

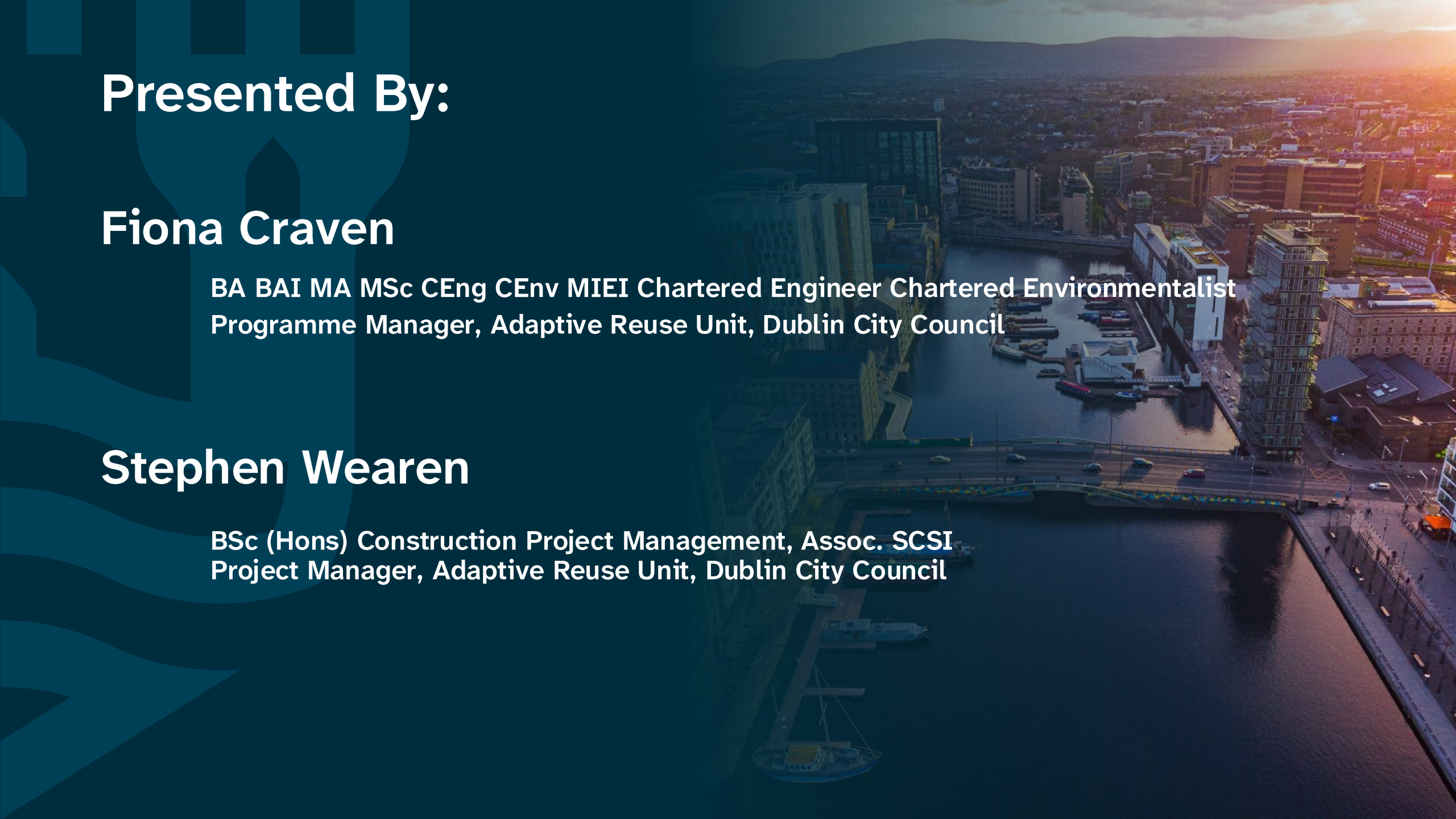


Fitzwilliam Quay Adaptive Reuse Project

A Case Study Presented at the National Building Control Office CPD Event
Building Control and the Reuse of Existing Buildings and Materials

September 23rd 2026

Osprey Hotel, Naas, Co. Kildare



Presented By:

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Dublin City Council Adaptive Reuse Unit

