

SLI OGIE UI DHUFAIGH				
Refer to 220084-RY-04-Z00-XXX-DR-DBFL-CE-5201 Construction Details Section A-A				
Carriageway elements	<ul> <li>1 x 3.0m wide Traffic Lane – in each direction</li> <li>1.8m wide Footpath</li> <li>1.0m wide grass verge /Buffer</li> <li>3.6m wide shared path / greenway</li> </ul>			

Table 3-1: Sli Ogue Ui Dhufaigh road cross-section elements

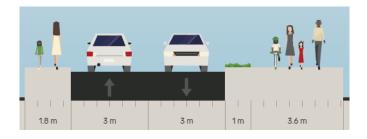


Figure 3-3: Slí Ógie Uí Dhufaigh street cross section

The proposed Quarry Walk access typical cross section (see Figure 3-4) has a total width of 14m and comprises of the following elements:

QUARRY WALK- Main Link Road				
Refer to 220084-RY-04-Z00-XXX-DR-DBFL-CE-5201 Construction Details Section B-B				
Carriageway elements	<ul> <li>1 x 2.75m wide traffic lanes – in each direction</li> <li>2.0m wide Footpath</li> <li>2.5m wide 2-way Cycle path</li> <li>1.0m wide grass verge /Buffer</li> <li>3.3m grass swale</li> </ul>			

Table 3-2: Quarry Walk road cross-section elements

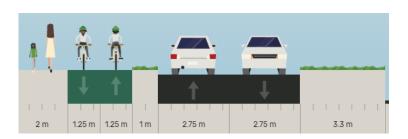


Figure 3-4: Quarry walk road cross section



The proposed Davnets Row shared link typical cross section (see Figure 3-5), has a total width of 5m and consists of the following elements:

DAVNETS ROW				
Refer to 220084-RY-04-Z00-XXX-DR-DBFL-CE-5202 Construction Details Section E-E				
Carriageway elements	<ul> <li>3.5m wide Shared Path</li> <li>0.5m wide grass verge</li> <li>1 x 0.5m wide Hard verge – In each direction</li> </ul>			

Table 3-3: Davnets Row Path cross-section elements



Figure 3-5: Davnets Row shared path cross section

#### 3.9 Traffic Flows

The road cross sections, pavement build-up, pedestrian crossings and other design elements have been informed by the predicted traffic flows for the proposed development. A detailed transport modelling and options assessment exercise has been undertaken to establish these flows. Refer to Traffic and Transportation Assessment Report submitted with this planning application for details.

#### 3.10 Pedestrian and Cycle Infrastructure

Cycle facilities and footpaths are provided along the proposed access roads within the scheme to encourage, maximize sustainable transport and active travel. The requirements for pedestrians and cyclists have been incorporated into the design. Best practice guidance from the National Cycle Manual and DMURS has been implemented on the scheme including:

 Provision of 2.5m wide 2-way segregated cycle tracks in accordance with the requirements of the National Cycle Manual.



- 1.0m wide grass verge separates the segregated cycle track from the carriageway
- Footpaths have been provided with a minimum width of 1.8m.
- Shared areas for pedestrians and cyclists are provided at the toucan crossing waiting areas.
- Extension of 3.6m wide shared path/greenway which ties into the existing Ulster Canal Greenway
- 1.0m wide grass verge separates the greenway from the carriageway
- 2No. Rest

## 3.11 Pedestrian crossings

Provision of pedestrian crossing facilities along key travel desire lines throughout the scheme in addition to those located at street nodes. Types and treatments of crossings have been detailed in the table below.

Crossing	Location	Width	Treatment
Uncontrolled			
Courtesy crossing	Sli Ogie Ui Dhufaigh	2m	Dropped kerb
Uncontrolled			
Courtesy crossing -	Quarry Walk	4m	Flat top raised table
Toucan crossing	Quarry Walk	4m	Flat top raised table

Table 3-4:Types of Pedestrian crossings and their location

#### 3.12 Pavement Design standards

Proposed access roads, shared paths, footpaths, and cycle paths within the subject site are designed in accordance with the Department of the Environment Recommendations for Site Development Works, the Design Manual for Urban Roads and Streets (DMURS), NTA Cycle Manual and Local Authority and TII Specifications for Road Works series 900 requirements.

### 3.13 Vehicle Tracking

The proposed roads will accommodate large trucks, refuse trucks, busses, and fire engines. Refer to DBFL general arrangement drawings no. drawings 220084-RY-04-Z00-XXX-DR-DBFL-CE-1201 &1202 for vehicle tracking paths.

Access tracking was completed for Monaghan Bottlers and Rooskey Avenue, to ensure access for Articulated vehicles and Large Refuse vehicles respectively, see Figure 3-6 below.



- Articulated Vehicle dimensions Width 2.55m Length 16.480m
- Large refuse vehicle dimensions Width 2.45m Length 9.860m



Figure 3-6: Vehicle Tracking analysis for Monaghan bottlers access and Rooskey avenue

The proposed access vehicle route into Roosky Lands has a 90-degree bend from Slí Ógie Uí Dhufaigh road leading to Quarry walk, this portion of road is designed to ensure that buses and cars would be able to manoeuvre past the bend to access the Monaghan Harps GAA club. Tracking analysis was completed to ensure that there is adequate space for a bus and private vehicle to comfortably track the bend in either direction and to access the Monaghan Harps GAA club, refer to Figure 3-7 below.

- Standard Rigid Bus dimensions Width 2.55m Length 12.0m
- Standard Design Vehicle dimensions Width 2.0m Length 4.8m.

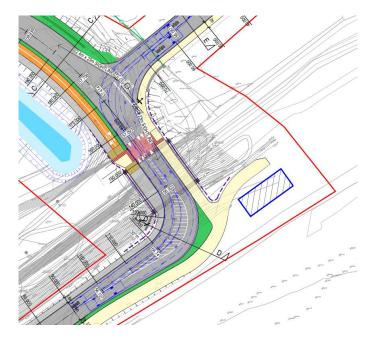


Figure 3-7: Vehicle Tracking analysis for 90 deg bend and Monaghan Harps GAA access



The proposed Civic offices access has been designed to ensure access for large refuse and fire engine trucks. Vehicle tracking analysis was completed, refer to Figure 3-8

• Large refuse vehicle dimensions - Width 2.45m Length 9.860m



Figure 3-8: Vehicle Tracking analysis for the Civic Offices access

# 3.14 Road Safety Audit / Quality Audit

A Stage 1 Road Safety Audit has been undertaken and is included in Appendix F:. All the problems identified by the auditor have been resolved as per auditors' recommendation or alternative measures were implemented in agreement with the auditor. A Quality audit has also been completed and is included in Appendix G: