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# MetroLink

Transport Infrastructure Ireland

## Grand Parade Drop Off – Construction Summary

| P01.1

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## MetroLink

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## Contents

# 1. Introduction

This paper provides an overview of the proposed Persons with Restricted Mobility (PRM) drop off at Charlemont Station and outlines the construction sequence of this facility. Further, it considers the additional impact of a proposal from Union Investment Real Estate GmbH to relocate the lift access shaft proposed to access Luas to the opposite side of Grand Parade, and adjacent to the proposed PRM.

## 2. Overview

At Charlemont Station, a Drop-Off for Persons with Restricted Mobility (PRM) is proposed under the MetroLink Project. It will be located to the South of Grand Canal and to the North of the Carrol's Building along the northern side of Grand Parade between its junctions with Dartmouth Place and Dartmouth Square West, as Figure 1. The Charlemont Drop-Off will provide improved connectivity between transport modes for PRM.

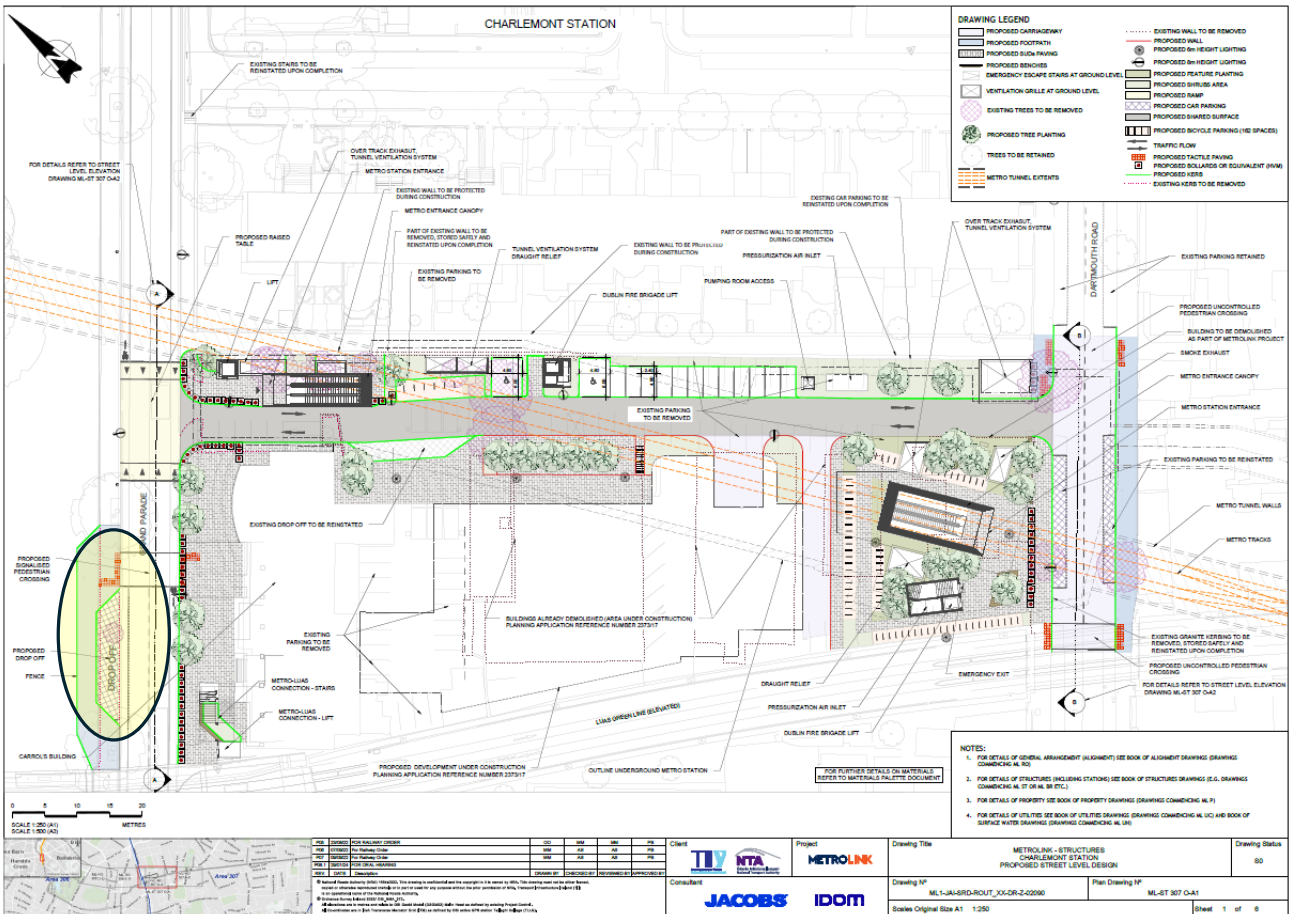


**Figure 1: Proposed location of Charlemont PRM Drop Off**

While approval of the work methodology will be required by Waterways Ireland, the method chosen for design and construction will mean that there will be no instream works on the Grand Canal, as Figure 2.