Established in 2022 as an Innovation Unit in the Housing Department

- > 500** Properties Assessed for Conversion to Apartments for Social Housing
- 17 Detailed Feasibility Studies Completed
- 8 Projects Progressed to Funding Application Stage
- 6 Projects with Funding Approved
- 3 Properties Acquired
- 10,000 Estimated Potential Homes from Vacant Floor Space in Commercial Property in DCC Area



Identified as an Example of Good Practice in Local Government by NOAC & CCMA in 2024

Adaptive Reuse: Feasibility Studies Completed



Feasibility Studies Completed Protected Structures and Historic Buildings



Feasibility Studies Completed Protected Structures and Historic Buildings



Cost Analysis / Valuation of Apartments (2024 Costs)

Location	Development Costs Per Apartment	Building Acquisition Cost Per Apt.	Total	Valuation of Completed Apartments	Difference Between Costs and Valuation
North Frederick Street, D1	€500,000	-	€500,000	€450,000	€50,000
Baggot Street, D2	€400,000	-	€400,000	€450,000	€50,000
Bolton Street, D1	€300,000	-	€300,000	€300,000	€0
Phoenix Park, D9	€308,000	-	€300,000	€300,000	€8,000
Office Building, Dublin 4	€185,000	€237,000	€422,000	€413,000	€9,000
Clontarf, D3	€230,000	€220,000	€450,000	€450,000	€0
Historic Buildings, Dublin 4	€288,000	€192,000	€480,000	€450,000	€30,000
Eden Quay, D1	€246,000	€278,000	€524,000	€420,000	€104,000
NCR, Dublin 7	€285,000	€275,000	€560,000	€425,000	€135,000
Capel Street, D1	€360,000	€200,000	€560,000	€400,000	€160,000
Abbey Street, D1,	€450,000	€150,000	€600,000	€400,000	€200,000

Funding Sources

Funding Received

- **DHLGH SHIP Funding (Social Housing Investment Programme)**
- **URDF Call 3 (Urban Regeneration Development Fund)**

Other Funding Applied For

- **EUI (European Urban Initiative)**
- **DCEE Mission Cities Accelerator Fund**
- **Historic Structures Fund**

Additional Funding Opportunities

- **THRIVE (Town Centre First Heritage Revival Scheme)**
- **DCEE Social Climate Fund**



Reuse of Buildings: Carbon Savings



Building Reuse Fitzwilliam Quay Project Carbon Savings



584 kgCO₂e/m²

Upfront Carbon Emissions of New Build Apartments

278 kgCO₂e/m²

Estimated Upfront Carbon Emissions of Fitzwilliam Quay Project

52%

Reduction in Carbon Emissions from Reusing Building Structure

- Using INDICATE Methodology for Carbon Estimation (IGBC)
- Thanks to Nick Taaffe and Adam Bermingham of the SCSi for preparing estimate

Building Reuse Carbon Savings Factoring In Infrastructure Costs



700 kgCO₂e/m²

Upfront Carbon Emissions of New Build Apartments

278 kgCO₂e/m²

Estimated Upfront Carbon Emissions of Fitzwilliam Quay Project

60%

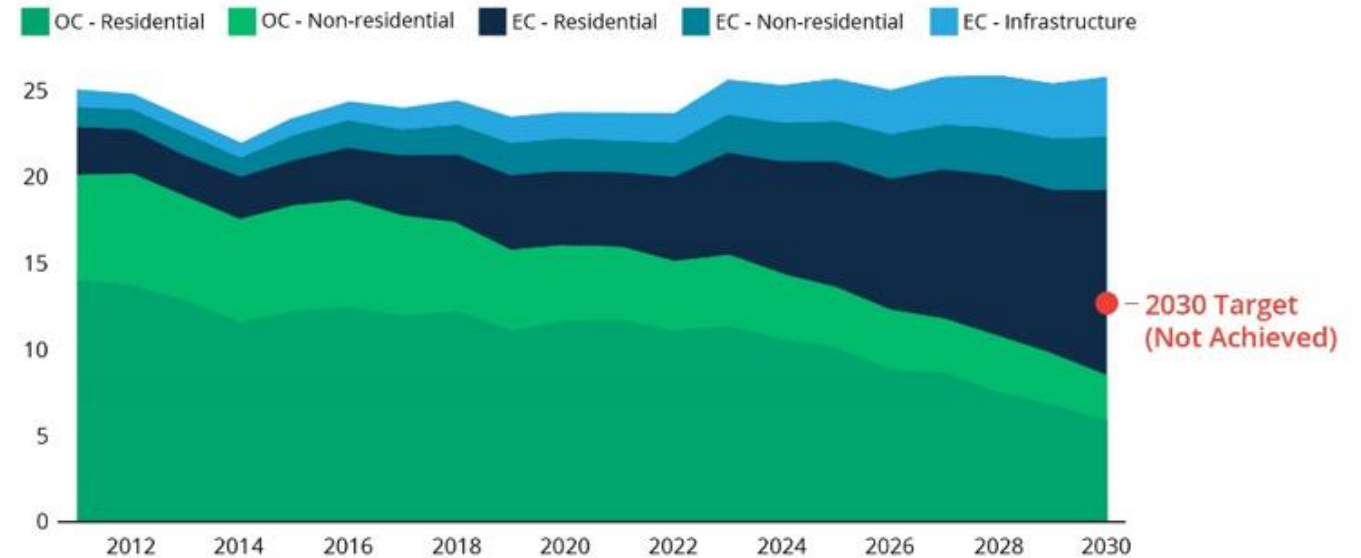
Reduction in Carbon Emissions from Building Reuse Compared With New Build Housing Development Inc. Infrastructure Costs

