the City and often much further afield.*
- **ZO 17 Landscape Preservation Zones** which has the objective *To preserve and enhance the special landscape and visual character of Landscape Preservation Zones*.

  The Sunday's Well/North Mall Distillery Landscape Preservation Zone has three site specific objectives:

  - To create a publicly accessible riverside open space with significant ecological value as part of campus development;
  - To provide an additional public pedestrian bridge to access the development site at the eastern end of the distillery site from the Lee Maltings site;
  - To provide an additional public route along through the centre of the site along the Mill Stream.

6.3.3. Section 6.20 of the Development Plan states that the objective of LPZs is to preserve and enhance the landscape character and assets of the sites. There is a presumption against development within LPZs, with development only open for consideration where it achieves the site-specific objectives set out in Tables 6.6-6.10. In exceptional circumstances, there may be limited scope for development to enable existing occupiers to adapt existing buildings to their evolving requirements, providing that the form or nature of development is compatible with the landscape character of the area. This might include a change of use or minor extensions. Section 6.22 states further that development will be appropriate only where it results in a neutral / positive impact on the landscape.

A designated **Walkway** encircles the subject site.

Landscape Character

The site is also located within an **Area of High Landscape Value**. Section 6.23 of the Development Plan state that *new development in AHLV must respect the character and the primacy and dominance of the landscape. In particular, development on topographical assets such as steep sided slopes, escarpments and ridges is considered to be inappropriate due to the detrimental impact of site and excavation works on the landscape. There will be a presumption against development where it causes significant harm or injury to the intrinsic character of the Area of High Landscape Value.*

- Objective 6.9: Landscape
- Objective 6.10: Landscape and Development
- Objective 6.12: Landscape Preservation Zones
- Objective 6.13: Areas of High Landscape Value:

  To conserve and enhance the character and visual amenity of Areas of High Landscape Value (AHLV) through the appropriate management of development, in order to retain the existing characteristics of the landscape, and its primary landscape assets. Development will be considered only where it safeguards to the value and sensitivity of the particular landscape. There will be a presumption against development where it causes significant harm or

injury to the intrinsic character of the Area of High Landscape Value and its primary landscape assets, the visual amenity of the landscape; protected views; breaks the existing ridge silhouette; the character and setting of buildings, structures and landmarks; and the ecological and habitat value of the landscape.

- Objective 6.15: Development on Scenic Routes
- Objective 6.16: Public Rights of Way
- Objective 6.26: Alien Invasive Species

Sections 6.25 to 6.33 of the Development Plan (View Management Framework) addresses views and prospects (see Map 03 included in Chapter C of Volume II of the Development Plan). Table 2 of Volume III of the Development Plan lists the Strategic Landmark Buildings. St. Vincent's on Sunday's Well Road is listed as such a building with linear views of Bachelor's Quay, Mardyke (Cricket Ground), and Mardyke Bridge.

Surrounding Lands

The lands located north of the Landscape Preservation Zone are zoned ZO 01, Sustainable Residential Neighbourhoods. These lands are also located within the Area of High Landscape Value.

The Northern Channel of the River Lee that is located south of the site, is partially designated an Architectural Conservation Area and Area of High Landscape Value. The immediate lands on the southern side of the river are zoned ZO 01, Sustainable Residential Neighbourhoods and ZO 05, City Centre.

Architectural Heritage and Architectural Conservation Area

Neither the Bottling Plant nor Cooperage building are designated Protected Structures. The Cooperage Building is listed on the NIAH's website (Reg. No. 20500776). The Local Authority's Conservation Officer (dated 28th May 2021) and third-party observations made to the Planning Authority in respect of the application, highlight that while the Bottling Plant is not on the NIAH's online mapping it is referenced (20500774) in the NIAH's publication "*An Introduction to the Architectural Heritage of Cork City*".

- Objective 8.17 (Conservation of the City's Built Heritage)

- Objective 8.18 (Reuse & Refurbishment of Historic Buildings)

Chapter 11 Placemaking and Managing Development outlines the development management standards applicable to the proposal.

A very small pocket in the north-eastern corner of the site essentially comprising the entrance to the campus is located in North Mall/The Marsh ACA.

Building Height

The Development Plan has a building height and density spatial strategy (based on the Cork City Urban Density, Building Height and Tall Building Study) which outlines the prevailing height and target height for different areas of the City. The subject site is located in the North West Inner Urban Suburb, which is stated to have a prevailing height of 2-2.5 No. storeys and a target height of 2-4 No. storeys.

6.4. Natural Heritage Designations

Cork Harbour SPA (site code 004030) c. 5.6km as-the-crow-flies at closest point

Great Island Channel (site code 001058) c.9.7km as-the-crow-flies at closest point

7.0 The Appeal

7.1. Grounds of Appeal

7.1.1. A Third-Party Appeal from Patrick Crowley (Sundays Well Road, Cork City, T23 YD0V) was submitted to the Board on 14th April 2022 opposing the Local Authority's decision. The grounds of appeal can be summarised as follows:

- No objection to the principle of the proposed development.
- The site is delineated as an Area of High Landscape Value and is immediately encircled on the riverside by a Landscape Preservation Zone and an Amenity Route that is treasured by local inhabitants.
- It is difficult to credibly argue that the development proposed by the Application will not have an adverse impact on the intrinsic character and visual amenity of the landscape in the area. The proposed building will tower over other buildings in the vicinity, contravening Objective 13.21 of the Development Plan.

- Views 1, 2, 4, 12 and 13 of the photomontages submitted with the Application illustrate the manner in which the domineering scale of the proposed development will irreversibly harm the character of the local landscape, greatly overshadowing the adjacent Amenity Route/Landscape Preservation Zone and NIAH protected Cooperage Building, whilst obstructing protected and locally cherished views. Views 4 and 13 illustrate how the proposal will obscure the view of St. FinBarre's Cathedral from Sunday's Well Road.
- The RFI proposal is shoe-horned into the narrow eastern end of the site, where it will unduly encroach upon the riverside Amenity Route/Landscape Preservation Zone, overshadow the adjacent NIAH-protected Cooperage Building, dominate the western vista over the river from Bachelor's Quay/North Mall (View 2), and intrude upon the peaceful natural landscape that is intrinsic to the character of the site.

7.2. Applicant's Response

7.2.1. A First-Party Response in respect of the Third-Party Appeal was received by the Board on 13th May 2022. The key points can be summarised as follows:

- An overview of the site's planning policy context.
- An overview of the North Mall Masterplan.
- The proposal will enhance the character and sustainability of the site while allowing for the appropriate development of future buildings.
- The building has been located to set back from the lined riverbank, creating the opportunity to add a major publicly accessible open space adjoining the River Walk which will enhance rather than detract from the overall biodiversity of the area.
- The design aligns with the retained and re-purposed elements of the Bottling Plant Building, bringing new life to what has been a derelict structure since 2007 and meaningfully integrating the old with the new. Extending the new building to the east of the gable wall of the Bottling Plant allows Tyndall to engage with the public at ground floor level.

- In response to the RFI, the design was significantly altered to address concerns of height and scale: (i) The building was moved in a westerly and northerly direction to lessen its impact on the riverbank and riparian landscape. (ii)The building was reduced in height at its western edge from seven to six storeys. (iii) The tall plantroom towers were removed, and all plant relocated into a basement plantroom. (iv) The feature architectural elements of the Bottling Plant were meaningfully integrated into the design of the new building resulting in a more horizontal architectural expression as opposed to a vertical one.
- In relation to View 1, the Applicant states that the proposal will add a new element and character to the view; however, the riverside character of the view remains largely unchanged as the network of riverside vegetation still takes visual prominence within this view.
- In relation to View 2, the Applicant states that the proposal will alter the edge of city riverside character, extending the sense of city centre development to the north of the River Lee channel at this point and altering the 'Urban Sylvan' and 'Estuarine/Riverine' landscape character. However, the river and its associated planting still take visual prominence within this view.
- In relation to View 4, the Applicant states that the Proposed Development will generate a recognisable change to the existing view from Sunday's Well Road. While the proposal will create a noticeable change in the view, it is noted that the overall style, scale, and massing will be in keeping with more contemporary developments located within the wider city.
- In relation to View 12, the Applicant states that the scale and height of the new building sits comfortably within this inner city setting with its four storey eastern façade similar to the existing six storey Tyndall National Institute and five storey Mercy Hospital Buildings across the river, while the western edge sits comfortably in proximity to the tall escarpment along Sunday’s Well Road.
- In relation to View 13, the Applicant states that while the proposal will create a noticeable change in this view, it is noted that the overall style, scale and masing will be in keeping with more contemporary developments located within the wider city.

7.3. Planning Authority Response

No response on file from the Local Authority.

7.4. Observations

None.

7.5. Further Responses

The Appellant made a further response to the Board on 3rd June 2022 in respect of the First-Party Response. The points can be summarised as follows:

- Re-iterate support, in principle, for the proposed development and recognize its local, national and international significance.
- Achieving the objectives of the NPF should never be used as a justification for developments that harm the visual and recreational amenity of cherished inner-city sites.
- Proposal unduly encroaches on the beautiful eastern beginning of the walkway, where the arboreal canopy is most dense at the curve of the river. it is imperative that amenities like this are preserved.
- It is misleading to compare the six storey Tyndall building with the proposal's four storey to give the impression that the latter is smaller. However, the four storeys exceed the height of the six storey building.
- It is utterly irrelevant whether the scale of the proposed development is in keeping with other contemporary developments within the city. The proposed development is located on an extremely sensitive Area of High Landscape Value. The only relevant question, therefore, is whether the scale of the proposed development is appropriate for the site in question.
- The failure by An Taisce to lodge a further submission following the re-design of the proposed development does not invalidate An Taisce's initial submission.
- The proposed development will completely overshadow the Cooperage Building in a manner disrespectful of its value as an NIAH protected heritage asset.

- Further stepping, by reducing the eastern part of the four storey portion of the building to three storeys, would enhance the integration of the proposed development into the surrounding landscape.

8.0 **Assessment**

8.1.1. Having inspected the site and examined the application details and all other documentation on file, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in this appeal are as follows:

- Principle of the Development,
- Land Use Zoning,
- Demolition of Bottling Plant Building,
- Building Height (New Issue), and
- Landscape and Visual Impact.

8.1.2. My assessment considers the revised RFI scheme as submitted to the Local Authority on 13th January 2022. As such, the assessment is based on the revised documentation submitted as part of the RFI Response, unless otherwise stated.

8.2. **Principle of the Development**

8.2.1. The proposed development includes for the demolition of a large proportion (i.e. the former processing hall) of the Bottling Plant building and the construction of a new part 4/5/6 storey research centre. The expansion of TNI is supported in national, regional and local planning policy. I note that the Appellant has no objection to the principle of the development. Having regard to the foregoing, I am satisfied that the principle of the development is acceptable.

8.3. **Land Use Zoning**

8.3.1. In terms of land use zoning, the majority of the subject site is zoned Institutions and Community (ZO 13) with an objective *To provide for and protect institutional and community uses.* (See Image 3 attached to this report for an extract of Map 3 Central – Suburbs of the Development Plan which illustrates the site's zoning). I consider that the proposed use, a research centre with ancillary cafe, is acceptable in principle with this objective. The balance of the site is zoned Landscape Preservation Zones (ZO

17) with the aim *To preserve and enhance the special landscape and visual character of Landscape Preservation Zones.* Whilst I note that this objective has a presumption against development, development is open for consideration where it achieves the site-specific objectives set out in Tables 6.6-6.10. The Sunday's Well/North Mall Distillery Landscape Preservation Zone has three site specific objectives:

- To create a publicly accessible riverside open space with significant ecological value as part of campus development;
- To provide an additional public pedestrian bridge to access the development site at the eastern end of the distillery site from the Lee Maltings site;
- To provide an additional public route along through the centre of the site along the Mill Stream.

8.3.2. The proposal facilitates these objectives, where applicable; access is maintained along the river banks, the campus would be enhanced with landscaping, and a north-south pedestrian route is provided through the centre of the site, west of the proposed building. The scheme does not include a public pedestrian bridge to the Lee Maltings site. Furthermore, in my view the provision of the publicly accessible café would benefit the area making it a more desirable area for pedestrians and cyclists and collectively would complement the landscape character.

8.3.3. The Applicant has not provided an overlay of the proposed scheme and the site's zoning objectives, however I estimate that the majority of the building, with the exception of the north-western corner and the bike store, is located on the Institutions and Community zoning objective. Having regard to the scale and architectural design of the bike store with its sedum roof, I do not consider that it would negatively impact the Landscape Preservation Zone.

8.3.4. In conclusion, the proposal is consistent with national and regional policy to expand the TNI's facilities and for compact urban development. However, whilst the redevelopment of the site can be seen to accord with planning policies with respect to the principle of the proposed use, the landscape sensitivity of the site will be a material factor in the assessment of the proposal. This matter is discussed in detail below.

8.4. Demolition of Bottling Plant Building

8.4.1. The Local Authority and third parties had significant concerns in respect of the original proposal which included for the complete demolition of the Bottling Plant building. The Department of Tourism, Culture, Arts, Gaeltacht, Sports and Media recommended that permission be refused for the proposed development. However, following the submission of the revised RFI design proposal, I highlight that there was only one observation submitted to the Local Authority.