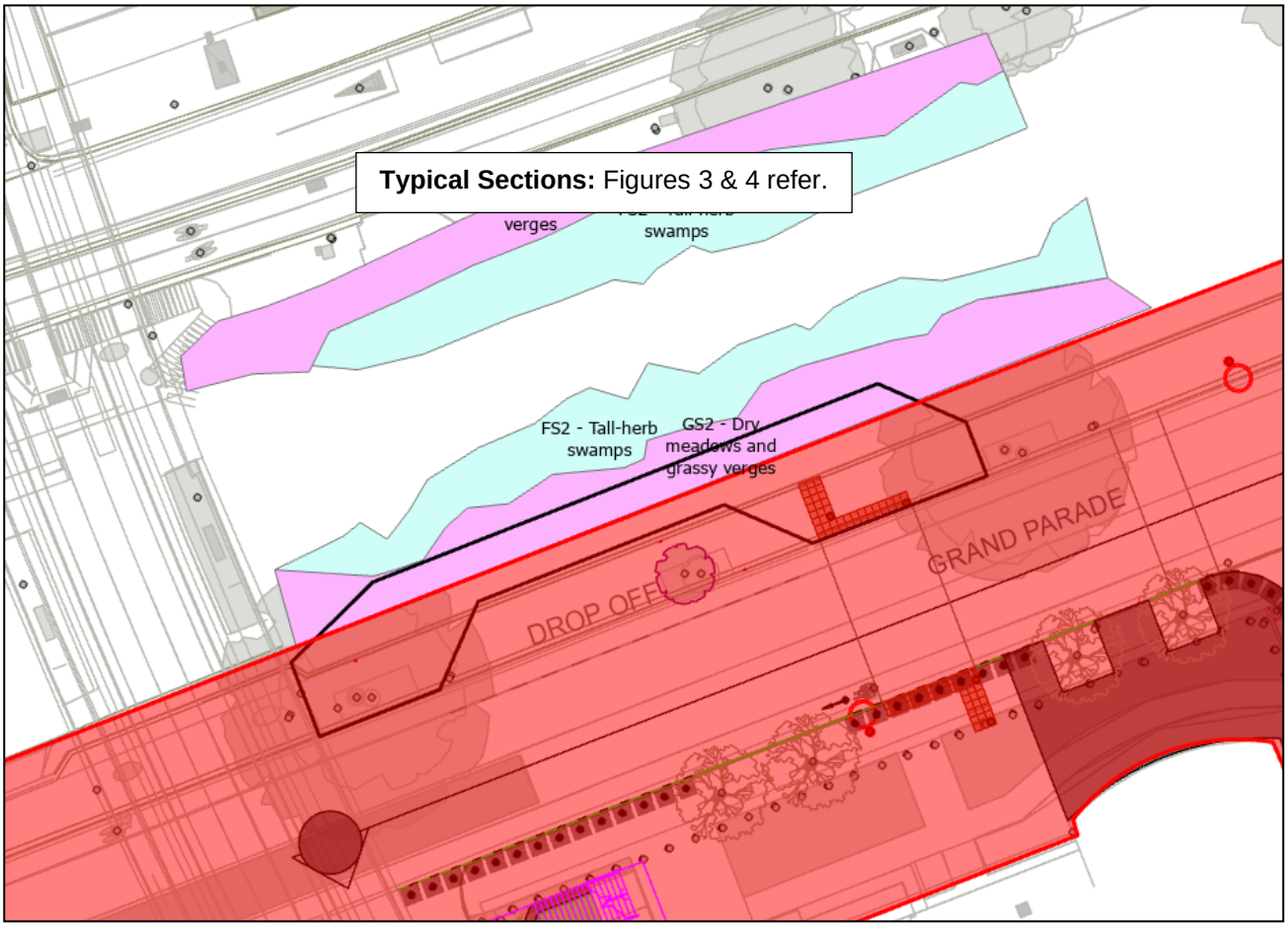


**Figure 2: Proposed Drop off Profile adjacent to the Grand Canal.**

# 3. Existing Details

The following section represents the existing walkway arrangement in outline at the proposed Drop Off location on the south side of the Grand Canal. These details, particularly the location and depth of the utility services will be verified for the detailed design of the proposal.

As Figure 3 below:

- 3.4m Footway Kerb to Kerb.
- 3.6m Canal Embankment.
- Utility Services under walkway (To be verified):
  - 3 x 100dia Telecoms Ducts grouped.
  - 2 x 100dia MV Electric Ducts laid separately.

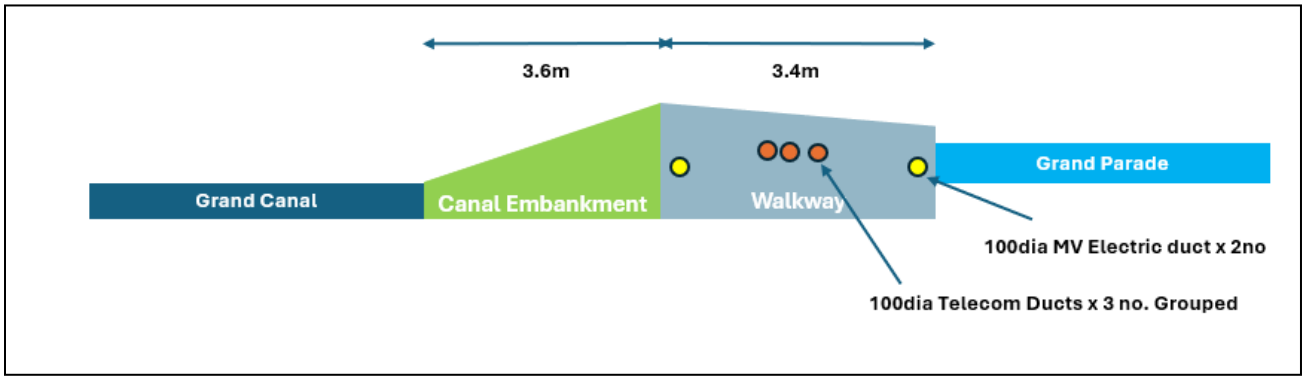


**Figure 3: Outline of existing walkway arrangements.**

# 4. Proposed Outline Details

As Figure 4 below:

- 3.6m Drop off.
- 3.0m Cantilever walkway over the Canal Embankment.
- Existing Utility Services under Drop off:
  - Maintained but lowered underneath the drop off structure.
  - Structure and finish subject to final design, but typically would include structure and finish outlined below.
- Structure:
  - Screw piles back and front (Tension and Compression piles) to avoid utility services.
  - Screw piles connected to Precast Beam/Slabs.
  - Insitu concrete finish.
- Finish:
  - 75mm asphalt over drop off.
  - 125mm asphalt over walkway.
  - Handrail to required standard.
  - Road markings, signage etc.