- Based on the **Savills Earth Estimate** for Embodied Carbon Associated with Infrastructure for Housing Development (UK): *Taby Halliwell*
- This is consistent with a recent report published by the EPA/UCD/UCG “**Town Revitalisation through the Integration of Vacant Buildings into the Circular Economy**” *L. Heaphy et al.* – embodied carbon of building reuse project in Ballina is estimated to be 33% that of a similar new build project with new infrastructure required

Climate Action Targets and Embodied Carbon

IGBC Modelled Scenario A: If Embodied Carbon is Not Addressed in Planned Development to 2030

Outcome: Failure to Meet Climate Action Target Resulting in Fines of Approx. €3-6 billion



Graph: Irish Green Building Council Source: BIACE UCD OC = Operational Carbon EC = Embodied Carbon

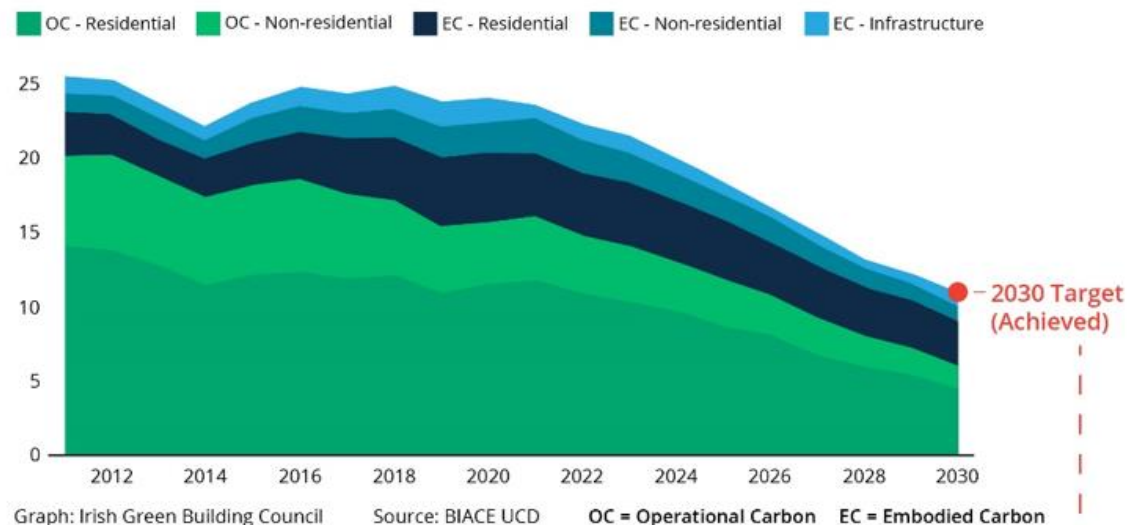
Research by UCD Building in a Climate Emergency Team and IGBC

Climate Action Targets

Irish Green Building Council Roadmap to 2030

IGBC Modelled Scenario B: Roadmap to Achieve 2030 Climate Action Targets by Addressing Embodied Carbon

Outcome: Success at Achieving Climate Action Targets: No Fines Payable & Systems Established to Ensure 2050 Targets can be Achieved



If 124,000 new homes are created from existing vacant buildings

If 500,000 existing homes are retrofitted to BER A3

If the carbon intensity of new development is reduced by 60%

An aerial photograph of a city harbor, likely Oslo, Norway, featuring a bridge, a river, and mountains in the background. The image is overlaid with a dark blue semi-transparent graphic on the left side, which includes a stylized white building silhouette with a pointed roof and a series of wavy lines below it. The text is centered over the image in a large, white, sans-serif font.