8.4.2. I am satisfied that the revised proposal retains the significant distinctive architectural features of the Building thereby ensuring that the site's heritage is protected, whilst also facilitating the expansion of the TNI's facilities in accordance with planning policy. The Applicant highlights that the proposal will allow for a doubling in size of the existing facilities. A detailed historic building survey /record of the Bottling Plant would be compiled prior to demolition and would include a comprehensive written, drawn and photographic record of the structure. It is also proposed to compile an oral history record by way of interviews with former employees of Irish Distillers Ltd who had worked at the bottling plant in order to document its industrial and social significance. I note that the Local Authority did not designate the Building or the neighbouring Cooperage Building a Protected Structure in the adoption of the new Development Plan.

8.4.3. In conclusion, on balance I consider the proposed development is acceptable in terms of the cultural and built heritage of the site.

8.5. Building Height – New Issue

8.5.1. The Local Authority considered that the proposed building height (part 4/5/6 storey) was acceptable, however the development was not assessed in respect of the current Development Plan's building height and density spatial strategy. As outlined above, the Strategy highlights that the prevailing height in the area (North West – 7) is 2-2.5 No. storeys and the target height is 2-4 No. storeys (see Map 01.02,03 City Centre/Docklands attached in Chapter B of Volume 2 of the Development Plan). Neither the Development Plan nor the supporting study provide a definition for 'target'. Section 11.32 of the Development Plan states: *Prevailing heights in any given area determines what is considered 'tall' in different parts of Cork City. Analysis on prevailing heights has been carried out at* ***sub-area level*** *and at neighbourhood level,*

so that prevailing heights represent a more accurate description of each place. Figure 11.2 Prevailing heights sets out the prevailing heights in each of Cork's neighbourhoods. However, the Cork City Urban Density, Building Height and Tall Building Study 2021 states that "***Generally**, the **target building height ranges** outlined in the strategy seeks to allow buildings **one storey taller than prevailing heights** across the range of environments in the zone. This is to encourage the best use of land whilst respecting local character."* (Bold: my emphasis.)

8.5.2. The Development Plan provides two definitions for a "tall building":

- Section 11.45: '*A **tall building** is defined as a building that is **equal to or more than twice the height of the prevailing building height in a specific locality**'*. (Bold: my emphasis.)
- Section 11.46: *Within Cork City only **buildings above 18m** / 6 residential storeys **are considered 'tall buildings'**, and **only then when they are significantly higher than those around them**.* (Bold: my emphasis.)

8.5.3. Whilst the Development Plan does not provide a definition for "specific locality", in my opinion, it is reasonable to interpret the term to refer to the various areas or sub-area levels referenced in Table 11.1. As stated above, the subject site is located within area 7 (North West) of the Inner Urban Suburbs. The site is located on the edge of this area (North West). The area to the east of the site is located within the "City Fringe/Corridor" which is stated to have a prevailing height of 3-6 storeys and a target height of 5-7 storeys.

8.5.4. Section 11.51 states that '***Tall buildings should only be developed in suitable locations identified in the development plan**. Tall building proposals outside of the locations specified are **not generally considered to be appropriate as they would likely conflict with the overall building height strategy for Cork'***. (Bold: my emphasis.) The subject site is not identified as such a location in the Development Plan for a tall building. Sections 11.53 to 11.60 outline the impacts to be considered in the assessment of tall buildings: Visual Impact, Functional Impact, Environmental Impact and Impacts on Microclimate, Cumulative Impacts with other Tall Buildings, Public Access, Application Process, and Development Guidance. These impacts are considered in the following sections.

8.5.5. I refer the Board to the Urban Development and Building Heights – Guidelines for Planning Authorities which notes that statutory development plans have tended to be overtly restricted in terms of maximum building heights. The Guidelines note that increasing building height is a significant component to making the optimum use of the capacity of sites in urban locations where transport, employment and services are available such as the subject site. Specific Planning Policy Requirements (SPPRs) of the Building Height Guidelines take precedence over any conflicting policies, and / or objectives of a Development Plan. Appendix 1 of the Development Plan (Statement of Conformity: Section 28 Ministerial Guidelines) highlights that the Development Plan has implemented the policies and objectives of Ministerial Guidelines issued under section 28 of the Planning and Development Act 2000, as amended including the Building Height Guidelines. Furthermore, I understand that the OPR in reviewing the new Development Plan did not raise the building height strategy including the provision of target heights for various areas, as an issue or conflict with the Section 28 Guidelines.

8.5.6. Criteria to be applied in considering applications taller than prevailing building heights are identified in section 3.2 and SPPR 3 provides that where those criteria are met, permission may be granted even in contravention of the development plan. Whilst the Applicant has not included analysis specifying how the proposal relates to the development management criteria, I note the following:

Broad Principles
Assist in securing NPF objectives of focusing development in key urban centres, fulfilling targets related to brownfield, infill development and effectively supporting the National Strategic Objective to deliver compact growth in our urban centres?
The proposed development is consistent with the NPF in developing a brownfield site in proximity to the city centre for high employment use.
Is the proposal in line with the development plan which plan has taken clear account of the requirements set out in Chapter 2 of these guidelines?
The proposed development is not in line with the Development Plan's building height and density spatial strategy, and as such, the proposal does not comply with this principle.
Where the relevant development plan pre-dates these guidelines, can it be demonstrated that implementation of the pre-existing policies and objectives of the

relevant plan or planning scheme does not align with and support the objectives and policies of the National Planning Framework?
Non-applicable. The Building Height Guidelines were published before the enactment of the Development Plan.
Criteria
At the scale of the relevant city/town
The site is well served by public transport with high capacity, frequent service and good links to other modes of public transport.
The central location of the site ensures that it has good accessibility and access to the full range of public transport services. The site is within walking distance (<2km) of the city centre and approx. 2.6km of Kent Station. A new dedicated park and ride bus stop is to be located within the application. Future high-capacity services and connections are planned, however, these do not appear to satisfy the wording of this criteria which appears to refer to current linkages.
Development proposals incorporating increased building height, should successfully integrate into / enhance the character and public realm of the area, having regard to topography, its cultural context, setting of key landmarks, protection of key views. Such development proposals shall undertake a landscape and visual assessment, by a suitably qualified practitioner.
The proposal includes the integration of the significant distinctive architectural features of the Building thereby ensuring that the site's heritage is protected. Unique site location in that whilst the proposal is immediately abutted by the low-rise Cooperage Building, the site is located on the edge of the city centre and below the escarpment on a low-lying area next to the River. The application is accompanied by appropriate visual and landscape assessments. The proposed development will successfully integrate into the area and will not adversely impact protected views or landscape preservation zone (see Section 8.6 below).
On larger urban redevelopment sites, proposed developments should make a positive contribution to place-making, incorporating new streets and public spaces, using massing and height to achieve the required densities but with sufficient variety in scale and form to respond to the scale of adjoining developments and create visual interest in the streetscape.
The proposed development allows for a building of sufficient scale to accommodate TNI's needs whilst also integrating parts of the Bottling Plant building. It will contribute to the development of the site's character and identity. Access will be maintained to the Lee Walkway, in addition to the provision

of a new north-south pedestrian route through the centre of the site. The massing and layout of development is considered to be acceptable having regard to the site's location.
At the scale of district / neighbourhood / street
The proposal responds to its overall natural and built environment and makes a positive contribution to the urban neighbourhood and streetscape.
The application includes a detailed architectural design statement, which highlights the proposal's high-quality design. Furthermore, the application includes a landscape impact assessment and photomontages of the proposal. The proposal satisfactorily addresses the surrounding environment with the varying building levels (part 4/5/6 storey) falling in the same direction as the escarpment. The proposal appropriately respects the natural riparian and arboricultural setting.
The proposal is not monolithic and avoids long, uninterrupted walls of building in the form of slab blocks with materials / building fabric well considered.
The varying building heights and the use of material and finishes to the elevations contributes to the breaking down of the development's overall massing.
The proposal enhances the urban design context for public spaces and key thoroughfares and inland waterway/ marine frontage, thereby enabling additional height in development form to be favourably considered in terms of enhancing a sense of scale and enclosure while being in line with the requirements of the Flood Risk Management Guidelines.
Redevelopment of this brownfield site will facilitate an extension to TNI's facilities in close proximity to its main headquarters on the Lee Malting's site, whilst also respecting the character and architectural heritage importance of the site. The development responds satisfactorily to the river and adjoining streets and creates new linkages across the campus. Flood risk is adequately addressed through the design approach.
The proposal makes a positive contribution to the improvement of legibility through the site or wider urban area and integrates in a cohesive manner.
The proposal will contribute to the development of the site's character and identity and will read as an extension of the city centre's built-up area.
The proposal positively contributes to the mix of uses and / or building / dwelling typologies available in the neighbourhood.
The proposal will allow for an increase in TNI's staff up to 250 post-graduate students and 750 staff, which will benefit both UCC and the range of employment opportunities available in the city.
At the scale of the site / building

The form, massing and height of proposed developments should be carefully modulated so as to maximise access to natural daylight, ventilation and views and minimise overshadowing and loss of light.
The design and layout achieves a satisfactory level of design for this urban context.
Appropriate and reasonable regard should be taken of quantitative performance approaches to daylight provision outlined in guides like the BRE 'Site Layout Planning for Daylight and Sunlight' or BS 8206-2: 2008 – 'Lighting for Buildings
No such assessment was submitted with the application. However, there are no sensitive neighbouring properties, including residential dwellings, in close proximity to the site that would be adversely overshadowed or experience a significant loss of daylight as a result of the proposal.
Where a proposal may not be able to fully meet all the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, in respect of which the planning authority or An Bord Pleanála should apply their discretion,
No significant loss of daylight to sensitive neighbouring properties anticipated.

8.5.7. Section 3.2 also notes that Specific Assessments may be required, and I note the following in this regard:

- No assessment submitted in respect of wind micro-climate, sunlight and daylighting are provided. However, having regard to the scale of the proposal and the proximity of the site to sensitive properties, I do not consider such assessments necessary in this instance.
- The application is accompanied by an EIAR and a Natura Impact Assessment.
- The site does not fall within the safety zones associated with Cork Airport and the submission of the IAA does not raise a specific objection to the proposed development.
- There are no submissions on the file which suggest that interference with telecommunication channels are likely.

I consider that the criteria set out in Sections 3.1 and 3.2 of the Guidelines have been appropriately incorporated into the development proposal, with the exception of the proposal not being in line with the Development Plan's building height and density spatial strategy.

8.5.8. Notwithstanding the new local building height policy context, I consider the proposed part 4/5/6 storey building to be acceptable at this location. I consider the site's location to be unique in that whilst the proposal is immediately abutted by the low-rise Cooperage Building, the site is located on the edge of the city centre and below the escarpment on a low-lying area next to the River. Having regard to the height of the buildings on the opposite side of the River, I do not consider that the proposed height would significantly deviate from the building height in this specific area, notwithstanding that the Development Plan states that the prevailing height in the area is 2-2.5 storeys. In my view, the stated prevailing height is generally more applicable to the more low-density lands north of Sunday's Well Road. In particular, I refer the Board to Cross-section 1 on Dwg. TNI2-STW-04-ZZ-DR-A-02513, Rev. P3, which illustrates the proposed six storey element of the building in the context of the surrounding area. In my opinion, the proposed height is not excessive or incongruous. In my view, the elevations' horizontal emphasis and use of building materials, alleviates the bulk and scale of the building. Having regard to the height, scale and massing of the proposal in the context of the surrounding environment, the proposed development would not have any negative micro-climate impacts on the area. The proposal would not negatively impact on aviation, navigation or telecommunications having regard to its height and design. I am satisfied that the proposed height would not have an adverse visual impact on the area, and that the proposed development would read as an extension to the city centre and would integrate positively into Cork's cityscape. In my opinion, it would have a positive relationship with the street and public realm, whilst also allowing for the redevelopment of a brownfield urban site in close proximity to public transport. Furthermore, I reiterate that national and regional planning policy seeks to develop brownfield sites in urban areas at greater densities.

8.5.9. However, notwithstanding my considerations regarding how the proposed research centre's height would be acceptable having regard to the site's context, the proposed height is not consistent with the current Development Plan's building height and density spatial strategy, acknowledging the prescribed prevailing heights and target heights outlined in the Plan. By definition (from the Development Plan), the proposed development is a "tall building", however the subject site is not identified as a location for such buildings. I reiterate that the Appellant has objected against the proposed building height, albeit under the previous Development Plan, which did not contain a

building height and density spatial strategy. Notwithstanding that SPPR3 facilitates the Board in permitting developments that conflict with the relevant development plan in relation to building height, it is important to note that the more recently enacted Development Plan states that regard has been had to the Building Height Guidelines and that the Local Authority's strategy, which is very detailed and has been subject to public consultation, has clearly identified the prevailing heights and envisaged target heights for the area, which the proposal is inconsistent with. As such, I recommend that permission is refused on the basis of the building's height being inconsistent with the Development Plan's building height and density spatial strategy. As outlined above, the Local Authority did not assess the proposal in the context of the current Development Plan and considered the proposed building height to be acceptable. As such, the Board may wish to seek comments from the relevant parties prior to determining the case.

Conclusion

8.5.10. In summary, in my opinion, the proposed building height at part 4/5/6 storeys is acceptable at this location and represents a sustainable use of the lands. However, from my interpretation of the new Development Plan such a building would be considered a "tall building" and the subject site is not identified as a location for such buildings. Therefore, having regard to this interpretation, the proposed development would be inconsistent with what is envisaged in the Development Plan's building height and density spatial strategy and on this basis solely, I recommend that permission is refused. As the relevant parties have not commented on the proposal in the context of the new Development Plan and in particular the building height and density spatial strategy, the Board may wish to seek their views prior to determining the case.

8.6. **Landscape and Visual Impact**

The crux of this appeal relates to the landscape and visual impact of the proposed development on the surrounding environment. Objective 13.21 of the Development Plan (2015-2021) that is referenced by the Appellant, is not contained in the current Development Plan (2022-2028). However, the site is afforded protection from a number of other policy objectives. The site is situated within an Area of High Landscape Value and is partially located in a Landscape Preservation Zone in the

current Development Plan, which has three site specific objectives, as listed above. The Development Plan highlights that this area's assets are: river, tree canopy, ecology, visually important land, landmarks / natural features / cultural landscape, institutional open space, and pedestrian / cycle routes. Section 6.21 of the Development Plan states that "*development will be appropriate only where it results in a neutral / positive impact on the landscape"*.

Site Context

8.6.1. Cork City has a distinctive topography with the low-lying centre accentuated by the ridge lines to the north and south. The Cork Landscape Study 2008 explains that the landscape is formed by a unique set of natural and built elements that have evolved over time. The distinctive ridgelines and topography to the north of the city are formed by the lower ranges of the Boggeragh Mountains to the north-west and the Nagle Mountains to the north. The southern ridges belong to the Shehy Mountains, the peaks of which lie to the east of Cork County. Due to the elevated nature of the lands to the north and south panoramic views over the city are available in places. To the east the topography remains relatively flat along the River Lee. The city is generally low rise with the skyline currently characterised by church spires such as St. Finbarre's Cathedral, North Cathedral and St. Anne's Shandon Tower and the infrastructure associated with the docks, notably the R & H Hall's Silos. Many of these buildings are designated Protected Structures.

Proposed Development

8.6.2. The proposed building steps down from six floors to the west (overall height of 34.47m with the service risers protruding to 37m) to four floors at the east (overall height of 25.62m), following the line of the escarpment on Sunday's Well. The Architectural Design Statement (6th December 2021) describes how the building has three principal components: the crown, middle and plinth. The Statement explains how the crown's northern section of the building has a formal appearance with tall vertical stairs and service towers, while the southern section has protruding curves with a strongly horizontal light weight expression floating over and cantilevering forward of the line of the plinth formed with the retention of part of the Bottling Plant. The western façade continues the theme of the upper building floating over the base scale. The recessed upper floor reduces the overall massing, and the roof plant is integrated with the

building thereby reducing the scale and improving the building form. The eastern façade is curved mimicking the bend in the river and tree line curve along the Lee Walkway. A band of glazing wraps around the south and east elevation of the first floor separating the crown and middle to give a lightweight appearance to the upper floors. The retention of the southern section of the Bottling Plant dominates the plinth which has a strong horizontal and colourful expression in contrast to the upper floors. The Applicant argues that the palette of materials ensures that the proposal blends into the surrounding site both up close and from afar. The materials include *inter alia*: bronze aluminium louvres/canopy, aluminium cladding panels, dark textured concrete cladding, and glazing spandrel panels.

Viewpoints

8.6.3. 12 No. photomontages accompany the application which was increased to 15 No. following further information with a critique of each provided in the EIAR. The photomontages demonstrate the impact at all viewpoints namely close, mid and distant. I consider that the photomontages are comprehensive in their extent, are representative of the main views available towards the site. However, whilst they may be accurate with regard to a camera view, they do not accurately reflect what would be seen by the naked eye at the respective locations in that the building will appear closer than they do in the photomontages. Notwithstanding this, such photomontages are only a tool, albeit a useful tool, in assisting and informing an assessment of the potential effects of the proposal.

8.6.4. Viewpoints 1, 2, 3, 11 and 12 are within approximately 100/150m east of the site. These locations provide important waterside views for pedestrians and drivers located in close proximity to the site. The landscape is highly sensitive to change at this location. The upper section of the Bottling Plant's yellow chimney is visible in View 1 and pays important homage to the former use on the site. The mature trees and planting largely screen out the plinth/lower sections of the proposed facility, with only the upper floors of the building visible in Views 1 and 2. The upper floors are largely screened out in View 3. The proposal does not protrude through the vegetation, and the building's position setback from the banks of the river ensures that it does not dominate this landscape (View 1, 2, and 3). This contrasts with the Tyndall building which directly fronts the river (View 2 and 11). Whilst the proposal would have a significant impact, I consider that the positioning, scale, massing and fenestration

detail of the eastern section of the building complements both the built and natural landscape. Furthermore, the use of materials and curved form of the building provides a positive juxtaposition with the adjacent existing redbrick Tyndall building which has a strong vertical emphasis.

8.6.5. I note the Appellant's concerns in relation to the impact, particularly in terms of overbearing and overshadowing impacts, on the Cooperage building. In my opinion, View 12 demonstrates that the proposal would provide a positive contrast in terms of architectural styles to the adjoining single storey building. Whilst the proposal is much greater in scale, I do not consider that it has a significantly overbearing impact on the structure. While there would be a greater impact on the landscape during the winter months, I do not consider this to be negative due to the setback distance of the six storey element. This section of the building would largely not be visible during the summer months when there is foliage on the trees. The trees to the east of the Cooperage building are protected by Tree Preservation Orders. Having regard to the Cooperage Building's position in relation to the mature trees and planting, it is largely overshadowed at present. I do not consider that the proposal would create a significant increase in overshadowing to adversely impact the character of the building. Furthermore, as the proposed building is located to the north of the Lee Walkway, it would not significantly overshadow this amenity space.

8.6.6. I concur with the Applicant that while the proposal would alter the urban sylvan and estuarine/riverine landscape character of this part of the city, the river and mature trees and planting still take visual prominence, as illustrated in Viewpoints 1, 2, 3, 11 and 12. Having regard to the site's proximity to the city core, I do not consider that the impact would be particularly unexpected. Whilst the visual impact on the landscape would be significant due to the scale and massing of the building, I do not consider it to be negative but rather the proposal reads as a contemporary addition to the townscape, which responds to the surrounding natural and built environment. In my opinion, the landscape's assets are not negatively impacted when the scheme is seen from these viewpoints. The impact from the proposal on the landscape from these viewpoints is significantly reduced in comparison to the original scheme submitted to the Local Authority (see Appendix 4.5 of the EIAR, dated 30th March 2021).

8.6.7. Views 3 and 12 in the revised proposal include the section of the site that is located within the ACA. The works proposed in this area are very limited. Furthermore, having

regard to the contemporary design of the proposed building, I do not consider that it would negatively impact the ACA.

8.6.8. Viewpoints 5, 6, 7, 8, 9, 10 and 14, and 15 demonstrate that when the proposal is viewed at distances of approximately 200m and more, it is largely not visible due to the built-up nature and topography of the city, and the design (massing and building materials) of the proposed facility. In my opinion, Views 7 and 9 illustrate how the proposed development would integrate successfully into the townscape. I concur with the Applicant that these views would have a slight/moderate impact on the landscape character, but I do not consider the impact to be negative.

8.6.9. Of substantive concern is the impact from Views 4 and 13 which are taken from an elevated position, in comparison to the subject site, in an eastward direction along Sunday's Well Road. Many of the city's landmark features are visible from the area east of St. Vincent Roman Catholic Church and Seminary, including St. Finbarre's Cathedral, St. Nicholas Church, the Holy Trinity Church, and the Elysian building. Due to the change in topography, the majority of the subject site is not visible with the exception of the crown of the trees and the Bottling Plant building's yellow chimney (see Photo Nos. 23-25 attached to this Report).

8.6.10. Sunday's Well is a long narrow road that runs parallel to the subject site and reaches a high point at St. Vincent Roman Catholic Church and Seminary, where there are expansive views across the city (see Map 03 in Chapter C of Volume 2 of the Development Plan). St. Vincent Roman Catholic Church and Seminary is identified as a Strategic Landmark Building, which are defined in the Development Plan as "*those that are widely appreciated due to their visual prominence and the role that they play in helping people to orientate themselves within the City"*(section 6.30.) I note that whilst there are Strategic Viewing Locations identified in the Development Plan, Sunday's Well road is not designated as such. It was previously highlighted as a Panoramic Assessment Point in the former Development Plan (see Maps 13 and 14 in the former Development Plan that are attached as Appendix 4.3 and 4.4 in Volume III of the EIAR). The current Development Plan highlights a number of linear views of special amenity value from the Church. I note from my site visit more expansive views of the city are available on the western section of the Road, as it is more elevated than the eastern section.

8.6.11. While View 13 from the Applicant's photomontages demonstrates that the proposal would have a negative impact at that particular location, View 4 highlights that as one moves in a western direction along Sunday's Well in the direction of St. Vincent, the impact from the proposal reduces, whereby many parts of the townscape are still visible. Therefore, while View 13 demonstrates that the proposal would largely dominant the view, View 4 offers a view of the proposal in the context of the existing townscape, where a striking contrast between the older buildings (particularly in terms of massing, form and building materials) and the proposal is provided. View 4 demonstrates that there would be a clear distinction between the old and the new.

8.6.12. Due to the elevated position of Sunday's Well above the city core, the views from it are very sensitive. With the exception of substantially reducing the height of the proposed development, there are limited other mitigation measures that would preserve the existing views whilst also facilitating significant redevelopment of the subject site. (As stated earlier, the scheme was reduced in height by one storey at RFI stage.) Cities are continuously changing and evolving and Cork is no different. The development may be considered as the next stage in the evolution of the cityscape and character which, as the Development Plan notes, involves the combination and interplay of many elements including the landscape, built environment, riverscape and natural heritage. Whilst View 13 emphasises the scale and massing of the proposed building and highlights the visual impact the proposal would have from a particular location on Sunday's Well, it is not a reasonable expectation in my view that there would be no material visual change on parts of the townscape in the redevelopment of the site having regard to national guidelines and the site's proximity to the city centre and public transport. Furthermore, it is not unreasonable that the operational functionality and the feasibility of the development in terms of the quantum of research space required must be taken into consideration and that a balance between design aesthetic and functionality must be struck. Therefore, whilst the visual impact from the proposed development may be negative when viewed from View 13, I do not consider this to be the case for View 4 and on balance, I do not consider that the proposal would have an adverse impact on the landscape and visual amenity provided by this elevated position. Furthermore, it would not negatively impact on the linear views of special amenity from St. Vincent's. Having regard to the foregoing, I consider that the visual impact from Sunday's Well is acceptable.

8.6.13. Having regard to the topography, proposed building design and the separation distance between the proposed building and nearby Protected Structures, including Alderman Reilly Bridge, the Distillery House, and St. Vincent Roman Catholic Church and Seminary, I do not consider that the proposal would adversely impact the character or setting of these Structures. Likewise, due to the difference in elevation between the site and Sunday's Well Architectural Conservation Area, in my opinion, the proposal would have a negligible long-term impact on the area. As stated earlier, I do not consider the proposal would negatively impact the North Mall/The Marsh ACA.

Landscape Assets

8.6.14. At this juncture, I will assess the potential impacts on the area's assets: river, tree canopy, ecology, visually important land, landmarks / natural features / cultural landscape, institutional open space, and pedestrian / cycle routes. The proposal does not include works within the river, however mitigation measures are outlined in the EIAR and NIS (see section 9.0 and 10.0 below) to ensure water quality is protected during the construction and operation of the development.

8.6.15. The Arboricultural Assessment and Impact Report (dated 4th December 2021) attached as Appendix 2.6 to the EIAR states that 88 No. trees were assessed and categorised as follows: 12 No. 'A' types, 43 No. 'B' types, 29 No. 'C' types and 4 No 'U' types. Excluding the 'U' type, the proposal includes for the felling of 5% of the total trees within the site. The Assessment states that the loss of trees is not considered significant from an arboricultural or landscape perspective as the larger high-value trees are to be retained within the site in addition to the trees which provide a sylvan edge to the banks of the Lee Walkway. The proposed development would not impact on trees listed within the existing TPO for the site. Tree protection measures are referenced in the Assessment, however I submit that this matter be addressed in further detail with the Local Authority by way of condition, should the Board be disposed to a favourable decision. I am satisfied with the findings of the Assessment and that the proposal would not adversely impact the sylvan character of the site.

8.6.16. Chapter 9 of the EIAR addresses biodiversity, which highlights that the site is likely to be used by a range of faunal species particularly in the higher value habitats present on and in proximity to the site. Several protected faunal species including bats and other mammals, aquatic species and birds have been recorded by the ecological

surveys of the site and surrounding area. In addition, two non-native highly invasive plant species are recorded within the campus (Japanese Knotweed and Himalayan Balsam). Various mitigation measures are proposed as part of the development to protect the site and the surrounding area's biodiversity including employing a project ecologist for the duration of the construction period. As such, I am satisfied that the site's ecology would not be adversely impacted on as a result of the proposed development (see Section 9.8 below for further discussion in relation to biodiversity).

8.6.17. I have considered the public realm and landscape proposals set out in the Landscape Design Statement (Appendix 2.8) and I consider them to be a satisfactory response to the site's context and the objectives of the Landscape Preservation Zone. The development facilitates public access across the campus with a new north-south pedestrian route included. Furthermore, whilst the proposal includes for a large building on the site, a significant section of the site would remain as open space. Having regard to the location of the car parking area to the west of the proposed building and screening provided by existing and proposed landscaping, I do not consider that the car park area would negatively impact the character of the site. As discussed in the earlier sections, in my opinion, the proposal does not adversely impact on visually important land or landmarks / natural features. In my view, the retention and incorporation of some of the most significant features of the Bottling Plant building is an important recognition of the cultural importance of the site, whilst also facilitating for the site's redevelopment in line with national, regional and local planning policy.

8.6.18. In summary, in my opinion, the area's landscape assets are not adversely impacted on by the proposed development.

Conclusion

8.6.19. On balance, I consider that a pragmatic approach has been adopted by the Applicant that seeks to retain the most distinctive architectural features of the Bottling Plant building whilst also providing for an expansion of the TNI in accordance with national, regional and local policy, without negatively impacting on the Landscape Preservation Area. Whilst the Development Plan states that there is a presumption against development within LPZs, it also states that development would be open for consideration where it achieves the site-specific objectives. As stated above, the

character area's objectives are achieved, where relevant. Furthermore, in my view, the landscape area's assets would not be adversely impacted upon by the proposal. Section 6.22 states further that development would be appropriate only where it results in a neutral / positive impact on the landscape. Whilst such an assessment is subjective to a degree, I consider that the proposed development would have a long-term neutral impact on the City's landscape. As such, I do not consider that the proposal contravenes the site's objectives or adversely impacts the amenity of the area. Furthermore, the proposal is consistent with national policy for compact urban growth. Having regard to the foregoing, I do not recommend that permission is refused based on the proposal's impact on the landscape character.

8.7. Planning Assessment Conclusion

8.7.1. In conclusion, I am satisfied that the principle of the development is appropriate in land use zoning terms, and I do not consider that the proposal would adversely impact on the landscape or visual amenity of the city. Subject to condition, I consider that the demolition of the Bottling Plant's processing hall and the integration of the remaining building into the proposal to be acceptable. However, in my opinion, the proposal is inconsistent with the Development Plan's building height and density spatial strategy and on this basis solely, I recommend that permission is refused.

9.0 Environmental Impact Assessment

9.1.1. This section of the report comprises an environmental impact assessment of the proposed development. I recommend that this section be read in conjunction with the planning assessment above.

9.1.2. Both the 2014 amended EIA Directive (Directive 2014/52/EU) and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 are applicable.

9.1.3. In terms of the classes of development in Schedule 5 of the Planning and Development Regulations 2001, as amended, for which an EIAR is required, the site at c.3.17 hectares is below the 10 hectare threshold for a built up area urban development as set out in Class 10 (b). Given the characteristics, and location of the proposed development, the Applicant waived EIA Screening in accordance with the criteria set

out in Schedule 7 of the Planning and Development Regulations, and voluntarily undertook the preparation of a full EIAR.

9.1.4. An EIAR was submitted with the application and was revised in response to the request for further information.

Content and Structure of EIAR

9.1.5. As stated in Section 8.0 above, my assessment considers the revised RFI scheme as submitted to the Local Authority on 13th January 2022. As such, the assessment is based on the revised documentation submitted as part of the RFI Response, unless otherwise stated.

9.1.6. The EIAR as amended consists of three volumes, grouped as follows:

- Volume I: Non-Technical Summary
- Volume II: Main Environmental Assessment Report
- Volume III: Appendices to the Main Environmental Assessment Report

9.1.7. It is submitted by the Applicant that the EIAR has been prepared in accordance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 that came into effect on 1st September 2018, and which the Board will be aware, transposed Directive 2014/52/EU into Irish planning law. As is required under Article 3(1) of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU, the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape and it equally considers the interaction between the factors referred to in points (a) to (d).

9.1.8. The EIAR (and NIS) were both revised and updated as part of the RFI Response, however Chapter 2 (Project Description) in Volume II (the main document) was not included as part of the revised EIAR. Chapter 2 (Project Description) of Volume III (appendices) includes a series of drawings, a number of which relate to the revised RFI proposal. Whilst there is no Project Description chapter for the revised scheme, the readvertised statutory notices submitted as part of the RFI Response do provide

a description of the revised proposal. Furthermore, additional supplementary documentation as outlined in Section 3.4.2 above was included with the Response and provides detailed information on the revised proposal.

9.1.9. Chapter 2 (Project Description) of Volume II of the original EIAR includes the Construction Management Plan, Construction Environmental Management Plan, and Construction Methodology. While the revised EIAR does not include these plans, the various discipline chapters refer to them. Having reviewed the Plans in the original EIAR, I consider them to be applicable to the revised scheme, with the exception of the references to the complete demolition of the Bottling Plant building and the construction of the pedestrian/cyclist bridge as these elements do not form part of the revised proposal. Notwithstanding this, whilst they contain detailed measures and are sufficient for the purposes of determining the planning application, I would consider them to be preliminary in nature. As such, should the Board be minded to grant permission for the proposed development, I recommend that detailed versions of the Plans for the purposes of the construction stage be submitted and agreed with the Local Authority prior to the commencement of the development.

9.1.10. In accordance with Article 5 and Annex IV of the EU Directive, the various chapters in the EIAR provide a description of the project comprising information on the site, design, size and other relevant features. As stated above, the project description is also provided in the readvertised Statutory Notices and supplementary RFI planning documentation. A description of the main alternatives studied by the Applicant and alternative locations and designs considered, is provided and the reasons for the preferred choice. The impact of the proposed development was assessed under all the relevant headings with respect to landscape and visual impacts; material assets - traffic and transport; material assets – utilities and infrastructure; land and soils; hydrology and hydrogeology; biodiversity; noise and vibration; air quality and climate change; cultural heritage; population and human health; and interactions of impacts. It also provides a description of measures envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects. The mitigation measures are presented in each chapter and are summarised in Chapter 15 of the EIAR. Where proposed, monitoring arrangements are also outlined. No difficulties were encountered in compiling the required information.

9.1.11. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. I am also satisfied that the information contained in the EIAR complies with the provisions of Articles 3, 5 and Annex (IV) of EU Directive 2014/52/EU amending Directive 2011/92/EU and Article 94 of the Planning and Development Regulations 2000, as amended. 8.1.8. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality. I note the qualifications and expertise of the persons involved in the preparation of the EIAR is set out at the start of each chapter.

9.1.12. I am satisfied that the information provided in the EIAR and supplementary information, including drawings, forming part of the planning application is sufficiently up to date and is adequate for the purposes of the environmental impact assessment to be undertaken.

9.1.13. I have carried out an examination of all the information presented by the Applicant, and the submissions made during the course of the application and the appeal. A summary of the submissions made have been set out in section 4.0 of this report.

The main issues raised specific to EIA can be summarised as follows:

- Impacts on cultural heritage and loss of historic fabric, and
- Townscape and landscape impacts.

9.1.14. These issues are addressed below under the relevant headings and, as appropriate, in the reasoned conclusions and recommendation.

9.2. Consultations

9.2.1. Details of the consultations entered into by the applicant as part of the preparation of the project are set out in Section 1.5 of the Volume I and Chapter 1 of Volume III of the EIAR. Submissions received during the course of the planning authority's assessment of the application including submissions from prescribed bodies are summarised in sections 4.3 and 4.4 above with the Third-party Appeal received by the Board summarised in section 7.1 above. I consider that the requirements in terms of consultation have been adequately met by the Applicant.

9.3. **Alternatives**

9.3.1. Article 5 (1) (d) of the 2014 EIA Directive requires:

"(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;"

9.3.2. Annex (iv) (Information for the EIAR) provides more detail on 'reasonable alternatives':

"2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for electing the chosen option, including a comparison of the environmental effects."

9.3.3. The Applicant outlines that the purpose of the project is to expand TNI facilities in accordance with government policy to position Tyndall as an international leader of scale in translational research, allowing it to play a key role in the further development of ICT innovation and impact in Ireland.

9.3.4. The Local Authority argued in respect of the original EIAR that the 'Alternatives' section was not complete, as it did not outline the consideration of alternative layout designs whilst taking into account the effects of the project on the environment. The Local Authority issued an RFI requesting that the Alternatives section be revised to consider the incorporation of the 160m long façade of the Bottling Plant building into the proposed development.

9.3.5. The consideration of reasonable alternatives was reconsidered in Chapter 3 of Volume I of the EIAR submitted in response to the RFI. The Alternatives considered related to Do-Nothing Alternative, Redevelop/expansion of the existing TNI facility, Alternative Locations, Alternative Layout Designs which included for the incorporation of elements of the Bottling Plant building into the design, and Alternative Studies Structures. The Applicant states that the creation of a new building that retains or incorporates part of the Bottling Plant (Option B – Alternative Layout Design) is the most appropriate and viable option of development of the TNI's new facility.

9.3.6. Having regard to the Guidelines for carrying out Environmental Impact Assessment 2018 which states that the type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment, I consider that the requirements of the Directive in terms of consideration of reasonable alternatives have been discharged.

9.4. Landscape and Visual Impacts

9.4.1. Chapter 4 addresses landscape and visual impacts in Volume II. It is accompanied by photomontages in Appendix 4.5: Volume III. In view of the context of this project within the city, 'landscape' effectively refers to the townscape. I highlight that there is a significant overlap with this section and sections of the planning assessment above (Section 8.0) and so I recommend that they be read in conjunction with each other.

Receiving Environment

9.4.2. I refer the Board to sections 1.0 and 8.2 above in which a detailed description is given of the receiving environment. In summary, the site is located on the western edge of the city core, on the banks of the northern channel of the River Lee. While the site is visually prominent from North Mall/Bachelor's Walk, and Prospect Row to the east and south, due to the city's topography and built-up nature, and the presence of a large escarpment to the rear of the lands, it is not visually dominant from within the wider city. The site has a mature sylvan character, with a number of trees along its eastern and southern boundaries, a number of which have TPO status. The trees largely screen the industrial buildings to the rear, with the exception of the Bottling Plant's yellow chimney. TNI's existing centre, the Mercy Hospital and Presentation College are located immediately opposite the site on the southern banks of the north channel.

9.4.3. In a 'Do Nothing' Scenario there would be no change in the townscape and views available.

Potential Impacts

9.4.4. The EIAR considered the townscape and visual impacts within a 1.5km core study. The assessment was informed by a site survey on 21st October 2020 and was supported by the photomontages taken at representative viewpoints within the study area as well as figures indicating townscape and landscape designations. This was further supplemented by additional photomontages and assessment submitted by way of further information.

9.4.5. The Applicant considers that the highest direct townscape effects would arise from the introduction of the proposed building on the site. The proposed development would be a recognisable new element in the existing townscape character when experienced from the surrounding street quarters due to its overall height, scale and massing. The development would integrate into the existing city townscape in views from more distant locations (beyond 200m). The Applicant considers the magnitude of change to be low/medium, and the significance of the change in character along the surrounding streets to be slight/moderate beneficial.

9.4.6. The majority of the visual effects would be experienced at a local level, immediately to the south and east, as well as from elevated locations along Sunday's Well road. The Applicant explains that the change in character would be limited to an area of approx. 200m, where the effect of intervening vegetation and buildings is at its lowest. Views from the N22 (View 14) are not considered significant as intervening vegetation and built structures would either fully or partially screen the majority of the proposed structure. The magnitude of visual change in available views beyond 200m is considered to range from low to negligible due to the mix of building styles and scale that are characteristic of the townscape.

Mitigation Measures

9.4.7. The principal mitigation measures are inherent in the design of the scheme. The design has evolved through an iterative process having regard to the site's cultural heritage and location within the townscape and visual receptors.

Cumulative Impacts

9.4.8. The cumulative impacts from the proposed development and the Lower Lee Cork Drainage Scheme were assessed. The retention of the mature trees and plants would retain the edge of the city townscape character of the area. I concur with the Applicant that the proposed development and LLFRS would not alter the overall baseline character of the River Lee corridor significantly. In visual terms, the highest effects would be limited to a radius of approx. 200m from the site where there are open views along the river corridor towards the development. Should permission be sought in the future for the remaining works proposed in the masterplan for the Campus, the potential landscape and visual impacts from same will be assessed at that point. At

the time of writing this Report, no further planning applications to development the masterplan have been submitted to the Local Authority.

Residual Impacts

9.4.9. Whilst the view from the location where View 13 on Sunday's Well Road was taken demonstrates that there would be a negative visual impact at this specific location, having examined the proposal from various locations on Sunday's Well Road, I do not considered that the proposed development would have an overall significantly negative visual impact on the panoramic view afforded from St. Vincent's Church. Furthermore, I do not consider that the proposal would have a significantly negative visual impact when viewed from the southern banks of the River Lee's northern channel or from locations further east of the site on North Mall or St. Vincent's Bridge as the trees and vegetation would remain visually dominant.

Landscape Conclusion

9.4.10. I have considered all of the written submissions, in particular the points raised in the Third-Party Appeal made in relation to landscape/townscape.

9.4.11. Undoubtedly the proposal would result in significant visual change to the subject site and its appearance from surrounding areas. In view of the benefits of the proposed development and the retention of the most distinctive architectural features of the Bottling Plant building, and benefits from the expansion of TNI facilities which are noted in national, regional and local planning policy, I consider the proposed development to be acceptable. Cities are continuously changing and evolving and Cork is no different. The impact would largely be at a local level including Sunday's Well. However beyond this, the impact on the townscape would be negligible overall.

9.4.12. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on the landscape.

9.5. Material Assets: Traffic and Transport, and Utilities

9.5.1. Chapter 5 addresses traffic and transport in Volume II. A Traffic and Transport Assessment (dated 7th December 2021) was also submitted as part of the RFI Response.

9.5.2. In addition Chapter 6 of the EIAR addresses site services.

9.5.3. In a 'Do Nothing scenario' there would be no change to material assets.

Receiving Environment

9.5.4. The site is located within the North Mall Campus of UCC that has one vehicular access point via Upper Winters Hill. This access is gated with a barrier and has stone walls on either side. Upper Winters Hill forms a priority junction with Sunday's Well Road to the north-east of the site. Sunday's Well Road forms part of the R846, which provides a distributor route between the N22 and the N20. Sunday's Well Road follows an east / west alignment between North Mall in the east and Western Road in the west. North Mall also forms part of the R846 to the east of the site. It follows an east / west alignment, parallel to the River Lee, between Sunday's Well Road in the west and North Gate Bridge, where it forms a signalised junction with Shandon Street and Farren's Quay.

9.5.5. The Applicant states that there are 351 No. car parking spaces on the North Mall Campus and of these 154 No. are located on the subject site. Following the Local Authority's RFI which requested clarification on the status of the car parking within the North Mall Campus, the Applicant advised that 71 No. of the existing 154 car parking spaces are associated with and permitted under historical planning permissions and the remaining spaces which are typically located on areas of hard standing associated with the Bottling Plant, have been used historically for years. This application seeks to formalise the historically used car parking spaces without a planning history and validate them within this application.

9.5.6. In terms of cycling facilities, the Lee Walkway is also used by cyclists. There is good pedestrian provision around the proposed development, with footways provided along the surrounding roads. The main pedestrian route into the campus is via a narrow footway which connects to the banks-of-the Lee riverside/ greenway routing along the riverbank, to the south of the bottling building.

9.5.7. The site is fully serviced in terms of utilities (surface water drainage, foul water, water supply, gas, electricity, and broadband, data and telecoms).

Proposed Infrastructure

9.5.8. The Traffic and Transport Assessment highlights that Cork Metropolitan Area Transport Strategy (CMATS) outlines a series of proposed measures for active travel, public transport and general traffic in Cork, to be implemented on a phased basis. This includes five high frequency bus routes running at 10 to 30-minute intervals, all of which converge in proximity to the site. A light rail corridor for Cork City is planned as part of the CMATS linking Mahon and Ballincollig. In addition, there are improvements planned for the bicycle network in the vicinity of the site.

9.5.9. The Applicant's masterplan for the North Campus includes for the development of a new bridge to provide a direct link between the existing Tyndall National Institute at the Lee Maltings site on the southern side of the river.

Potential Impacts

9.5.10. During construction it is estimated that there would be 15 movements per day during early demolition and enabling works, to approximately 60 truck movements per day at peak construction. Staff numbers are estimated at a maximum of 150 per day. The Applicant argues that delivery vehicles travelling to and from the site would be spread across the course of the working day, meaning the number of HGV's travelling during the peak periods would be relatively low. As such, the Applicant considered that a detailed analysis of this stage is not deemed necessary.

9.5.11. In terms of the operational phase of the development, the proposal would result in 129 car trips during the AM peak hour and 128 during the PM peak hour. However, as no new car parking spaces are proposed, drivers going to the new facility would be required to use UCC's existing park and ride facility, which operates between the main campus and three car parks (Pouladuff Road, Black Ash and Dennehy's), at a 15-minute frequency during the peak hours and every 30 minutes in the off-peak. The service would be diverted to route via the North Mall Campus. The proposal includes for a bus stop located to the north of the proposed building. The service is free to all students and staff at UCC. As such, the Applicant advises the only uplift in vehicle trips on the local road network as a result of the proposed development would relate to the park and ride shuttle bus service. This equates to a total uplift of 8 two-way vehicle

trips during both the AM and PM peak hours. The percentage impact of the proposed development trips on the site access junction and the North Mall/Griffith Bridge junction have been assessed to demonstrate that the proposed development has a maximum increase in trips of 1.7% on the site access junction in the AM peak and 5.4% on the site access/ Upper Winters Hill road in the PM peak. Therefore, the proposal would have negligible effects on the national road network and the road network immediately surrounding the site.

9.5.12. Local diversions of site services would be required during the construction phase.

Mitigation Measures

9.5.13. An outline Construction Management Plan has been prepared alongside the site Traffic and Transport Assessment. As stated above, I recommend that detailed versions of these plans be submitted for agreement with the Local Authority prior to the commencement of the development, should the Board be minded to grant permission for the proposal.

9.5.14. In terms of the operational phase, a new dedicated park and ride bus stop is to be located within the application site, and a new TFI / Coca Cola bike sharing docking station is to be considered. In addition, the UCC Mobility Management Plan would be updated.

Cumulative Impacts

9.5.15. The proposed development would not give rise to any significant adverse local or cumulative traffic impacts in-combination with other developments in the surrounding and wider area.

Residual Impacts

9.5.16. No significant residual impacts are anticipated.

Material Assets – Conclusion

9.5.17. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I note that the Local Authority raised no objection to the proposed development in terms of traffic impacts or site services. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on material assets.

9.6. Land Soils

9.6.1. Chapter 7 of Volume II supported by Appendices 7.1 (Environmental Site Assessment Report) and 7.2 (Ground Investigations Report) of Volume III assess the potential impact on land and soils.

Receiving Environment

9.6.2. The site is a brownfield site, on the edge of the city centre, comprising a mix of buildings, hardstanding areas, and areas of dense vegetation and mature planting. Based on the GSI Groundwater Resources the area is shown to be underlain by the Gyleen Formation (GY, comprising Sandstones and Mudstone) which is mapped to underlie the majority of the proposed development site, whilst the Cuskinny Member (KNcu also comprising Sandstones and Mudstone) is mapped within the southern extreme of the site. Both rocks are classified by the GSI as Regionally Important Gravel Aquifers. Furthermore, the GSI records show the area to be underlain by Urban Soils (Made Ground) with Alluvial Deposits detailed to the immediate west.

9.6.3. The site investigation testing results indicated that the Made Ground presents a potential source of contamination as the soils on site have elevated hydrocarbons and heavy metals including Arsenic, Cadmium, Copper, Mercury, Nickel, Lead and Zinc.

9.6.4. Groundwater was encountered at the boundary between the Made ground and alluvial deposits depth 2.3m bgl (TP01); at the boundary between the alluvial and glaciofluvial deposits below to 6.0m bgl (RC01) and again at 13.5m bgl (RC02A) within the SAND deposits. Tidal and seasonal fluctuations are expected.

Potential Impacts

9.6.5. Excavations required for the proposed basement. Contaminants could potentially enter groundwater and surface-water, eventually being released to the River Lee. It is considered that the vast majority of excavated material will consist of Made Ground and naturally excavated soils. Assuming a worst case scenario, all material will be taken off site and deposited at an appropriately licensed/ permitted waste management site. However, the Applicant states that it is anticipated that the majority of the excavated materials would comprise of uncontaminated soils.

9.6.6. Construction sites can pose a significant short-term risk to groundwater quality for the duration of the construction period if contaminated water is allowed percolate to the aquifer.

9.6.7. The proposed development would not have any likely significant impacts on the subsoils once operational.

9.6.8. In a Do Nothing Scenario there would be no change to land and soil within the site.

Mitigation

9.6.9. The Construction Environment Management Plan (CEMP) would include a schedule of mitigation measures included as part of the EIAR (for summary see Table 7.1 of Chapter 7: Volume I) and any subsequent conditions relevant to the proposed development.

9.6.10. Soil/stones would be removed from the site and disposed of as a waste or, where appropriate, as a by-product by a licensed contractor. Soil would be tested and classified as hazardous or non-hazardous in accordance with relevant legislation.

9.6.11. A remediation strategy to be prepared that provides details of a proposed capping system for any contaminated soils left in-situ with verification, and/or verification protocols to be followed to confirm source removal has been achieved through excavation to achieve engineering levels.

9.6.12. There would be limited stockpiling on site.

9.6.13. All fill and aggregate for the proposed development would be sourced from reputable suppliers as per the project Contract and Procurement Procedures.

9.6.14. All storage of fuel and refuelling would occur on the permitted construction compound within the site.

9.6.15. Correct construction management will be used to ensure that there will be minimal inflow of groundwater into any excavation; includes the use of secant piled walls and appropriate dewatering measures such as sump pumps and well points. Infiltration to the underlying aquifer is therefore not anticipated.

Cumulative Impacts

9.6.16. No cumulative impacts from the perspective of land and soil.

Residual Impacts

9.6.17. Residual impact during the construction phase is considered to be of negligible magnitude and imperceptible significance with no residual impacts during the operational stage.

Conclusion: Land and Soils

9.6.18. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the mitigation measures. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on land and soil.

9.7. Hydrology and Hydrogeology

9.7.1. Hydrology and hydrogeology are addressed in Chapter 8, with a standalone Flood Risk Assessment (3rd December 2021) also provided.

Receiving Environment

9.7.2. The site is located on the northern banks of the River Lee's northern channel. The proposed development site does not contain field drains or natural watercourses. However, there is a disused mill race to the north of the site. The River Lee is classified as 'at risk'. It has a 'moderate' Transitional Waterbody WFD Status.

9.7.3. As stated above, the Gyleen Formation is mapped to underlie the majority of the proposed development site, whilst the Cuskinny Membe is mapped within the southern extreme of the site. Both rocks are classified by the GSI as a Regionally Important Gravel Aquifers.

9.7.4. The OPW map illustrates the site is in Flood Zone B (Moderate Risk) in the current scenario. However, considering future potential climate change (i.e. increase in rainfall of 20% and sea level rise of 0.5m as recommended by the OPW), the site is identified as being prone to potential flooding for events up to 1% AEP or 1 in 100 for river flooding or 0.5% AEP or 1 in 200 for coastal flooding plus climate change effect. As such, the site is considered to be within Flood Zone A. There have been no flood events in the immediate area that could have an impact on the subject site.

9.7.5. A combined sewer is currently servicing the area to the north of the site. The site is also served by a private Cast Iron Watermain, which turns around the existing Bottling

Plant building. There is an existing ø225mm and ø300mm surface water sewer serving the Bottling Plant and the Cooperage Building adjacent to the proposed site.

9.7.6. Surface water currently percolates through the soils and bedrock to ground and drains to the River Lee and the Mill Race to the north.

9.7.7. In a 'Do Nothing scenario' there would be no change in the hydrological regime.

Potential Impacts

9.7.8. Construction activities could result in a release of suspended solids into the watercourse during earthwork activities.

9.7.9. Accidental spillage during refuelling of construction plant with petroleum hydrocarbons is a significant pollution risk to groundwater, surface water (via subsurface flows) and associated ecosystems, and to terrestrial ecology.

9.7.10. Release of effluent from on-site wastewater systems has the potential to impact on groundwater and surface waters.

9.7.11. Water quality impacts to underlying aquifers, most likely via groundwater flow paths. The Applicant states that given the largely granular nature of the underlying soils it is anticipated that the natural flow of groundwater below the site should be able to continue to flow through the piles and around the new basement construction.

9.7.12. The majority of surface water arising on site would drain to ground and River Lee.

9.7.13. Risk of flooding.

Mitigation Measures

9.7.14. Site drainage/surface water control measures during construction including silt fencing will be placed down-gradient of the construction areas, silt bags, temporary sumps/attenuation lagoons, sediment traps, pumping systems, settlement ponds, temporary pumping chamber.

9.7.15. After periods of heavy rainfall, it is likely that surface water will collect and need to be pumped from any shallow excavations (c. 1.5m).

9.7.16. Daily monitoring and inspections of site drainage during construction will be completed.

9.7.17. No pumped construction water will be discharged directly into any local watercourse.

9.7.18. All storage of fuel and refuelling will occur on the permitted construction compound within the site.

9.7.19. An emergency plan for the construction phase to deal with accidental spillages will be contained within an Environmental Management Plan.

9.7.20. Spill kits will be available to deal with any accidental spillage in and outside the refuelling area.

9.7.21. Water and drainage will be required to service the site toilet and canteen facilities. Applications will be made to Irish Water for connections to the water main and foul drain.

9.7.22. Daily visual inspections and regular water testing to be undertaken as required.

9.7.23. No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed.

9.7.24. The outfall from the building will have on overflow pipe from a tank inside the building in order to discharge water even for the 100 years flooding event plus climate change's effect. The volume of the internal tank will cater for the water from the roof in the emergency case of no discharge into the River Lee.

9.7.25. A wastewater storage tank will be installed for use in the event of flooding issues, with 24hour capacity.

9.7.26. Surface water that is generated will run through a bypass interceptor prior to being pumped to the River Lee.

9.7.27. Carparking areas will be allowed to flood in case of no surface water discharge into the River Lee in order to mitigate the risk. The car park runoff will be treated with a petrol interceptor before discharging into the River Lee.

9.7.28. The proposed finish floor level (FFL) of the ground floor for the proposed new buildings and hardstanding areas is 4.90m AOD that is above the fluvial flooding 0.1% AEP and tidal flooding 0.5% AEP for current and mid-range future scenario. The levels correlate with the LLFRS. The Applicant highlights that the proposed finish floor level for the building is higher than the rest of the site to avoid damages when it is not possible to discharge water into the river (due to the rise in the river level) from the remaining hardstanding areas. In that scenario, the Applicant states that the car park and road

areas will flood but it is unlikely to reach the building finish floor level. The proposed high finish floor level will also help in case of flood defence failure.

9.7.29. Staff to be familiarised with the Cork City Council Emergency Plan.

9.7.30. Non returning valves will be installed at all the outfalls avoiding water back flow.

9.7.31. An extension to TNI's existing trade effluent licence will be sought.

Residual Impacts

9.7.32. No significant residual impacts are anticipated. Due to the flood defence levels proposed no residual risk of flooding is anticipated.

