Mixed Use Development, Carrigaline, Co Cork.



Construction Management Traffic Plan

Document Control Sheet

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INTRODUCTION

1.1 BACKGROUND

1.0

Martin Hanley Traffic and Transportation Consulting Engineers have been engaged by Reside Investments Ltd, to prepare a Construction Management Traffic Plan (CMTP).

The (CMTP) will supplement the planning application for a proposed development consisting of 202 apartments and 22 Townhouses as well as a large retail outlet and 2No small retail units and a creche with associated underground parking.

This "Preliminary Construction Management Traffic Plan" outlines, broadly how the construction stage traffic can best be managed during the construction works on site. This is a draft plan and does not constitute a construction stage, Traffic Management Plan or Works Proposal. It is recommended that it should be provided to an appointed contractor in order to inform them of perceived problems, constraints, and mitigation measures. A detailed Method Statement and Traffic Management Plan should be prepared by an appointed Contractor in advance of any works. This detailed Contractors Method Statement should describe the proposed phasing of the works, set out protection measures for staff and local residents and describe entrance and associated traffic and pedestrian management measures.

2.0 TRAFFIC MANAGEMENT OBJECTIVES

- Ensure the safety and health of work personnel, the public and those who will be impacted by the construction works.
- > Ensure that road users are aware of the potential changed traffic conditions and that risks are identified and mitigated.
- ➤ Ensure that the site's operations will be maintained at a satisfactory level of performance during the period of the construction works.
- > Ensure that temporary parking for security clearance and temporary laydown for heavy vehicles or loads is made available, inclusive of turnaround areas.
- > Ensure clear routing of traffic and clearly delineated interaction of light vehicles with heavy vehicles.

3.0 CONSTRUCTION WORKS INFORMATION

The purpose of the CMTP is to regularise the traffic movements to and from the proposed Development off the Carrigaline Western Relief Road, ensuring safety for all road users during planning the construction works. The construction works planned for the site are to cater for 202 Apartments and 22 Townhouse as well as a large retail outlet and 2No small retail units and a creche with associated underground parking.

The main entry/exit for construction traffic will be via the proposed junction with the Carrigaline Western Relief Road (CWRR).

Currently the access junction is under construction as part of the CWRR Scheme and is due for completion by September 2022.

The proposed opening hours of the large retail shopping developments are generally between 08:00 and 22:00 Monday to Friday and between 09:00 and 18:00 Saturday and Sunday.

Peak traffic flows on the Carrigaline Western Relief Road generally occur during the 07:30-08:30 and 16:30-17:30.

4.0 PLANNING

4.1 TRAFFIC ASSESSMENT

The following traffic volume and data should be considered during the preparation of the CMTP:

- Current traffic volumes, peak times, and flow, and expected construction traffic volume.
- Vehicle types (consider heavy and permit vehicle routes, oversize vehicle routes, and other special needs).
- Operating speeds and construction lower speeds.
- Where queues are likely to occur as a result of the works, the CMTP should quantify the likely queue lengths and indicate what contingency strategy will be undertaken if queue lengths exceed acceptable limits. The CMTP should clearly state at what stage and how the strategies will be implemented.
- Methods to guide vehicles through the construction site.
- Methods of traffic control (i.e., signage, line-marking, bollards, barricades, etc.).
- Whether or not the construction works require measures requiring additional traffic control (such as traffic controllers, light vehicle escorts, police escorts, able signage, variable message signs, etc.).
- Whether or not the works should be confined to the hours of low traffic flow such as during nights and/or weekends.
- Where it is likely that over-sized vehicles or loads may need to be accommodated as part of the traffic management regime, traffic management planners should ensure that lane width, turning movements and vertical alignments are suitable for these vehicles to traverse.
- Provide details of any unregistered vehicles proposed to be used for transport during construction and their requirements. The CMTP should also identify the interface between any unregistered vehicles and other vehicles and pedestrians.
- ➤ The potential impact that construction works will have on pedestrian and cyclist both on-site and on adjoining roads. The CMTP should indicate the likely sources and routes taken by pedestrians, cyclists and identify facilities that may generate high volumes of pedestrian or cycle traffic. Where paths are interrupted, alternative safe access needs to be provided (taking into consideration pedestrian and cyclist behaviour).

4.2 CONSTRUCTION SITE ASSESSMENT

Access to Adjoining Roads and Businesses

The planning process should take into consideration all neighbouring business access and roads, and ensure that access is maintained at all times to leaseholds and other and public roads

Environmental Conditions

Any potential problems that may impact sight distances at entry and exit points to business should be identified and addressed. The need for any temporary re-positioning of road furniture should also be identified. Care should be taken to ensure traffic control devices will not affect roads in an east-west direction through shadowing or glare. Measures to remove and store signs during storm preparations should be included in this section. Where there is a Storm Response Plan proposed for the site, the CMTP should refer to that document.

