



**Dublin City Council**

Comhairle Cathrach Bhaile Átha Cliath

**Directions for the Control & Management of  
Roadworks in Dublin City**

**Dublin City Council  
Roadworks Control Unit  
Floor 6, Block 2  
Civic Offices  
Fishamble Street  
Dublin 8**

**June 2010**

# Table of Contents

<b>Section 1. Introduction</b>	<b>4</b>
1.1 Introduction	4
1.2 Legal Background	4
1.3 Definition of Roadworks and Emergency Roadworks	6
1.4 Application of these Directions	7
1.5 Requirement for Specific Direction/Permit/Consent in Relation to All Proposed Roadworks	7
1.6 Conditioning of Directions/Permits/Consents	7
1.7 Refusal/Withdrawal of a Direction/Permit/Consent	8
1.8 Violation Notices	9
1.9 Roadworks Control Unit	10
1.10 Operative Date	10
<b>Section 2. General Directions - Restrictions on Roadworks</b>	<b>11</b>
2.1 Restrictions on the Timing of Roadworks	11
2.2 Restrictions on the Periods During which Roadworks are Permitted	12
2.3 Restrictions on Roadworks to Accommodate Special Events	12
2.4 Moratoria on Roadworks on Specified Roads	12
2.5 Requirement to Cease Work in the Event of Traffic Accident or Other Emergency	13
2.6 Direction to Cease Work	13
2.7 Relaxation of Restrictions	13
<b>Section 3. Notification Requirements</b>	<b>14</b>
3.1 Required Notification of all Roadworks	14
3.2 Wayleave Application and 3 Month Advance Notification (Form T1)	14
3.3 7 Day Advance Application (Form T2)	15
3.4 Requirement to Submit a Works Method Statement	15
3.5 Requirement to Submit a Traffic Management Plan	16
3.6 Daily Notification	16
3.7 Minimum Impact Works Notification	17
3.8 Reinstatement Completion Notification (Form T5)	17
3.9 Temporary Road Closures	18
3.10 Notification of Emergency Roadworks	18
3.11 Notification of Required Extension of Time	18
3.12 Notification of Works Involving Duct Pulling/Cabling or Testing	18
3.13 Notification of Works at or Near Signalised Junctions	18
3.14 Notification of Suspension of Paid Parking	19

<b>Section 4</b>	<b>General Directions – Traffic</b>	<b>20</b>
4.1	Roadworks Identification Signs	20
4.2	Signposting, Barrier Control and Illumination	20
4.3	Conduct of Roadworks so as to Minimise Traffic Disruption and Danger to Pedestrians and Traffic	21
4.4	Roadmarkings, Signage and Special Surfaces	23
4.5	Signalised Junctions & Temporary Traffic Signals	23
4.6	Availability and Use of Steel Plates	24
4.7	Avoidance of Underground Services	25
4.8	On-Site Storage of Materials and Plant	25
4.9	Necessary On-Site Documentation	25
<b>Section 5</b>	<b>General Directions - Road Maintenance</b>	<b>26</b>
5.1	Definitions	26
5.2	Ten Day Notices	27
5.3	Road opening Licences	27
5.4	Specification of Roadworks/Reinstatements	27
5.5	Cycling Facilities	30
5.6	Requirements on Recently Approved Carriageways or Footways	30
5.7	Approved Permanent Reinstatement Materials	30
5.8	Concrete Flags, Granite Kerbs & Cobble Setts	31
5.9	Inspection of Works	31
5.10	Bridge Crossings	31
5.11	Indemnification of Dublin City Council	32
5.12	Emergency Repairs	33
5.13	Submission of ‘As Constructed’ Drawings	33
5.14	Pavements/Carriageways where Special Conditions Apply	33
5.15	Bollards (Street Furniture)	33
5.16	Manhole Chambers and Frames	33
5.17	Telecoms Chamber Specification	34
5.18	Jointing Bays and Holes	34
5.19	Deviations from Specifications	35
<b>Section 6</b>	<b>General Directions - Other Services</b>	<b>36</b>
6.1	Luas - Light Rail System	36
6.2	Waterworks	37
6.3	Electricity & Public Lighting	37
6.4	Sewers & Main Drainage	38
6.5	Cellars	39
6.6	Parks and Open Spaces	39
<b>Section 7</b>	<b>The Management of Scarce Underground Road Capacity</b>	<b>41</b>
<b>Section 8</b>	<b>T2 Application Charge, Long Term Damages Charges and Taking in Charge Procedures</b>	<b>44</b>

<b>APPENDIX I</b>	<b>Flow Charts Showing Procedures</b>	<b>46</b>
<b>APPENDIX II</b>	<b>List of Roads with Impact Numbers</b>	<b>52</b>
<b>APPENDIX III</b>	<b>List of Resurfaced Roads 2000 to 2004</b>	<b>52</b>
<b>APPENDIX IV</b>	<b>Charges for the Suspension of Parking &amp; for Road Markings</b>	<b>52</b>
<b>APPENDIX V</b>	<b>Charges for Reinstatement of Road Markings</b>	<b>52</b>
<b>APPENDIX VI</b>	<b>Road Maintenance -Charges</b>	<b>53</b>
<b>APPENDIX VII</b>	<b>Ten Day Notice</b>	<b>54</b>
<b>APPENDIX VIII</b>	<b>Guidelines for Installing and Maintaining Services Close to Trees</b>	<b>56</b>
<b>APPENDIX IX</b>	<b>Specification for the Supply of Mapping Information to Roadworks Control Unit</b>	<b>60</b>
<b>APPENDIX X</b>	<b>Specification for the Installation of Ducting on Behalf of Dublin City Council</b>	<b>61</b>
<b>APPENDIX XI</b>	<b>Compaction Specification</b>	<b>62</b>
<b>APPENDIX XII</b>	<b>Temporary Road Closures</b>	<b>63</b>
<b>APPENDIX XIII</b>	<b>Hoarding/Scaffolding Licences</b>	<b>65</b>
<b>APPENDIX XIV</b>	<b>Positioning of Vehicles/Equipment/Mobile Scaffolding, Hoists and Cranes on Public Roads/Footpaths</b>	<b>68</b>
<b>APPENDIX XV</b>	<b>Skips</b>	<b>69</b>
<b>APPENDIX XVI</b>	<b>Restrictions on Timing of Roadworks</b>	<b>71</b>
<b>APPENDIX XVII</b>	<b>Specifications/Drawings</b>	<b>72</b>
<b>APPENDIX XVIII</b>	<b>Pavements that are Listed Structures and Designated Granite Pavements/Carriageways</b>	<b>84</b>

## **Section 1**      *Introduction*

### **1.1**            **Introduction**

The purpose of this document is to set out the requirements of Dublin City Council in relation to the carrying out of roadworks.

- It does not replace the statutory obligations imposed by other legislation.
- It is not a traffic management design document. It may however impose constraints on those who are involved in the design, implementation and use of temporary traffic measures and signs at roadworks.
- It does not permit works to be undertaken on Private Property.

**Under Section 13 of the Roads Act 1993, sub-section 10(a), A person who without lawful authority or the consent of a road authority-**

- (i) defaces a public road by writing or by any other means,
- (ii) damages a public road
- (iii) excavates a public road
- (iv) (I) places or deposits any material or thing on a public road  
(II) permits dung or urine from an animal owned by him or any material or thing which falls from a vehicle owned or used by him, to be left on a public road, or  
(III) does any other thing, such that the material, thing, dung or urine or the doing of such other thing is a hazard or potential hazard to persons using a public road or obstructs or interferes with the safe use of a public road or the maintenance of a public road, shall be guilty of an offence.

**Under Section 81 of the Roads Act 1993, sub-section 1(b), A person guilty of an offence under any other provision of this Act shall be liable on summary conviction to a fine not exceeding £1,000 or, at the discretion of the court, to imprisonment for a term not exceeding six months or to both such fine and imprisonment.**

### **1.2**            **Legal Background**

In accordance with Section 101D Road Traffic Act, 1961 (Subsection 2) as inserted by Section 9 of the Dublin Transportation Authority (Dissolution) Act 1987, a local authority can issue Directions in writing to persons carrying out roadworks in its functional area. A Direction may specify:-

- (a) the periods during which and the times at which roadworks shall or shall not be carried out,
- (b) the period within which roadworks shall or shall not be carried out,

- (c) the manner in which roadworks shall or shall not be carried out,
- (d) requirements and standards in relation to the temporary or permanent reinstatement of a public road following the carrying out of roadworks,
- (e) requirements in relation to the giving of security for satisfactory reinstatement of a public road following the carrying out of roadworks,
- (f) requirements in relation to the control of traffic in the vicinity of roadworks.

Directions can be issued to all persons, without exception, engaging in roadworks in its administrative area.

Section 13 of the Roads Act, 1993 imposes a responsibility on the road authority for the maintenance and construction of public roads. Subsection 7 provides as follows

*" A Road Authority may do all such things as arise out of or are consequential on or are necessary or expedient for the performance of its functions under this act or otherwise in relation to public roads or ancillary thereto "*.

The above provision empowers a road authority to take whatever actions it considers necessary to maintain and manage the roads within its functional area.

Part 5 of the Communications Regulation Act, 2002 deals with the regulation by road authorities of roadworks carried out by network operators or their agents for the purpose of establishing, extending or maintaining etc. underground electronic communications infrastructure and associated physical infrastructure.

A 'network operator' is defined in the Act as 'any person who provides or operates an electronic communications network'. This includes telecoms operators and other utilities (incl. Bord Gais, the ESB, and Dublin City Council) in cases where they install communications infrastructure either on its own or alongside other services.

The provisions of Part 5 of the Communications Regulation Act, 2002 are without prejudice to the Section 101 D of the Road Traffic Act, 1961 (subsection 2) as inserted by Section 9 of the Dublin Transportation Authority (Dissolution) Act, 1987.

Section 53 (7) of the Communications Regulation Act, 2002 provides as follows:

*'A road authority may formulate and, after public consultation, adopt a scheme setting out its policy regarding:*

- (a) *the use of underground road capacity, including the rationing of any particular underground spaces below roads.*

- (b) *conditions (including restrictions and requirements) that may be imposed by it in relation to the grant of consents either generally or with respect to specific areas or circumstances.*
- (c) *refusal of consents, either generally or with respect to specific areas or circumstances.*
- (d) *charges for consents and provision for repair of long term damage to roads.*
- (e) *emergency road works.'*

Section 53 (5) of the Act, provides as follows:

*'A road authority may, subject to any regulations under section 56 (2), impose charges on network operators –*

- (a) *for the grant of consents to cover the administrative costs, including costs involved in monitoring compliance with consents, incurred by the road authority under this section, and*
- (b) *for reasonable costs it may incur in making good long term damage to a road as a result of road openings carried out by the network operator.'*

Dublin City Council prepared a draft Scheme in June 2003 and following a public consultation procedure an amended Scheme was adopted which came into effect on 1 December 2003. This updated version of the **Directions** incorporates the provisions of that Scheme.

### **1.3 Definition of Roadworks and Emergency Roadworks**

Roadworks means repairs, maintenance, alterations, improvements, installations or any other works to, above or under a public road. (The terms 'public road' and 'road' in these Directions have the meaning assigned to them in the Roads Act, 1993.) Roadworks include any works on the carriageway and footpath, where public road and footpath space is temporarily unavailable for public use. This can include the placement of skips on a public road or footpath. The use of skips on public roads is governed by the Dublin City Council (Control of Skips) Bye-Laws, 1999.

Emergency roadworks are defined as roadworks the carrying out of which is immediately required in order to prevent, or reduce the risk of loss, injury or damage to persons or property. Telecom related roadworks do not generally qualify as emergency roadworks, although permission may be given in exceptional circumstances to carry out telecom related works under this classification.

All emergency road works must be declared as such and emergency signs must be displayed. Work must be carried out continuously until the emergency is contained. Once the emergency is contained, the work will cease to be an emergency and the Directions in relation to planned works apply.

Emergency works identification signs are only to be displayed while the emergency element of the works is being carried out and must be replaced with standard roadworks identification signs thereafter.

#### **1.4 Application of these Directions**

These *Directions* apply to all persons who intend carrying out roadworks (as defined in Section 1.2 above) on public roads in the City Council area. These *Directions* also apply to Dublin City Council in relation to all roadworks it undertakes.

The General Directions set out in this document relate to the carrying out of roadworks on all public roads in the Dublin City Council area. In addition, specific *Directions* in respect of any individual proposed roadworks may be issued by the Roads & Traffic Department Dublin City Council.

#### **1.5 Requirement for Specific Direction/Permit/Consent in Relation to All Proposed Roadworks**

No roadworks, irrespective of duration, other than emergency works, may be carried out on any road without a specific individual Direction/Permit/Consent from the Roadworks Control Unit indicating the location where the works are to be carried out, the period during which and the times at which the roadworks shall be carried out and any other particular requirements in respect of the said roadworks.

#### **1.6 Conditioning of Directions/Permits/Consents**

Under Section 53 (6) of the Communications Regulation Act, 2002 a road authority, when considering an application for a consent is required to have regard to the following:

- *the existing and potential use and availability of spaces under the surface of the road concerned,*
- *traffic control,*
- *the protection of the environment and of amenities including residential amenities,*
- *the manner and timing of the reinstatement of the road and*
- *any Scheme adopted under subsection (7) of the Act.*

Section 53 (4) of the Act requires that any conditions contained in a consent –

- *shall not discriminate unfairly between network operators and*
- *shall be consistent with the need of the road authority to carry out its functions under the Roads Acts, 1993 to 2001 and the Road Traffic Acts, 1961 to 2002.*

In considering an application for a Direction/Permit/Consent the City Council will, in addition to the factors set out above, have regard to the past performance of the utility/operator and/or any person engaged by the utility/operator in complying with conditions attached by the City Council to previous Directions/Permits/Consents issued to the utility/operator.

### **1.7 Refusal/Withdrawal of a Direction/Permit/Consent**

Where the holder of a Direction/Permit/Consent fails to comply with any condition attached to the Direction/Permit/Consent, the City Council will, if it considers it appropriate to do so, withdraw the Direction/Permit/Consent. The City Council also reserves the right to withdraw other Directions/Permits/Consents issued to the particular utility/operator concerned.

The City Council will refuse an application for permission to carry out roadworks in the following cases:

1. Where the City Council is not satisfied here the there is sufficient ‘free’ space to accommodate the proposed infrastructure while complying with the minimum cover and clearance distances specified in the Directions.
2. Where the City Council is of the view that the installation of the planned infrastructure would seriously compromise the capacity of the road to accommodate the planned installation at some future date of other services or of transport infrastructure.
3. Where the City Council is proposing to develop a new road/footpath or refurbishing an existing road/footpath and it proposes to undertake the provision of electronic communications infrastructure or other relevant infrastructure on behalf of other utilities or operators as part of that development.
4. Where the past performance of the utility/operator and/or any person engaged by the utility/operator in complying with the provisions of these Directions and with any conditions attached by the City Council to a previous Direction/Permit/Consent issued to the utility/operator has, in the opinion of the City Council, been unsatisfactory.
5. In cases where invoices for T2 Applications and for long term damage charges have not been paid.

6. In cases where invoices issued by the City Council's loop maintenance contractor in respect of the cost of repairing loops damaged during previous works undertaken by or on behalf of the utility/ operator have not been paid by the utility/operator.
7. Where a moratorium on roadworks has been imposed by the City Council on the particular road in respect of which an application for a Direction/Permit/Consent to undertake road works has been submitted unless under exceptional circumstances.
8. Where the utility/operator is unable or unwilling to indemnify Dublin City Council in respect of all claims, proceedings, liabilities, losses or expenses of whatever nature, however arising in connection with the proposed roadworks. A minimum indemnity of €6.5m for a single incident/claim is required. The period of cover shall be from the start of the works until the location of the works is taken in charge by the City Council.

Sections 53 (11), (12), (13) and (14) of the Communications Regulation Act, 2002 deals with the procedures that will apply in cases where a road authority proposes to refuse to grant consent, to grant consent subject to conditions, or to withdraw a consent in respect of road works. Dublin City Council will comply with these provisions.

All notifications will be in writing delivered using the City Council's on-line extranet roadworks control system.

### **1.8 Violation Notices**

In order to ensure compliance with the Directions, Dublin City Council will inspect roadworks sites on an ongoing basis. Where utilities/operators or their agents are not complying with these Directions, Violation Notices will be issued.

The Roadworks Control Unit of Dublin City Council will record all Violation Notices and non-compliance reports will be prepared and distributed to each operator/utility by Dublin City Council on a regular basis.

The Roadworks Control Unit will take into consideration the number of Violation Notices issued to each operator/utility when processing wayleave applications and deciding whether or not to grant permission for roadworks, what conditions are to be imposed and whether or not to require a bond.

Where a Utility company or agents working on its behalf incur an excessive no. of Violations during the year, then Dublin City Council reserves the right to suspend the granting of permits to that Utility for a specific period of time eg. 1 month, 3 months or as otherwise determined by Dublin City Council.

### **1.9 Roadworks Control Unit**

These *Directions* are administered by the Roadworks Control Unit, Dublin City Council, Roads & Traffic Department, Floor 6, Block 2, Civic Offices, Fishamble Street, Dublin 8. The Unit can be contacted as follows:

<b>Phone</b>	<b>(01) 222 2246</b>
<b>Fax</b>	<b>(01) 222 2813</b>
<b>e mail</b>	<b>roadworks.control@dublincity.ie</b>

### **1.10 Operative Date**

These *Directions* will come into operation 11<sup>th</sup> June, 2010.

## Section 2

## *Restrictions on Roadworks*

### 2.1 Restrictions on the Timing of Roadworks

Each road/street in Dublin City has been graded according to its importance as a strategic traffic route by assigning it a Traffic Impact Number. The Traffic Impact Numbers assigned to each road/street in the City Council area are set out in Appendix II. This list is updated from time to time on Dublin City Council's website [www.dublincity.ie/traffic](http://www.dublincity.ie/traffic).

Having regard to the need to minimise the disruption to traffic caused by roadworks, the City Council has decided that the following general restrictions will apply in relation to times at which non emergency roadworks may be carried out (see also Appendix XV).

Traffic Impact Number	Times During which Roadworks <u>may be</u> Carried Out	
	<i>(Note: additional restrictions may be imposed by the Roadworks Control Unit in particular cases)</i>	
1	Mon – Fri	08.00 – 23.00 hrs
2	Mon – Fri	08.00 – 23.00 hrs
3	Mon – Wed	10.00 – 16.00 hrs & 19.30 – 23.00 hrs
	Thursdays	10.00 – 16.00 hrs, & 21.00 – 23.00 hrs
	Fridays	10.00 – 15.00 hrs, & 21.00 – 23.00 hrs
	Sat & Sun	09.00 – 23.00 hrs
	Public Holiday	09.00 – 23.00 hrs
4	Mon – Wed	19.30 – 23.00 hrs
	Thurs & Fri	21.00 – 23.00 hrs
	Sat & Sun	09.00 – 23.00 hrs
	Public Holiday	09.00 – 23.00 hrs
5	Mon – Wed	19.30 – 23.00 hrs
	Thurs & Fri	21.00 – 23.00 hrs
	Saturday	09.00 – 12.00 hrs & 18.30 – 23.00 hrs
	Sunday	09.00 – 23.00 hrs
	Public Holiday	09.00 – 23.00 hrs

Permission may be given by the Roadworks Control Unit in particular cases to commence evening works before 19.30 hrs (or 21.00 hrs on Thursdays and Fridays) on roads of Traffic

Impact Numbers 3, 4 & 5 if the nature of the works at the particular location is not deemed by the Roadworks Control Unit to be disruptive to traffic flow. In exceptional cases, permission may be granted by the Roadworks Control Unit for works to be carried out on roads with Traffic Impact Numbers 1, & 2 on weekends and public holidays.

All non emergency roadworks must be completed and the site vacated by 23.00hrs.

The general restrictions set out in the table above are based on the assumption that the proposed roadworks will allow two-way traffic to be maintained. Where the proposed roadworks will affect two-way traffic being maintained, the restricted hours during which roadworks may not be carried out, may be extended by the Roadworks Control Unit. In certain cases there may be a particular requirement that the roadworks be carried out at the weekend or on a Sunday only. Where it is proposed to carry out roadworks adjacent to schools, colleges, libraries, hospitals, hotels or other public buildings additional timing restrictions may be applied by the Roadworks Control Unit.

## **2.2 Restrictions on the Periods During Which Roadworks are Permitted**

Having regard to the need to minimise the disruption to traffic caused by roadworks the City Council has decided that no roadworks, other than emergency roadworks, permanent reinstatement works and certain QBC/Luas /T21 works, will be permitted on roads with Traffic Impact Numbers 3, 4 & 5 during the last week of November each year. After that, no roadworks, other than emergency roadworks and certain QBC/Luas/T21 works, will be permitted on all roads with Traffic Impact Numbers 3, 4 & 5 in the run up to Christmas. These restrictions, which will apply every year, are intended to facilitate additional traffic before Christmas. New works in the period prior to commencement of the last week in November must be planned so that permanent reinstatements are completed before this time. Permission may be given by the Roadworks Control Unit for minimum impact works, customer activations and cable pulling during the restricted period. **Exact dates for Operation Freeflow will be determined by the gardai each year.**

## **2.3 Restrictions on Roadworks to Accommodate Special Events**

The City Council reserves the right to restrict or prohibit roadworks either generally across the city or on specified routes in order to accommodate major on-street events from time to time. Every effort will be made by the City Council to give utilities/operators the maximum advance notice of restrictions that will be imposed to facilitate on-street events.

## **2.4 Moratoria on Roadworks on Specified Roads**

Having regard to the need to minimise the disruption caused by roadworks, the need to protect residential amenity, the need to preserve scarce road space and the need to safeguard recently renewed road and pavement surfaces, the City Council will from time to time be

imposing moratoria, of a given duration, on road openings on specified roads, with a traffic impact number 3, 4 & 5.