Cumulative Impacts

9.7.33. The Applicant advises that no significant cumulative impacts on any of the regional surface water catchment or groundwater bodies will occur from the proposed development. This includes the proposed LLFRS, which proposes to raise a defence wall and a berm nearby the River Lee respectively up to a level of 4.6m and 4.9m AOD. As outlined above, the planning permission for LLFRS is currently subject to judicial review. However, the Applicant highlights that as the FFL for the proposed development will be set at 4.9m AOD, there will be no need for further defences as this level is adequate from a flooding perspective.

Hydrology and Hydrogeology - Conclusion

9.7.34. I am satisfied that any potential impacts would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions including monitoring conditions. Importantly, whilst the LLFRS plans to provide flood relief to the City, the proposed development is not dependent on its delivery. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of water.

9.8. Biodiversity

9.8.1. Chapter 9 addresses biodiversity, with photographic record of the site attached as Appendix 9 in Volume II and an updated arboricultural assessment and impact report (4th December 2021) attached as Appendix 2.6. In addition a NIS accompanies the application with an appropriate assessment undertaken in section 10 below. There is

also an overlap with land, soil and water which are addressed above. I recommend that the relevant sections be read in conjunction with each other.

Receiving Environment

9.8.2. The site is located on the edge of the city centre dominated by existing buildings, hardstanding and mature trees and planting particularly along its eastern, southern, and western boundaries. The EIAR sets out details regarding the existing environment in terms of flora and fauna. Otter, badger, irish hare, red squirrel, pine martin, bird, bat and habitat surveys were undertaken in 2020. These were updated on foot of the Local Authority's RFI in 2021. In addition, an aquatic survey of the north channel of the River Lee was carried out.

9.8.3. The proposed development site does not lie within the boundary of any designated Natura 2000 site.

9.8.4. The woodland and treeline habitats within the site are considered to be of high ecological value having regard to the maturity of the trees present. The North Mall Campus is considered to be ideally positioned to support local bat populations. The Bottling Plant is deemed to be of 'Moderate' suitability as a roosting habitat for bats. The trees along the River Lee and Mill Race Channel, are deemed of 'High' suitability as a commuting and foraging habitat for bats.

9.8.5. The Mill Race Channel is noted to be of value in that it provides a secluded place off the main channel for species like otter to rest or potentially breed. The River Lee is considered to be of national importance.

9.8.6. Japanese knotweed was recorded to be growing across different habitats throughout the study area. While no stands or individual Himalayan Balsam plants was noted within the site, the Applicant highlights that a sign denoting the presence and treatment of this species indicated that it was present along the southern bank of the Mill Race Channel.

9.8.7. There are numerous records of otters, which are of international importance, in the area including a holt in Mill Race Channel. In addition, a potential otter holt was recorded in the proposed car parking area. Signs of badgers, mink and and foxes were also noted in the area. The remains of Brown Rat, Wood Mouse and Bank Vole were recorded inside and adjacent to the Bottling Plant.

9.8.8. In a ‘Do Nothing’ scenario, some of the habitats present would continue to develop naturally. The trees within the woody habitats would continue to mature although those in poor condition would eventually have to be removed in order to avoid potential damage and/or injury caused by their failure. The invasive plant species would continue to be managed under the current management plan implemented by UCC.

Potential Impacts

9.8.9. For a detailed assessment of the impact of the development on designated sites and their qualifying interests and to avoid undue repetition, please refer to the appropriate assessment carried out in section 10 below.

9.8.10. Direct habitat loss and the alteration of habitats within the proposed development site will occur.

9.8.11. The water quality of the Mill Race Channel and River Lee could deteriorate as a result of the proposed works.

9.8.12. Introduction or spread of invasive plant species such as Japanese knotweed or Himalayan balsam.

9.8.13. Human activity, machinery operation and vehicular and vessel traffic can result in the disturbance and displacement of fauna that utilise the proposed development site for foraging, commuting or breeding purposes or nesting/roosting purposes in the case of bird and bat species.

9.8.14. Demolition, excavation and piling works could result in impacts to otter.

9.8.15. Excessive lighting could also lead to the displacement of nocturnal fauna which are most active at night.

9.8.16. The primary impacts associated with the operation phase of the proposed development are impacts on water quality via wastewater/foul effluent discharge and surface-water run-off.

9.8.17. There is the potential for the disturbance/displacement of bat species that utilise the site during the operational phase of the proposed development due to increased permanent light levels which can ultimately break connectivity between foraging/roosting habitats and permanently alter emergence times and reduce the size of foraging areas.

Mitigation

9.8.18. The measures to be employed to protect ground and surface water including temporary dewatering works which are detailed under the heading 'Hydrology and Hydrogeology' above in addition to measures to deal with excavated soil which are addressed under the heading 'Land and Soil' are relevant in terms of biodiversity. To avoid undue repetition, I recommend that these sections be read in tandem.

9.8.19. The Construction Environmental Management Plan, which is included in the original EIAR, sets out the procedures, standards, work practices and management responsibilities of the appointed contractor to address potential negative environmental effects that may arise during construction.

9.8.20. The proposed development will take note and adhere to, where applicable, the targets and actions set out for the North Mall Campus within the University College Cork Biodiversity Action Plan 2018-2023.

9.8.21. A suitable qualified project ecologist will be employed for the duration of the works to ensure that mitigation measures and relevant ecological planning conditions are implemented in full.

9.8.22. Habitats that are earmarked for retention will be securely fenced and signposted prior to the start of construction works.

9.8.23. Existing trees to be retained are to be protected from damage by a 2.0m high weld mesh/heras fence or similar approved.

9.8.24. Removal of woody habitats such as treelines, hedgerows and scrub will be done outside of the bird breeding period.

9.8.25. Pre-construction faunal, bat and otter surveys will be undertaken. The potential holt located within 150m of the proposed development will be monitored pre-, during and post construction works. Sheeting will be attached to the fencing present between the construction area and the potential holt to act as a noise and visual barrier.

9.8.26. A pre-construction survey for invasive species will be carried out. All stands of Japanese knotweed and Himalayan Balsam will be clearly delineated with hazard tape. Prior notification will be given to all contractors that parts of the site are contaminated with Japanese knotweed and Himalayan Balsam. Where Japanese

knotweed removal is required to facilitate the construction of the proposed development, this will clearly be laid out in the Japanese Knotweed Management Plan.

9.8.27. Works will comply with The IFI's Guidelines on protection of fisheries during construction works adjacent to waters.

9.8.28. Construction works will adhere to best practice guidance set out by CIRIA (2001).

9.8.29. No wastewater will be discharged on-site during either the construction or operational phase.

9.8.30. For the operational phase**,** artificial lighting will only be installed where necessary.

Cumulative Impacts

9.8.31. The construction and operation of LLFRS could potentially lead to cumulative impacts resulting in the deterioration of water quality and the spread of invasive plant species, in combination with the proposed development. However, subject to the implementation of the mitigation measures, significant cumulative impacts are not anticipated.

Residual Impacts

9.8.32. No significant residual impacts are anticipated.

Biodiversity: Conclusion

9.8.33. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on biodiversity.

9.9. Noise and Vibration

9.9.1. Chapter 10 addresses noise and vibration during the construction and operational phases of the development. Appendix 10 of Volume III includes the Sound Level Meter Calibration Certificate and the Acoustic Calibrator Calibration Certificate.

Receiving Environment

9.9.2. An environmental noise survey was conducted in order to quantify the existing noise environment. The dominant source of noise recorded from three locations ((i) on the Lee Walkway, (ii) beside the UCC Schools of Psychology and Biological, Earth &

Environmental Science buildings and (iii) along Grenville Place) during the day was general urban hum, birdsong, traffic noise including reversing signals from ambulances, and pedestrian activity. At night, the dominant noise sources are recorded to be road traffic and general urban hum. Daytime noise levels were in the range of 46 LAeq to 65 LAeq, while night time noise levels range from 41 LAeq to 55 LAeq across the three locations.

9.9.3. The Do Nothing Scenario would consist of leaving the subject site in its current state.

Potential Impacts

9.9.4. Due to the nature of the activities undertaken on a large construction site, there is potential for generation of significant levels of noise.

9.9.5. The flow of vehicular traffic to and from a construction site is also a potential source of relatively high noise levels.

9.9.6. All of the predicted main works construction noise emission levels at each of the nearest noise sensitive receptors are consistent with or below the lower threshold criterion of 65dB LAeq,1hr for construction activities during weekday periods.

9.9.7. The potential for vibration at the majority of neighbouring noise sensitive locations during construction is typically limited to excavation works and lorry movements on uneven road surfaces.

9.9.8. Most of the plant required by the proposed building will generate noise to some degree.

Mitigation

9.9.9. Continual monitoring of noise and vibration will be carried out during the main construction phase.

9.9.10. Limiting the hours during for site activities likely to create high levels of noise.

9.9.11. Ensure all site access roads are kept as even as possible so as to mitigate the potential for vibration.

9.9.12. External building services plant to be selected with maximum noise level specifications.

9.9.13. Emergency generator testing to be restricted to hour long periods once per month during daytime periods only.

9.9.14. Implementation of noise control techniques including acoustic louvres, solid barriers screening external plant, anti-vibration mounts on reciprocating plant, and duct mounted attenuators on the atmosphere side of air moving plant.

Cumulative Impacts

9.9.15. No significant cumulative impacts are anticipated.

Residual Impacts

9.9.16. No significant residual impacts are anticipated.

Noise and Vibration: Conclusion

9.9.17. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of noise and vibration.

9.10. Air Quality and Climate Change

9.10.1. Chapter 11 addresses air quality and climate change. A standalone Energy & Sustainability Report (3rd December 2021) was submitted with the RFI Response.

Receiving Environment

9.10.2. Cork City is within Zone B with pollutant concentrations falling below EU limit values.

9.10.3. The development area is located within a zone which includes sources of transportation related air emissions principally from the R846, boats that cross the River Lee, local road infrastructure, sources of domestic, retail, public and commercial building's heating. The Bottling Plant roof is clad in asbestos sheeting.

9.10.4. There are no major sources of industrial air emissions within 2km of the site.

9.10.5. In a 'Do Nothing' scenario there would be no change in prevailing conditions in terms of air and climate.

Potential Impacts

9.10.6. During the enabling, demolition and construction phase there will be extensive site works, involving construction machinery and construction activities on site which have the potential to generate fugitive windblown dust emissions.

9.10.7. The movements of construction vehicles on the site shall also generate windblown dust emissions. CO2 will be released into the atmosphere as a result of the movement of construction vehicles and use of plant.

9.10.8. During the construction phase, existing vegetated areas in the development site will be removed due to site clearance works and associated movement of construction traffic thus impacting the micro-climate.

9.10.9. The operational phase of the proposed development will result in a slight impact on local air quality primarily as a result of the requirements of new buildings to be heated.

Mitigation

9.10.10. Mitigation measures in place to minimise dust emissions.

9.10.11. A programme of air quality monitoring shall be implemented at the site boundaries for the duration of the construction phase.

9.10.12. Use of rubble chutes and receptor skips during construction activities.

9.10.13. Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un- surfaced roads will be restricted to essential site traffic only.

9.10.14. Material stockpiles containing fine or dusty elements including topsoils shall be covered with tarpaulins.

9.10.15. All plant not in operation shall be turned off and idling engines shall not be permitted for excessive periods.

9.10.16. Removal of asbestos or ACMs will be carried out by a suitably qualified contractor and ACM's will only be removed from site by a suitably licenced waste contractor for disposal at a suitably licensed facility.

9.10.17. A programme of Nitrogen Dioxide monitoring shall be undertaken for a 1 year period.

9.10.18. Proposed research facility to be in accordance with Technical Guidance Document Part L 2017 Conservation of Fuel and Energy – Buildings other than Dwellings to reduce energy consumption and will achieve a minimum Building Energy Rating of A3. In addition, the proposed development will be designed to achieve BREEAM 'Excellent' certification and aspiring to achieve 'Outstanding'.

9.10.19. A system of mechanical ventilation will serve the laboratory areas. Returned air will be filtered to eliminate any harmful particulate discharge. Exhausts from fume cupboards

will collect and discharge at roof level using dilution fans. Harmful gases will be scrubbed prior to discharge. These systems will be automatic in operation and will be continually monitored by the Building Management System. As stated in the statutory notices, biannual testing on emissions to atmosphere will be carried out.

Cumulative Impacts

9.10.20. No significant cumulative impacts are anticipated.

Residual Impacts

9.10.21. It is predicted that there will be no significant air quality or climate impacts.

Air and Climate: Conclusion

9.10.22. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on air and climate.

9.11. **Cultural Heritage**

9.11.1. Character 12 addresses cultural heritage. Appendix 12 of Volume III comprises a photographic record of the site (12.1), archaeological and NIAH inventory entries (12.2), and excavation database entries (12.3).

9.11.2. In addition, the following documents were submitted with the RFI that relate to this matter: Outline Conservation Works (November 2021), Heritage Significance Report (August 2021), Visual Structural Condition Survey (6th August 2021), and Independent Architectural Assessment Report (December 2021).

Receiving Environment

9.11.3. The site location is as previously described. In short, the north-eastern corner is located in an ACA. The Distillery House and chimney, Alderman Bridge and St. Vincent Roman Catholic Church and Seminary (PS797) are designated Protected Structures. In addition, the Lee Maltings Complex on the southern bank of the river is also listed as a Protected Structure. The Cooperage Building, is listed on the NIAH website (Reg. No. 20500776). The Bottling Plant building is referenced (20500774) in the National Inventory Architectural Heritage's publication "*An Introduction to the*

Architectural Heritage of Cork City" as an example of 20th century industrial architecture.

