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1 General

1.1 Definitions and Scope

1.1.1 "Taking in Charge" is the "formal legal process by which responsibility for certain public areas, structures and services in a private residential development or estate are transferred to, or put in the charge of, a local authority".

Office of the Planning Regulator, A Guide to Taking in Charge of Completed Residential Developments (2021)

- 1.1.2 A "Development" for the purposes of this policy consists of two or more houses and includes the provision of new roads, open spaces, car parks, sewers, watermains or drains, EV charging points and public lighting.
- 1.1.3 A "House" for the purpose of this policy includes a dwelling house or other permanent residential unit that is permitted by a grant of planning permission.
- 1.1.4 This Policy does not apply to commercial or non-residential developments. Where a development includes both residential and non-residential elements, Wexford County Council will only consider taking in charge those public areas and services that directly facilitate the residential element of the development.
- 1.1.5 Wexford County Council will consider taking in charge a development that has only been partially completed, where planning permission for the development has expired and all roads, sewers, open spaces and other services have been constructed for all of that part of the development on which houses have been built.
- 1.1.6 Wexford County Council may, at its absolute discretion, and where the circumstances are compelling, take responsibility for the provision and ongoing maintenance of certain aspects of a development in the interests of public health and/or public safety.
- 1.1.7 This Policy shall apply to all applications to take a development in charge received on or after (Policy Adoption Date).
- 1.1.8 This Policy will not apply to apartments unless the apartments are imbedded in a mixed-residential development. In such instances only the external services of these apartments will be capable of being taken in charge.
- 1.1.9 This Policy shall not apply to holiday developments as these are outside the current Memorandum of Understanding between Uisce Éireann and Wexford County Council.
- 1.1.10 This Policy shall not apply to residential developments that are served by standalone water services infrastructure, waste-water treatment plants and potable water supplies that were provided by developers as part of housing developments, as these Developments are now being dealt with under the National Developer Provided Infrastructure Resolution Programme.

1.1.11 If due to exceptional circumstances or changes in Uisce Éireann or National Policy a Taken in Charge application for holiday homes, apartments or residential developments may come within the remit of this Policy.

1.2 Statutory Framework

- 1.2.1 Section 180 of the Planning and Development Act 2000 sets out the responsibilities of local authorities regarding the taking in charge of housing developments. It requires a planning authority to commence taking in charge procedures under section 11 of the Roads Act 1993 for finished and unfinished developments, where certain conditions have been met, within 6 months of receipt of a valid taking in charge application.
- 1.2.2. A Taking in Charge application is processed under section 180. The decision whether or not to take a development in charge is made by the elected members of the Council under section 11 of the Roads Act 1993.
- 1.2.3. In certain circumstances, as outlined in this Policy, the Council may assume responsibility for some aspects of a housing development pursuant to the following legislation:
 - (i) Declare the road to be a public road pursuant to Section 11 of the Roads Act 1993
 - (ii) Assume control of the water mains and the foul and surface water sewers pursuant to the provisions of Section 43 of the Water Services Act 2007. Uisce Éireann will become responsible for the operation and maintenance of water services infrastructure from the date of taking in charge of estate by Wexford County Council
 - (iii) Take responsibility for the provision and maintenance of public lighting within a development pursuant to the provisions of Section 2 of the Local Government (Sanitary Services Act) Act 1964.
- 1.2.4 The relevant sections of the Planning and Development Act, Roads Act, Water Services Act and Local Government (Sanitary Services) Act are contained in Appendix 11
- 1.2.5 The Memorandum of Understanding between Uisce Éireann and Wexford County Council for the taking in charge of residential estates connected to Uisce Éireann owned or controlled water and wastewater network excluding Developer Provided Infrastructure (as defined in paragraph 1.1.9) and Taking in Charge Protocol are set out in Appendix 10.

1.3 General Policy

- 1.3.1 Wexford County Council will commence the Taking in Charge procedure under Section 180 of the Planning and Development Act:
 - a) On the request of the Developer/Owner of the public areas to be taken in charge if the development is satisfactorily completed;

Or

b) On the request of the majority of the owners of the residential units in the development, where the development has not been satisfactorily completed and where no enforcement action has been taken within four years of the expiry of the planning permission;

Or

- c) Where Wexford County Council is satisfied that the standard of completion is in accordance with:
 - An agreed Site Resolution Plan, and
 - Is at the maximum realizable level in the particular circumstances, and will not expose the Council to undue future expenditure or other potential liability,

the Council may, at its absolute discretion at any time after the expiration of the permission, where requested by the majority of the owners of the houses, and notwithstanding the requirements set out in Sections 4-9 of this Policy and the related appendices, initiate procedures to take in charge, take control of, or otherwise assume responsibility for the future maintenance of a development, or parts, or aspects thereof,

Or

- d) In certain exceptional circumstances the Council may Take in Charge certain aspects of a development on public safety or public health grounds even though the development is not fully complete.
- 1.3.2 The public infrastructure that will be Taken in Charge includes, where applicable:
 - Roads,
 - Footpaths,
 - Public car parking spaces,
 - Public EV charging points,
 - Public open spaces,
 - Play area required by planning permission,
 - Public Lighting,
 - Foul water sewers,
 - Surface water drains,
 - Water mains,
 - Unassigned services (e.g.ducting)
 - Any other services agreed by Wexford County Council at its absolute discretion.

- 1.3.3 The satisfactory completion of a development will be determined in accordance with this Policy and the planning permission(s).
- 1.3.4 Where there is a conflict between the technical requirements set out in this Policy and the planning permission, the requirements specified in the planning permission shall take precedence.
- 1.3.5 The responsibility for the development remains with the developer until it is Taken in Charge.
- 1.3.6 Wexford County Council may from time-to-time monitor developments throughout the course of construction to ensure that they are completed in accordance with the planning permission(s) and all relevant standards.

2 Taking in Charge Applications by Developers

2.1 Application Process

- 2.1.1 A Developer or other party in control of the site may apply to have a development taken in charge by submission to Wexford County Council of an application form as set out in Appendix 1.
- 2.1.2 The form shall be fully completed, referenced and signed by the applicant and shall be accompanied by:
 - As-constructed Drawings
 - CCTV Surveys and Reports
 - Certification by a suitably qualified and indemnified Chartered Engineer
 - Compliance Documentation
 - The Site Safety File
 - Any other additional information required by this policy.
- 2.1.3 Wexford County Council will assess the development based on the documents submitted and on a site inspection in accordance with the Assessment Protocol set out in Appendix 3.
- 2.1.4 In considering whether to recommend taking in charge a housing development Wexford County Council will consider:
 - a) The General Conditions set out in Section 2.2.
 - b) Compliance with the requirements set out for roads and footpaths, public lighting, water services and open spaces (sections 4-9)
 - c) The cost to the Council of maintaining services
 - d) Whether the completion works have been carried out in accordance with a site resolution plan.

- 2.1.5 Inspections shall be held jointly with the developer's representative, where possible, and the developer shall be notified of outstanding issues.
- 2.1.6 Wexford County Council will arrange a re-inspection on being advised that all outstanding issues have been completed and if all issues are satisfactorily resolved will commence the statutory taking in charge procedure.
- 2.1.7 If on re-inspection it is found that not all outstanding issues have been addressed a fee of €500.00 shall apply to each subsequent inspection required.
- 2.1.8 Where, during re-inspections, new issues that were not apparent at the time of the initial inspection come to the attention of Wexford County Council, these matters may be taken into consideration in considering whether to take in charge the development. If further inspections are required solely as a result of "new" issues referred to above, the re-inspection fee set out in Section 2.1.7 shall not apply to the first subsequent inspection required.