A list of streets/routes currently subject to moratoria is available on request from the Roadworks Control Unit, Roads & Traffic Department, Dublin City Council or by checking the Roadworks Control On-Line System. [www.dublincityroadworkscontrol.ie](http://www.dublincityroadworkscontrol.ie)

## **2.5 Requirement to Cease Work in the Event of Traffic Accident or Other Emergency**

In the event of any unanticipated traffic disruption arising in the vicinity of approved roadworks, such as a traffic accident or emergency works, the approved roadworks can only continue where reasonable pedestrian and vehicular traffic flow is still possible. Where reasonable pedestrian and vehicular traffic flow cannot be maintained, the utility/company must cease the works concerned and reopen the road to traffic.

## **2.6 Direction to Cease Works**

On the instruction of an authorised official of Dublin City Council, or a member of An Garda Síochána works must be immediately suspended and safe provision made (including secured plating) for pedestrian and vehicular traffic flow.

## **2.7 Relaxation of Restrictions**

In exceptional cases where, because of the nature of the roadworks being carried out it is, in the judgement of the Roadworks Control Unit, not feasible to comply with the general restrictions set out above or compliance would result in the imposition of excessive costs on the utility/company concerned, and where alternative traffic management measures (e.g. road closure) would be inappropriate, consideration may be given to relaxing these general restrictions. The prior written consent of the Roadworks Control Unit must be obtained for the relaxation of any of these general restrictions in any exceptional case.

In cases where restrictions are relaxed, utilities/companies must still continue to work in the original hours designated to them in order to work the maximum hours possible to expedite the works.

Where a relaxation of the restricted hours for non-emergency works is granted beyond 23.00 hrs by the Roadworks Control Unit the relevant utility/company shall comply with the notification requirements set out in Section 3.6.

## **Section 3**

## ***Notification Requirements***

### **3.1 Required Notification of All Roadworks**

Notification must be submitted to the Roadworks Control Unit in relation to all proposed roadworks in the Dublin City Council area. The particular requirements in relation to notification are set out in the following Sections.

Since one of the purposes of notification is to ensure the co-ordination of roadworks to minimise any disruption to traffic, the City Council reserves the right to circulate details of roadworks notifications submitted to third parties.

All notifications must be submitted by the relevant utility/operator and not by their contractors.

### **3.2 Wayleave Application and 3 Month Advance Notification (Form T1)**

A Wayleave Application/3 Month Advance Notification (Form T1) must be submitted using the Roadworks Control Online Extranet (RCOE) system in respect of the following categories of work:

- Works involving a number of roads.
- All excavations and reinstatements, which are greater than 100m in length.
- All works affecting signalised controlled junctions.
- All works on bridges.
- All works on level crossings.
- All works on other sites of engineering difficulty
- All works within 25mt of existing or planned Luas lines

Permission under this Section does not entitle the applicant to commence work until a 7 Day Advance Application (Form T2) has been approved and appropriate conditions imposed. The Wayleave Application/3 Month Advance Notification (Form T1) must be submitted by the utility/company, a minimum of three months prior to the proposed commencement date. One T1 form should be submitted per project.

Permission may be given by the Roadworks Control Unit for works which are subject to 3 months advance notification to commence prior to the expiry of the notification period subject to certain conditions being met.

Full details of the work proposed and the location(s) must be submitted. Failure to do so will result in the application being refused.

A T1 Permit is valid for a period of one year from the date of issue. If works do not commence within that time, a further T1 application must be made.

### **3.3 7 Day Advance Application (Form T2)**

A 7 Day Advance Application (Form T2) must be submitted using the RCOE system in respect of the following categories of work:

- All works requiring a Wayleave Application/3 Month Advance Notification
- All works lasting in excess of one day.
- All works which affect more than 1 lane of traffic.
- All works on roads with traffic impact numbers 1, 2, 3, 4 & 5 except in the case of work, which will have a minimum impact on traffic or pedestrian flow.
- All works involving the erection/renewal/replacement/upgrade of cabinets, boxes, pedestals, shelters or kiosks.

An adequate description of the proposed works must be given in the application.

The Roadworks Control Unit may relax the 7 day advance application requirement subject to certain conditions being met.

For all approved T2 Applications a Direction/Permit/Consent will be issued in respect of the works, a copy of which is to be retained on site, and be available for inspection by Dublin City Council staff or members of An Garda Siochana.

Should the proposed works affect grass verges or a tree lined roadside this should be made clear on all notifications. In these cases it is the responsibility of the utility/operator to contact the Parks and Landscapes Services Division, Dublin City Council, prior to works commencing as outlined in Section 6.6.

It is also the responsibility of the utility/operator to contact the Water/Drainage Divisions of Dublin City Council prior to submission of a T2 Application to check for existing services. Documentary evidence of such contact may be required by the Roadworks Control Unit prior to the issue of a Direction/Permit/Consent.

### **3.4 Requirement to Submit a Works Method Statement**

Depending on the nature of the roadworks to be undertaken and their likely impact Dublin City Council may require a utility/company to submit a “Works Method Statement” in respect of any proposed roadworks. Where a “Works Method Statement” is required a copy should be retained on site. The “Works Method Statement” should provide information on the following:

- the name and contact phone number of the individual responsible for the works,
- the nature and proposed duration of the roadworks,
- the proposed dispositions on site of all works, plant, materials and
- the proposed activities sequence etc.

### **3.5 Requirement to Submit a Traffic Management Plan**

A Traffic Management Plan should be prepared in connection with all proposed works on roads/streets with Traffic Impact Nos. 3, 4 & 5. The Roadworks Control Unit may require the submission of a Traffic Management Plan prior to the issue of a Direction/Permit/Consent. Where a Traffic Management Plan is submitted to the City Council a copy should be retained on site. On major works, especially where conditions have been relaxed by the Roadworks Control Unit, the Garda Traffic Division in Dublin Castle must be notified before the works commence.

A Traffic Management Plan must contain information on the following issues where relevant:

- Evidence of compliance with HSA requirements (mandatory in all Traffic Management Plans)
- Compliance with Department of Transport's Signs Manual
- The type and locations of all temporary signage to be erected,
- The type and locations of all temporary road markings to be installed,
- Details of any temporary changes to existing road markings and signage that will be required to facilitate the road closure,
- The proposed operation of any contra flow traffic lanes,
- The location of proposed temporary traffic signals (see Section 4.5 on use of temporary traffic signals.)
- Details of any changes to other street infrastructure (e.g. taxi ranks, bus stops, etc.) that will be required to facilitate the roadworks,
- Arrangements for local access and pedestrian access,
- Provision for pedestrian movements including any special provision required to facilitate the mobility impaired and disabled,
- Proposed changes to on-street parking arrangements,
- Any proposals to erect barriers,
- Proposed lighting arrangements,
- Proposals for the use of flag men and
- The arrangements that will be made to advise local property owners/residents of the traffic management arrangements that will apply during the roadworks.
- Arrangements for storage of materials.
- For all works within 30 metres of any Traffic signals the contractor must contact the Dublin City Council maintenance contractor SERCO prior to any work commencing, so that any damage to loops which occurs can be speedily repaired. Failure to contact SERCO prior to works starting will result in permission to work being withdrawn.

### **3.6 Daily Notification**

A notification of the proposed location of all works including emergency roadworks must be emailed to the relevant Roads Superintendent, to the Roadworks Control Unit and to the Infrastructure Management Unit before 10.00hrs on the day that work commences or on the

previous day. They should also be notified if work is resumed after a break. The relevant email addresses are as follows:

Roadworks Control Unit  
North City Roads Superintendent  
South City Roads Superintendent  
Infrastructure Management Unit

roadworks.control@dublincity.ie  
patrick.moloney@dublincity.ie  
paul.nolan@dublincity.ie  
imu@dublincity.ie

**IN ADDITION TO THE ABOVE NOTIFICATION ALL AFFECTED RESIDENTS AND BUSINESSES MUST BE NOTIFIED OF THE PLANNED WORKS BY LETTER DROP NO LATER THAN TWO DAYS BEFORE WORKS COMMENCE. THIS LETTER SHOULD CONTAIN THE NAME OF THE ORGANISATION FOR WHOM THE WORKS ARE BEING DONE, A BRIEF DESCRIPTION OF THE WORKS AND A CONTACT NUMBER.**

If the utilities/operators propose to carry out works at a weekend they are required to submit a notification to the Roadworks Control Unit by email , by 12 midday on the Friday prior to the work being carried out. The notification should indicate the location and timing of the proposed roadworks together with the reference number of the Direction/Permit/Consent authorising the roadworks.

### **3.7 Minimum Impact Works Notification (Form T3)**

An application (Form T3) should be submitted using the RCOE system by each utility/operator for all proposed minimum impact works involving excavation or reinstatement of the roadway which were not previously notified to the Roadworks Control Unit by means of a 7 Day Advance Application (Form T2). Applications will be accepted up to close of business on the day before the proposed works.

Minimum impact works are defined as works on roads with Traffic Impact Numbers 1 and 2 which, in the opinion of the Roadwork Control Unit or a member of An Garda Siochana, will not impact on vehicular traffic or pedestrian flow and which can be completed within **three** days. Minimum impact works do not arise in the case of roads with Traffic Impact Numbers 3, 4 and 5.

Even in cases where roadworks will have minimal impact on vehicular traffic or pedestrian flows, they can only be carried out during the unrestricted hours that apply in respect of the particular road and during unrestricted periods.

### **3.8 Reinstatement Completion Notification (Form T5)**

Notification (Form T5) of the completion of all permanent reinstatement works should be submitted using the RCOE system within one month of the relevant works having been completed. For projects covered by a Wayleave Application/ 3 Month Notification (Form T1)

the T5 form should only be submitted on completion of the permanent reinstatement for the entire job.

### **3.9 Temporary Road Closures**

Where full closure of a road is required to facilitate roadworks the procedures set out in Section 75 of the Roads Act, 1993 must be followed. An application for a temporary road closure must be made to the Roadworks Control Unit at least 5 weeks in advance of the required closure date. Any extension to an existing temporary road closure must also be notified to the Roadworks Control Unit 5 weeks prior to the expiration of the existing temporary road closure. Any conditions attaching to the road closure including traffic management arrangements must be implemented in full by the utility/company.

See Appendix XII for a list of conditions concerning temporary road closures.

### **3.10 Notification of Emergency Roadworks (Form T4)**

Notification (Form T4) of **all** emergency roadworks irrespective of the Traffic Impact Number of the road must be submitted using the RCOE system.

### **3.11 Notification of Required Extension of Time**

If a utility requires an extension of time, it must notify the Roadworks Control Unit 2 working days before expiry of original T2 that an extension of time is required for work at a specified location and state the expected finishing date. An extension of time may be granted for a maximum period one month beyond the original finishing date. However, an extension will only be granted if work is substantially complete. Otherwise a new 7 Day Advance Notification (Form T2) must be submitted.

### **3.12 Notification of Works Involving Duct Pulling/Cabling or Testing**

Where the proposed work involves access via an existing chamber only, 24 hours advance notification to the Roadworks Control Unit will be accepted, provided works will be carried out in accordance with timing restrictions detailed in Section 2.1 and there will be no adverse affect on vehicular traffic or pedestrian flows. In all other cases a T2 is required to be submitted.

### **3.13 Notification of Works at or Near Signalised Junctions**

No works are permitted within 30 metres of any signalised junction or within 30 metres of any junction on a road with a Traffic Impact Number 3, 4 or 5 except with the prior consent of the Roadworks Control Unit.

Where works are proposed through signal-controlled junctions the utility/company must notify Dublin City Council at Wayleave Application/3 Month Advance Notification stage. Prior to the submission of the 7-Day Advance Application (T2), the applicant must contact the Roads & Traffic maintenance contractor SERCo. An on-site meeting between SERCo and a representative of the utility may be required in order to agree procedures including the line of the road opening and identifying any SCATS loops that cannot be avoided.

No T2s will be issued where the utility/Company has not satisfied the requirement to contact the Dublin City Council Roads & Traffic Department's maintenance contractor SERCo.

Relevant Contact number for Dublin City Council maintenance contractor SERCo is :- 01 8621541

Where damage to loops cannot be avoided the utility/company must undertake to pay the City Council's loop maintenance contractor the cost of reinstating the loops. Failure to pay the City Council's loop maintenance contractor for the cost of reinstating damaged loops will result in future applications for permission to work being refused until all outstanding invoices are paid.

### **3.14 Notification of Suspension of Paid Parking**

Where proposed works interfere with the operation of paid parking bays, the utility/operator shall notify Dublin City Council at the Wayleave Application/3 Month Advance Notification stage. Prior to the submission of the 7 Day Advance Application (T2), the applicant shall submit an application for the suspension of parking to the Parking Control Section, Roads & Traffic Department, pay the appropriate charges and quote the receipt number on the 7 Day Advance Application form. Charges for the suspension of on-street parking are set out in Appendix IV.

Suspension of parking spaces must only be carried out with the prior written consent of the Roads & Traffic Department. The onus is on the applicant to ensure that the parking spaces are secured for the times during which their use is required. Failure to comply with this requirement will result in the issuance of a violation notice, and/or a refusal to issue a T2 permit.

Application forms for the suspension of paid parking are available on request from the Roads & Traffic Department, Floor 4, Block 2, Civic Offices, Fishamble Street, Dublin 8 – phone 222 2775.

## Section 4

## *General Directions - Traffic*

### 4.1 Roadworks Identification Signs

**All roadworks must be signed and protected in accordance with the current Traffic Signs Manual. A traffic management plan must be submitted in respect of all works on Impact 3, 4 and 5 roads.**

A minimum of two Roadworks Identification Signs must be displayed at all times, in addition to the statutory signs identified in the current version of the Department of Transport's *Traffic Signs Manual*, positioned so as to be clearly visible to traffic approaching from both directions. The signs may be free standing or mounted on safety barriers and must be kept clean at all times. The signs are to be in accordance with City Council Drg. No. TD2696A, TD2696B or TD2696C (see List of Drawings in Appendix XVI) and must show:

- (a) utility/operator's name,
- (b) utility/operator's contact phone number and
- (c) contractor's name & phone number.

### 4.2 Signposting, Barrier Control and Illumination

Signposting, barrier control and, where necessary, illumination must be adequate at all times to ensure safe conditions for general traffic and for pedestrians.

All excavations must be reinstated or plated at night. Only in exceptional circumstances will the City Council permit excavations to remain open at night. In such cases they will require to be adequately lit and protected.

All signs must comply with Chapter 8 of *current version of the Department of Transport's Traffic Signs Manual*. Where a Traffic Management Plan is required it shall provide full details of the temporary signage to be provided. **Generic plans taken from manuals or inadequate sketches do not constitute traffic management plans.**

Applicants must confirm, at T2 stage, that at least one member of the crew will have a safepass ticket on site at all times, as shown below.

## Dublin City Council

Comhairle Cathrach Bhaile Átha Cliath

### T2 Health & Safety

**Please confirm you have the following provisions in place for the T2: FLINT530-1**

Competent Project Supervisor Design Process (PSDP)	<input checked="" type="checkbox"/>
Competent Project Supervisor Construction Stage (PSCS)	<input checked="" type="checkbox"/>
Safety & Health Advisor (PSCS) Appointed	<input checked="" type="checkbox"/>
Site-Specific Risk Assessment prepared	<input checked="" type="checkbox"/>
Method Statement for the work prepared	<input checked="" type="checkbox"/>
Site-Specific Traffic Management Plan prepared	<input checked="" type="checkbox"/>
There will be on site, at all times when works are in progress, at least 1 person who is competent in Signing, Lighting and Guarding at Roadworks	<input checked="" type="checkbox"/>

### 4.3 Conduct of Roadworks so as to Minimise Traffic Disruption and Danger to Pedestrians and Traffic

Roadworks must be carried out in a manner that ensures that obstructions to pedestrian and vehicular traffic are kept to a minimum at all times. **Applicants must comply with all current requirements of the Health and Safety Authority. In particular applicants must confirm that competent supervisors for the design and construction phases of the project have been appointed.**

The following procedures must be observed:

- (a) On routes with a traffic impact code of 3, 4 or 5 construction plant and delivery vehicles must, where feasible, operate in the same lane as the work or excavation.
- (b) Vehicles or plant not actively engaged in the work may not be kept on site if their presence interferes with vehicular traffic or pedestrian flow.

- (c) Flag men must be used where necessary, and in all cases where there is only one remaining traffic lane on a two way road. Requirement for STOP/GO to be operated by an “authorised person” under S.I. 637 Road Traffic (Signs) Regulations 2006.
- (d) A safe alternative route for pedestrians must be provided with all roadworks at all times. **Proper provision must be made for disabled persons including mobility impaired and partially sighted/blind members of the public.** The use of *‘Pedestrians Use Other Footpath’* signs is not permitted except where the carriageway width is inadequate to accommodate a temporary walkway for pedestrians on the carriageway. Where the latter is not possible the signs must be placed and the footpath blocked at the nearest safe crossing point and a temporary dishing must be provided for mobility impaired and disabled persons on both sides of the road if there is no dishing at that location.
- (e) Garda assistance must be requested if necessary.
- (f) Cones and/or continuous barriers should be used where necessary to prevent parking on the side of the works and/or on the opposite side of the road. Where the parking area is controlled the requirements of Section 3.14 must be adhered to.
- (g) Pay and Display Machines on the side of the works and/or the opposite side of the road should be hooded and continuous barriers used to prevent parking. Suspension of parking spaces must only be carried out with the prior written consent of the Roads & Traffic Department (See Section 3.14).
- (h) Contra-flow lanes, properly delineated by cones or barriers must be operated wherever traffic is required to travel on the opposing lane.
- (i) The site must be kept in a safe manner at all times.
- (j) The site must be kept in a tidy manner and free from litter at all times.
- (k) The roadworks must proceed as expeditiously as possible.
- (l) Work should commence at the junction and proceed away from the junction where possible. Roadworks should be carried out so as to minimise the effect on the capacity of the junction (i.e. traffic flow through the junction).
- (l) There must be a designated contact person from the utility/company concerned available to attend the site at short notice (i.e. within 30 minutes) if requested by the Roadworks Control Unit.

#### **4.4 Road Markings, Signage and Special Surfaces**

Temporary direction signs and/or road markings required for the roadworks must be in place at all times during the work and must be removed immediately following completion of the work.

Where, as a result of roadworks, existing road markings and traffic control measures no longer apply, they must be covered, removed, relocated or amended at the commencement of the works. Any such alterations can only be carried out with the prior consent of the Roadworks Control Unit, Dublin City Council and all alterations must be re-instated immediately after completion of the works.

Where road markings are removed or damaged a record of the layout and locations shall be taken by the utility/company in order to facilitate their reinstatement upon completion of the works.

All road markings shall be reinstated by the appropriate utility/company immediately after permanent reinstatement is completed. The road marking must be carried out by a reputable lining contractor approved by Dublin City Council and should meet the City Councils specifications. A list of approved contractors can be obtained by the Roadworks Control Unit of Dublin City Council. Dublin City Council may carry out reinstatement of road marking if requested by the utility. In such cases this will be charged at contract rates plus 33%.

Where coloured surfaces or anti-skid surfaces are damaged they must be reinstated by the utility/company as part of the permanent reinstatement. Full width reinstatement must be carried out to the City Councils specifications. Contact should be made with the Roads Maintenance Division of Dublin City Council for detailed advice in relation to the surface colour or the anti-skid surfacing.

#### **4.5 Signalised Junctions and Temporary Traffic Signals**

Notification, as detailed in Section 3.13 is required when work is being undertaken at or near signal controlled junctions so that any necessary on-site inspection may be undertaken and adjustments made to the traffic signal control system to take traffic information from other loops in the vicinity of the junction, or to install video detectors on a temporary basis pending the re-installation of any damaged SCATS loops.

Where it is agreed that there is no alternative to damaging loops, the work will only be allowed to proceed subject to the utility/operator concerned agreeing to the following conditions:

- (a) The necessary permanent reinstatement work at the junction will be undertaken within two weeks of the road opening works in order to facilitate early repair of damaged loops,
- (b) The utility/operator concerned will pay the City Council's loop maintenance contractor the full cost of the repair of each damaged loop and

- (c) Where the permanent reinstatement work is not undertaken within two weeks of the completion of the road opening works the utility/operator will agree to pay Dublin City Council's loop maintenance contractor an additional sum of €100 per week to cover the cost of additional inspections and the cost of providing any temporary detection facility that may be required until the permanent reinstatement work is completed and the loops are repaired.

Each utility/company will be responsible for any damage to traffic signal ducting or other traffic signal infrastructure. Where ducting is damaged two new 100mm ducts will be required to be laid across the junction to replace a damaged duct together with new manholes if required by the ITS Division, Roads & Traffic Department. The utility/operator who caused the damage will be required to pay all the costs associated with the replacement of ducts/manholes.

Where chambers are to be installed near to signalised junctions they shall not be located on or close to existing traffic loop equipment.

In general Dublin City Council does not permit the use of temporary traffic signals. In very exceptional circumstances the prohibition may be relaxed subject to approval being obtained in advance from the Roadworks Control Unit.

#### **4.6 Availability and Use of Steel Plates**

Steel plates must be available on site or alternatively steel plates must be capable of being delivered to the site within 30 minutes in sufficient quantity to cover the excavation in its entirety. Where plates are used they must comply with the following conditions.

- The plate/plates must be set in flush with the road surface. They should be fixed to the road surface (to prevent dislodgement) by means of countersunk holding down bolts. A groove is required to be made around each excavation into which the plate shall sit and be fixed.
- They must have an anti-skid surface.
- Consideration should be given to accidental wheel loading, where appropriate.
- The utility/operator will be responsible for the structural adequacy and safety of any such plates.
- Each plate should be clearly marked with the full name of the Utility/Network Operator so they may be easily identified, and
- **The maximum period a steel plate can remain in place is 4 days.**

#### **4.7 Avoidance of Underground Services**

All persons carrying out roadworks which require excavations of the public road must ascertain the position of existing underground services prior to the commencement of the work.

Plans, maps and other relevant information about buried services (particularly gas, water and electricity) should be obtained prior to the commencement of any excavation works. In addition, suitable cable and pipe location devices should be used to confirm, as accurately as possible the location of all services in and around the proposed work area.

Attention is drawn to the need to protect cellars as set out in Section 6.5.

#### **4.8 On Site Storage of Materials and Plant**

On-site storage of materials, spoil, plant, machinery and vehicles used in connection with any roadworks will only be permitted for the duration of the roadworks provided it does not, in the judgement of the Roadworks Control Unit, interfere in any way with pedestrian or vehicular traffic flow and it does not constitute a danger to pedestrians or vehicles.

The storage location for sand and/or gravel, in particular, must be kept in a tidy state. It must not be allowed to spread over adjoining areas and the location must be cleaned before the contractor moves away. No spoil or other materials should be left overnight on site and the site must be left in a clean and tidy condition after each working day.

#### **4.9 Necessary On-Site Documentation**

The utility/operator shall ensure that the contractor has on site and available at all times:

- (a) a copy of the individual Direction/Permit/Consent where works are subject to a T2/T3/T4 application.
- (b) a copy of a Works Method Statement if one was requested by the Roadworks Control Unit.
- (c) a copy of the Traffic Management Plan where work is being carried out on a road with traffic impact Numbers 3, 4 & 5 or where a plan was required by the Roadworks Control Unit.
- (d) a copy of the written consent from the Roadworks Control Unit for the use of temporary traffic lights where this is applicable.

### 5.1 Definitions

A **rigid road** is a road with a pavement in which the main structural element is a high strength concrete slab that also provides the wearing surface.

A **flexible road** is a road with a pavement in which the road base is either cement bound or bituminous with bituminous upper layers.

A **composite road** is a road with a pavement in which the main structural element is a high strength concrete slab over which a bituminous surface is applied.

**Temporary reinstatement** means the first part of a two stage reinstatement procedure where, in general a granular or cement bound material is used to make up the level to within 65mm of the finished surface level in the case of footways, and 75mm in the case of roads. This is then topped by 75mm of Dense Bitumen Macadam Basecourse (20mm nominal size) material in the case of road carriageways, and 65mm of Delay Set Macadam or similar approved material for footways, which is only designed to last for a short period of time.

**Permanent reinstatement** means the second part of a two-stage reinstatement procedure where the upper part of a temporary reinstatement is removed and the reinstatement completed.

**Immediate permanent reinstatement** means a one-stage reinstatement procedure where, in general, cement bound material rather than a granular material is used to make up the level to the road pavement and the reinstatement completed

**Shallow excavation** works involve an excavated depth of less than 1.25m.

**Deep excavation** works involve an excavated depth of equal to or more than 1.25m.

An **estate road** is any road consisting primarily of single residential units. It does not include any regional roads, through roads, or roads used either by buses or significant volumes of commercial or commuter traffic. It also does not include areas of parking bays situated on major roads.

A **non-estate road** is any type of road except an estate road as defined above.

**Planned** works are any works which have been planned in advance and are not a response to an emergency.

**Larger** works are defined as works that in excess of 20 linear metres in length.

## **5.2 10-Day Notices**

Prior to the carrying out of major roadworks, 10 day notices are issued by the Roads Maintenance and Road Construction Divisions of Dublin City Council to all utilities/operators.

Utilities/operators are required to respond to these notices if there is some consideration that would affect the proposed work. All works being planned by utilities/operators, within the affected area, shall be subject to the conditions as laid out in the 10 day notice notification. (See Appendix VII for a sample of a 10-Day Notification). Upon completion of these works a 5 year moratorium on all non emergency roadworks will be applied and a ten year moratorium on non emergency footway works. Works on recently reconstructed roads or newly constructed roads will generally not be permitted for a period of 5 years (10 years on footpaths). See Clause 5.4

## **5.3 Road Opening Licences**

A Road Opening Licence (ROL) is a licence that allows the holder to excavate a specified section of the public road (the public road includes carriageway/footway and associated grass verge), and carry out reinstatement (which may be permanent or temporary). A ROL may be issued for the purposes of installing drainage connections to a new development, reconstructing a portion of the public road if damaged over the course of a development, or as required by Planning Permission. Once the Road Opening Licence is issued, no work can commence on the carriageway/footway until a T2 Permit is applied for, and is granted by the Roadworks Control Unit of Dublin City Council.

## **5.4 Specification for Roadworks/Reinstatements**

(a) All works must be carried out in accordance with the current “NRA Specification for Road Works”, and the current Department of the Environment Guidelines for trench reinstatement in public roads, including all amendments & additions to the above documents by the Roads & Traffic Department of Dublin City council. For Road Maintenance taking in charge design standards refer to the following URL:

[www.dublincityroadworkscontrol.ie/rmstandards.asp](http://www.dublincityroadworkscontrol.ie/rmstandards.asp)

(b) In the event of conflict of specification between those provided by the Department of the Environment, Heritage and Local Government and the contents of this Section, the matter shall be referred to the Senior Engineer, Road Maintenance Division for a decision.

(c) On all larger works, the route should be walked with the relevant Road Maintenance Division staff member in advance of any work and the method of reinstatement agreed.

(d) All areas/surfaces that have been drilled by the utility/operator in order to support the placement of roadworks barriers or for any other purpose shall be deemed to be part of the excavation works and shall be required to be reinstated accordingly.

(e) The minimum cover on services in footpaths is 450mm. In the carriageway the minimum cover is 750mm for all roads. Dublin City Council reserves the right to remove any services where the minimum specified cover has not been complied with.

(f) All protective sand surround to the services shall be kept to a safe minimum and shall be compacted such that no residual consolidation will occur upon changes in moisture content.

(g) Cement Bound Material Category 3, formally 20N/20 semi-dry concrete, must be used as backfill for all trenches except over watermain. Granular material type Cl. 804 can be used with the approval of the City Council's Roads Maintenance Engineer for trenches greater than 500mm wide. Semi-dry concrete shall be laid in compacted layers in accordance with Cl. 802 of the NRA specification.

(h) For all trench openings greater than 20 metres in length on roads with Traffic Impact Numbers 3, 4 and 5 the permanent reinstatement of wearing course HRA or SMA must be machine laid.

(i) The trench width shall be a minimum of 600mm wide.

(j) The use of warning tape or marker board shall be in accordance with the utility's requirements. Where a two-stage reinstatement is undertaken the warning tape shall be located in the lower layers of the granular fill. In the case of single stage reinstatement the tape shall be located below the cement bound material.

(k) In the case of microthin and/or other cold laid asphaltic materials, the Area Engineer, Road Maintenance Division shall decide on the appropriate surface course, formally wearing course, to be used.

(l) The Area Engineer, Road Maintenance Division shall also decide on the following:

- appropriate reinstatement standards for footway overlays.
- reinstatement standards for deep excavations.

(m) Where necessary the Road Maintenance Division of Dublin City Council will undertake coring of reinstatements. Where the cores indicate a reinstatement to be outside the specification, the full cost of the coring operation shall be borne by the utility together with the cost of reinstating the opening to the City Council's specification.

(n) The longitudinal alignment of trenches shall be straight and of reasonable length, aligned parallel to the centre line of the road or the kerb as appropriate. In the case of road crossings, the alignment shall be at right angles to the kerb or property line. Failure to meet these requirements shall cause the area of reinstatement to be extended. In the case of rigid roads, the edge of the opening shall coincide with an existing joint; otherwise the area of reinstatement shall be squared. The longitudinal alignment of the trench shall not be on the channel of the carriageway.

(o) Dublin City Council requires all permanent reinstatement to be carried out as soon as possible after laying of services and no later than 4 weeks after the initial work was

undertaken. However the overriding consideration is public safety and temporary reinstatements must be properly maintained at all times. A T5 must be submitted within 4 weeks of the permanent re-instatement.

**(p)** Except in exceptional cases all permanent reinstatement must be completed within 4 weeks of the undertaking of the original work. Failure to comply with this Direction may lead to future Wayleave Applications being refused.

**(q)** Any cracked area adjacent to a footway opening resulting from the excavation operation or where the edge of the trimmed opening is within 400mm of joint, edge, other reinstatement or ironwork shall be included within the area to be reinstated.

**(r)** Where the edge of the opening of the carriageway is within 1 metre of a traverse or longitudinal joint, edge, other reinstatement or ironwork the reinstatement should be extended to that joint.

**(s)** All reinstatements of shallow openings shall be carried out as per the following drawings: RM 23-01f, RM 23-02f, RM 23-03f, RM 23-04f and RM 23-05f. (See Appendix XVII). In addition to the notes on the above drawings the following standards 1-5 apply for Flexible Carriageways.

1. Excavation on carriageway not closer than 500mm to the kerbline, in order to avoid undermining the footway. Ensure that any service boxes or chambers are located away from carriageway junctions and road channels.
2. All edges to be saw cut to sufficient depth that the integrity of the adjacent pavement shall not be damaged during subsequent works.
3. Prior to reinstatement, saw cut the carriageway a second time. The depth of cut shall be, at minimum, to the top of the binder course. The width of the cut shall be a minimum of 100mm from the sides of the excavation. Where within 750mm of the carriageway edge, joint, other reinstatement or ironwork, the trim line shall be extended to that situation.
4. 50pen Hot Bitumen binder or cold thixotropic bitumen 50-70pen to be applied to all vertical cuts in accordance with B.S. 594 prior to application of surface course.
5. Joints sealed with hot bitumen and topped with fine sand / grit to get a minimum 55 skid resistance value and shall not exceed 3mm thickness or 25mm width.

**(t)** The Roads Maintenance Division may specify in certain situations that road crossings are to be carried out by means of directional drilling or other similar method.

**(u)** Multiple ducts to be laid as per RM 23- 06c. Chambers to be constructed as per drawings RM 23957 & RM 23967(See Appendix XVII).

### **Delay Set Macadam or similar Materials**

The use of Delay Set Macadam or any similar material is strictly prohibited for use as a temporary reinstatement material for road openings in the road carriageway.

## **5.5 Cycling Facilities**

Cycle facilities to be reinstated in accordance with Dublin City Council policy and The Traffic Management Guidelines 2003 issued jointly by The NTA, DOT and Department of The Environment and Local Government. Reinstatement of coloured surfacing to be carried out using resin based coloured surface treatment (see appendix XV11 for specification), where the colour must match the existing cycle track. A sample panel of coloured material may be required for larger cycle track reinstatements (see appendix XV11 for details).

## **5.6 Requirements on Recently Improved Carriageways or Footways**

On any carriageway, which has been reconstructed or overlaid within the past five years, all permanent reinstatement must include for a full lane width reinstatement. A list of streets affected by this requirement is provided on the Dublin City Council website. In the case of carriageway crossings of these streets the minimum reinstatement width shall be 6.0 m including the trench width.

Due to the longer life expectancy of concrete footpaths, only full bay reinstatements shall be acceptable on footpath crossings where the footpath is less than ten years old. On longitudinal trenches where the footpath is less than ten years old, full footpath reconstruction will be necessary.

On all other footpaths with longitudinal trenches only one joint will be permitted (i.e. the reinstatement will be from the trench to the kerb line or back of path line).

## **5.7 Approved Permanent Reinstatement Materials**

The following approved permanent reinstatement materials should be used:

### ***Wet Mix Macadam***

For permanent reinstatements, where such a sub-base exists, Cl. 802 wet mix macadam compacted in accordance with Cl. 820 may be used instead of granular material.

### ***Cement Bound Material***

Cement bound materials include 20N/20 semi-dry concrete, 20N/20 wet concrete or wet concretes of higher strengths and foam concrete. Where 20N/20 semi-dry concrete is used – a protective tarpaulin shall be used to cover the concrete after its delivery to prevent it from drying out. 20N/20 semi-dry concrete shall be used within 2 hours of delivery to site. It is prohibited to use 20N/20 semi-dry concrete or any concrete over watermains.

### ***Bituminous Spray***

Tack coat may be omitted in the case of immediate permanent reinstatement of small openings. It shall be required in the case of immediate permanent reinstatement of continuous trenches.

### **5.8 Concrete Flags, Granite Kerbs & Cobbles/Setts**

Under no circumstances shall drilling of any form take place in granite pavement slabs or kerbs. All existing granite flags, granite kerbs and cobble/sets of any type of stone within the limit of the site on or in the public roads and pavements are the property of Dublin City Council. The utility/operator shall be responsible for any damage or loss caused to said items which may arise out of or in consequence of their contractors' operations during the course of the works, and the full cost of replacing such damaged or missing items shall be payable by the contractor. Unless otherwise agreed with the Area Engineer, Roads Maintenance Division in advance of the works, where such stone items are discovered in excavations or are required to be removed from the site because of the works, then these shall be separated from all other excavated material and delivered by the contractor to Marrowbone Lane Roads Maintenance Depot (between the hours of 8:00am and 4:00 pm Monday to Friday).

The contractor shall be responsible for the unloading of all such stone items at the Depot. In the event that there is any question as to whether or not the material discovered in excavations or required to be removed from the site because of the works, is to be salvaged, as set out above, such matter shall be decided by the Area Engineer.

Provided the temporary reinstatement, that has replaced the removed material, is satisfactory Dublin City Council will take the works in charge after 3 months of same being returned. If the temporary reinstatement is not satisfactory, the utility/operator will be notified of same via the Roadworks Control Online Extranet (RCOE). The rates for reinstatements are shown in Clause 1 of Appendix VI "Road Maintenance – Charges". Once works have been taken in charge, full liability will automatically transfer to Dublin City Council.

### **5.9 Inspection of Works**

The Area Engineer, Road Maintenance Division may decide on an initial joint inspection of the route prior to any work being carried out. Regardless of the foregoing, the onus is on the utility to bring any existing defects to the attention of Road Maintenance Division prior to the commencement of work.

The Area Roads Superintendent and/or the Senior Engineering Technician in the Infrastructure Management Unit may decide to inspect the site while the works are being undertaken. During any inspection, he may point out additional areas of damage to the roads, footpaths or verges resulting from the works. If this additional damage is agreed, the areas shall also be reinstated by the utility. If the areas are disputed, they shall be referred to the Senior Executive Engineer, Infrastructure Management Unit, Road Maintenance, for a decision.

### **5.10 Bridge Crossings**

Where a utility proposes to carry out a bridge crossing, the following procedure must be followed:

- A route feasibility study must be carried out to demonstrate that this is the only possible crossing.
- Alternative techniques for crossing (e.g. tunnelling or moling) must be investigated.
- Having exhausted other methods of crossing, a Wayleave Application/3 Month Advance Notification (Form T1) as detailed in Section 3.2 must be submitted to the Roadworks Control Unit. A method statement, to include consultants engineers report (if required), should be submitted at this stage to both the Roadworks Control Unit and to the Senior Engineer, Road Design Division for approval. This method statement should include:
  - a cross-section of the bridge in schematic form showing the location of all existing services and
  - a plan indicating the route of the proposed service along the entire length of the bridge.

The following conditions must be complied with for all bridge crossings:

- Accurate relevant dimensions must be included on all drawings.
- No service can be placed in the carriageway of the bridge.
- In the case of masonry bridges, no voussoirs shall be damaged or interfered with in any way during excavations by a utility or its contractor. Any excavated fill material must be properly reinstated or replaced with concrete.
- No tram rails located in a bridge shall be removed or interfered with in any way to facilitate the laying of ducts.
- Dublin City Council must be indemnified against all costs associated with the temporary removal and/or relocation of services for any future remedial and rehabilitation work to the bridge

### **5.11 Indemnification of Dublin City Council**

Indemnification of Dublin City Council is required in respect of all claims, proceedings, liabilities, losses or expenses of whatever nature, however arising in connection with the activities covered by all applications, with a minimum indemnity of €6.5m for a single incident/claim. The period of cover shall be from the start of the works until the location of the works is taken in charge by Dublin City Council. The Council may require evidence of indemnification.

### **5.12 Emergency Repairs**

Should a Road Maintenance repair crew be required to carry out any emergency remedial measures to any works a charge of €1,000 for each site visit will be payable by the utility/operator.

### **5.13 Submission of ‘As Constructed’ Drawings**

In the case of bridges, Road Maintenance Division shall be furnished with ‘As Constructed’ drawings. The drawings shall consist of cross-section at mid span and plan. They shall be compatible to Microstation, Bentley Systems CAD software. The drawing shall give sizes, distances and depth of services.

### **5.14 Pavements/Carriageways Where Special Conditions Apply**

This refers to footpath areas constructed in granite that are listed structures under the Dublin City Development Plan and also to stretches of pavement/carriageway constructed in granite or in setts. These areas include Temple Bar, North Great George Street, Upper Merrion Street, Grafton Street, Christchurch Place, Nassau Street, Henry Street and O’Connell Street. (A list of these streets is given in Appendix XVII).

Utilities/operators or their contractors are prohibited from carrying out any work on or alterations to granite pavements/carriageways until arrangements have been made with the City Council’s Road Maintenance Division to remove and store all granite in advance of the work commencing. A similar requirement operates in the case of carriageways with setts. The Road Maintenance Division will also be responsible for all permanent reinstatement work. The full cost of the removal and storage of granite/setts together with the cost of permanent reinstatement work will be borne by the utility/operator. An estimate of the likely cost can be provided in advance by Road Maintenance Division.

### **5.15 Bollards (Street Furniture)**

All existing bollards in the carriageways and footways are the property of Dublin City Council. The utility/network operator shall be responsible for any damage or loss caused to said items which may arise out of or in consequence of their contractors’ operations during the course of the works, and the full cost of replacing such damaged or missing items shall be payable by the utility/network operator.

### **5.16 Manhole Chambers and Frames**

All manhole chambers and other ironwork shall remain the responsibility of the utility together with a 300mm wide surrounding strip of carriageway/footway. In the event of manhole/chamber covers and frames or other ironwork having to be altered by Dublin City Council or any future roadworks, the full cost of such alterations shall be borne by the

utility/operator. The operator will be responsible for maintenance of the structure/chamber and for any claims arising. In the event of the carriageway/footpath being resurfaced/overlaid the utility/operator will be responsible for raising all their chambers to match the new road/footpath surface.

All chambers should be kept away from the kerb line and shall not be placed over traffic loops. Due to the regular failure of roadwork ironwork installations as a result of shrinkage of mortar during installation, insufficient mortar strength, installation opened to traffic too early and failure of bond between mortar and frame. Frames for chamber covers and gratings shall be set on a mortar compliant with cl. 507 section 17 of series 500 NRA (SRW) and HA 104 DMRB. A minimum mortar bed of 12mm shall be provided in combination with steel shims located under the four corners of the frame to ensure that the manhole cover and frame remains flush with the carriageway surface at all times. For construction of manhole chambers in the footpath and carriageway please refer to Dublin City Council Drainage Division's drawings and Code of Practice.

All manhole covers and frames shall be Class D400 to IS/EN 124, 150mm deep frame for roads and 100mm deep frame for footways and green areas. They shall be of non-rock design, have closed keyways, be manufactured from spheroidal cast iron (ductile iron) or similar approved material and have a 600mm x 600mm (or 600mm diameter) clear opening. The cover and frame to be coated in bitumen or similar approved material. The frame to be designed to prevent the cover falling into the manhole. Frames for chamber covers and gratings shall be set on a mortar compliant with cl. 507 section 17 of series 500 NRA (SRW) and HA 104 DMRB. A minimum mortar bed of 12mm shall be provided in combination with steel shims located under the four corners of the frame to ensure that the manhole cover and frame remains flush with the carriageway surface at all times. A combination of 3mm or 5mm steel shims shall be used under the four corners of the frame to keep it flush with the finished road surface while the mortar is curing and post opening to traffic loading.

The specification is to be adhered to for all metal frames/covers within Dublin City Council's administrative area. The specification also applies to frames being raised or lowered. Where adjustment of frame is required to match existing carriageway level, only Class B Engineering brick shall be used.

### **5.17 Telecom Chamber Specification**

The maximum dimension for telecommunication chambers, permitted within the carriageway or footway, is 1.5 metres (width or length). Should a telecom operator require to construct a chamber or chambers in excess of these dimensions approval must be obtained from the Roads Maintenance Division of Dublin City Council prior to commencement of works.

### **5.18 Joint Bays and Holes**

Where it is proposed to place a jointing bay or hole on a road or footpath the precise location should be indicated in both the T1 and T2 applications. A detailed Traffic Management Plan

and Works Method Statement must be submitted in respect of each location together with the proposed time period for the works.

The City Council will decide if permission is to be granted and what conditions will apply.

### **5.19 Deviations from Specifications**

If for any reason any deviation from specification is required such as to cover over ducts, reinstatement widths etc, it will be necessary to get written consent from the Road Maintenance Division. In these cases it may also be necessary to have the work certified by a Chartered Engineer. This certification will also be required where deemed necessary by Road Maintenance Division in cases of workmanship carried out by inexperienced contractors.

## Section 6

## *General Directions – Other Services*

### 6.1 LUAS - Light Rail System

On a light rail system there are dangers to life and limb that are significantly different from those met elsewhere. Light rail vehicles can travel at speeds up to 70kph., are quiet in operation and cannot steer to avoid obstructions. In addition, exposed overhead lines carry electricity at a dangerous voltage. Accordingly special precautions need to be taken by utilities/operators and other parties carrying out works on, near or adjacent to the Luas system. The following is a list of streets affected by the existing Luas system:

#### **Luas Red Line**

Naas Rd, Davitt Rd, Suir Rd, St. James' St, Bow Lane West, Steevens Lane, St. John's Road West, Sean Heuston Bridge, Wolfe Tone Quay, Parkgate St, Benburb St, Arran Quay Tce, Smithfield, Phoenix St North, Bow St, Church St, Chancery St, Mary's Abbey, Upper Abbey St, Middle Abbey St., O'Connell St, Lower Abbey St, Beresford Place, Store St, Amiens St.

#### **Luas Green Line**

St. Stephen's Green West, Harcourt St, Adelaide Rd, Peter Place, Dunville Avenue.

#### **Luas Docklands**

Amiens Street, Harbour Master Place, Lower Mayor Street, Upper Mayor Street, The Point Depot.

**The above streets are deemed to include all side roads extending 25 metres back from a junction with the main road or street with a light rail service.**

All Directions/Permits/Consents issued to utilities/operators governing works in the above streets will contain a condition placing an onus on the applicant to consult with and **obtain the approval of the Light Rail Operator:**

**Veolia Transport Ireland Ltd.**

**Luas Depot**

**Red Cow Roundabout**

**Clondalkin**

**Dublin 22**

**Tel : (01) 4614969**

**E-mail : [reception@veolia-transport.ie](mailto:reception@veolia-transport.ie)**

The operator may impose restrictions over and above those imposed by Dublin City Council. A Code of Practice for parties carrying out works on, near or adjacent to the Luas system has been drawn up and copies can be obtained from the Operator.

All roads and footpaths in the above listed streets have been fully reconstructed as part of the Luas light rail system and are included in the list of streets/routes currently subject to moratoria as set out in Section 2.4 above.

## **6.2 Waterworks**

Where cables, poles or junction boxes are to be laid in close proximity to existing watermains, the Planning and Asset Management Section in the Water Services Division must be contacted a minimum of one week in advance of the works. The contractor on the site should have in his possession a copy of the watermain records for the area.

Consultations should take place with the Planning and Asset Management Section at least two weeks before any work which is due to be carried out in the vicinity of an arterial watermain takes place.

There should be a minimum clear horizontal distance of 300mm between any utilities, cabinets, poles, junction boxes, chambers and local watermains. No other service should be laid over the line of a watermain. There should be a minimum vertical clearance of 100mm where other services cross over a watermain and such crossings should be at least 300mm from any pipe joints. Pipes/ducts, cabinets, poles, junction boxes or chambers should not be constructed on top of a watermain.

Care must be taken while laying ducts so as not to damage any watermains or fittings.

No lean mix concrete should be used for backfill over watermains.

Hydrants, which are provided for emergency supply, may not be used without the written permission of the Water Division, Dublin City Council.

Application for watermains connections must be made 2 months in advance of the required date.

## **6.3 Electricity & Public Lighting**

All ducts should be located at least one metre back from the kerb. A utility/operator may be permitted to stray inside this zone on the footpath if they give an undertaking to bear the costs of relocating their services, at their own expense, should that space be required at a later date to accommodate public lighting posts. Where public lighting already exists then a relaxation of the specified clearance on footpaths may be permitted at the discretion of the Public Lighting Division of Dublin City Council-

Damage to underground cables, associated ducting, overhead lines, or column foundations must be immediately reported to the Public Lighting Division in order to ensure the safety of the general public and workforce personnel. No repairs must be undertaken without the prior approval of the Division. The Public Lighting Maintenance Inspector can be contacted at (01) 2224444.

The use of augurs or mole drilling equipment is prohibited in roads and footpaths where underground serviced public lighting exists.

**Before commencement of the road works the name of the contractor, the location & extent of the works along with the name and phone number of the site agent must be forwarded by e-mail to [lighting@dublincity.ie](mailto:lighting@dublincity.ie)**

#### **6.4 Sewers & Main Drainage**

The following conditions must be complied with:

- Cables must not be laid through City Council manholes or sewers.
- Under no circumstances should any manhole or inspection chambers be constructed directly over or within a minimum distance of 300mm of any existing sewer.
- No proposed piping, ducting or cable laying should interfere in any way with sewer services.
- Trenches must be a minimum of 300mm away from the kerb-line in order to avoid damaging road gullies.
- The contractor must submit T2 details to the Drainage Division before commencement of any piping, ducting or cable laying on site.
- A CCTV survey of all Drainage infrastructure along the route of any newly laid services may be required before release of the road opening bond. The contractor must contact the Drainage Division of Dublin City Council prior to any piping, ducting or cable laying on site to determine the location of any existing sewers.
- No material, liquid or solid, may be discharged to a public sewer. In particular sewers may not be used for discharge of pumped groundwater without the written permission of the City Council.
- Application for sewer connections must be made 3 months in advance of the required date.

Standard construction details are available from the Road Design Division, Dublin City Council showing where and when not to use lean mix around drainage pipes, these details have been developed in conjunction with the Drainage Division.

## **6.5 Cellars**

Where services are being laid in areas where there are old brick cellars under the road or footpath special care should be taken not to interfere with the integrity of the structure. Under no circumstances should the arch of the cellar be broken to allow services through as the structural stability of the cellar is dependant on the arch ring being maintained intact.

## **6.6 Parks and Landscape Services**

Where works are due to take place in open spaces or in parks a wayleave must be obtained from the Parks and Landscapes Services Division, Civic Offices Wood Quay, Dublin 8.

Where works are due to take place in grass verges or on roadsides that have tree planting, a wayleave must be obtained from the Roadworks Control Unit of Dublin City Council. The notification requirements for these works are laid out in Section 3.3 of these Directions.

It is the responsibility of the utility to indicate on the notifications the locations where grass verges or roadsides with tree planting will be affected by the proposed works.

It is also the responsibility of the utility to contact the Parks and Landscapes Division prior to the works proceeding to agree all reinstatements and working practices. The notification required by Parks and Landscapes Services Division is as follows:

3 months for T1 applications  
1 week for a T2 application

Contact details for the Parks and Landscape Services Division are as follows:

Mr. Mick Harford, District Parks Officer, telephone 086 8150532, or in the case of Mr. Harford being unavailable

Mr. Noel McEvoy, Executive Parks Superintendent, telephone: 01 2223401

Once notification has been received specific conditions with regard to the proposed works can be agreed with the individual utilities.

Immediately prior to works commencing in open spaces, parks, grass verges or on roadsides that have tree planting and while works are ongoing, daily work schedules are required to be submitted to the Parks and Landscapes Services Division.

Kiosks, chambers, junction boxes or signs are not permitted to be located on parks, open spaces or grass verges without prior approval being granted from the Parks and Landscapes Services Division.

Costs for reinstatement, loss of amenity, supervision and administration that may arise due to work on parks, open spaces and grass verges must be agreed with the Parks and Landscapes Services Division prior to commencement of work.

Failure to adhere to any of the requirements relating to works being carried out on parks, open spaces, grass margins or medians could result in increased charges.

Utilities/companies engaged in roadworks close to trees must comply with the specifications and conditions prepared by the City Council's Parks and Landscapes Services Division as set out in Appendix VIII.

Where proposed roadworks are within the canopy spread of any tree, the Parks and Landscapes Services Division must be contacted a minimum of one week in advance of the works.

When working within the canopy spread of any tree the following rules apply:

- Use trenchless technology or hand dig only. The use of hand operated pneumatic or surface saw cutting tools to break out hard surfaces or rock is permitted but not JCB type excavator breakers. Once the hard surface is cleared all further excavations must be by hand.
- Roots greater than 25mm in diameter should be left intact.
- Do not store spoil, building materials, chemicals or fuel within the site. Temporary fencing should be erected around trees during the course of the work.
- Do not traverse the area, in the vicinity of the tree, with mechanical plant.

## Section 7

# *The Management of Scarce Underground Road Capacity*

‘Free’ underground space below public roads in the City Council area and especially in the inner City is a finite and increasingly scarce resource. While the City Council recognises the importance of facilitating utilities and network operators who wish to undertake roadworks with a view to installing additional infrastructure it cannot ignore the fact that space under a significant number of public roads is heavily congested with existing services and apparatus.

In some cases, the installation of electronic communications infrastructure by utilities/network operators is simply not possible because there is insufficient available ‘free’ space to permit the infrastructure to be installed while complying with the specified minimum cover and clearance distances required by the City Council. In other cases while sufficient ‘free space’ may be available the City Council has a responsibility to ensure that it does not permit the installation of services/infrastructure where this will compromise the planned installation of other services or of transport infrastructure at a later stage.

Under Section 53 (6) of the Communications Regulation Act, 2002 a road authority, when considering an application for a consent, is required to have regard to the existing and potential use and availability of space under the surface of the road concerned, including

- (i) *the course and depth of ducts to be laid by the applicant,*
- (ii) *the existence of ducts in addition to those which are immediately required by any network operator, and*
- (iii) *the existence of duct space in addition to that which is reasonably required by any network operator.*

Dublin City Council will have regard to all these factors in considering an application for a Direction/Permit/Consent.

While the City Council recognises that there may be strong commercial and competition reasons for facilitating different network operators being given access to the same stretch of a public road to install electronic communications infrastructure it reserves the right to refuse consent to road works to install electronic communications infrastructure and associated physical infrastructure in cases where there is insufficient ‘free’ underground space and also in cases where it considers that the installation of additional electronic communications infrastructure could seriously compromise the capacity of the road to accommodate the planned installation of other services or of transport infrastructure.

The City Council will deal with applications to undertake roadworks to facilitate the installation of electronic communications infrastructure, in areas of the City where the availability of ‘free’ underground space is restricted, as follows:

- The City Council may require a network operator seeking permission to undertake road works on a particular road to satisfy the Council by means of surveys of existing services (incl. trial holes, slit trenches etc., to a specification determined by the City Council), in relation to the availability of ‘free’ space on the particular road.
- Where on the basis of such a survey the City Council is satisfied that there is sufficient ‘free’ space to accommodate the proposed electronic communications infrastructure while complying with the minimum cover and clearance distances specified, and subject to compliance with other conditions it may grant consent for the requested road works.
- Where on the basis of such a survey the City Council is not satisfied that there is sufficient ‘free’ space to accommodate the proposed electronic communications infrastructure while complying with the minimum cover and clearance distances specified, it may refuse consent for the requested road works.
- Where on the basis of such a survey the City Council is satisfied that there is sufficient ‘free’ space to accommodate the proposed electronic communications infrastructure while complying with the minimum cover and clearance distances specified, but the installation of that infrastructure would seriously compromise the capacity of the road to accommodate the planned installation of other services or of transport infrastructure, it may refuse consent for the requested road works.
- Where the City Council is developing a new road/footpath or refurbishing an existing road/footpath it may consider requests from utilities and network operators for the installation, extension or renewal of services. Where the City Council is satisfied that the requests of all network providers cannot be accommodated because sufficient ‘free’ space will not be available for all the electronic communications infrastructure that has been requested, after other services have been accommodated it reserves the right to determine what quantum of electronic communications infrastructure will be installed and to make the necessary arrangements for installing this infrastructure. The City Council will seek to reach agreement between network operators in relation to the allocation of this infrastructure and how the cost should be shared.
- Where the City Council is concerned about the adequacy of remaining ‘free’ space to accommodate electronic communications infrastructure at a particular location or locations while complying with the minimum cover and clearance distances specified including cases where the City Council is proposing to develop a new road/footpath or refurbishing an existing road/footpath it may use the powers available to it under Section 53 (18) of the Communications Regulation Act, 2002. These powers enable a road authority to require network operators to provide

information on the utilisation of electronic communications infrastructure, which they own or operate at a particular location, and such access to the infrastructure as may be required to enable the road authority to exercise its functions under this Section of the Act.

## Section 8

## *T2 Application Charge, Long Term Damages Charges and Taking in Charge Procedure*

### 8.1 Charges

An administration charge of €185 will be imposed for each T2 application received by Dublin City Council to carry out roadworks. The charge for T3 permits will be €50. These charges will be billed in arrears on a monthly basis by Dublin City Council. The normal payment terms will apply (i.e. 30 days).

The following charges for long term damages will apply in respect of road works carried out by network operators:

#### **Trench Widths Less than 1 metre**

*Carriageways (Traffic Impact 3, 4 &5)*

*€31.00 per linear metre*

*Carriageways (Traffic Impacts 1 & 2)*

*€15.50 per linear metre*

*Footpaths*

*€15.50 per linear metre*

*Parks/Verges & Grassed Areas*

*To be agreed with Parks &  
Landscapes Services Section*

#### **Trench Widths Greater than 1 metre**

*Carriageways (Traffic Impact 3, 4 &5)*

*€31.00 per m<sup>2</sup>*

*Carriageways (Traffic Impact 1 & 2)*

*€15.50 per m<sup>2</sup>*

*Footpaths*

*€15.50 per m<sup>2</sup>*

*Parks/Verges & Grassed Areas*

*To be agreed with Parks &  
Landscapes Services Section*

### 8.2 Taking in Charge Procedure

The following taking in charge procedure will apply:

#### **Step 1**

T5 is submitted upon completion of permanent reinstatement works (including appropriate special surface treatments and renewal of carriageway markings) within the specified period. The position of all chambers and over-ground structures and the associated areas of carriageway space must be clearly identified on the drawings. Chambers and all over ground structures together with the area of the carriageway/footway surface surrounding the chamber or over ground structure 300 mm in each direction will remain in charge of the network operator. The operator will be responsible for maintenance of the structure/chamber and for any claims arising. In the event of the carriageway/footpath being resurfaced/overlaid the utility/network operator will be responsible for raising all his chambers to match the new carriageway/footway surface.

### **Step 2**

Within 2 months of the submission of the T5 form and attachments, Dublin City Council will carry out an initial inspection of the road openings and a snag list will be prepared and forwarded to the network operator. Openings will be accepted or rejected. Rejected openings will be accompanied with a snag list and forwarded to the utility/network operator via the RCOE.

### **Step 3**

The network operator will advise Dublin City Council that the snag list has been completed within four weeks.

### **Step 4**

Within a further 2 months of being advised that the snag list has been completed a second inspection will be carried out by Dublin City Council and, subject to a satisfactory outcome of this inspection, the City Council will advise the network operator that the defects liability period has commenced. The defects liability period will extend for 24 months from the date the network operator is advised that the defects liability period has commenced (i.e. within four weeks of the City Council being advised of the completion of snags assuming a satisfactory outcome to the inspection). If the inspection indicates problems with the reinstatement Steps 2, 3 and 4 will be repeated. The long-term damages charge will be invoiced in full on acceptance of the reinstatement following completion of the inspection at start of the defects liability period. The normal payment terms will apply (i.e. 30 days).

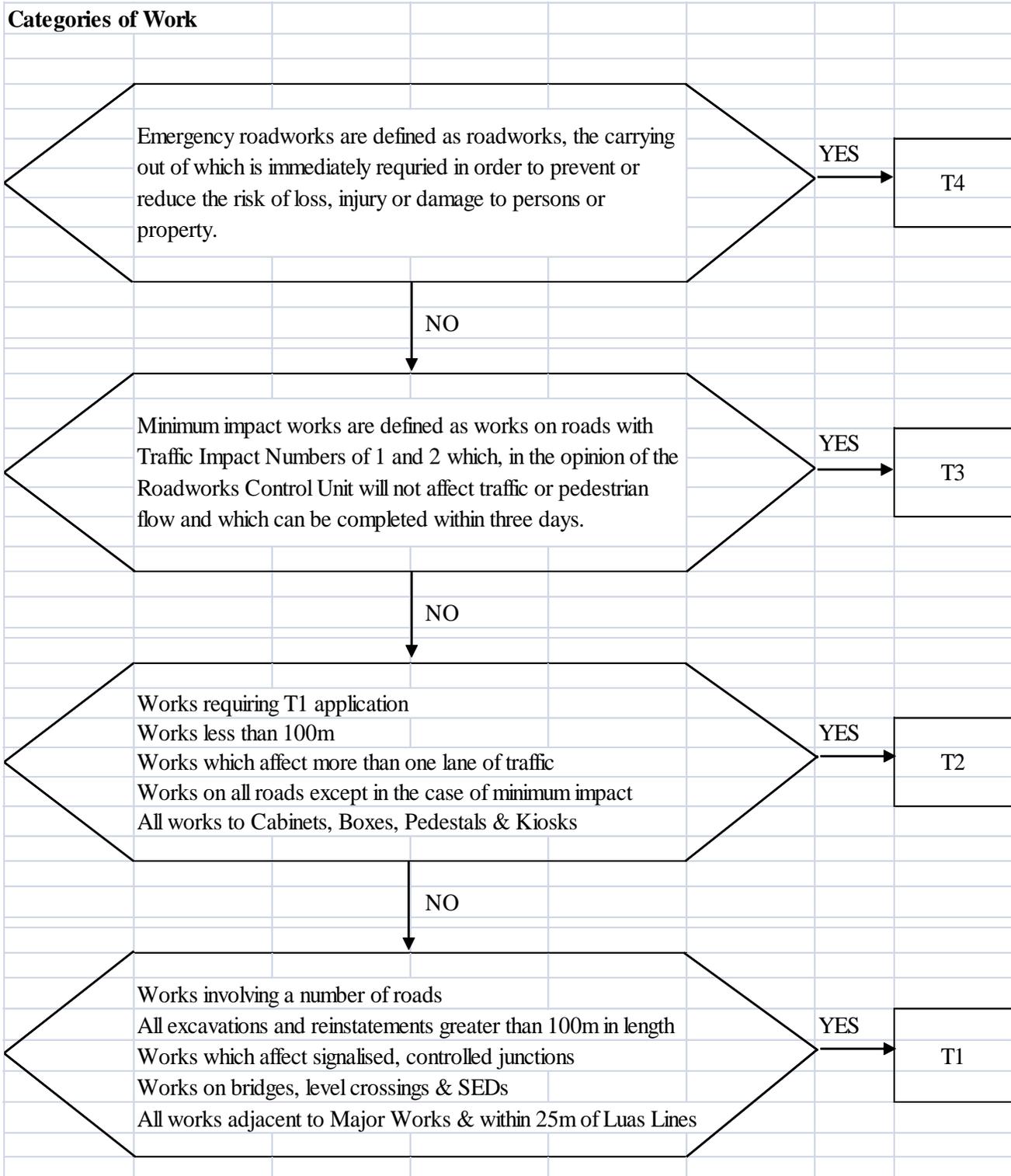
### **Step 5**

Within four weeks of the end of the 24 month defects liability period, a further inspection will be carried out by Dublin City Council and the network operator will be advised of any snags. Subject to satisfactory inspection either then or on execution of the snag list the operator will be advised in writing that the carriageway/footway opening has been 'taken in charge' by Dublin City Council with the exception of chambers, over ground structures and associated carriageway/footway space.

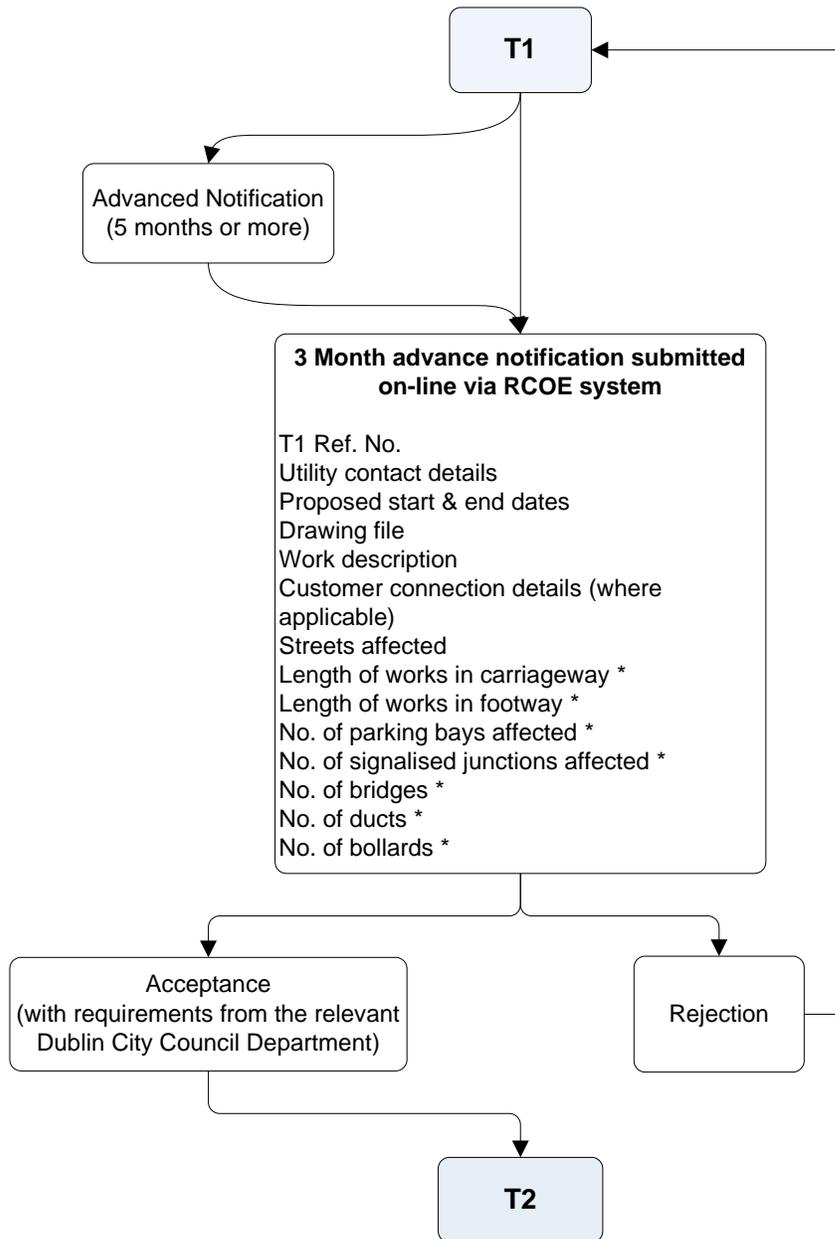
The longterm damage charge will be invoiced in full on acceptance of the reinstatement following completion of the inspection at start of the defects liability period. The normal payment terms will apply (i.e. 30 days).