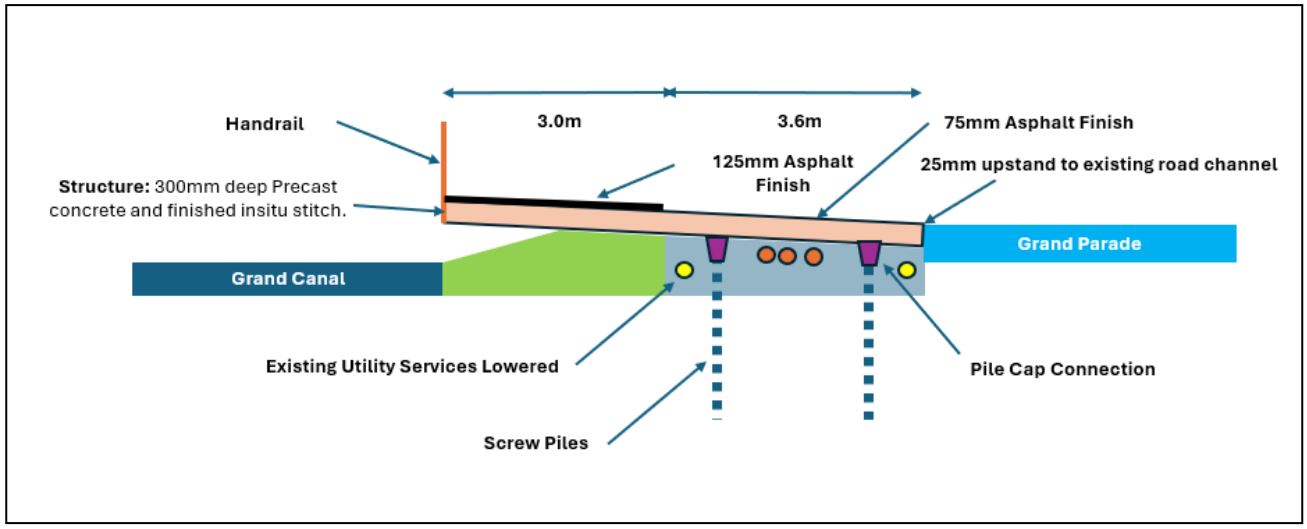


**Figure 4: Outline Section through completed Drop Off.**

# 5. Construction Work Sequence for Drop Off

Works sequence to complete PRM Drop off at Grand Parade will require the following sequence of working:

1. Protection of the canal waterway in advance of commencing the works, as agreed with Waterways Ireland.
2. Diversion and Footway Closure.
3. Create worksite, including protection measures agreed with Waterways Ireland along the Grand Canal embankment.
4. Removal of existing small tree, paving and kerbs.
5. Subject to a design risk assessment undertake one of the following: Temporary diversion, protection, or isolation of each of the following utility services:
    a. 3 x 100mm Telecom ducts.
    b. 1 x 100mm MV Electric ducts at two locations, front and back of the existing footway.
    c. If diversion, it is assumed that this is achieved within the work site without the need to isolate.
6. Preparation of site for screw pile installation, excavation and piling mat.
7. Piling and pile cap preparation.
8. Relocate or reconnection of services as described in sequence 5 above.
9. Install drop of precast concrete planks (for the drop off deck and connect to pile caps).
10. Install handrail and protect.
11. Insitu concrete stitching of the drop off deck.
12. Finishing works.