Reuse of Buildings: Recommendations to Support Reuse

Recommendations to Support and Promote Building Reuse

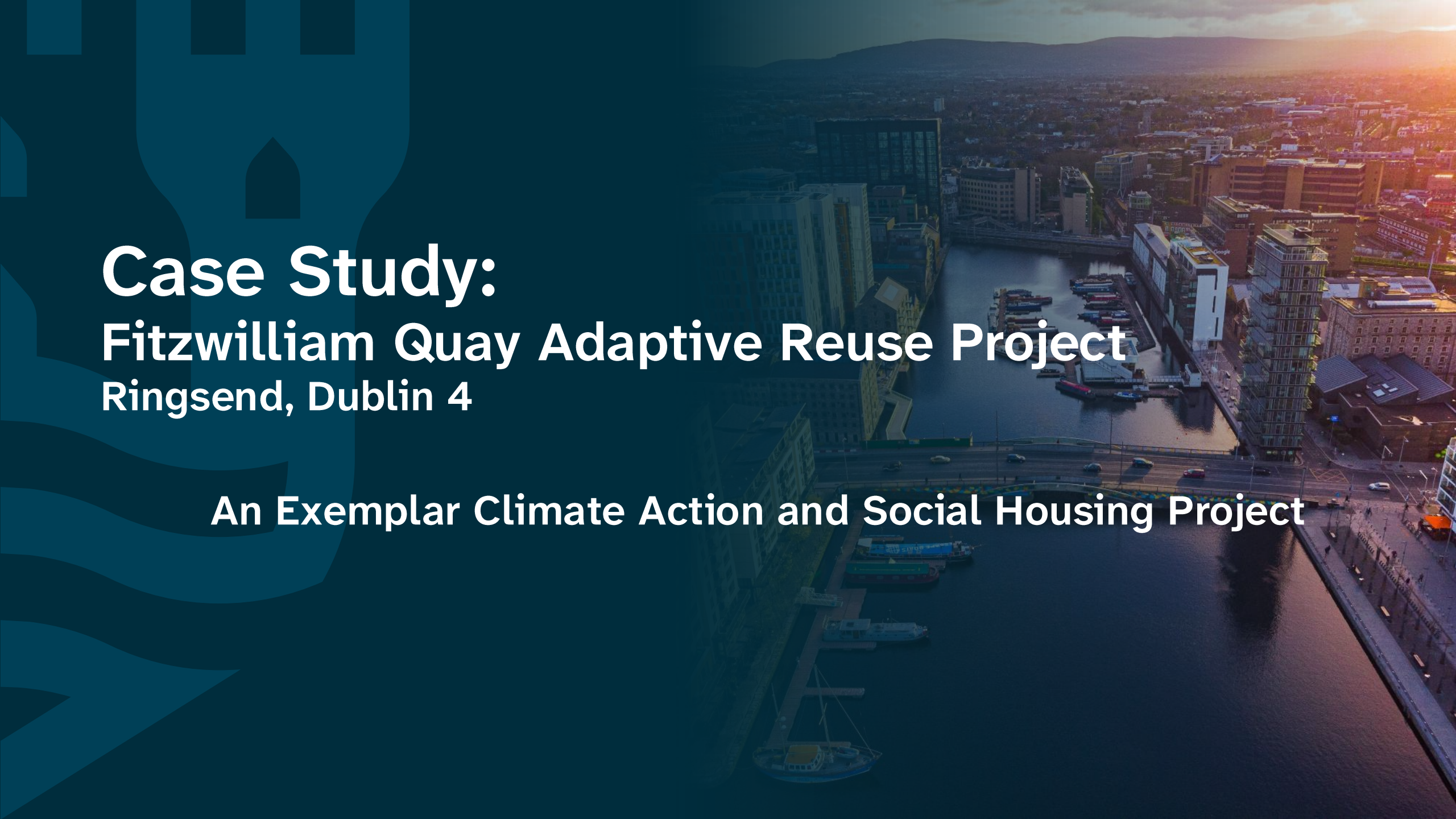
DESIGN

- Use existing building layout: minimise structural intervention, adjustments to doors or window openings etc.
- Use planning derogations where possible: e.g. requirements for private open space, lifts, accessible access
- Compensate by providing improved facilities in other areas – larger apartment size