2.2 General Conditions

- 2.2.1 The development must be authorized and built in accordance with the planning permission(s) or with an agreed Site Resolution Plan with regard to the areas and services to be Taken in Charge.
- 2.2.2 All financial conditions must be discharged in full or otherwise as agreed as part of a Site Resolution Plan.
- 2.2.3 All public areas and services must be certified as complying with all relevant planning permission(s) and the relevant national design standards by a qualified Chartered Engineer or Architect or otherwise as agreed as part of a Site Resolution Plan.
- 2.2.4 Evidence of the structural stability of all structures to be Taken in Charge shall be submitted and certified by a qualified Chartered Engineer or otherwise as agreed as part of a Site Resolution Plan.
- 2.2.5 The qualified Chartered Engineer certifying the development shall provide evidence of Professional Indemnity Insurance to the minimum value of €1.5 million.
- 2.2.6 An as-constructed site layout shall be submitted with the application showing the following information:
 - (i) The development boundary in red
 - (ii) Open spaces coloured green
 - (iii) All roads, footpaths and public lights clearly marked

- (iv) All services including water mains, valves hydrants, sewers, gullies, telecom/ESB ducts and poles and manholes.
- (v) House numbers and street names
- 2.2.7 The bond lodged under the planning permission(s) with Wexford County Council shall only be released by Wexford County Council when an estate, or part of, is Taken in Charge.
- 2.2.8 Wexford County Council may at its absolute discretion apply a bond or other relevant security to carry out works to bring the development up to a satisfactory standard where the developer fails to carry out such works.
- 2.2.9 Services that are outside of the site or are not in the public areas will only be Taken in Charge where a wayleave is granted to Wexford County Council granting rights of access for the purpose of maintenance, repair and improvement to the relevant service. It is the responsibility of the developer to procure the necessary wayleaves and to ensure that they are registered on the folio of the affected property. Any costs related to procuring said wayleaves shall be borne by the developer.
- 2.2.10 A safety file containing information relevant to the development works in accordance with Health and Safety legislation must be submitted with the application to take the development in charge. Appendix 5

3 Taking in Charge Applications by House Owners

3.1 Application Process

- 3.1.1 Where the planning authority has not taken enforcement action against the developer of the development, Wexford County Council will commence the taking in charge procedure under Section 11 of the Roads Act 1993 when requested to do so by the majority of the owners of the houses in that development.
- 3.1.2 An "owner" for the purposes of this policy is the person (or persons) listed as the registered owner on the Property Registration Authority folio at the date of application for taking in charge.
- 3.1.3 In assessing the wishes of the majority of the owners of the houses in a development, each house shall have a single vote, even where that property is owned by two or more individuals.
- 3.1.4 An application form submitted by the owners must contain the following information:

- a) The name of the development and its location.
- b) The planning permission reference number.
- c) The name of the developer and the current owner.
- d) The signatures of the majority of homeowners who want the estate Taken in Charge, and
- e) The signature of the residents' representative.
- 3.1.5 An example of the Application Form is included in Appendix 1.
- 3.1.6 On receipt of a valid Taking in Charge application Wexford County Council will initiate the Taking in Charge procedures under Section 180 of the Planning and Development Act 2000 (As amended) and Section 11 of the Roads Act 1993.
- 3.1.7 Wexford County Council refers a valid Taking in Charge application with completed Schedules 1 and 2 (Engineer's report) to Uisce Éireann with recommendation as to whether the application is Category A or Category B, that is, not requiring, or requiring funding of remedial works respectively.

4 Roads and Footpaths

- **4.1 Introduction** The roads and footpaths shall generally be considered for taking in charge in conjunction with surface water mains, public lighting and other public services referred to in this policy. The roads and footpaths shall be constructed in accordance with planning permission and the requirements set out below and in Appendices.
- 4.1.1 Roads and footpath details are based on the following documents:
 - Current County Development Plan
 - Current Design Manual for Roads and Bridges (DMRB) (Greater than 60kph)
 - Current Design Manual for Urban Roads and Streets (DMURS) (Less than 60kph)
 - Current NTA Guidelines (National Transport Authority)

4.2 Road Design

4.2.1 Layout Design: Layouts should be designed so as to deter through traffic. Roadalignments should be such as to limit vehicle speeds and facilitate pedestrian movement. However, narrower roadway widths should only be considered where realistic measures have been incorporated to eliminate on-street parking. Adequate access for wheelchairs and prams should be provided.