## Appendix I Flowcharts Showing Procedures

(i) The trench width shall be a minimum of 600mm wide.

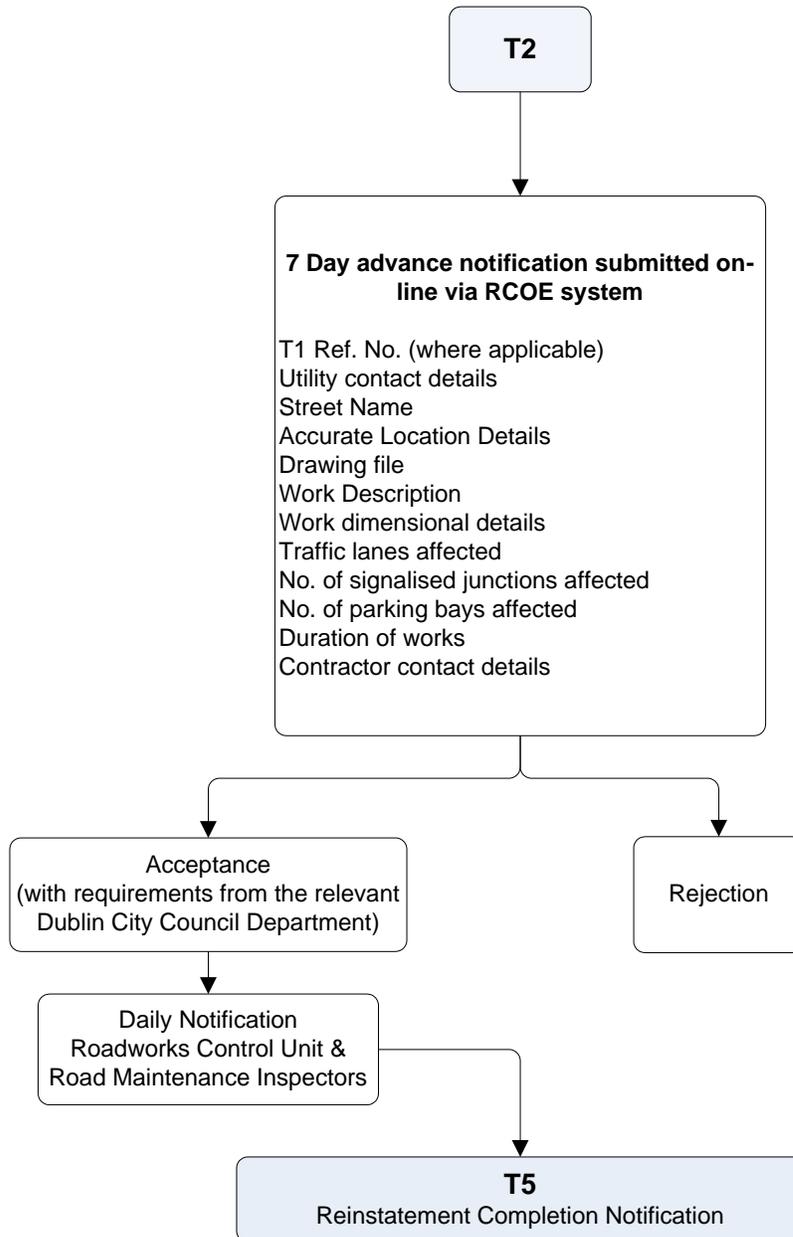


## Three Month Notification

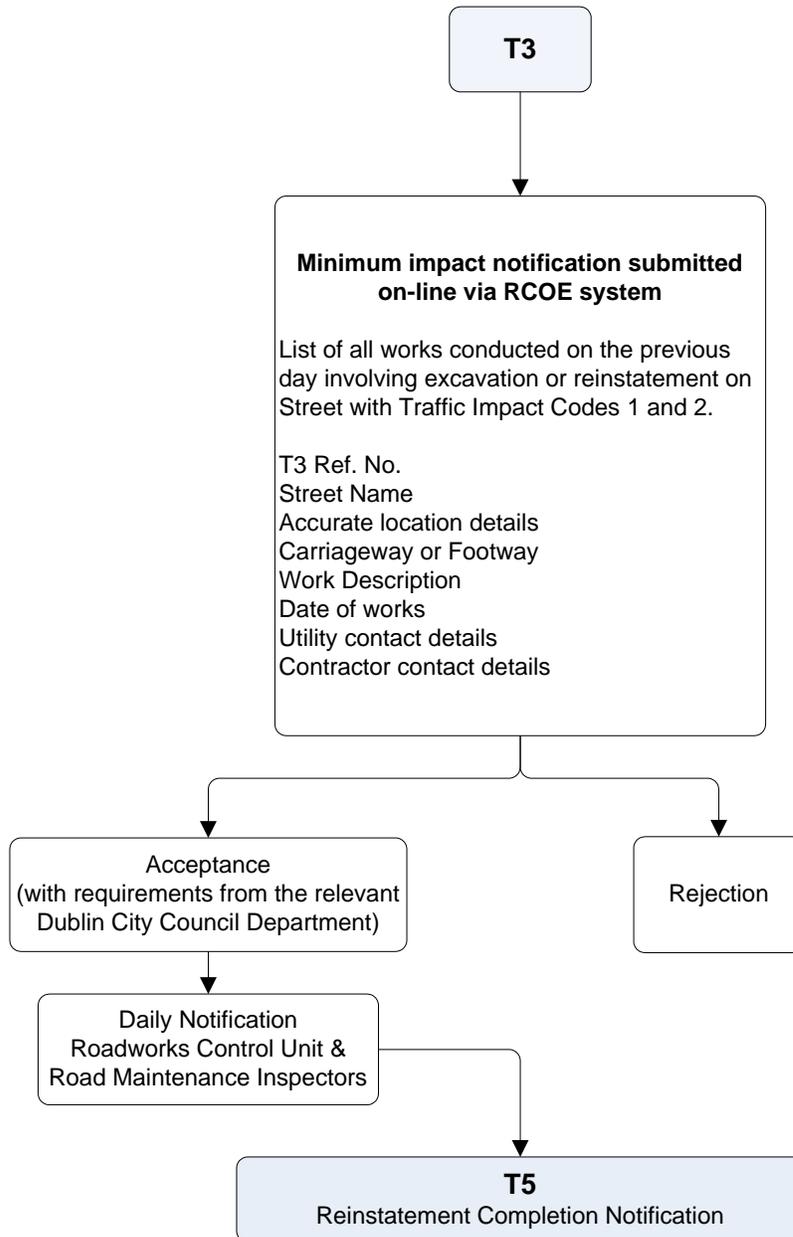


\* Details required for each street listed as part of the T1 Application

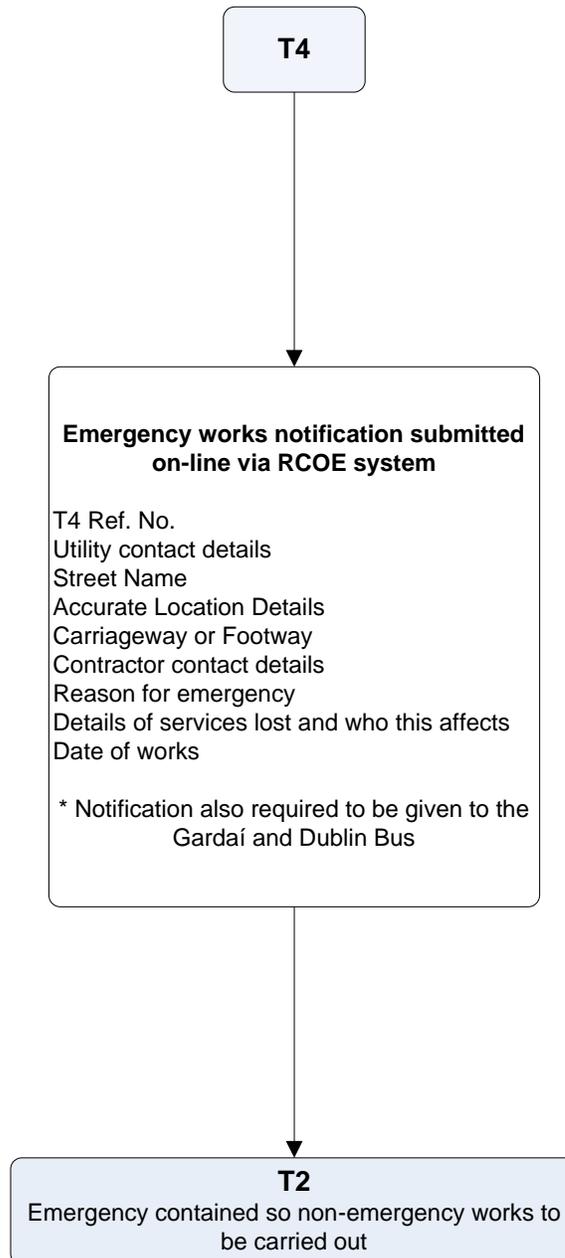
## Seven Day Notification



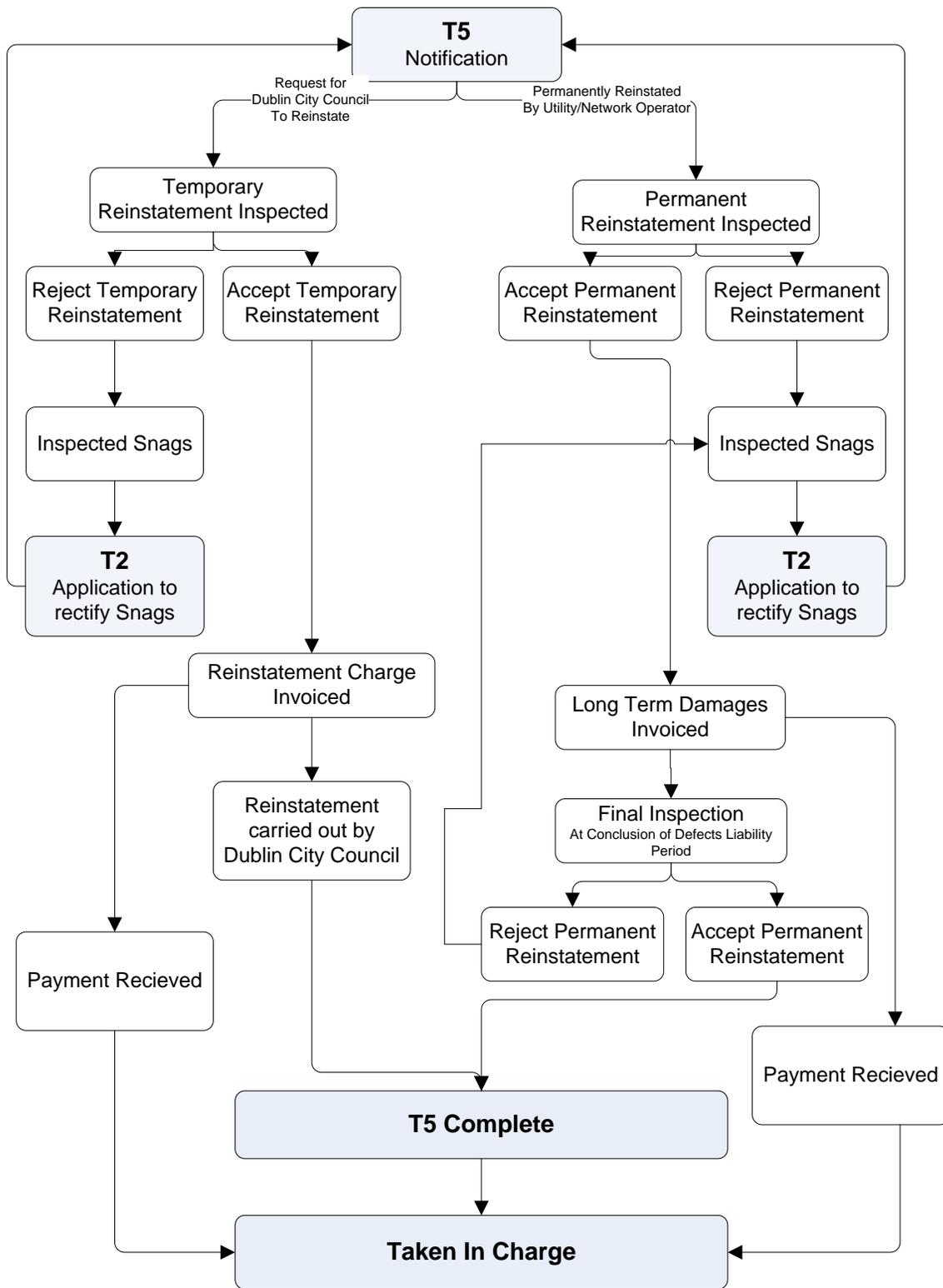
## Minimum Impact



## Emergency Works



## Reinstatement Notification



***Appendix II***      **List of Roads with Traffic Impact Numbers**  
***(This list is subject to review – see DCC website)***

The current list of Roads with Traffic Impact Numbers can be located at:  
<http://www.dublincityroadworkscontrol.ie/streets.asp>

***Appendix III***      **List of Resurfaced Roads (See DCC website for updates).**

The current list of Streets that a moratoria applies can be located at:  
<http://www.dublincityroadworkscontrol.ie/moratorium.asp>

***Appendix IV***      **Charges for Suspension of Parking and for Road Markings**

The current list of Charges for Suspension of Parking and for Road Markings can be located at:  
<http://www.dublincity.ie/RoadsandTraffic/Parking/Pages/SuspensionofPaidParking.aspx>

***Appendix V***      **Charges for Reinstatement of Road Markings**

Public liability attributable to damaged/missing road markings shall remain with the utility/operator responsible for their removal:

- i) for ten weeks after Dublin City Council has received a written official order from the utility for the work in accordance with the following Schedule of Charges, or
- ii) for whatever lesser time it takes Dublin City Council to have them replaced.

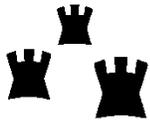
Where Dublin City Council is requested to reinstate markings the utility will be invoiced at current contract rates including VAT plus 33%.

## ***Appendix VI* Roads Maintenance Charges**

1. Reinstatement Charges (excl. Long Term Damages Charge) are reviewed annually. Current charges are available from Road Maintenance Division or on the City Council website.

The Reinstatement /Long Term Damage charges can be found at:  
<http://www.dublincityroadworkscontrol.ie/charges.html>

## Appendix VII Ten Day Notice



### Dublin City Council

Comhairle Cathrach Bhaile Átha Cliath

#### 10 Day Notification

Roads Maintenance Services  
Block 2, Floor 4 Civic Offices,  
Fishamble Street, Dublin 8.

Date : Location :  
Ref . No. : Nature of Works :  
Drg. No. :

Please note that Roads Maintenance Division propose to commence works as outlined above in the immediate future.

If you are aware of some consideration that would affect this proposal, please send a written reply indicating the reason for your intervention and proposed time scale to the under-signed within 10 days of the above date, and quoting the reference and location used above. In the absence of a reply it will be assumed that you have no interest in the matter. (Names and contact details of responsible persons should be included.) NB even if you do not propose to carry out any works in the area highlighted on our drawing please forward a drawing showing the line and level of your existing services. This information is necessary for our safety design file.

*Parties concerned with underground services are asked to take particular note of the following conditions :*

- (1) Where the proposed works might impinge on existing underground services that lack sufficient cover, the authorities responsible for such services shall draw immediate attention to same. This shall be done by furnishing the under-signed with maps which accurately indicate the positions and depth of the vulnerable services. In the absence of such information, Roads Maintenance Division will not accept responsibility for any damage that services might suffer.
- (2) Where complete reconstruction of a carriageway and/or footpath is proposed, arrangements should be made for any necessary repair, alteration, renewal or installation of underground services before the proposed work commences. In such circumstances, Reinstatement charges shall not be payable but the party concerned shall continue to assume full liability for any openings until taken over for reconstruction. Long term damages will not apply.
- (3) Where resurfacing/reconstruction of a carriageway and/or a footpath is proposed arrangements should be made for all necessary repair, alteration, renewal or installation of underground services before the proposed work commences. The utility/company shall be responsible for the reinstatement of the trench. (the wearing course layer can be laid in DBM basecourse material on roads where speed limits are less than 50km/hour.). The utility/company will be responsible for these works until Road Maintenance

commence work on the site. Where it proposed to reconstruct footpaths a) full permanent reinstatement can be carried out or b) a temporary reinstatement (which meets the requirements of the Roadworks Directive). In both cases the utility/company will be responsible for these works until Road Maintenance commence work on the site. Long term damages will not apply.

- (4) Where a reconstructed or resurfaced road pavement is excavated within 5 years of the date of this 10 day Notice, the party shall *overlay a full lane width of pavement for the full length excavated*. Only established surfacing contractors shall be employed and the materials used and the depth of overlay shall match the existing specification.
- (5) Where a reconstructed or overlaid footpath is excavated within 10 years of the date of this 10-Day Notice, the party shall restore the *full footpath width for the full length excavated* to its condition prior to excavation. The materials used and the depth of reconstruction or overlay shall match the existing specification.
- (6) Where a utility carries out work in an area covered by a 10-Day Notice, but such work extends outside the said area, then normal Reinstatement Charges and Long Term Damage Charges apply.
- (7) Before commencement of work on site the utility/company must contact the Area Engineer or the Superintendent concerned.

They are:

Area Engineer South:	Martin Jordan	Telephone No.222 2568 or 086 8150091
Superintendent:	Paul Nolan	Telephone No. 4543736 or 086 8150086
Area Engineer North:	Adrian Corrigan	Telephone No.222 2562 or 086 8150115
Superintendent:	Pat Moloney	Telephone No.837 1595 or 086 8151373

---

**John Flanagan**  
**SENIOR ENGINEER**

## **Appendix VIII Guidelines for Installing and Maintaining Services Close to Trees**

This document gives general guidance on methods of work to minimise damage to trees, which should be followed by utilities/operators and their contractors. Dublin City Council, Parks and Landscape Services Division, should be informed about planned work at an early date prior to commencement.

*“Early consultation with the relevant statutory authorities is recommended, both in relation to retention of existing trees and planting new ones. Detailed plans showing the routing of all services in the proximity of trees are essential, and should also show the access space needed for excavating and laying the service”. BS 5837 6.4.1*

From February 1998 damage to trees caused by failure to comply with the guidelines will result in a charge being levied on the utility/operator. This charge will reflect the amount of damage sustained and where the life/safety of the tree or trees is undermined it will include the cost of total replacement. These charges will be drawn up by professional parks staff and each case will be assessed on an individual basis.

### **DAMAGE TO TREES**

- (1) *“The part of a tree most susceptible to damage is the root system, which, because it is not immediately visible, is frequently ignored. Damage or death of the root system will affect the health, growth, life expectancy and safety of the rest of the tree. The effects of such damage may only become evident several years later”. (BS 5837 7 12)*

*Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil. They often grow out further than the tree’s height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the pavement and into front gardens but they can also grow under the carriageway. During excavation great care should be taken to minimise damage to retained roots, including the bark around the roots.*

*“If the root system is damaged, new roots must develop to sustain the tree. These may develop from the damaged root or by increased growth of other parts of the system. It may take years to replace all the lost roots. Vigorous young trees are the most likely to be capable of rapid root regeneration but mature trees find it very difficult to recover from major root damage, if at all. While roots may regenerate, they will not necessarily provide their original anchorage”. (NJUG 1995 2.6)*

- (2) Tree trunks can be easily damaged, so be careful when working near them. For example, don't lean paving slabs against trees, don't chain machinery to them or nail site notices to their trunks.
- (3) The unplanned removal of branches may adversely affect the balance of the tree and hence its safety.

## **PROTECTING ROOTS**

The UK utilities joint association, the National Joint Utilities Group (NJUG) has produced guidelines for contractors working in the vicinity of trees, developed with representatives of the Arboricultural Association (NJUG, 1995). These recommend the establishment of a "Precautionary Area" around trees, defined as a circle (from the centre of the tree) of radius four times the girth of the tree measured at chest height.

- (1) Establish a protection zone around each tree: the Precautionary Area. See Fig 1.
- (2) In the Precautionary Area:
  - **Don't** excavate with machinery. Use trenchless techniques where possible. Otherwise, dig only by hand.
  - When hand digging, carefully work around roots, retaining as many as possible.
  - **Don't** cut roots over 25mm in diameter, unless the Dublin City Council's Tree Officer agrees beforehand.
  - Prune roots, which have to be removed, using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
  - Backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites, backfill only with excavated soil.
  - **Don't** repeatedly move/use heavy mechanical plant except on hard standing.
  - **Don't** store spoil or building material, including chemicals and fuels.
- (3) Frost and drying winds can damage exposed roots. If trenches are to be left open overnight, cover the roots with dry sacking. Remember to remove the sacking before backfilling.

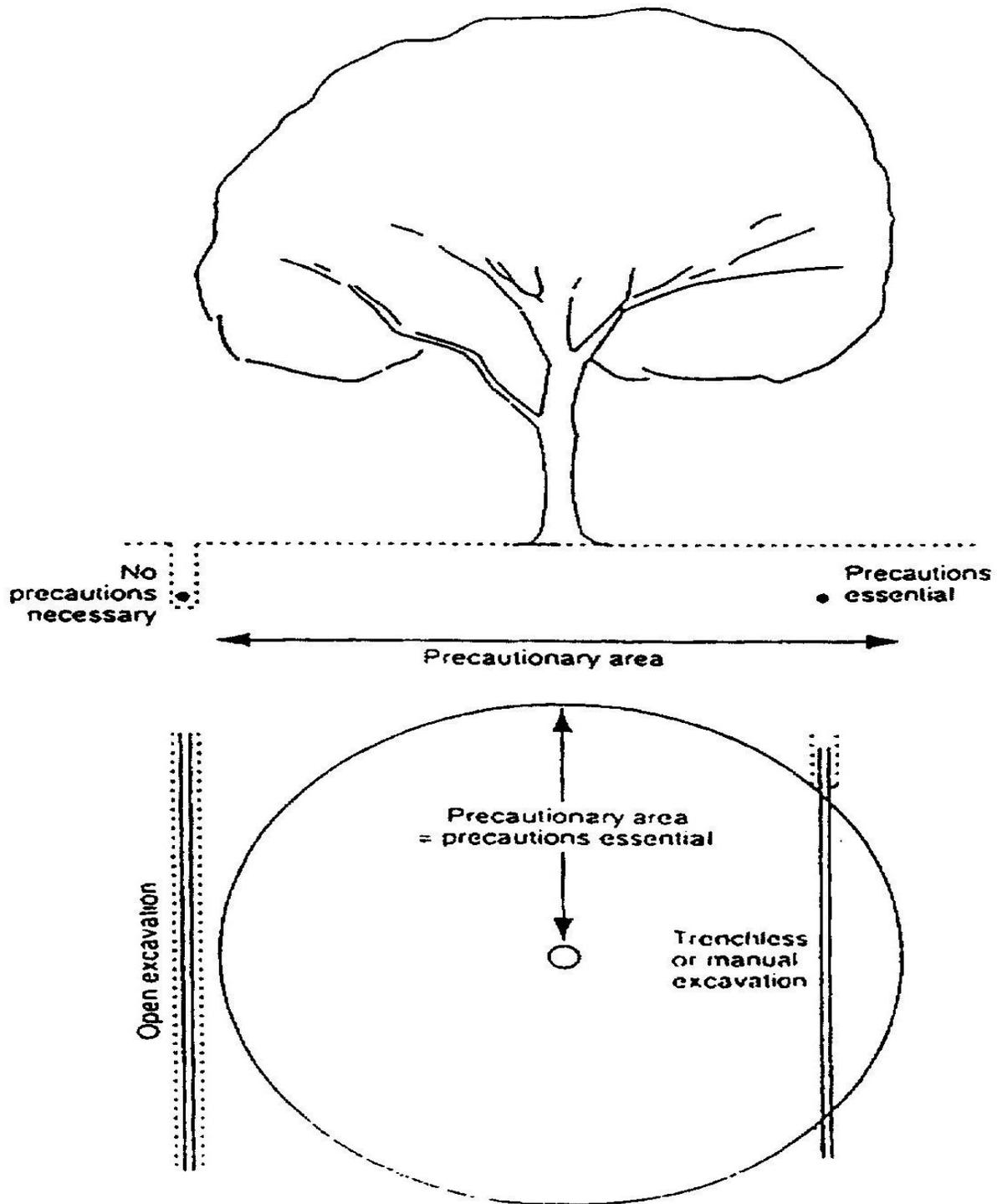
The advisability of using these precautions is undeniable. The confidence with which they can be enforced is a different matter. In the intensely competitive works of utility contracting, the only sure way of minimising root damage to an acceptable degree is by use of the appropriate trenchless technology and by specifying its use from the outset. Contractors must be required by the utility companies who employ them to use this technology. This is an easy administrative task and need not involve the utilities in any additional expenditure.

*“In order to avoid damage to roots by the mole, it is recommended that the depth of run should be below 600mm. Techniques involving external lubrication of the mole with materials other than water (e.g. oil, bentonite, etc.) should be avoided, unless precautions are taken to ensure that there is no contamination of the soil within 600mm of the surface within the precautionary area”.* (NJUG 4.5.2)

#### **REFERENCES:**

Guide for “Trees in Relation to Construction”, BS 5837:1991

Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees. National Joint Utilities Group (NJUG) April 1995.



**Fig. 1.** To determine the Precautionary Area measure the girth of the tree at chest height. Multiply this by 4 and draw a circle of this radius from the centre of the tree.

## ***Appendix IX* Specification for the Supply of Map Information to Roadworks Control Unit**

### **1.1 Application to Mapping Data**

This specification applies to mapping data supplied to the Roadworks Control Unit as part of the 3 Month Advance Notification (T1) process. It does not apply to mapping supplied under the 7 Day Advance Application (T2) process.

### **1.2 Separate Drawing File**

A separate drawing file shall be submitted for each 3 Month Advance Notification. The filename shall also appear on the T1 form as “Drawing Number”.

### **1.3 Drawing File**

The drawing file shall comply with the following requirements:

- It shall be in Microstation DGN format or Autocad DWG or DXF format, version 2000 or less.
- It shall only include linework, polygons and any necessary text to indicate the location and extent of the proposed works.
- **No Ordnance Survey background map shall be supplied.**
- The position of all proposed chambers or joints of any type must be included in the drawing.
- The drawing shall specify if the works are on the footpath or on the carriageway (whether inbound or outbound) and indicate the remaining lanes that will be available to traffic.

### **1.4 Irish National Grid Co-ordinates**

All data shall be to Irish National Grid co-ordinate system, as defined by Ordnance Survey Ireland and should be located to fit on the Ordnance Survey’s 1:1,000 vector mapping.

### **1.5 Subsidiaries**

The specification for subsidiary companies shall be the same as for the parent company.

## ***Appendix X*      Specification for the Installation of Ducting for Dublin City Council**

### **Specification for Ducting**

1. All bends, ducts, couplings etc., shall be singlewall and meet the requirements of BS 1401-1, coloured black and shall comply with the manufacturer's recommendations:

Main Ducts:-      External diameter 110m  
                            Single Socket  
                            Min wall thickness 3.2mm

2. Where ducting is installed on behalf of Dublin City Council by a utility/operator the ducting is to be continuous and is to be slewed around the utility/Operator's intermediate chambers.
3. The matrix shall be, unless otherwise directed by the Roadworks Control Unit, that ducts for Dublin City Council be laid on top.

## Appendix XI Compaction Specification

### Compaction Requirements for Unbound Materials in Road

Type of Compaction Plant	Category	Minimum number of passes for layers not exceeding the following compacted thickness.		
		100mm	150mm	225mm
Smooth-wheeled (or vibratory roller operating without vibration)	Mass per metre width of roll: over 2700kg up to 5400kg over 5400kg	16	Unsuitable 16	Unsuitable Unsuitable
		8		
Pneumatic-tyred roller	Mass per wheel: Over 4000kg up to 6000kg	12	Unsuitable Unsuitable	Unsuitable Unsuitable
	Over 6000kg up to 8000kg	12		
	Over 8000kg up to 12000kg	10	16 12	Unsuitable Unsuitable
	Over 12000kg	8		
Vibratory Roller	Mass per metre width of vibrating roll:	16	Unsuitable 16	Unsuitable Unsuitable
	Over 700kg up to 1300kg	6		
	Over 1300kg up to 1800kg	4	6 5	10 9
	Over 1800kg up to 2300kg	3		
	Over 2300kg up to 2900kg	3	5 4	8 7
	Over 2900kg up to 3600kg	2		
	Over 3600kg up to 4300kg	2	4 3	6 5
	Over 4300kg up to 5000kg	2		
Over 5000kg	2			
Vibrating – plate Compactor	Mass per square meter of base plate: Over 1400 kg/m <sup>2</sup> up to 1800 kg/m <sup>2</sup>	8	Unsuitable 8 6	Unsuitable Unsuitable 10
	Over 1800 kg/m <sup>2</sup> up to 2100 kg/m <sup>2</sup>	5		
	Over 2100 kg/m <sup>2</sup>	3		
Vibro – tamper	Mass: Over 50kg up to 65kg	4	8 6 4	Unsuitable 10 8
	Over 65kg up to 75kg	3		
	Over 75kg	2		
Power Rammer	Mass: 100kg – 500kg	2	8 8	Unsuitable 12
	over 500kg	2		

## **Appendix XII Temporary Road Closures**

Dublin City Council adopts a strict approach to all requests for temporary road closures to facilitate building works/development. Where building work is taking place adjacent to heavily trafficked routes, developers are required to ensure that all building activity (including storage of materials and machinery, location of cranes, siting of skips). In order to minimise the extent and duration of temporary road closures economic charges are imposed to the use of all road space.

Where a temporary road closure is granted the following charges apply:

### **Daily Charges per linear metre, per lane**

Traffic Impact 1	€5.50
Traffic Impact 2	€11.00
Traffic Impact 3	€15.40
Traffic Impact 4	€30.80
Traffic Impact 5	€46.40

The above charges may be reduced by up to 50 % if the road closure takes place between 7p.m. and 7 a.m. or on a Saturday, Sunday or a Public Holiday.

In addition an advertising/administration/inspection fee €2,375 is charged for processing each application. In paid parking areas, the charge for the suspension of paid parking in the relevant tariff zone applies. A fee will also be charged for removal/replacement/reinstatement of road markings, pay & display machines etc.- a list of charges is available on request.

The following conditions apply in respect of all temporary road closures to facilitated building/development works:

1. An application for a temporary road closure must be made a minimum of five weeks prior to the proposed closure date to allow for processing of applications and advertising.
2. The applicant shall submit in writing a Traffic Management Plan which give information on the following:
  - proposed diversion route/routes
  - provision for pedestrians and local access
  - the location and details of all temporary signage to be erected by the applicant,
  - details of arrangement for delivery of materials to the site and
  - details of proposed location of any skips which could impinge on traffic or pedestrian flow.

3. Unless otherwise directed, signs at the affected section of road should read “NO THROUGH ROAD”/“BEALACH CAOCH” rather than “ROAD CLOSED”/“BÓTHAR DÚNTA”.
4. As part of the Traffic Management Plan, the applicant must define the size (i.e. length) of the works. This is required for fixed works (i.e. works at a specific location) and for moving works (i.e. works which are carried out along a street or road).
5. The applicant shall also provide a sketch of the site showing the compound, location of materials, plant etc.
6. Materials shall be stored within the area defined as the site and not on the footpath/carriageway.
7. The public road must not be used for the location of site huts without the prior written permission of the Roadworks Control Unit.
8. No non goods vehicles shall be located within the site. Vehicles or plant not actively engaged in the work may not be kept on site.
9. The applicant shall submit a fee of € 2,375 at the time of application to cover advertising, administration and inspection costs. Additional charges may be applied after application has been considered.
10. The applicant shall indemnify Dublin City Council against all claims, proceedings, liabilities, losses or expenses of whatever nature, however arising in connection with the road closure for the period and times during which the road closure is in place.
11. Where the proposed works results in the removal of statutory signs, the signs shall be removed at the commencement of the proposed works and replaced at the completion of the works by the Roadworks Control Unit at the applicant’s expense.
12. Any other signage associated with the road closure and the maintenance of same shall be at the applicant’s expense.
13. In addition, the applicant shall pay, where appropriate, any other expenses incurred by the Council such as the suspension of parking bays, the temporary removal and replacement of traffic signs or the temporary replacement of road markings. Any such payment shall be made prior to the insertion of the second advertisement.
14. In the case of disc parking and/or pay & display parking, 5m length is equivalent of 1 no. Parking space.

<http://www.dublincity.ie/RoadsandTraffic/Permits/Pages/Howtoapplyforatemporaryroadclosure.aspx>

## ***Appendix XIII Hoarding/Scaffolding Licences***

An applicant wishing to place a hoarding, fence or scaffold on a public road must contact the relevant a Roadworks Control Inspector. Contact names and telephone numbers are available on request from the Roadworks Control Unit (telephone (01) 222 2246). The applicant must meet with the Roadworks Control Inspector on site to discuss the conditions that will apply, the area of the public road/footpath that can be enclosed by the hoarding/scaffolding and the charge that will be payable. An application form must be completed by the applicant and the Roadworks Control Inspector and submitted to the Roadworks Control Unit for processing.

On receipt of the relevant fee the licence/permit will be issued to the applicant.

For hoarding/scaffolding located along designated strategic routes of traffic impact numbers 3, 4 and 5 a licence will only be issued initially for a 3 month period. A Traffic Management Plan must be submitted with all hoarding/scaffolding licence applications on these routes and in the case of applications in respect of other routes where requested by the Roadworks Control Unit. The Plan must be approved by the Roadworks Control Unit before a licence is issued. The submission of incomplete or unacceptable Plans will result in the licence not being granted. Applications for extension of hoarding/scaffolding licences will only be accepted subject to full adherence with the provisions of the agreed Traffic Management Plan.

Where a hoarding/scaffolding impinges on or will affect paid parking bays the relevant charge for the suspension of these bays must be paid. These charges are set out in Appendix IV.

Where the footpath/carriageway is damaged by a site development the consequent fees payable to Road Maintenance Division are set out in Appendix VI.

All hoarding and scaffolding should be designed in such a way that the carriageway is not impinged upon and that 1.2m of footpath can remain clear either under the scaffolding or along the outside of the hoarding. Only where absolutely necessary will permission be given for a hoarding to protrude onto the carriageway. On streets with high pedestrians volumes a minimum clearance for the remaining footpath of 1.8mt is required.

Where scaffolding is used, and the width of the footpath is reduced to under 1.2mt a strongly roofed pedestrian passageway with clear headroom of not less than 2m and a clear width of 1.2mt (1.8mt in the case of a street with a high pedestrian volume) must be provided under the scaffolding.

Access to traffic controllers and to traffic signal chambers must be maintained at all times in order that maintenance work can be undertaken. The controller door must not be obstructed.

Access to pay & display machines must be maintained at all times unless otherwise agreed with the Roadworks Control Inspector.

Public lighting fittings and associated cabling and equipment shall not be enclosed or removed within the hoarding, scaffolding or fencing without the permission of the Public Lighting

Division of Dublin City Council. Where this is intended the Licensee shall make application including a marked site map indicating the location of the public lighting equipment involved, at least 21 days prior to the commencement of the works. This application should be submitted to the Senior Engineer, Dublin City Council, Public Lighting Division, 61-64 Marrowbone Lane, Dublin 8.

Where public lighting equipment is to be enclosed within the hoarding, scaffolding or fencing, it shall be adequately protected against damage and shall remain available for inspection and maintenance when required.

The Licensee shall be responsible for all damage to columns and fittings due to the construction works within and immediately external to the enclosure, including damage to foundations and service cables, and shall bear all expenses arising from their restoration.

Wherever the public lighting has been rendered partially or totally inoperative by the development, the Licensee shall erect and maintain sufficient temporary lighting to standards approved by the Public Lighting Division.

Where a scaffolding/hoarding is erected in the vicinity of overhead electrical lines whether within the enclosure or otherwise, the Licensee is required to make available on request the relevant extract from his safety statement detailing the measures to be taken for the avoidance of hazard.

Where the proposed hoarding/scaffolding has only a minimum impact on the public footpath (i.e. there is a minimum remaining width of footpath of not less than 1.2mt or 1.8mt in the case of streets with high pedestrian volumes) a charge of €207 per month or part thereof will apply for a fixed length of hoarding etc. up to a maximum of 30 metres. There is an additional charge of €10 per additional metre impinging on the footpath/road.

In addition, the following charges will apply in cases where the minimum width of footpath available to the public is less than 1.2 metres (1.8mt in the case of streets with high pedestrian volumes) and where it is necessary to impinge on the public road, either to accommodate the hoarding/scaffolding and/or to make alternative arrangements for pedestrians:

**Charges for Hoarding/Scaffolding that Impinge on the Public Road and for Partial Road Closure (i.e. Lane Closure)**

<b>Traffic Impact Number</b>	<b>Charge per Square Metre of Public Road Used per Month or Part Month</b>	<b>Minimum Monthly Charge For Public Road Used</b>
<b>1</b>	<b>€2.40</b>	<b>€260</b>
<b>2</b>	<b>€3.90</b>	<b>€520</b>
<b>3</b>	<b>€15.90</b>	<b>€790</b>
<b>4</b>	<b>€31.90</b>	<b>€1,650</b>
<b>5 &amp; Pedestrianised Streets</b>	<b>€47.90</b>	<b>€2,470</b>

In cases where it is not possible to make provision for a pedestrian walkway on the public road because of the narrowness of the road a charge calculated on the basis of a 1.2m walkway will be imposed.

An application form for a Licence/Permit to erect and maintain a hoarding/fence/scaffolding on a public road/footpath and for the use of public road space is available on request from the Roadworks Control Unit, Roads & Traffic Department, Block 2, Floor 4, Civic offices, Fishamble Street, Dublin 8; Telephone (01) 222 2246.

<http://www.dublincity.ie/RoadsandTraffic/Permits/Pages/HoardingScaffolding.aspx>

**Appendix XIV POSITIONING OF  
VEHICLES/EQUIPMENT/MOBILESCAFFOLDING,  
HOISTS AND CRANES etc. ON PUBLIC  
ROADS/FOOTPATHS**

A charge of €100 per day or part thereof applies where a vehicle, mobile scaffolding, any equipment or a standard hoist is located on a public footpath, in a loading bay or a paid parking bay where pedestrian access can be maintained on the public footpath at all times. The “Daily Suspension Rate” for paid parking will also be chargeable if the vehicle / scaffolding / equipment/hoist etc. is placed in a paid/permit parking area during the operating hours of paid parking controls.

In all other cases where a vehicle/scaffolding/equipment/hoist etc. impinges on the public road or forces pedestrians onto the public road so that after due provision is made for pedestrians there is a reduction in the number of lanes available for traffic and in all cases involving mobile cranes, the charge to be applied will be determined by reference to the Impact Number of the road, the duration, and the number of lanes affected as per the table below:

NOTE. Permission will generally not be given for positioning of vehicles etc during clearway or bus lane hours.

Minimum Charge Per Traffic Lane or Part Thereof (Traffic Lane Taken as 3m in Width)

Traffic Impact Number	Duration Up to 6 hours	Duration Between 6 and 24 hours
1	€ 150	€ 450
2	€ 250	€ 750
3	€ 500	€ 2,000
4	€ 750	€ 2,350
5	€ 1,000	€ 3,000

\*These charges may be reduced by up to 50% if the work is carried out between 7pm and 7am or on Saturday, Sunday or Public Holiday.

**Use of road space associated with development/construction works or other commercial activity**

Charge per traffic lane or part thereof for cranes exceeding 120 Ton (Traffic lane taken as 3m width)

Cranes, which have a gross weight of 120 ton or more the higher charge, will apply. Duration up to 6 hours has a minimum charge of €3,000. These charges may be reduced by up to 50% if the work is carried out between 7pm and 7am or on Saturday, Sunday or Public Holiday.

<http://www.dublincity.ie/RoadsandTraffic/Permits/Pages/HoardingScaffolding.aspx>

## ***Appendix XV* Skips**

The placing of skips, on public roads, is governed by the Dublin City Council, Control of Skips, Bye-Laws. The Roadworks Control Unit is responsible for the implementation of these Bye-Laws. Prohibitions, restrictions and conditions relating to the placing of skips on public roads are set out in Part II of these Bye-Laws.

There is a prohibition on placing skips in the following locations at all times without a permit:

- on double yellow lines,
- within 5mt. of a junction,
- within 15mt. on the approach side or 5mt. on the other side of a pedestrian crossing or traffic lights.
- obstructing any vehicular entrance except with the owners consent,
- entrance,
- on a footpath, grass margin, or median strip,
- in a disabled parking bay,
- at a taxi rank, bus stop or 24 hour cycle track,
- interfering with the entrance to or exit from a Fire, Ambulance or Garda Station.
- Where there is a no parking sign,
- on a motorway and
- at a school entrance.

Skips may not be located during the time indicated on the relevant traffic sign when the following restrictions are in operation without a permit indicating the times at which the skip may be located and the period during which delivery and collection of the skip is prohibited:

- on a clearway/bus lane/cycle track,
- on a single yellow line or in a loading bay,
- in bus coach parking areas
- in pedestrian areas
- in pay & display and permit parking areas.

Permits will only be issued in respect of certain locations (incl. bus lanes and cycle tracks) in exceptional circumstances.

Where it is proposed to locate a skip, provision should also be made to prevent damage to pavement surface. Permanent bollards should not be removed. Skips must not be placed on the footpath where cellars exist beneath the pavement surface.

Skips must have permanently attached horizontal reflective markings of a type that is clearly visible to road users and pedestrians.

Permission will only be given to place skips in paid parking areas subject to the prior payment to the Roads & traffic Department Dublin City Council of the appropriate charge, set out in Appendix V.