Hazardous Facilities and Conditions

Any dangerous goods sites (such as fuel stations, public pools, generating plants, etc.), gas and electricity transmission features and any other potentially dangerous facilities/situations that have the potential to impact or be affected by the construction traffic, should be recorded in the CMTP. Risks associated with such hazardous facilities should form part of the respective CMTP risk assessment.

Impact on Adjoining Road Network

Change of normal operations on site may have significant impacts on traffic flow on the main road by causing excessive delays or queue lengths, particularly for other leaseholders. This may require specific traffic engineering analytical skills to assess the potential impacts. The CMTP should document details of any such consideration and analysis, along with any proposed measures to mitigate potential impacts on the adjoining road network.

4.3 RISK IDENTIFICATION AND ASSESSMENT

The CMTP should include an assessment of all potential risks associated with the traffic passing near and through the construction site and should determine the operational measures that minimise the risk. The identification and assessment process should be undertaken. The likelihood and consequences should be rated after risk treatments (that is residual risk) have been determined. The site manager should, so far as practicable, control or reduce identified risks in accordance with the hierarchy of control. The CMTP should provide details of the mechanism that will be used to identify and assess future hazards as they arise throughout the construction works.

4.4 EMERGENCY PLANNING

Contact details of the An Garda Siochana and emergency services contacts in the area should be documented in the CMTP. The CMTP should also include provisions for emergency services vehicles to travel through the site to another site or business, and to access the site should an emergency situation arise on-site during the construction works

5.0 CONSTRUCTION TRAFFIC

The working hours on the site will be 07.00 to 18.00. Deliveries to the site by large Goods Vehicles not exceeding 10m in length will be restricted to the period 10.00 to 16.00.

The proposed construction traffic haul route for all large deliveries to the site is outlined below in Fig 5.1 and on drawing CM-CMTP-P01 in the appendix,

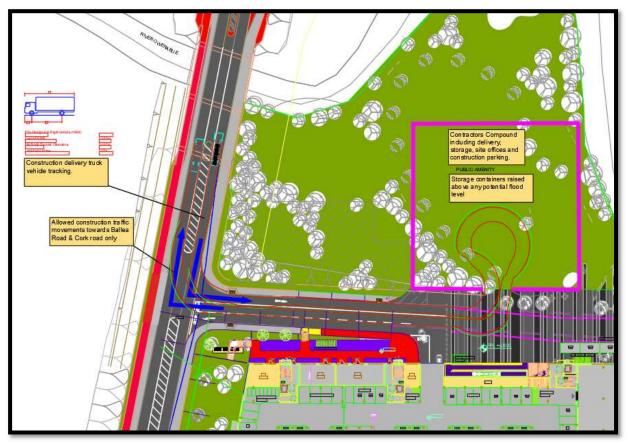


Figure 5.1 Proposed Construction Stage Haul Route for construction traffic

The proposed construction traffic route, as outlined in figure 5.1 above proposed that all construction delivery traffic to the site will travel along the Carrigaline Western Relief Road (CWRR). This traffic will use the Ballea Road R613 and Cork Road R611. No construction traffic will travel along Main Street Carriagline.

This route will be employed for all construction deliveries to the site during the construction stage.

A vehicle tracking anlysis has been undertaken for a 10.0m construction delivery truck and the results are shown on drawing CM-CMTP-P01 in the appendix to this report. The optimal location for temporary contractors compound will be in the proposed public amenity area. The entrance to the site compound will be centrally located and at the southern end of the compound.

In general construction traffic will be approx 1 or 2 delivery trucks per day. Delevery vehicles will be no more that 10m in length. It is envisaged that the total number of construction staff will average approx 50No and associate parking will be provided,

Construction Traffic Deliveries	Construction Parking
1 or 2 per day 10m max length	50 Construction staff
	25 parking spaces

Table 5.1 Proposed Construction Deliveries and Parking.

6.0 TRAFFIC SAFETY & MANAGEMENT CONSTRUCTION STAGE

The appointed Works Contractor on site shall be responsible for the planning, design, implementation, maintenance and removal of traffic safety and management measures required in order to facilitate and complete the works. The closure of the any roads to traffic during the works period will not be permitted.

The Contractor should be aware that during working hours it is a specific requirement of the Contract that STOP/GO under the control of flagmen be employed for traffic management operations. Two-way traffic should be provided at all times with STOP/GO only permitted during peak hour traffic periods, between 07.00-09.00 in the AM peak traffic period and between 16:30-18:00 in the PM peak period. The Contractor shall notify all businesses within the extent of the Works of the start date and duration of the Works through a letter/email drop 2 weeks in advance of the start date. Further information leaflets shall be issued at monthly intervals throughout the duration of the Works or as may be required to advise of any interference with access.