4.2.2 Roadway Width:

The roadway width should be 6m for main arterial routes within large estates. A road width of 5.5m shall be acceptable for all other roads within the estate. The amount of off-roadway parking to be provided per house, is subject to the current Wexford County Council County or Local Development Plan.

- **4.2.2.1** Junctions: An uncontrolled intersection is an intersection that does not rely on the positive controls of signs, or signals, for the allocation of priority amongst approach roads. Junctions should normally be designed as uncontrolled intersections, to the requirements of the Transport Infrastructure Ireland (TII) publication *DN-GEO-03060* " *Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)*" and Chapter 4 of Design Manual for Urban Roads and Street, current version.
- **4.2.2.2** All junctions internal to the development should be T-junctions. The stagger of these junctions and the layout of junctions with other roads, are subject to approval.
- **4.2.2.3** Junction Sightlines: The area of unobstructed sight distance required at a junction is termed the "clear sight triangle" and is measured from a driver eye height of 1.05m to an object height of 1.15m. The clear sight triangle is illustrated in Figure 2.1. below. The minimum dimensions of the clear sight-triangle for roads of various design speeds are given in Table 2.1, with the major road design speed determining the required dimensions.

Figure 4.1 Clear Sight Triangle:

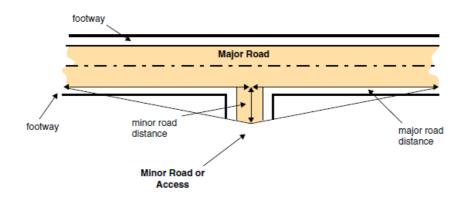


Table 4.1 Major road design speed determining the required dimensions:

Speed		Minor Road Distance	Major Road Distance
Greater 60km	than	2.0m / 3.0m*	As per Current County Development Plan
Less 60km	than	2.4m	As per Current DMURS table 4.2

*Sightlines shall be measured from a point 3 metres back from the edge of the public road (2 metres in the case of a proposed access/egress to be used for single dwelling house), at the centre point of the proposed access/egress to points generally on the near side of the public road in both directions.

65m

Extract from Current County Development Plan:

•	National Roads	230m
•	Class 1 Regional Roads	220m

- Class 2 Regional Roads 135m
- Local /County Roads

Design Speed (km/h)	SSD Standard (metres)	Design Speed (km/h)	SSD Standard (metres)
10	7	10	8
20	14	20	15
30	23	30	24
40	33	40	36
50	45	50	49
60	59	60	65

Extract from current the Design Manual for Urban Roads (DMURS):

Table 4.2: Reduced SSD standards for application within cities towns and villages. Reduced forward visibility increases driver caution and reduces vehicle speeds.

4.2.3 Cul-de-sac Ends: Turning bays should be provided at the ends of culs-de-sac. Where the cul de sac is less than 50m there would be no requirement for a turning circle. The dimensions required for turning bays in residential culs-de-sac depend both on the maximum size of vehicle to be accommodated and on the frequency with which the turning bay would be used by that vehicle.

- **4.2.3.1** Figure 2 illustrates suitable turning bays for the end of culs-de-sac. The types (i), (ii) and (iii) shown on the figure, should enable most large refuse vehicles, or fire engines, to turn by means of a three-point turn. Other types of turning bay may well be acceptable.
- **4.2.3.2** Other types of turning bay may well be acceptable. Smaller dimensions would suffice for types (i), (ii) and (iii), where it is intended that only private cars should use the turning bay. Type (iv) permits turning, without reversing, for the indicated vehicle types.
- **4.2.3.3** Developers should determine the local authority requirements with respect to turning capability, before finalizing cul-de-sac layout.