# 6. Works Constraints

It is proposed that the works will be undertaken under the following conditions:

- Standards Working Hours.
- Traffic Management:
  - Single lane closure adjacent to the works, only during off peak traffic hours;
  - Traffic in both directions controlled by traffic signals.
- Construction Programme anticipated to take up to 8 weeks.
- Works to be completed for the finishing of the MetroLink Station at Charlemont.

# 7. Proposed Relocation of the Lift Shaft

Representations by Consultants (John Spain Associates, Henry J Lyons Architects, and David Slattery Conservation Architects Ltd) on behalf of Union Investment Real Estate GmbH (Union) on the 25 March 2024, proposed the relocation of the lift shaft proposed for access between the MetroLink station and Luas Platform from the street level outside of the Carroll Building at Grand Parade to the opposite side of road and adjacent to the Grand Canal. The proposal put forward on behalf of Union require that the lift shaft would be positioned on the same alignment of the finished proposed PRM Drop Off, illustrated on Figure 5 below.

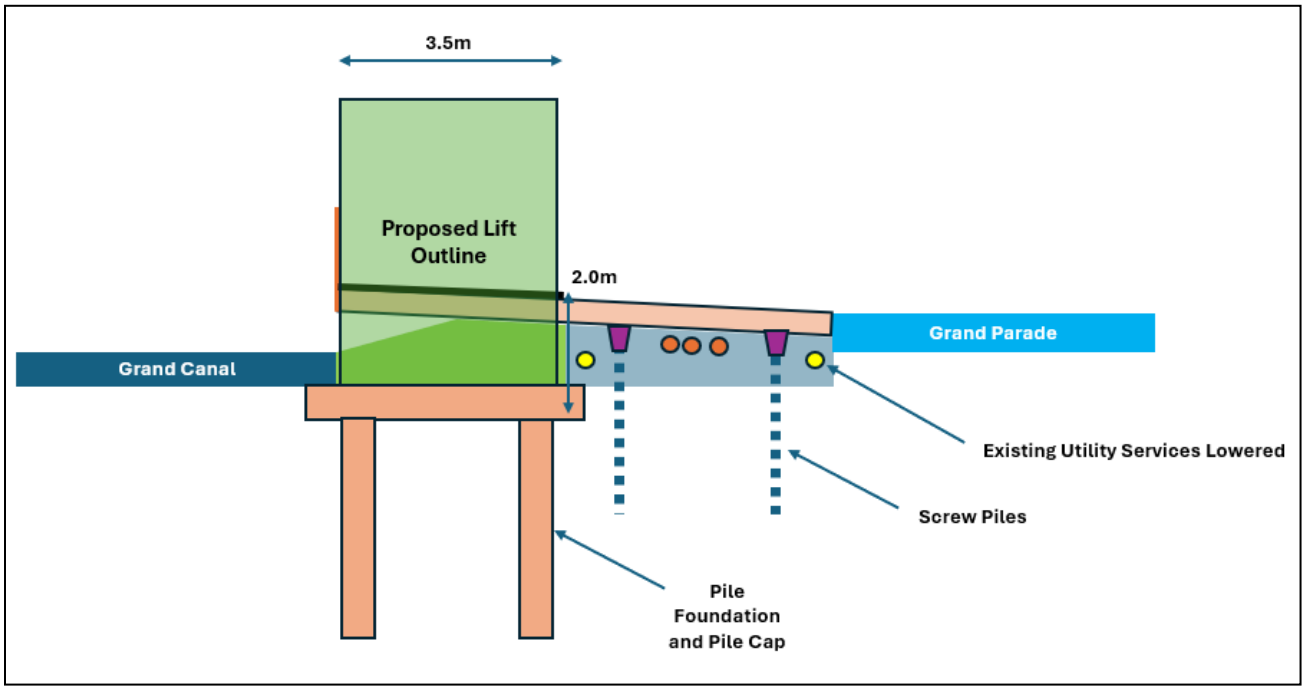


**Figure 5: Union Proposed Location of Luas Access Lift**

TII does not agree with this proposal and does not consider that it represents an optimum or appropriate proposal, for the reasons explained during the Oral Hearing.