A Skip Permit Application Form (should be submitted to the Roadworks Control Unit not later than 2 working days prior to the proposed placement date

Skip permits will only be issued where skips are hired from licensed skip operators. The licence number must be quoted for all skip applications. The permit must be available for inspection on site at all times

<http://www.dublincity.ie/RoadsandTraffic/Permits/Pages/SkipPermit.aspx>

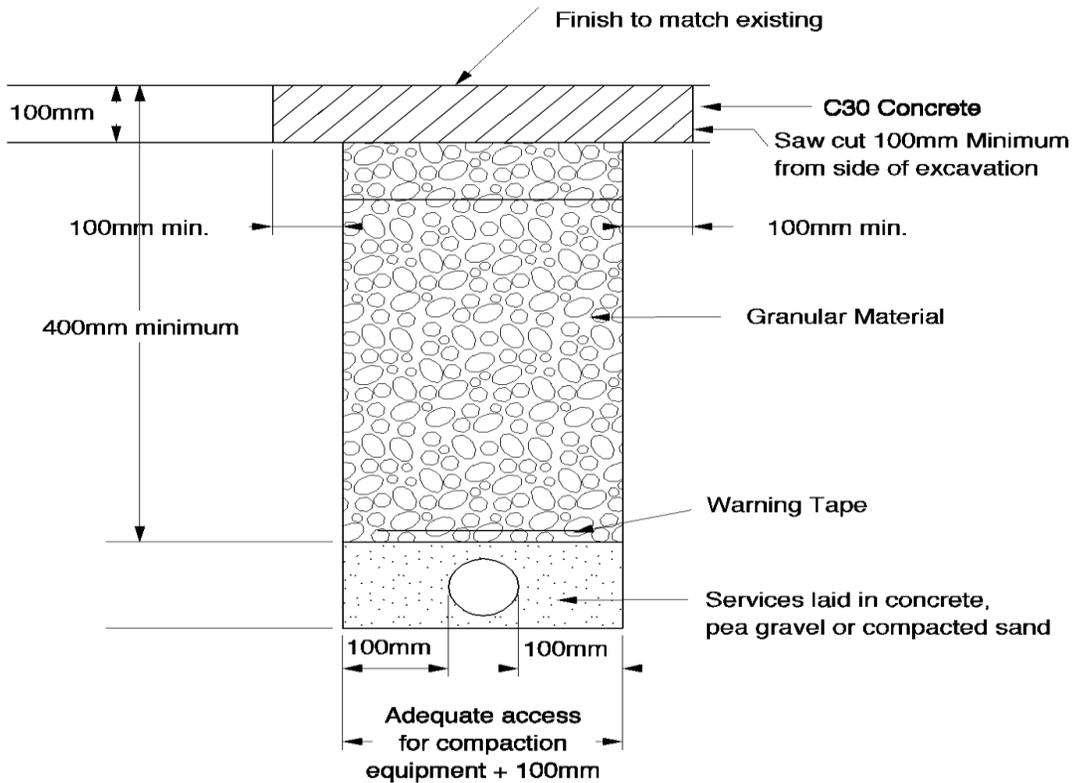
## Appendix XVI Restrictions on Timing of Roadworks

Traffic Impact	Traffic Impact 1 & 2		Traffic Impact 3				Traffic Impact 4			Traffic Impact 5			
	Mon- Fri	P.H. Sat-Sun	Mon- Wed	Thurs	Fri	P.H. Sat-Sun	Mon- Wed	Thurs Fri	P.H. Sat-Sun	Mon- Wed	Thurs Fri	Sat	P.H. Sun
	00.00-08.00												
08.00-09.00													
09.00-10.00													
10.00-11.00													
11.00-12.00													
12.00-13.00													
13.00-14.00													
14.00-15.00													
15.00-16.00													
16.00-17.00													
17.00-18.00													
18.00-18.30													
18.30-19.00													
19.00-19.30													
19.30-20.00													
20.00-21.00													
21.00-22.00													
22.00-23.00													
23.00-24.00													

Shading indicates times during which roadworks are permitted.

P.H. Public Holiday

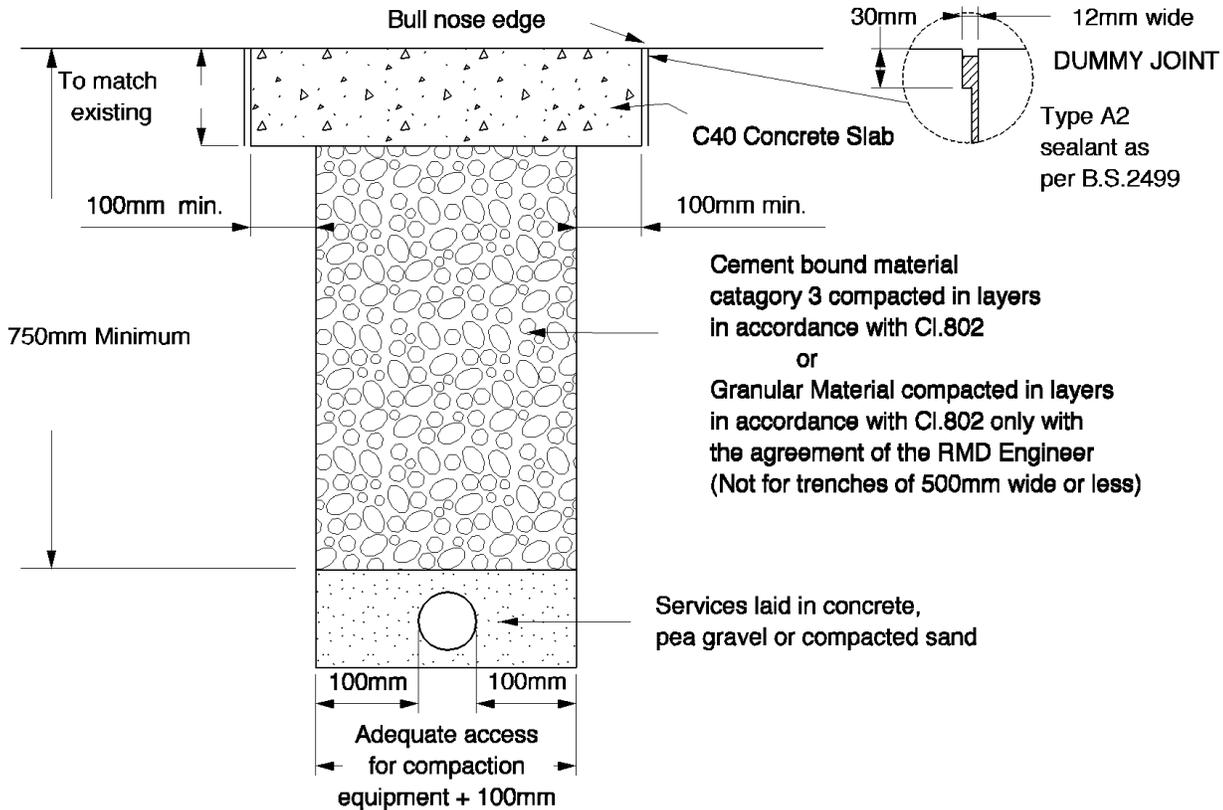
# Appendix XVII Specifications/Drawings



**NOTES**

1. All edges to be saw cut to the full depth.
2. If the opening is to be temporarily dressed, it shall be topped with 50mm of compacted Asphalt Concrete 20 dense Binder (formerly 20mm DBM) to B.S. 4987.
3. Concrete apron to be 200mm thick at driveways and 300mm thick at commercial access.
4. Any cracked area adjacent to the opening resulting from the excavation operation or where the edge of the trimmed opening is within 400mm of joint, edge, other reinstatement or ironwork shall be included within the area to be reinstated.
5. All Clause References are to the N.R.A. Specification for Roadworks.

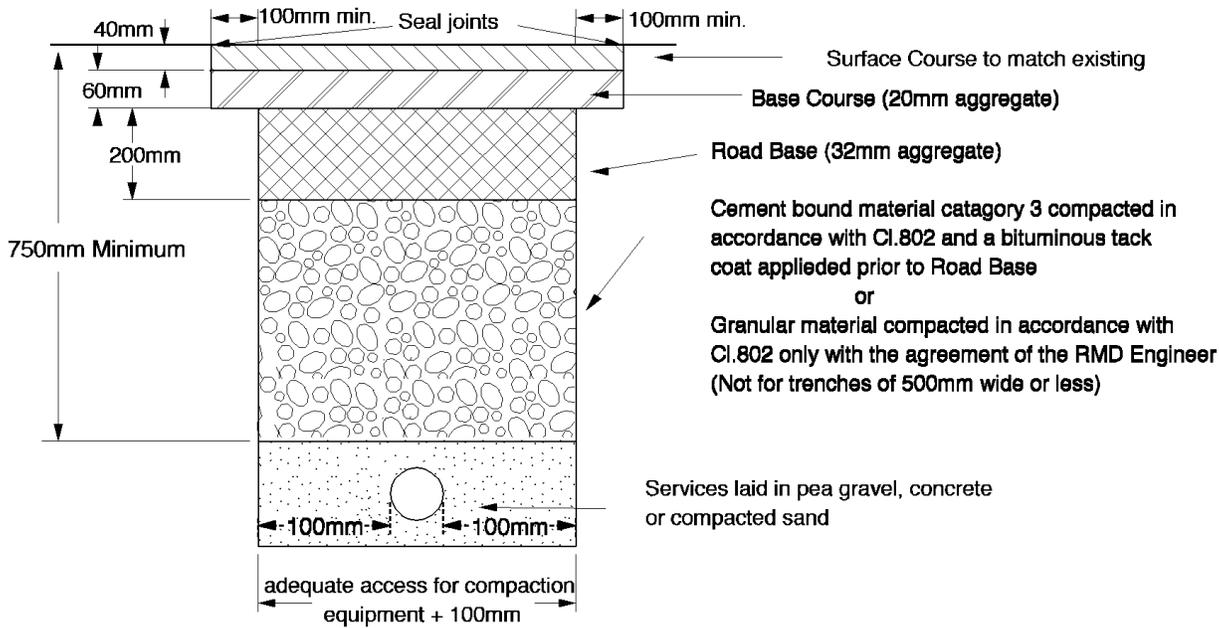
<p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> CIVIC OFFICES WOOD QUAY., DUBLIN 8.</p>	<p><b>CONCRETE FOOTWAY : REINSTATEMENT STANDARD</b></p>										
	<p><b>ROADS MAINTENANCE DIVISION</b></p>										
<p><b>J. McDAID</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: small;">DRAWN</th> <th style="font-size: small;">DATE</th> <th style="font-size: small;">REVISED</th> <th style="font-size: small;">SCALE</th> </tr> <tr> <td style="font-size: x-small;">S.McCABE</td> <td style="font-size: x-small;">01/11/2004</td> <td style="font-size: x-small;">01/07/2009</td> <td style="font-size: x-small;">N.T.S</td> </tr> </table>	DRAWN	DATE	REVISED	SCALE	S.McCABE	01/11/2004	01/07/2009	N.T.S	<p style="font-size: large;"><b>R.M. 23-01f</b></p>	
DRAWN	DATE	REVISED	SCALE								
S.McCABE	01/11/2004	01/07/2009	N.T.S								



**NOTES**

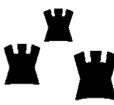
1. If the opening is to be temporarily dressed, it shall be topped with 60mm of compacted Asphalt Concrete 20 dense Binder (formerly 20mm Basecourse DBM) to B.S. 4987.
2. All edges to be saw cut to a sufficient depth that the integrity of the adjacent pavement shall not be damaged during subsequent works.
3. Surface finish to be similar to adjoining area.
4. Where the edge of the opening is within 1 metre of a transverse or longitudinal joint, edge, other reinstatement or ironwork the reinstatement should be extended to that joint.
5. Existing expansion joints to be constructed as 12mm expansion joints consisting of Flexcell material sealed with A2 type sealant as per B.S. 2499.
6. All joints that are removed or otherwise damaged must be replaced or reconstructed to a similar design and using equivalent materials.
7. All joints between new and existing surfaces should be dummy joints, topped up with 50 pen bitumen
8. Cl. 804 Granular Material Type B, compacted in layers in accordance with Cl. 802
- 9 All Clause References are to the N.R.A. Specification for Roadworks.

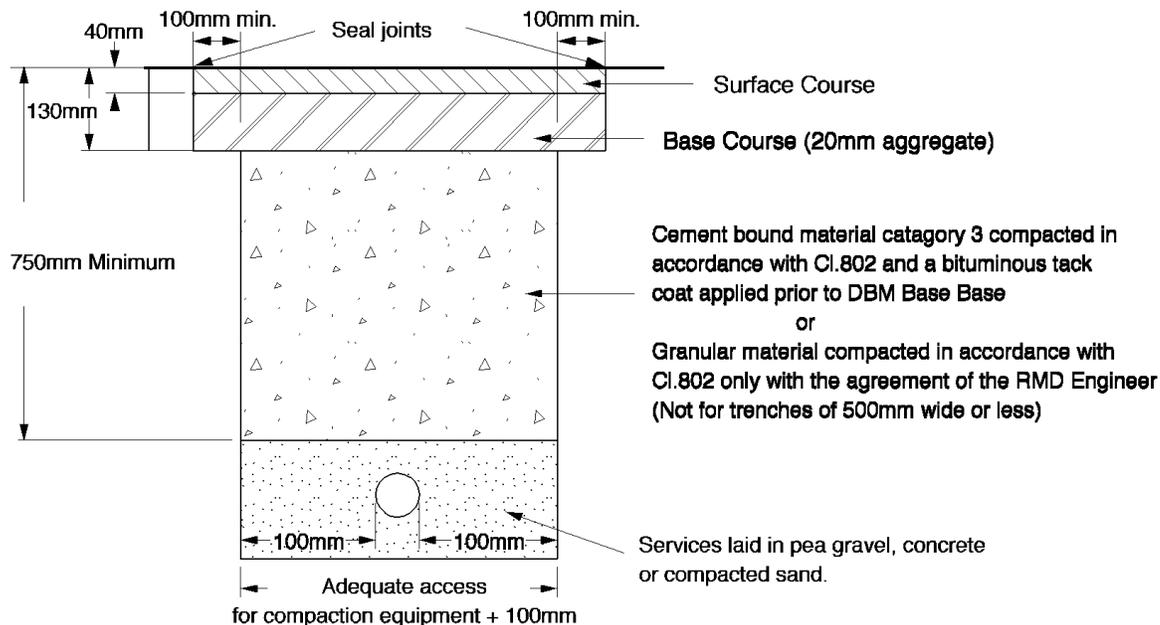
 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> <b>CIVIC OFFICES</b> <b>WOOD QUAY, DUBLIN 8.</b></p>	<b>RIGID (CONCRETE) ROAD : REINSTATEMENT STANDARD</b>				<b>R.M. 23-02e</b>
	<b>ROADS MAINTENANCE DIVISION</b>				
<p><b>J. McDAID</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	DRAWN	DATE	REVISED	SCALE	
	S.MCCABE	01/11/2004	01/07/2009	N.T.S.	



**NOTES**

1. If the opening is to be temporarily dressed, it shall be topped with 60mm of compacted AC14 close surf 70/100 (formally 0/14 close grade macadam)
2. The surface course employed may be one of the following:
  - a. Hot Rolled Asphalt 30/14 surface (wearing) course : Shall comply with the requirements of Clause 910, S.R.W. It shall be laid and compacted to Clause 901.
  - b. Stone mastic Asphalt: Shall comply with the requirements of NSAI Standard Recommendation 28, S.R.W. Where necessary the existing surfaces shall be regulated in accordance with Clause 907. It shall be laid and compacted to Clause 901.
  - c. Thin Surface Course Materials: Shall comply with the requirements of Clause 942, S.R.W. Where necessary the existing surfaces shall be regulated in accordance with Clause 907. It shall be laid and compacted to Clause 901. Type of surface course to be agreed with RMD Engineer.
3. Asphalt Concrete 20 Dense Binder (formerly 20mm basecourse DBM) shall be used for the basecourse and shall comply with the requirements of Clause 906, S.R.W. It shall be laid and compacted to Clause 901. It is to be compacted to a minimum thickness of 60mm.
4. Carriageway base material shall comprise of Asphalt Concrete 32 Dense Base (formerly 28mm Road base DBM).
5. Cement Bound Material Category 3 (formally 10/20 semi-dry concrete): CBM3 shall be made from aggregate as in sub-clause 1001.6 SRW. It shall be made and constructed in accordance with the requirements of clause 1038 NRA, SRW. The ratio by mass of cement to aggregate shall be sufficient to produce a 7 day cube strength of 10N/mm<sup>2</sup>.
6. The surface of the semi dry concrete shall be sprayed with a bituminous tack coat as per CI.920 prior to laying of bituminous material.
7. CI. 804 Granular Material Type B, compacted in layers in accordance with CI.802.
8. Depending on the composition of the road, the overbreak may extend to the top of the granular or cement bound material.
9. All Clause References are to the N.R.A. Specification for Roadworks.

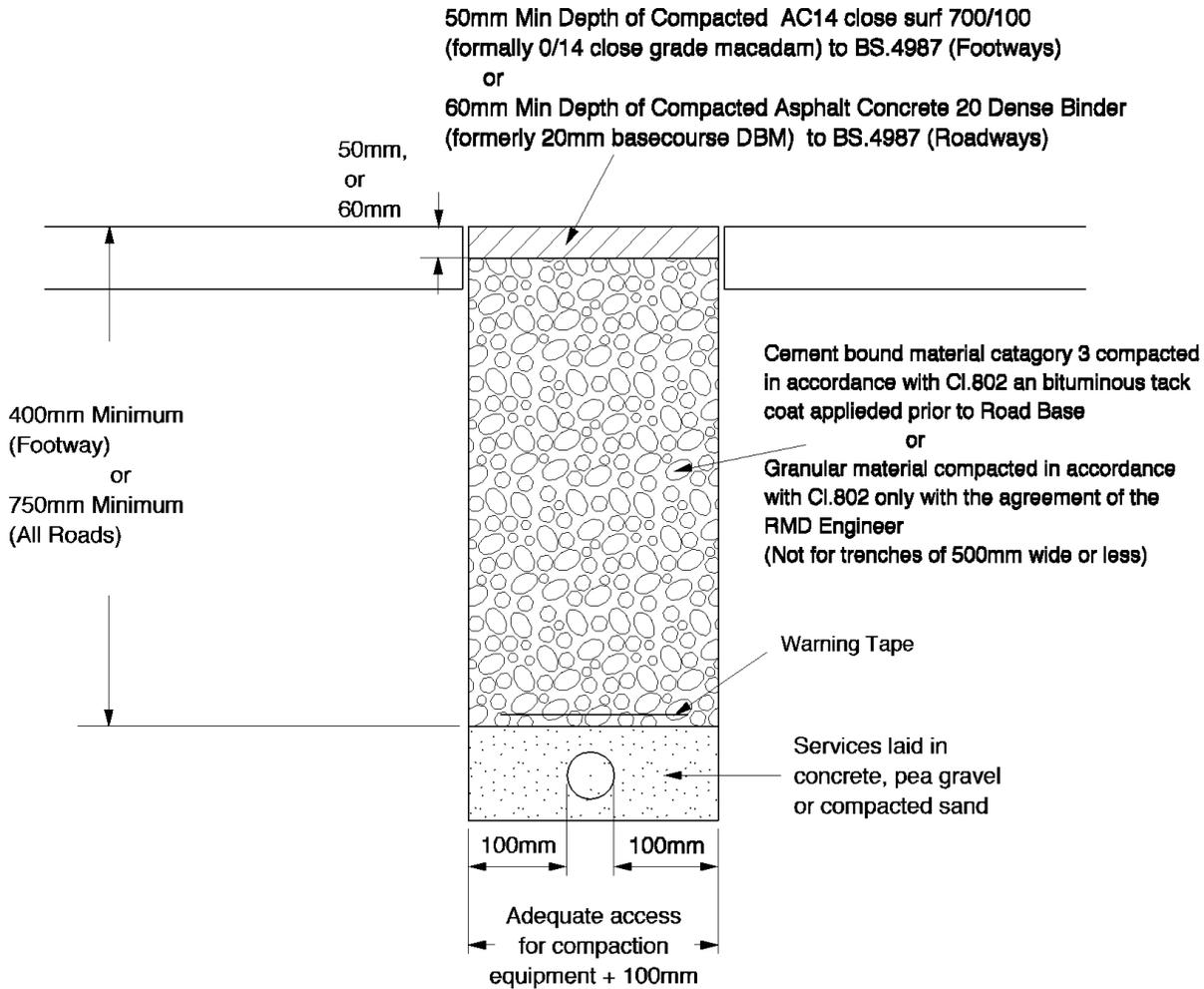
 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> CIVIC OFFICES WOOD QUAY., DUBLIN 8.</p>	<p><b>COMPOSITE ROAD, FLEXIBLE ROAD : REINSTATEMENT STANDARD FOR NON-ESTATE ROAD</b></p>			
	<p><b>ROADS MAINTENANCE DIVISION</b></p>			<p><b>R.M. 23-03f</b></p>
<p><b>J. McDAID</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	<p>DRAWN S. McCABE</p>	<p>DATE 01/11/2004</p>	<p>REVISED 01/07/2009</p>	<p>SCALE 1:N.T.S.</p>



**NOTES**

1. If the opening is to be temporarily dressed, it shall be topped with 60mm of compacted AC14 close surf 700/100(formally O/14 close grade macadam).
2. The surface course employed may be one of the following:
  - a. Hot Rolled Asphalt 30/14 surface (wearing) course : Shall comply with the requirements of Clause 910, S.R.W. It shall be laid and compacted to Clause 901.
  - b. Stone mastic Asphalt: Shall comply with the requirements of NSAI Standard Recommendation 28, S.R.W. Where necessary the existing surfaces shall be regulated in accordance with Clause 907. It shall be laid and compacted to Clause 901.
  - c. Thin Surface Course Materials: Shall comply with the requirements of Clause 942, S.R.W. Where necessary the existing surfaces shall be regulated in accordance with Clause 907. It shall be laid and compacted to Clause 901. Type of surface course to be agreed with RMD Engineer.
3. Asphalt Concrete 20 Dense Binder (formerly 20mm basecourse DBM) shall be used for the basecourse and shall comply with the requirements of Clause 906, S.R.W. It shall be laid and compacted to Clause 901. It is to be compacted to a minimum thickness of 60mm.
4. Cement Bound Material Category 3 (formerly 10N/20 semi-dry concrete): CBM3 shall be made from aggregate as in sub-clause 1001.6 SRW. It shall be made and constructed in accordance with the requirements of clause 1038 NRA, SRW. The ratio by mass of cement to aggregate shall be sufficient to produce a 7 day cube strength of 10N/mm<sup>2</sup>.
5. The surface of the semi dry concrete shall be sprayed with a bituminous tack coat as per Cl.920 prior to laying of bituminous material.
6. Cl. 804 Granular Material Type B, compacted in layers in accordance with Cl.802.
7. Depending on the composition of the road, the overbreak may extend to the top of the granular or cement bound material.
8. All Clause References are to the N.R.A. Specification for Roadworks.