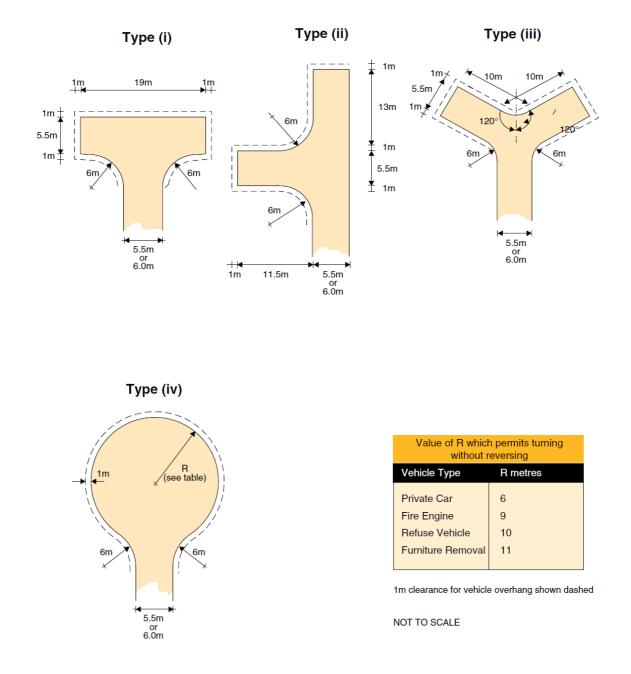


Figure 2 Residential Turning Bays

- **4.2.4** Road Gradients: Longitudinal gradients should normally lie between 0.5% and 5%, but a higher minimum gradient of up to 1% may be required, depending on the type of surface and the method of application. Gradients shall be in accordance with the requirements of the Transport Infrastructure Ireland (TII) publication DN-GEO-03031 "Rural Road Link Design" current version. The gradient of the side road should not be greater than 3%, for a distance of 7m from the junction.
- **4.2.5** Road Crossfall: A crossfall of 2.5% should be provided for a normal machine laid surface. This may be decreased to 2% for a high-quality surface finish or may be increased to 3% for hand-laid surfaces.

- **4.2.6** Horizontal Alignment: Roads should normally be designed and located to intersect at angles of between 70 and 110 degrees and preferably at 90 degrees. Where one road crosses or meets another at an angle outside this range, suitable curves should be introduced in the alignment of the minor road, subject to approval, in order to improve the angle of intersection.
- **4.2.7** Driveways: Driveways should have a minimum width of 3m and a maximum gradient of 10%. A kerb upstand of 25mm should be provided at entrances.
- **4.2.8** Please be advised that this minimum width and maximum gradient does not relieve the Developer of the responsibility to comply with Part M of the Building Regulations:

4.2.8.1 In cases where the driveway also forms the accessible approach to the dwelling, as well providing the private car parking space, then the driveway shall comply with the requirements of the latest Edition of Technical Guidance Document (TGD) M Section 3.1 in full. [The current edition of the Technical Guidance Document Part M is 2010, but this is expected to be re-issued in 2022 to include Changing Places requirements.]

- **4.2.8.2** If the driveway forms the accessible approach then,
 - a) the minimum width of the driveway shall be 3.6m, as required by TGD M Section 3.1.2.3 (b). [This provides a 900mm clear accessible approach alongside the car, as required by TGD M Section 3.1.2.1 (a).]

and

- b) the maximum gradient will be 1 in 21 or 4.76% as required by TGD M Section 3.1.2.3. [Please be advised that this applies to driveways that extend to the "entrance at the boundary of a dwelling plot" as defined in TGD M Section 3.1.2(a), "where the dwelling plot can be taken to mean the private lands associated with the dwelling", as defined in the Footnote associated with this Section.]
- **4.2.9** Services: Services should be laid underground, adjacent to the roadway. The laying of services in other location is subject to approval.
- **4.2.10** The public area, including any footway (if any) beside the roadway, should be of sufficient width to accommodate the services required. Services should only be laid under the roadway where there is a requirement to cross the roadway. In such cases, services should be laid at right angles to the roadway.
- **4.2.11** Electric Car Charging Points: Please refer to current Development Plan, current EU Energy Performance of Buildings Directives, Transposed Legislation, Irish Building Regulations and associated Technical Guidance Documents. Site layouts and car parking arrangements will ensure that car charging cables will not be laid across footpaths or green areas to avoid a trip hazard.