POLICY

- Improve Grant Systems to Support Mixed-Use Projects and Projects That Create Multiple Units
- An Improved Grant System Should Factor in Carbon Reductions for Grant Calculation (Carbon Credits)
- Project Grants to be Assessed on a Case-by-Case Basis
- Establish Programme Offices to Deliver Exemplar Projects and Build Case Study-Based Guidance Docs



An aerial photograph of the Fitzwilliam Quay in Dublin 4, Ireland. The image shows a river flowing through a city, with modern buildings lining the banks. A bridge crosses the river in the foreground. The sun is setting in the background, creating a warm glow over the city. The text is overlaid on the left side of the image.

Case Study:

Fitzwilliam Quay Adaptive Reuse Project

Ringsend, Dublin 4

An Exemplar Climate Action and Social Housing Project

Building Reuse and Materials Reuse Fitzwilliam Quay Project



Fitzwilliam Quay Adaptive Reuse Project



Development Summary

15 - total residential units

15 (100%)- social housing



Site Area: 780m²

Height: 3 storeys – existing building

Costs developed and funding approved at feasibility stage. Pre tender estimate currently being progressed by IDT

Status: Part 8 approved July 2026, Design to Tender in progress

Next Milestone:

Publication of tender expected October 2026

Estimated Delivery: Q2 2028

Fitzwilliam Quay Project: Background

Excellent location close to city centre, bus, train and bicycle routes.

Excellent floor plan suitable for conversion to residential

Potential to promote car free development and create attractive communal garden

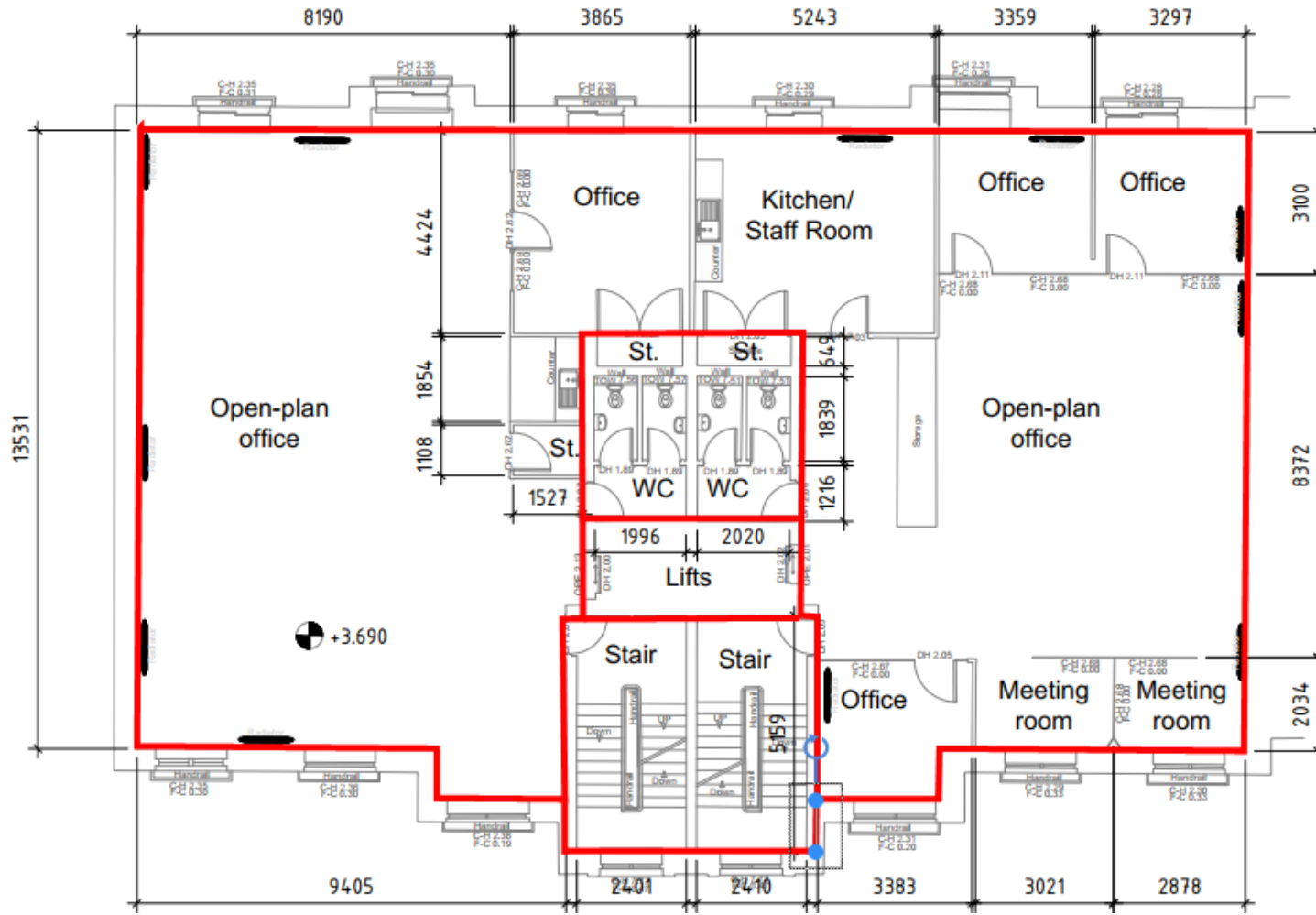


Established residential street

Close to Ringsend Village

Housing Need

Fitzwilliam Quay Project: Existing Building



Open Floor Plans

Mirrored on Each Level

Dual Cores

1

Apartment sizes 49-56m²

Separate Entrances

Minimal Communal Spaces

Fitzwilliam Quay Adaptive Reuse Project

- Early identification of material reuse sub-project
- Inclusion of brief and allocation of hours in IDT tender documentation
- Review of materials viable for reuse
- Hierarchy of reuse
 - Within project
 - Within DCC
 - Other public sector/non-profit
 - Private
- Contract tender inclusion
 - Cost Management
- Construction and redistribution

Fitzwilliam Quay Project: Material Assessment



- Glazing
 - Doors
 - Windows

42 Items



Fitzwilliam Quay Project: Material Assessment



➤ Office Partitions
– 41 Items

Fitzwilliam Quay Project: Material Assessment



➤ Doors
- 42 Items

Fitzwilliam Quay Project: Material Assessment



➤ Kitchens
- 5 Units



➤ Storage
- 6 Units



➤ Sanitaryware
- 20 Units

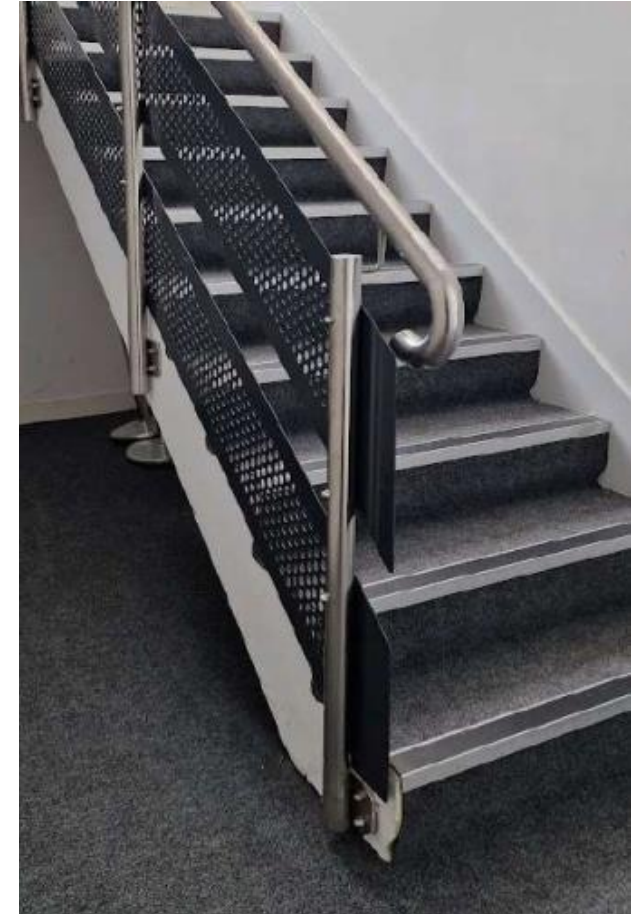
Fitzwilliam Quay Project: Material Assessment



➤ Paving



➤ Fencing



➤ Balustrades

Fitzwilliam Quay Project: Material Assessment



➤ Raised Access Flooring
- 860m2

➤ Cills
- 28 Units

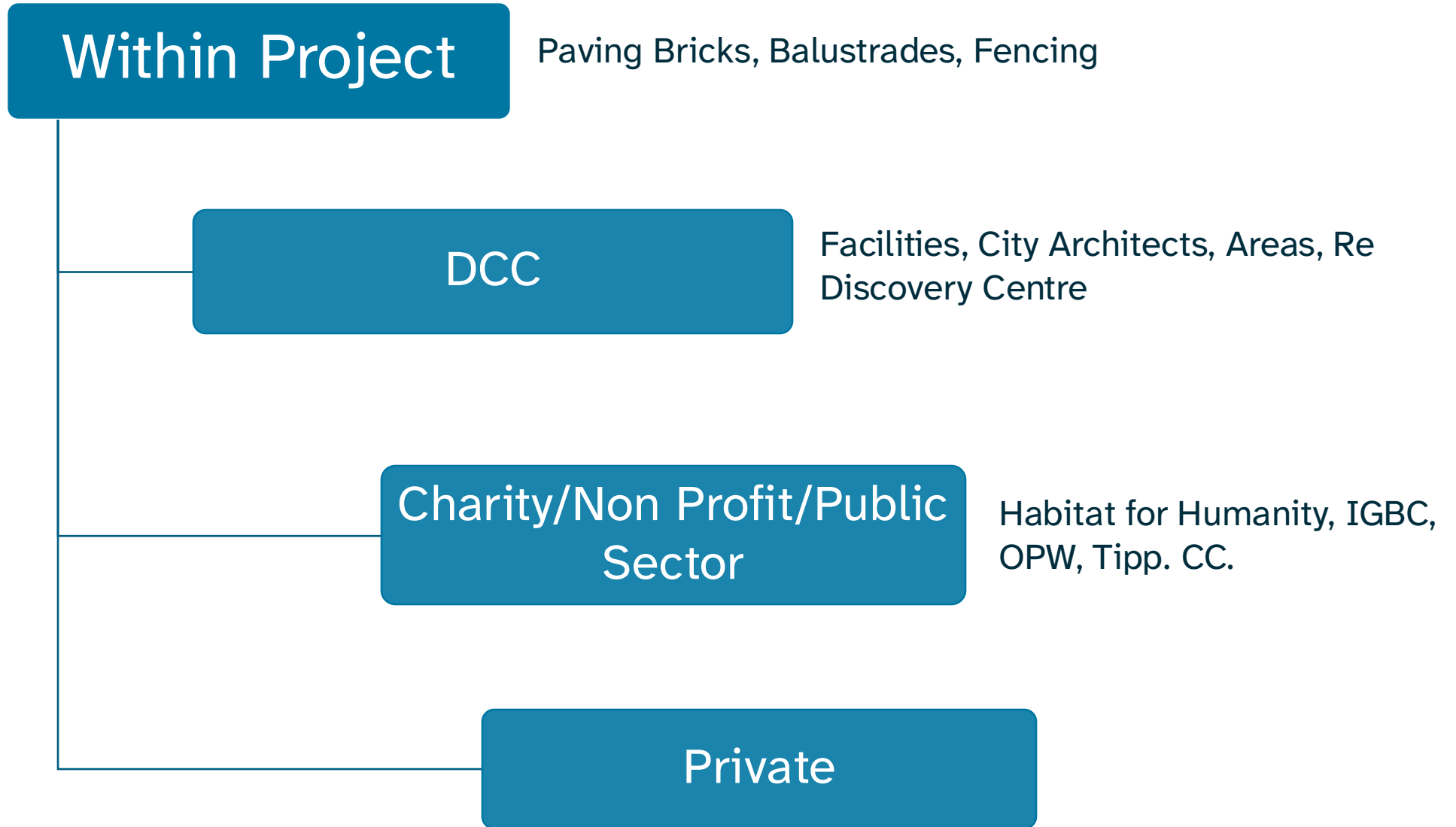


➤ Carpet Tiles
- 28 Units

➤ Ceiling Tiles
- 760m2



Fitzwilliam Quay Project: Engagement/Redistribution

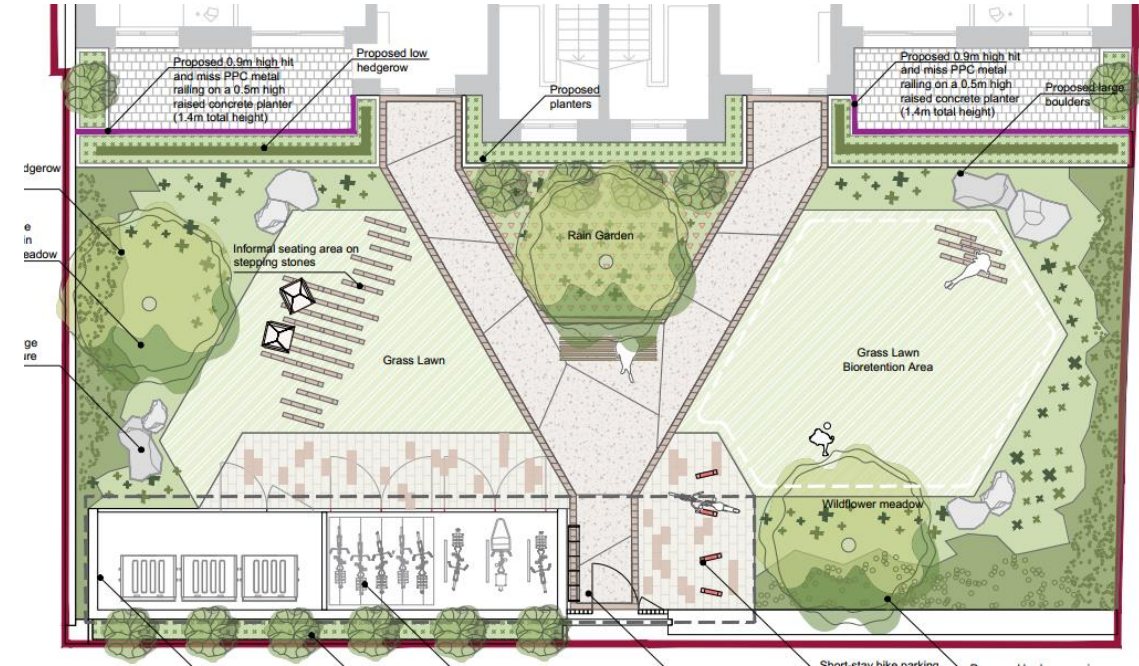


Fitzwilliam Quay Project: Direct Project Reuse



Building Structure

Other: Balustrades,
Fencing, Juliet
Balconies



Paving Bricks



Fitzwilliam Quay Project: Indirect Project Reuse

- Tipperary County Council
 - Raised Access Flooring

- Habitat for Humanity
 - Windows
 - Internal Doors
 - Cills
 - Kitchens
 - Storage (Some)
 - Sanitaryware

- Benefits to Reuse
 - Carbon Savings
 - Reduced waste
 - Savings in reusing material
 - Cost savings for non profits
 - Revenue source for charities



- Unclaimed items
 - Office Storage
 - Carpet Tiles
 - Suspended Ceilings
 - Office Partitions
 - External doors



- Barriers to Reuse
 - Lack of sources for reuse
 - Costs associated with removal
 - Phasing
 - Administration
 - Unwillingness to reuse

Estimated Costs Associated With Materials Reuse

LA Admin and Mgt.	€12,800	(160 hours)
IDT	€11,150	(115 hours)
Phase 1 removal	€5,000	
Phase 2 removal	€50,000	
Total	€78,950	



Recommendations to Support and Promote Materials Reuse

1. Early Identification

- Commitment to progress sub project
- Include in IDT or adjacent contract
- Develop Requirements
- Include in Contract Tender
- Monitor resources and costs

2. National Material Reuse Forum

- CMEX Project Example
- Enfield Material Exchange

3. Material Storage

- National or regional material storage and distribution networks

4. Funding

- Dedicated funding to facilitate the administration and progression of removal, storage and redistribution of viable materials





Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council

Thank you for
your time