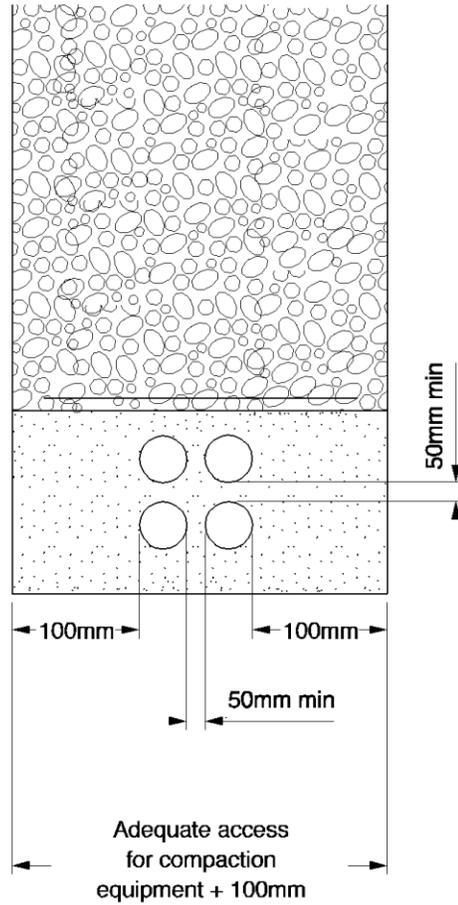
 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> CIVIC OFFICES WOOD QUAY, DUBLIN 8.</p>	<p><b>COMPOSITE ROAD, FLEXIBLE ROAD REINSTATEMENT STANDARD FOR ESTATE ROAD</b></p>				<p><b>R.M. 23-04f</b></p>
	<p><b>ROADS MAINTENANCE DIVISION</b></p>				
<p><b>J. McDAID</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	DRAWN	DATE	REVISED	SCALE	
	S.McCABE	01/1/2004	01/07/2009	N.T.S.	



**NOTES**

1. All edges of excavated area to be saw cut.
2. Cl. 804 Granular Material Type B, compacted in layers in accordance with Cl. 802.
3. The surface of the Cement bound material category 3 shall be sprayed with a bituminous tack coat as per Cl.920 prior to laying of bituminous material.
4. All Clause References are to the N.R.A. Specification for Roadworks.

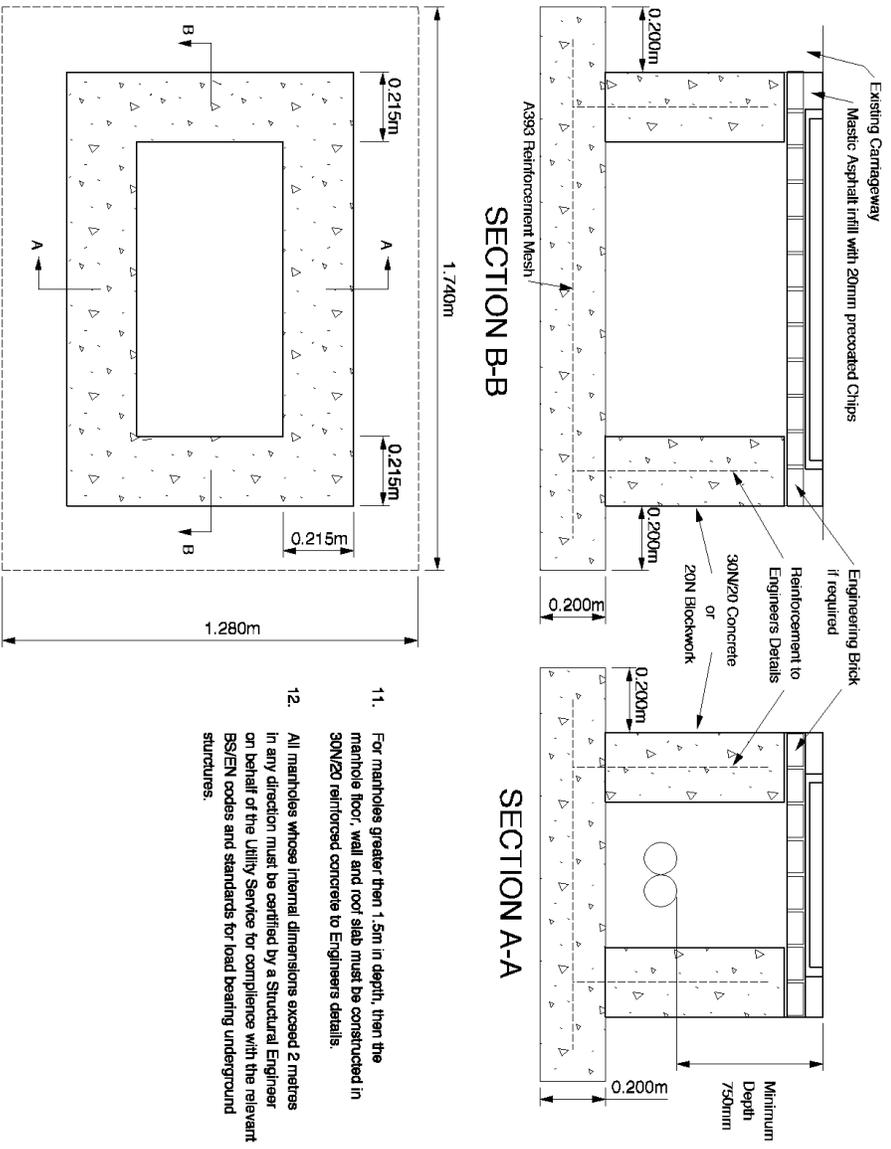
 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> CIVIC OFFICES WOOD QUAY., DUBLIN 8.</p>	<p><b>FLAGS, BRICKS, SETTS TEMPORARY REINSTATEMENT</b></p>				<p><b>R.M. 23-05f</b></p>
	<p><b>ROADS MAINTENANCE DIVISION</b></p>				
<p><b>J. McDAID</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	<p>DRAWN S. McCABE</p>	<p>DATE 01/12/2004</p>	<p>REVISED 01/07/2009</p>	<p>SCALE 1:N.T.S.</p>	



NOTES

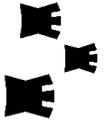
1. Each layer of Ducts to be laid and compacted separately

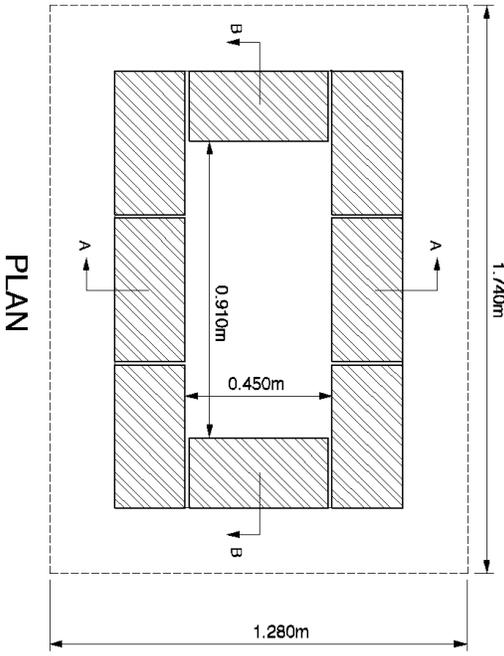
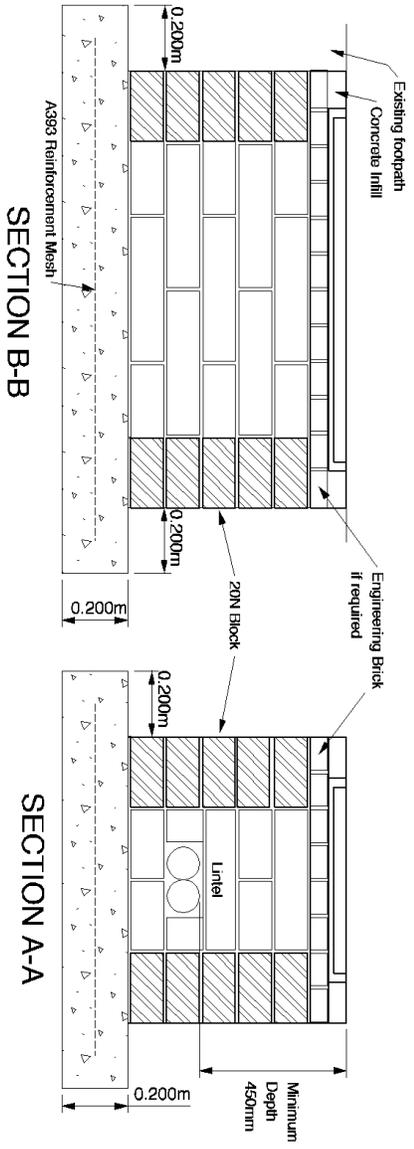
 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Chathair Bhaile Átha Cliath</p> <p><b>ROADS &amp; TRAFFIC DEPARTMENT.</b> CIVIC OFFICES WOOD QUAY, DUBLIN 8.</p>	<p><b>MULTIPLE DUCTS (TWO OR MORE)</b></p>				<p><b>R.M. 23-06c</b></p>
	<p><b>ROADS MAINTENANCE DIVISION</b></p>				
<p><b>B. CALLEGY</b> DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>	<p>DRAWN S. McCABE</p>	<p>DATE 01/11/2004</p>	<p>REVISED //20</p>	<p>SCALE N.T.S.</p>	



- 11. For manholes greater than 1.5m in depth, then the manhole floor, wall and roof slab must be constructed in 30N/20 reinforced concrete to Engineers details.
- 12. All manholes whose internal dimensions exceed 2 metres in any direction must be certified by a Structural Engineer on behalf of the Utility Service for compliance with the relevant BS/EN codes and standards for load bearing underground structures.

- 1. Foundation Base Slab.  
The concrete base slab shall be formed to the dimensions shown using 30N/20 concrete with A393 reinforcing mesh placed centrally in the slab.
- 2. Chamber Walls.  
Walls shall be constructed of 30N/20 in situ concrete or solid high density blocks class S20 to IS. 20 or Blocks shall be laid on the flat to form a wall thickness of 215mm and can be finished with a header course of engineering brick Class E(50N) if required to receive the manhole cover and frame
- 3. Manhole Cover and Frame.  
This shall be a class D400 manhole cover and frame to (S)/EN 124, 150mm deep frame for roads, 100mm deep frame for footpaths and green areas, of non rock design, closed key ways, 600x 600 clear opening. Frames shall be designed to prevent covers falling into manholes. Manholes covers and frames shall be coated in bitumen or similar approved material.
- 4. Construction Details.  
Concrete lintel shall be provided over all duct opens. The areas outside the blockwork shall be filled with 20N/20 semi-dry concrete, or granular material which must be compacted in accordance with C1.802 after the mortar to the blockwork has been allowed to cure for 3 days.
- 5. Frames shall be bedded on a mortar compliant with C1.507 section 17 series 500 NEA (SRM) and HA 104 DMRB. A minimum mortar bed of 12 mm shall be provided in combination with steel shims located under the four corners of the frame to ensure that the manhole cover and frame remains flush with the carriageway surface at all times.
- 6. Top of duct shall be 750mm below finished ground level.
- 7. Mortar for blockwork shall be Designation (2) or 1:3 cement/sand
- 8. Mortar joints to blockwork shall be 8-12mm thick.
- 9. Where manholes of greater size than that shown are to be constructed then a precast reinforced concrete roof slab should be used, onto which the manhole cover and frame can be bedded.
- 10. All ladders rungs etc. shall be Hot dipped galvanised to BS 729

 <p><b>DUBLIN CITY COUNCIL</b> Comhairle Cheiltear Bhaile Átha Cliath ROADS &amp; TRAFFIC DEPARTMENT. CIVIC OFFICES WOOD QUAY, DUBLIN 8.</p>		REVISION	DESCRIPTION	DATE	REFERENCE DRAWINGS
				/20	
<p><b>ROADS MAINTENANCE DIVISION</b></p>				/20	
				/20	
<p>J. McDAID DEPUTY CITY ENGINEER (ROADS &amp; TRAFFIC)</p>				/20	
				/20	
<p><b>CARRIAGEWAY CHAMBER D400 COVER AND FRAME</b></p>				/20	
				/20	
<p>SCALE 1:1N.T.S.</p>				/20	
				/20	
<p>DATE 28/05/2010</p>				/20	
				/20	
<p>DRAWING No. R.M. 23967a</p>				/20	
				/20	



1. Foundation Base Slab.  
The concrete base slab shall be formed to the dimensions shown using 30N/20 concrete with A393 reinforcing mesh placed centrally in the slab.
2. Chamber Walls.  
Walls shall be constructed of solid high density blocks class S20 to 1:3, 20 or 30N/20 in situ concrete. Blocks shall be laid on the flat to form a wall thickness of 215mm and can be finished with a header course of engineering brick (Class B5/50N) if required to receive the manhole cover and frame
3. Manhole Cover and Frame.  
This shall be a class D400 manhole cover and frame to IS/EN 124, 150mm deep frame for roads, 100mm deep frame for footpaths and green areas, of non rock design, closed key ways, 600x 600 clear opening. Frames shall be designed to prevent covers falling into manholes. Manholes covers and frames shall be coated in bitumen or similar approved material.
4. Construction Details.  
Concrete (inlet) shall be provided over all duct opens. The areas outside the blockwork shall be filled with 20N/20 semi-dry concrete, or granular material which must be compacted in accordance with CI 802 after the mortar to the blockwork has been allowed to cure for 3 days.
5. Frames shall be bedded on a mortar compliant with CI 507 section 17 series 500 NRA (SRM) and HA 104 DMEB. A minimum mortar bed of 12 mm shall be provided in combination with steel shims located under the four corners of the frame to ensure that the manhole cover and frame remains flush with the footpath surface at all times.
6. Top of duct shall be 450mm below finished ground level.
7. Mortar for blockwork shall be Designation (2) or 1:3 cement/sand
8. Mortar joints to blockwork shall be 8-12mm thick.
9. Where manholes of greater size than that shown are to be constructed then a precast reinforced concrete roof slab should be used, onto which the manhole cover and frame can be bedded.
10. All ladders rungs etc. shall be hot dipped galvanneal to BS 729.

**DUBLIN CITY COUNCIL**  
Comhairle Chathair Bhaile Átha Cliath  
ROADS & TRAFFIC DEPARTMENT.  
WOOD QUAY, DUBLIN 8.

**J. McMAID**  
DEPUTY CITY ENGINEER : ROADS & TRAFFIC

REGION	DESCRIPTION	DATE	REFERENCE DRAWINGS
		/20	
		/20	
		/20	

**ROADS MAINTENANCE DIVISION**

CHECKED BY	CAD BY	REFERENCE DRAWINGS
APPROVED BY		

**FOOTWAY CHAMBER  
D400 COVER AND FRAME**

SCALE 1:N.T.S.

DATE 28/05/2010

DRAWING No.  
**R.M. 23957a**



TYPE A



DUBLIN CITY COUNCIL  
Comhairle Chathair Bhaile Átha Cliath

ROADS & TRAFFIC DEPARTMENT.

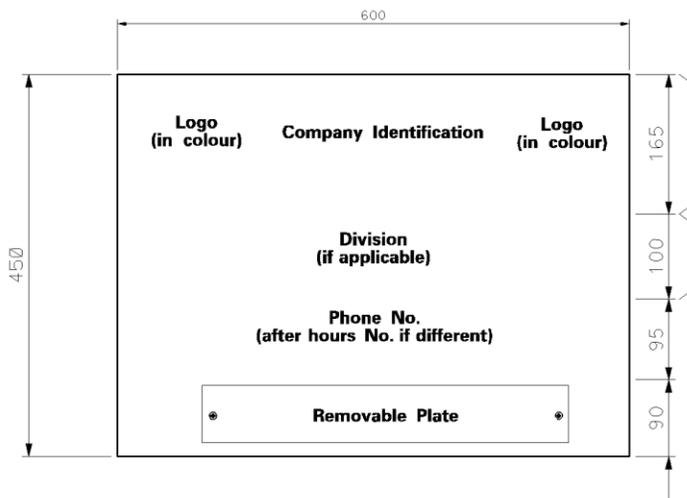
CIVIC OFFICES  
WOOD QUAY., DUBLIN 8.

CONTROL OF ROADWORKS REGULATIONS  
ROADWORKS IDENTIFICATION SIGNS

TRAFFIC CONTROL AND  
MANAGEMENT DIVISION.

DRAWN	DATE	REVISED	SCALE
N.C.	199 /1998	27/10/2004	1:100

T.D. 2696\_1A



**LOGO OPTIONS**

**E.S.B.**

**DUBLIN GAS**

**AN BORD GAIS**

**TELECOM EIREANN**

**DUBLIN CITY COUNCIL**

**DUBLIN CITY COUNCIL**

**ROADS MAINTENANCE**

**MAIN DRAINAGE**

**WATERWORKS**

**PUBLIC LIGHTING**

**TRAFFIC**

**TYPE B – General Arrangement**

**Type A similar with dimensions 1200 x 1200**



**TYPE B**



**DUBLIN CITY COUNCIL**  
Comhairle Chathair Bhaile Átha Cliath

**ROADS & TRAFFIC DEPARTMENT.**

**CIVIC OFFICES**

**WOOD QUAY., DUBLIN 8.**

**CONTROL OF ROADWORKS REGULATIONS  
ROADWORKS IDENTIFICATION SIGNS**

**TRAFFIC CONTROL AND  
MANAGEMENT DIVISION.**

DRAWN	DATE	REVISED	SCALE
N.C	11/9 /1998	27/10/2004	1:75

**T.D. 2696\_1C**

### **Resin Based Coloured Surface Treatment**

Coloured surface treatments, made with aggregate and resin-based binders, shall consist of a film of binder sprayed on to a sound substrate and covered with aggregate to provide a coloured textured, durable matrix of the required skid resistance. The binder shall contain an epoxy or other approved resin component.

The chippings shall be crushed rock complying with BS 63: Part 2, cold or hot, as described in Table 9/11. When determined in accordance with BS 812: Parts 113 and Part 114, the chippings shall have the minimum polished stone value and maximum aggregate abrasion value described in Table 9.1.

Colour of Chips:	Red
Chipping Size:	3mm uncoated 6mm uncoated
Type of Aggregate:	Crushed rock
Minimum PSV:	60
Maximum AAV:	12
Maximum Flakiness Index:	25

Table 1

The binder shall be mixed by a metered machine that accurately and continuously batches together the components of the binder; intimately mixing them before discharge. A control mechanism shall maintain each component within 5% by mass of the normal proportion specified by the resin manufacturer and a calibrated flow meter (or other approved means) shall be provided for each component. If the components of the binder are heated to facilitate mixing or application, the temperature shall not exceed the maximum recommended by the resin manufacturer. A temperature gauge accurate to  $\pm 2^{\circ}\text{C}$  shall be used with all binders that require heating.

The vessels containing the components shall each be provided with an approved method of measuring the volume of material used.

The machine shall spray the binder, such that the amount collected on any longitudinal stretch of the surface 50mm wide within the width of the spray shall not be less than 90% of the overall minimum requirement for the surface being treated. The mean amount of binder collected on any four adjacent 50mm wide strips shall be not less than 95% of the overall minimum requirement. Before work commences, and thereafter at intervals not exceeding one month or as otherwise required by Road Maintenance Services, the Developer shall provide evidence that the sprayer and all metering gauges complies with the requirements of the Specification. If required, the test to measure the spray pattern shall be made in the presence of Road Maintenance Services.

The surface shall be vigorously brushed to remove dust, laitance and other loose matter. Any oil visible on the surface shall be removed by washing and scrubbing with a detergent

solution followed by flushing with clean water or by another approved method. The surface shall be allowed to dry before application of the binder. Unless otherwise directed by Road Maintenance Services, existing road markings, ironwork and road studs shall be suitable masked.

All existing thermoplastic road markings not required in the new road layout shall be removed by burning from the area to be surfaced.

The binder shall be sprayed on to a dry surface at a rate which will vary according to the texture and porosity of the surface. On a smooth close textured surface the amount of binder shall be not less than 1.35 kg/m<sup>2</sup> or such rate specified by the resin manufacturer; on a more rugous surface a greater rate of spread may be required. Heated binders shall be allowed to cool before application of the aggregate. A mechanically-metered plant shall be used to cover the binder uniformly with an excess of aggregate. Rolling of the aggregate is not permitted.

Hand application of the binder, will be permitted if Road Maintenance Services approves the proposed methods of batching, mixing and application of binder to the road surface.

The material used as masking shall be removed together with the binder sprayed upon it and the remainder of the binder allowed to cure. During the curing period no disturbance or trafficking of the treated surface will be permitted. Before opening to traffic at the end of the curing period the excess aggregate shall be removed by vacuum sweeper or other approved means.

### **Coloured Surface Sample Panels**

Sample panels of coloured & anti-skid surfacing & shall consist of the materials to be used on site. The size of individual samples shall be 250mm by 200mm at minimum. The samples submitted shall offer a variety of colours and finishes (all resembling existing materials installed in bus, cycle lanes and junctions within the functional area of Dublin City Council). Each sample shall be clearly identified to distinguish the various materials and rates of spread offered. Samples with the same binder, binder colour, rate of spread of binder, chip colour and rate of spread of chips shall bear the same characteristic number. The samples will be used to judge compliance with the colour of the final laid material with the specification.

## ***Appendix XVIII Pavements/Carriageways Where Special Conditions Apply***

The current list of roads with traffic impact numbers can be located at:  
<http://www.dublincityroadworkscontrol.ie/pavements.asp>