It can also be noted that, this proposal would have the following additional impacts to the construction of the PRM Drop Off if the lift shaft was moved:

- The removal of a mature tree adjacent to the Luas Station Bridge.
- The installation of a cofferdam (see also Figure 6) within the canal and the canal embankment to support:
  - The piling platform for the supporting structural piles.
  - The installation of the piles.
  - The excavation and construction of the pile cap foundation for the lift shaft.
  - The construction of the proposed lift shaft to the Luas interface.

The environmental effects of these proposed works have not been assessed in the Environmental Impact Assessment Report (including all updates provided during the Oral Hearing) prepared in respect of the MetroLink project.

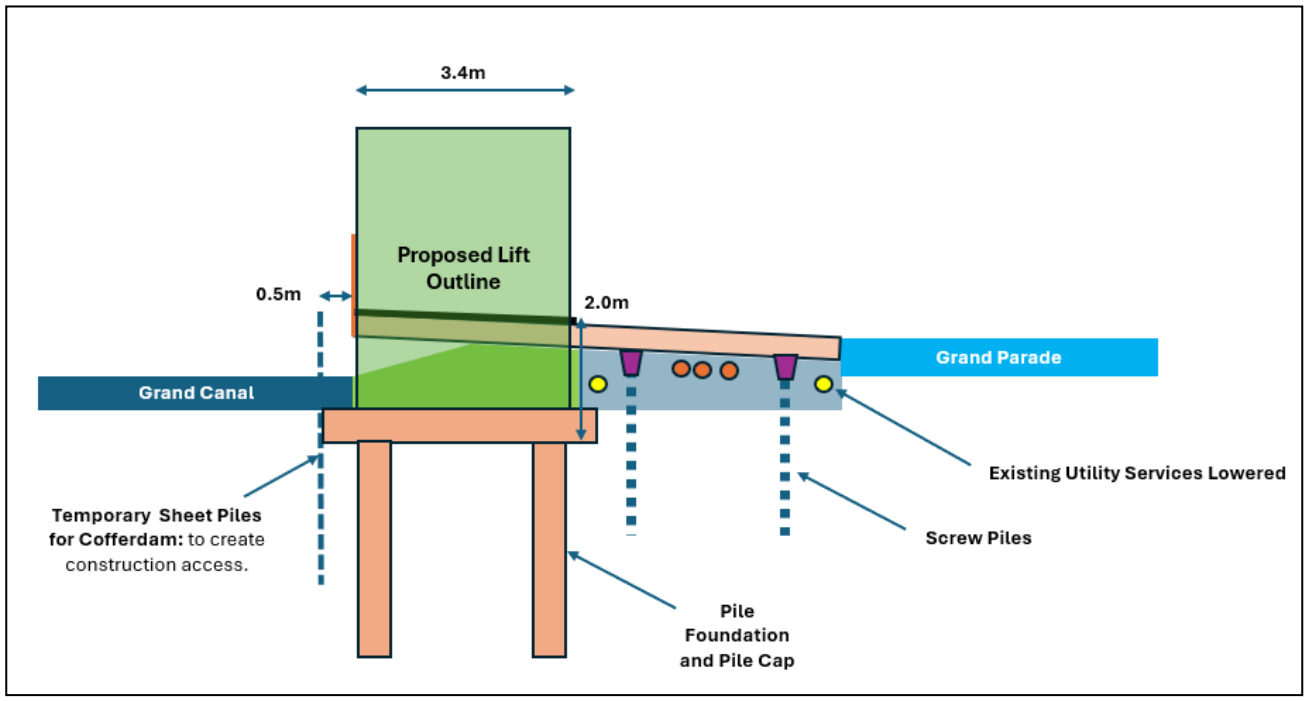


**Figure 6: Temporary Sheet Pile Cofferdam for Construction**