The Contractor shall comply at all times with the requirements of the Department of the Environment Chapter 8 -Traffic Signs Manual, Temporary Traffic Management Design Guidance, Temporary Traffic Management Operations Guidance, Temporary Traffic Measures and Signs for Roadworks and also the Guidance for the Control and Management of Traffic at Road Works (Second Edition, 2010) prepared by the Local Government Management Services Board and any additional requirements detailed in the Design Manual for Roads and Bridges.

The design and implementation of Traffic Safety and Management measures shall be conducted by a Traffic Management Design Specialist appointed by the Contractor.

Lightweight water filled barriers or concrete barriers shall be the only delineation devices used within the Temporary Traffic Management phases implemented, unless otherwise agreed to in writing by the Local Authority. For each temporary traffic management phase of the Works, the Contractor shall compile detailed traffic management plans showing the sequence of execution of the Works within the programme constraints of the design. The traffic management plans shall include the following information as a minimum:

- 1. Phasing of the Works at each location.
- 2. Drawings showing traffic management layout, including:
 - a) Geometric design
 - b) Road works speed limits (if proposed by the Contractor).
 - c) Position of flagmen, signs, and temporary traffic signals.
 - d) Safety zones
 - e) Location and width of lanes.
 - f) Working areas.
 - g) Access and exit locations for contractor's materials.
 - h) Temporary barriers.
 - i) Taking up and reinstatement of road markings.
 - j) Temporary lighting
 - k) Crossovers.
 - I) Contra-flow arrangements.
 - m) Provision for emergency services.
 - n) Protection/diversion of services, supplies and the like.
 - o) Signing
- 3. Timing of operations.
- 4. Road lighting
- 5. Preventing mud and dust on the public roads

The Contractor's traffic management proposals shall take account of the work area required for paving or reinstatement and the location of construction joints. Delay to affected traffic within the Works area should be kept to a minimum.

The setting up and removal of any traffic management measure or temporary diversion shall not be undertaken during the following times:

- Monday to Saturday 06.00 to 09.30 hours and 16.00 to 19.00 hours; and
- on any local or national public holiday.

The exact times and movements of HGV's will be agreed during Cork City Council traffic coordination meetings.

All vehicles used on Site shall be fitted with a roof mounted amber flashing beacon as a minimum. The use of a vehicles hazard warning lights shall not be acceptable on Site.

All Contractor's applications for temporary road closures shall be subject to the full statutory procedures outlined in the Temporary Closing of Roads Regulations. All applications relating to road opening licences, lane occupations, signs or signals must be submitted to Cork County Council in writing. Cork County Council applies the T license system detailed in the national "DTTAS Guidelines for Managing

Control of Roadworks in Cork City document.

Openings in Public Roads". Fees and charges are detailed in Directions for the Management and

All necessary traffic safety precautions shall be undertaken by the Contractor to ensure the safety of all traffic and pedestrians using the existing roads adjacent to the Site and connecting minor roads during the execution and completion of the Works, and all precautions shall be taken to minimise disruption to the local residents. The Contractor shall maintain access at all times to lands and businesses affected by or adjacent to the Works. He shall pay particular attention to construction sites and business premises adjacent to the Site.

The Contractor shall provide, maintain, and finally remove all necessary temporary gates, stiles, ramps, and any similar items and shall provide temporary crossings of trenches and other obstructions. Where the Contractor has to maintain these ways across the site he shall maintain them at existing ground level and fenced on both sides with temporary fencing. Where it is necessary to have gaps, the Contractor shall ensure that gaps in the fencing for site traffic shall be gated with the gates giving priority to non-site traffic. During working hours, the Contractor shall ensure that the crossings are manned such that site traffic can use the crossing without prejudicing the security of the crossing, be it vehicular or pedestrian.

The Contractor shall ensure that no item of plant, goods, or equipment (including stores or offices) shall be placed or parked on the public roadway or its verges in a manner which shall / may result in danger to the personnel on the Site or members of the public, or which shall / may restrict sight distances on all accesses to the Site or on public roads.

The Contractor shall provide and maintain access to all existing properties adjacent to the Works.

All drivers including those delivering plant and materials must be given clear instructions regarding designated haul routes, delivery times and working hours. Including the traffic arrangements applicable at any particular time of the construction process.

The Contractor shall be responsible for maintaining the running traffic carriageway and any pedestrian routes adjacent to the works in a clean and safe condition at all times.

7.0 APPENDIX