9.11.4. There are no recorded archaeological sites (as recorded by the ASI) within the proposed development site and it is predominantly located outside the Zone of Archaeological Potential (ZAP), as designated by Cork City Council, and the Zone of Notification (ZON), as designated by the National Monuments Service. The northern portion of Alderman Reilly bridge is located in the ZAP.

9.11.5. The Cooperage Building is currently in use as a series of laboratories and offices by UCC's School of Biological, Earth and Environmental Sciences (BEES). The Bottling Plant building is currently being used for storage. Chapter 12 and the supplementary reports listed in Section 9.11.2 provide further detail on the building.

9.11.6. In a 'Do Nothing' Scenario the site and building would remain unchanged with the possibility of deteriorating fabric and loss of less robust elements.

Potential Impacts

9.11.7. Demolition of main processing hall of the Bottling Plant building.

9.11.8. Risk of minor impacts during the course of construction to the Alderman Reilly's bridge.

9.11.9. Temporary impacts on the setting of the ACA during the construction phase.

9.11.10. The Applicant anticipates an indirect, moderate negative impact on the Cooperage Building.

Mitigation

9.11.11. Archaeological monitoring of ground clearance and excavation works during the construction phase will be carried out by a suitably qualified archaeologist, licensed by the National Monument Service.

9.11.12. A method statement detailing the proposed strategy for archaeological supervision of ground works during the construction phase to be drawn up.

9.11.13. A detailed historic building survey /record of the Bottling Plant will be compiled prior to demolition and will include a comprehensive written, drawn and photographic record of the structure.

9.11.14. It is also proposed to compile an oral history record by way of interviews with former employees of Irish Distillers Ltd who had worked at the bottling plant in order to document its industrial and social significance.

9.11.15. Due care will be taken during the course of construction to minimise the risk for inadvertent/accidental damage arising from construction activity on the fabric of Alderman Reilly Bridge, the Cooperage and other historic building stock within the vicinity of the development site.

Cumulative Impacts

9.11.16. No significant cumulative impacts are anticipated.

Residual Impacts

9.11.17. Demolition of main processing hall will comprise a permanent loss of historic fabric. However, the retention and integration of the most architecturally significant section of the Bottling Plant building into the new facility is considered a positive impact.

Cultural Heritage: Conclusion

9.11.18. A significant number of observations were submitted to the Local Authority opposing the original design proposal for the site, which include for the complete demolition of the Bottling Plant building. The Department of Tourism, Culture, Arts, Gaeltacht, Sports and Media recommended that permission be refused for the proposed development. However, following the submission of the revised RFI design proposal, I highlight that there was only one observation submitted to the Local Authority.

9.11.19. In my view the proposed development will include the retention of the most distinctive architectural elements of the building while also facilitating the expansion of the Tyndall facilities in accordance with national, regional and local policy. As such, on balance I consider the proposed development is acceptable in terms of the cultural and built heritage of the site.

9.11.20. I am satisfied that the potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on cultural heritage.

9.12. Population and Human Health

9.12.1. Chapter 13 deals with population and human health. However, as would be expected the likely effects of the proposed development on human beings and health are addressed under several of the headings of this environmental impact assessment and, as such, should be considered as a whole.

Receiving Environment

9.12.2. I refer the Board to section 1 above which gives a description of the site and its location. In summary the site is located on the edge of the city centre core on the banks of the northern channel of the River Lee. The site forms part of UCC's North Campus. The Bottling Plant building is used as storage, while the Cooperage building is as labs. The Lee Walkway runs along the southern boundary of the site, which contains mature trees and planting.

9.12.3. In a 'Do Nothing' scenario the site will largely remain an underutilised urban site, with the exception of the amenity walkway. This would have a knock-on negative impact on the vibrancy and vitality of surrounding areas. Furthermore, the building would continue to decline structurally without major intervention.

9.12.4. Untreated surface water would continue to be discharged to the River Lee.

Potential Impacts

9.12.5. General construction activities such as demolition and excavation may give rise to emissions to air or surface water, noise and vibration, and traffic.

9.12.6. Positive impacts can be expected for local cafes, shops and restaurants during the construction phase, as workers from the site can be expected to shop and eat locally.

9.12.7. Retention of the architectural significant southern/riverside portion of the building is considered positive.

9.12.8. The economic, research and educational benefits of the proposed development will be considerable for Cork City and is a project of national significance. It will attract new staff and students.

9.12.9. The proposed development may result in a positive impact, as staff and students of the facility may choose accommodation in the surrounding area. The Applicant states that overall, the impact is likely to be positive, imperceptible and long term on population and settlement.

9.12.10. Additional safe pedestrian routes enhancing connectivity throughout the site are considered a positive aspect of the revised development.

9.12.11. Significant impact on the townscape and visual impact of the site, particularly at a local level (within 200m of the site).

Mitigation

9.12.12. A contractor safety management programme will be implemented identifying potential hazards associated with the proposed works.

9.12.13. See mitigation measures referenced in earlier sections above which relate to population and human health.

Cumulative Impacts

9.12.14. No significant cumulative impacts are anticipated.

Residual Impacts

9.12.15. The residual impacts arising are considered positive in terms of creation of employment and the redevelopment of an underused urban site. There will be residual visual impacts relating to the perceived change to the existing landscape. However as discussed above, I consider these changes to be a continuation of the evolution of the cityscape that will not have long term significant negative impacts.

Population and Human Health: Conclusion

9.12.16. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on population and human health.

9.13. **Interactions between Factors and Cumulative Impacts**

9.13.1. I have considered the interrelationships between factors and whether these may, as a whole, affect the environment, even though the effects may be acceptable when considered on an individual basis. Chapter 14 of the EIAR evaluates the potential interactions which the proposal development may have on the receiving environment and sensitive receptors during the demolition/construction and operational phases of the proposed development. Table 14.1 of the EIAR provides a matrix of potential interactions of effects for ease of reference. In my assessment of each environmental

topic I have considered the likelihood of significant effects arising as a consequence of interrelationship between factors. Most interactions e.g. the impact of noise and air quality on the population and human health, and cultural heritage and landscape are addressed under individual topic headings. I am satisfied that effects as a result of interactions can be avoided, managed and/or mitigated by the measures which form part of the proposed development, mitigation measures, and suitable conditions. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects as a result of interactions between the environmental factors.

9.13.2. Cumulative impacts were assessed in each chapter of the EIAR and is assessed under each heading above. Consideration was given both to the construction and operational phases. I am satisfied that the cumulative assessment is robust and fully assesses the impacts of the current proposal in the context of other permitted and proposed developments and projects.

9.14. Risk of Major Accidents and Disasters

9.14.1. The requirements of Article 3(2) of the Directive include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disaster. The two key considerations are:

- The potential of the project to cause accidents and/or disasters, including implications for human health, cultural heritage, and the environment.
- The vulnerability of the project to potential disasters/accidents, including the risk to the project of both natural disasters and man-made disasters.

9.14.2. The EIAR addresses this issue in Chapter 16. During the construction and operational phases 17 No. possible risks were identified whereby the proposed development has the potential to cause a major accident/disaster (see Table 16.5). The Table identifies a range of risks, associated mitigation measures and residual risks. I consider that the principal risks of major accident or disaster relate to:

- Loss of Screening and Habitats

Existing trees to be retained are to be protected during the construction stage in accordance with the recommendations of the Arboricultural Assessment and the BS

5837:2012. In addition, the Landscape Masterplan will further enhance planting and biodiversity on the site.

- Risk to Water Quality

A surface-water drainage system will be in place to treat surface-water run-off from the hard-standing elements within the proposed development prior to discharge to the River Lee. By-pass separators to treat surface-water flows will be install prior to discharge into the River Lee and the drainage system will be regularly maintained and inspected in line with industry standards and requirements. This will be an improvement as at present surface-water drains directly into the River Lee. Non-returning valves at outfall points will be installed.

- Spread of Invasive Plant Species

An invasive species management plan will be produced by a qualified invasive species specialist who will also oversee the management/eradication of invasive plant species when required. The control/eradication of Japanese knotweed will be included as part of the Construction Environmental Management Plan (CEMP). Subject to the implementation of mitigation measures the potential for significant residual impacts is not anticipated.

- Flooding

A site-specific Flood Risk Assessment (FRA) has been carried out and proposed levels within the development adequately address the risk of flooding. Furthermore, the LLFRS would provide further protection to the site. The development would not give rise to significant off-site flood risks.

- Risk of contaminant escape from site excavation works.

9.14.3. I note that measures to control risks associated with the demolition and construction are incorporated into the Construction Management Plan, as well as the EIAR and NIS. Subject to identified mitigation measures, particularly the removal of any contaminated materials offsite, risks are not assessed as being significant.

9.14.4. The site is not connected to or close to any site regulated under the Control of Major Accident Hazards Involving Dangerous Substances Regulations i.e. SEVESO and so there is no potential effects from this source.

9.14.5. It is considered that having regard to the nature and scale of the development itself, there are unlikely to be any effects deriving from major accidents and or disasters and I am satisfied that this issue has been addressed satisfactorily in the EIAR.

9.15. **Reasoned Conclusion**

9.15.1. **Population and Human Health**: Significant positive impacts through the redevelopment of a brownfield and underutilised urban site for research purposes allowing for the doubling in size of the Tyndall National Institute. Potential negative short-term impacts to human beings arising from noise, dust, traffic, excavation and demolition impacts during the construction phase will be mitigated with the preparation of a Construction Management Plan.

9.15.2. **Cultural Heritage**: There will be negative impacts arising from the demolition of the Bottling Plant building's processing hall, which is of architectural significance. However this is offset by the retention and integration of the most distinctive architectural features of the Building into the new research facility. Furthermore, detailed mitigation measures are proposed including a detailed historic building survey /record of the Building will be compiled prior to planned demolition; the retained sections of the Building will be conserved and refurbished in accordance with the "Outline Conservation Works" submitted at RFI stage, and an oral history record by way of interviews with former employees of Irish Distillers Ltd who had worked at the site will be conducted.

Landscape: The proposed development will have a significant impact on the townscape of the area, particularly areas within 200m south and east of the site. The mature trees and planting along the banks of the river will remain visually dominant. I do not consider the change in the landscape to have a significant long-term impact, but rather the proposal will read as an extension to the city centre and the continued evolution of the cityscape. In terms of the visual impact from Sunday's Well Road, View 13 demonstrates that the proposal will have a negative impact at this specific point, however View 4 highlights the dynamic nature of the views provided as one travels along the Road. Overall, I do not consider that the proposal will have a significantly negative visual impact on the panoramic viewpoint in the long-term. Beyond 200m, in my view the proposal will have a negligible visual impact as it will successfully integrate into the townscape.

9.15.3. **Water**: During the construction phase, there is potential for negative impacts on the water quality of the River Lee arising from the release of hydrocarbons, soil and sediment and excess water from dewatering activities which may contain silt/sediment. Detailed mitigation measures are set out to prevent the contamination of the adjacent watercourse from fuel or other hazardous materials. To mitigate against the risk of flooding, measures such as minimum finished floor levels for the new facility and use of demountable defences are proposed.

9.15.4. Notwithstanding the conclusions reached in respect of the negative impact from particular locations along Sunday's Well road (View 13), it is considered that the environmental effects would not justify a refusal of planning permission having regard to the overall benefits of the proposed development.

10.0 Appropriate Assessment

10.1. Compliance with Articles 6(3) of the EU Habitats Directive

10.1.1. 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 site's 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.

10.1.2. The application is accompanied by a Screening Assessment and a Natura Impact Statement (NIS). The NIS contains a description of the proposed development, the project site and the surrounding area. It outlines the methodology used for assessing potential impacts on the habitats and species within the European Sites that have the potential to be affected by the proposed development. It predicts the potential impacts for the sites and their conservation objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European sites and their conservation objectives.

10.1.3. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development.

Brief Description of the Development

10.1.4. The development site is described in section 2 above in this report, in section 4.4 of the submitted NIS and in further detail in the various sections of the EIAR. The site principally comprises two industrial buildings, hard standing and areas of mature vegetation. Site investigations have identified areas of contamination across the site. A Third Schedule invasive species was recorded on the site (Japanese Knotweed). Black-headed gull and Grey Heron were recorded flying over the site. The Applicant highlights that it is likely that they are using the River Lee and Mill Race Channel for foraging purposes.

10.1.5. The proposed development is as described in section 3 above in this report, in section 4.5 of the NIS and in the various sections of the EIAR. In summary the proposed development entails the development of a brownfield site for a part 4/part 6 storey research facility and associated development. Finished floor levels are to be raised having regard to the drainage characteristics of this area and the findings of the flood risk assessment. The development will connect to mains sewerage and water services.

10.1.6. The site currently drains directly to the River Lee to the south and the Mill Race Channel to the north. Some revisions to the local drainage network are proposed, however, the primary outfall will remain via the River Lee.

Submission and Observations

10.1.7. Inland Fisheries Ireland comments noted.

10.2. **Stage 1 – Screening**

10.2.1. The proposed development is not directly connected with or necessary for the management of any European Site and therefore it needs to be determined if the development is likely to have significant effects thereon.

10.2.2. The Applicant prepared a screening report (December 2021) for appropriate assessment in respect of the revised RFI scheme. In determining the extent of potential effects of the development, the Applicant took a precautionary approach in using a 15km radius around the development footprint as a potential zone of influence and thereby included two European Sites in the screening exercise. The source-pathway-receptor model of impact prediction was employed.

10.2.3. The full catalogue of qualifying interest features of the SAC site and special conservation interests of the SPA site were listed and examined in view of the following types of impacts that could result in significant effects on the conservation objectives of those European sites namely:

- Indirect habitat loss and alteration
- Water quality
- Disturbance of species
- Habitat or Species Fragmentation
- Cumulative/In-combination Impacts.

10.2.4. These identified potential impacts would primarily occur due to a deterioration in water quality in both the construction and operational phases of the development.

10.2.5. The site is located on the River Lee which flows into Cork Harbour SPA, located is 5.6km to the east. The hydrological link is c5.8km.

10.2.6. Great Island SAC is c.9.7km to the east with a hydrological distance of c.10.5km via the River Lee and Cork Harbour.

10.2.7. The screening determined that further assessment was required to establish whether the proposed development could adversely affect the integrity of those two sites.

10.2.8. Based on an examination of the screening report for appropriate assessment and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, proximity and functional relationship between the proposed works and the European sites, their conservation objectives, the dilution capacity of the water in the river and harbour, and taken in conjunction with my assessment of the subject site and the surrounding area, in my opinion, it is unlikely that the proposed development may result in significant effects on the two European

sites. However, having regard to the potential for contaminated soils to be present on the site and the risk of flooding, particularly during the construction phase of the proposal, I have adopted a precautionary approach and conclude that the proposed development may result in significant effects (or such effects cannot be ruled out at this stage) on two European sites and therefore, appropriate assessment is required to determine if adverse effects on site integrity can be ruled out. I include a summary of the screening assessment in relation to the said European sites in Table 1 below.

10.2.9. The presence of invasive species (Japanese knotweed) on the site is noted[1]. This species is listed on the Third Schedule of the 2011 European Communities (Birds and Natural Habitats) Regulations and is a species which it is an offense to disperse, spread or otherwise cause to grow in any place. Soils and other material containing knotweed are also identified in the regulations as vector materials, subject to the same strict legal controls. Failure to comply with the legal requirements set down can result in either civil or criminal prosecution. I note the conclusions of the submitted NIS with regard to the potential spread of knotweed from the site, which are considered to be reasonable. The remediation of the site / eradication of such infestation is a mandatory requirement irrespective of proximity to any European Site, and is not therefore regarded as a mitigation measure. The Applicant highlights that all infestations identified on the North Mall Campus have received 3-4 years of chemical herbicide treatment under UCC's current invasive species management plan.

10.2.10. In conclusion, potential significant effects on the European Sites Cork Harbour SPA (004030) and Great Island Channel SAC (001058) are identified as impacts on water quality due to run-off of silt and other contaminants from the site at construction and operational stages.

10.3. Appropriate Assessment Screening Determination

10.3.1. Following the screening process, it has been determined that appropriate assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on the following European sites (i.e. there is the possibility of significant effect):

[1] Himalayan balsam infestations were previously eradicated from the North Mall Campus. The Applicant highlights that no new plants have been recorded at this site since 2018.

- Cork Harbour SPA (site code 004030)
- Great Island Channel (site code 001058)

10.3.2. Measures intended to reduce or avoid significant effects have not been considered in the screening process.

Table 1: AA Screening Summary Matrix				
European /Natura 2000 Site www.npws.ie	**Distance from proposed development/ Source, pathway, receptor**	**Possible significant effect (alone)**	**In combination effects**	**Screening conclusion**
Cork Harbour SPA (site code 004030)	Connection via River Lee. c.5.6km at closest point c.5.8km Hydrological connection	Potential for impacts to habitat loss and alteration, disturbance, and species fragmentation due to deterioration of water quality: development may result in significant effects alone.	Possible - requires more detailed analysis.	Possible significant effects cannot be ruled out without further analysis and assessment and the application of mitigation measures - Appropriate assessment required.
Great Island Channel (site code 001058)	Connection via River Lee. c.9.7km at closest point c.10.5km Hydrological connection	Potential for impacts to habitat loss and alteration and species fragmentation due to deterioration of water quality: development may result in	Possible - requires more detailed analysis.	Possible significant effects cannot be ruled out without further analysis and assessment and the application of mitigation measures - Appropriate

		significant effects alone.		assessment required.

10.4. Appropriate Assessment

10.4.1. The Natura Impact Statement

10.4.2. The Applicant also prepared a Natura Impact Statement (December 2021) in respect of the revised RFI scheme, which examines and assesses potential adverse effects of the proposed development on two designated European Sites.

10.4.3. The NIS is stated as having been informed by best practice guidance for such assessments, consultation with various prescribed bodies including EPA, IFI, etc. a desktop and literature study, including NPWS databases, the synopses, Natura 2000 Data Forms and conservation objectives and EPA mapping, and habitat and species surveys.

10.4.4. Section 6.2 contains an assessment of the potential impacts of the proposed development on the identified European Sites and in combination effects, while Section 6.3 sets out a series of mitigation measures.

10.4.5. The NIS concluded that there will be no significant effects to the integrity of the designated sites.

10.4.6. Having reviewed the NIS, all supporting documentation and submissions, I am satisfied that the information allows for a complete assessment of any adverse effects of the proposed development on the conservation objectives of the abovementioned European sites alone, or in combination with other plans and projects.

Appropriate Assessment of Implications of the Proposed Development

10.4.7. The following is an assessment of the implications of the project on the relevant conservation objectives of the European sites using the best available scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.

- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.

Relevant European sites:

10.4.8. The following sites are subject to appropriate assessment.

1. Cork Harbour SPA (site code 004030)

2. Great Island Channel SAC (site code 001058)

Aspects of the Proposed Development

10.4.9. The main aspects of the proposed development that could adversely affect the conservation objectives of European sites include;

- Impacts to water quality and water dependant habitats through construction related pollution events and /or operational impacts.
- Impacts on air quality arising from construction related activities
- Impacts on species arising from noise during the construction and/or operation of the proposed development.

10.4.10. Tables 2 and 3 summarise the appropriate assessment and integrity test. The conservation objectives, targets and attributes as relevant to the identified potential adverse effects have been examined and assessed in relation to all aspects of the project (alone and in combination with other plans and projects). I have also examined the Natura 2000 data forms as relevant and the conservation objectives supporting documents for these sites available through the NPWS website (www.npws.ie). Mitigation measures proposed to avoid and reduce impacts to a non-significant level have been assessed. In terms of possible in-combination effects, plans, programmes and existing and proposed developments were considered. This complete assessment allows for clear, precise and definitive conclusions to be reached in terms of adverse effects on the integrity of European sites.

Summary of Appropriate Assessment of implications of the proposed development on the integrity of European Sites alone and in combination with other plans and projects in view of the sites Conservation Objectives.

Table 2 Cork Harbour SPA Key issues • Water quality impacts due to pollutants or soil/silt run off during construction and operational phases • Impacts on air quality during construction • Noise and disturbance of species during construction Conservation Objectives https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004030.pdf					
Summary of Appropriate Assessment					
Conservation Objective: To maintain the favourable conservation condition of the following:	**Targets and attributes (summary- as relevant)**	**Potential adverse effects**	**Mitigation measures (including monitoring)**	**In-combination effects**	**Can adverse effects on integrity be excluded?**
Little Grebe Great Crested Grebe Cormorant Grey Heron Shelduck Wigeon Teal Pintail Shoveler Red-breasted Merganser Oystercatcher Golden Plover Grey Plover Lapwing Dunlin Black-tailed Godwit Bar-tailed Godwit Curlew	Long term population trend stable or increasing. No significant decrease in the range, timing or intensity of use of areas, other than that occurring from natural patterns of variation.	<u>Construction</u> Impacts on Water Quality and habitats due to run-off of silt and other contaminants at construction and operational stages. Dust emissions from Construction Activities Noise disturbance during construction <u>Operational Phase</u> Hydrocarbons from car park	Specific measures identified in section 7.0 of the NIS and in the EIAR including the Construction Environmental Management plan and Construction Methodology plan, including inter alia: • Exclusion zones and barriers to prevent sediment washing into adjoining drains. • Temporary sediment control measures and	The Lower Lee Flood Relief Scheme comprises of a combination of flood walls, embankments, regrading of road and pavement sections, flow control measures and pen stock construction, culverting, and other minor works. As outlined above, the LLFRS is currently the subject to legal challenge by way of judicial review. It was subject to AA at planning stage.	Yes Adverse effects on site integrity can be excluded as there is no doubt as to absence of effects on these qualifying interests in view of their conservation objectives.

Redshank Black-headed Gull Common Gull Lesser Black-backed Gull		Release of emissions from laboratories.	hydrocarbon/oil interceptor facilities provided where site works involve discharge to local drainage network. • If necessary excess water from dewatering during construction of basement to be managed and discharged to river via a temporary pipe installation. Settlement tanks and filters to be incorporated in design. • Removal of any contaminated ground material to an appropriate, licenced facility reducing longer-term impacts on water quality. Construction noise to be kept to minimum in accordance with relevant standards and regulations. Mitigation measures to reduce dust emissions including dampening	Subject to similar best practise measures and AA screening, significant in-combination effects are not anticipated should this project proceed and the Board's decision is not overturned. In the event that the decision is overturned or remitted, it will be subject to AA again as part of a subsequent planning application.	
Common Tern	No significant decline in productivity rate, breeding population, distribution of breeding colonies, no significant decrease in prey biomass, no significant increase in barriers to connectivity.				
Wetland and Waterbirds	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 hectares, other than that occurring from natural patterns of variation.				

			down measures with water sprays. <u>Operational Phase</u> Installation of bypass separators and non-returning valves at outfall points. Wastewater storage tank will be installed for use in the event of flooding issues, with 24hrs capacity. Development to be subject to a trade effluent licence, which will be an extension of TNI's current licensing agreements. Biannual testing on emissions to atmosphere.		
Overall conclusion: Integrity test Subject to the control of silt and contamination in accordance with identified measures, significant adverse effects can be excluded. There will be longer-term positive impacts on water quality through the removal of contamination sources from the site and installation of bypass separators. Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of Cork Harbour SPA in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.					

Table 3 Great Island Channel SAC Key issues • Water quality impacts due to pollutants or soil/silt run off during construction and operational phases Conservation Objectives https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001058.pdf					
Summary of Appropriate Assessment					
Conservation Objective: To maintain (M) or restore (R) the favourable conservation condition of the following:	**Targets and attributes (summary-as relevant)**	**Potential adverse effects**	**Mitigation measures (including monitoring)**	**In-combination effects**	**Can adverse effects on integrity be excluded?**
Mudflats and sandflats not covered by seawater at low tide (M)	The permanent habitat area is stable or increasing, subject to natural processes. Conserve mixed sediment to sandy mud with polychaetes and oligochaetes community complex in a natural condition.	<u>Construction Phase</u> Impacts on Water Quality and habitats due to run-off of silt and other contaminants at construction <u>Operational Phase</u> Hydrocarbons from car park	<u>Construction Phase</u> Specific measures identified in section 7.0 of the NIS and in the EIAR including the Construction Environmental Management plan and Construction Methodology plan, including inter alia: • Exclusion zones and barriers to prevent sediment washing into adjoining drains. • Temporary sediment control measures and hydrocarbon/oil interceptor facilities	The Lower Lee Flood Relief Scheme comprises of a combination of flood walls, embankments, regrading of road and pavement sections, flow control measures and pen stock construction, culverting, and other minor works. As outlined above, the LLFRS is currently the subject to legal challenge by way of judicial review. It was subject to AA at planning stage. Subject to similar best practise measures and AA screening, significant in-	Yes Adverse effects on site integrity can be excluded as there is no doubt as to absence of effects on these qualifying interests in view of their conservation objectives.
Atlantic salt meadows (R)	Targets for habitat area, distribution, Physical structure, vegetation structure and composition				

			provided where site works involve discharge to local drainage network. • If necessary excess water from dewatering during construction of basement to be managed and discharged to river via a temporary pipe installation. Settlement tanks and filters to be incorporated in design. • Removal of any contaminated ground material to an appropriate, licenced facility reducing longer-term impacts on water quality. <u>Operational Phase</u> Installation of bypass separators and non-returning valves at outfall points. Development to be subject to a trade effluent licence, which will be an extension of TNI's current licensing agreements.	combination effects are not anticipated should this project proceed and the Board's decision is not overturned. In the event that the decision is overturned or remitted, it will be subject to AA again as part of a subsequent planning application.	

Overall conclusion: Integrity test Subject to the control of silt and contamination in accordance with identified measures, significant adverse effects can be excluded. There will be longer-term positive impacts on water quality through the removal of contamination sources from the site and installation of bypass separators. Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of Great Island Channel SAC in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.					

10.5. Appropriate Assessment – Conclusion

10.5.1. 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.

10.5.2. Having carried out screening for appropriate assessment of the project, it was concluded that the proposed development may have a significant effect on Cork Harbour SPA (site code 004030) and Great Island Channel SAC (site code 001058). 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.

10.5.3. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the Cork Harbour SPA and Great Island Channel SAC, or any other European site, in view of the sites' Conservation Objectives.

10.5.4. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

11.0 Recommendation

11.1. Having regard to the foregoing I recommend that permission for the above described development be refused for the following reasons and considerations.

12.0 Reasons and Considerations

Having regard to the *Cork City Development Plan 2022-2028* and in particular the building height and density spatial strategy, the proposed part 4/5/6 storey research centre is not consistent with the current Development Plan, acknowledging the prescribed prevailing heights and target heights as outlined in the Plan for the subject site. By definition in the Development Plan, the proposed development would be categorised as a "tall building", however the subject site is not identified as a location for such buildings in the Plan, and as such it is considered that the proposed development would be inconsistent with the Development Plan. The proposed

development would, therefore, be contrary to the proper planning and sustainable development of the area.

Susan Clarke
Planning Inspector

6th December 2022