4.2.12 Clearance: The normal minimum lateral clearance of fixed objects from the roadway edge should be 1m. This applies to items such as public lighting columns, posts and piers at entrances to developments.

4.2.12.1 Landscaping design should take into account existing and proposed ESB overhead infrastructure. In particular, no trees should be planted that may interfere with this. Careful consideration shall be given to the types of planting that is proposed next to footpaths and roads. Some species are not suitable for such planting as root structure may cause damage to the infrastructure.

4.2.12.2 Trees must be a minimum of 6m from lighting columns provided the landscape design has been carried out by a landscape architect and the design agreed with the Roads Department of Wexford County Council.

4.3 Road Construction

- **4.3.1** Road construction should comply with the requirements laid out in **Appendix 6** *"Wexford County Council Roads Section Design & Construction Standards: Minimum Required Standards".*
 - Any deviation from the requirements above must be approved in advance by Wexford County Council Roads Department.
 - Design must be in compliance with current IS EN 13108 and SR28.
 - Design must be signed off by a certified person.
 - Where a subgrade has a CBR lower than 2.5%, it is considered unsuitable for support, and must be 'permanently improved'.
 - Wexford County Council requires that 2 days advance notice by email be given by the developer to WCC in advance of all bituminous work being carried out (dates and approx. times included).
 - Cores will be required post completion to verify laying depths and proper compaction; and shall be taken in accordance to the requirements of BS 594987 Clause 9.
- **4.3.2** Developers/Builders and their staff who are involved in the construction of road pavements should be very familiar with the contents of the following documents:
 - TII DN-PAV-03021
 - TII Specification for Roadworks Series 800 Unbound materials (CC-SPW-00800)
 - BS 594987:2015 Specification for transport, laying, compaction and product-type testing protocols.
- **4.3.3** Notwithstanding the information contained in the above documents, Wexford County Council Roads Section draws particular attention to the schedules in

Appendix 6 as reoccurring problems are being regularly encountered at construction stage.

4.4 Footpath Construction

- **4.4.1** All footpaths to be 2m in width. Footpath design and construction must be consistent with the guidelines and specifications listed below and must be accessible. Priority must be given to the pedestrian and cyclist over vehicular traffic for all design and construction instances.
 - **4.4.1.1** The design of footpaths, walkways and roads shall be so designed in accordance:
 - Current Design Manual for Urban Roads and Streets (DMURS) (Less than 60kph)
 - Current National Transport Authority Guidelines.
 - 4.4.1.2 All footpaths shall be constructed as per drawings included in Appendix 7
 - RCD/1100/1 Kerb Details
 - RCD/1100/2 150mm In-Situ Concrete Footway
 - RCD/1100/3 100mm In-Situ Concrete Footway
 - RCD/1100/4 In-Situ Kerb Details

NB – These are our current RCS's but are subject to review by Wexford County Council Roads Department.

5 Public Lighting

- 5.1 All public lighting should comply with the requirements laid out in Appendix 8 *"Wexford County Council Public Lighting Specification".*
 - Generally, the development shall only be considered for taking in charge if all public lighting in the areas to be taken in charge has been commissioned and is in operation.
 - The Developer shall furnish to the Council, a copy of the public lighting design, as approved by approved lighting design engineers.
 - The Developer shall be responsible for maintenance of the public lighting system until such time as the development has been taken in charge by the Council
 - LED luminaires will only be considered for public lighting applications.
 - All LED lanterns shall come with a ten-year manufacturers' warranty.

- Dimming capability shall be considered for each lighting design, regardless of the application.
- All new lighting installations shall be inspected by Wexford County Council, or their agents, prior to being taken in charge.
- Lighting columns should generally be located at the back of the footpath (within the confines of the path) and not in private property.
- In all developments, the economic and appropriate locating of columns shall take priority over planned tree planting.
- Trees should be a minimum of 6m from lighting columns. The landscape design should be carried out by a landscape architect and the design agreed with the Roads Department of Wexford County Council.

6 Water Services and Surface Water

6.1 Surface Water

6.1 All surface water shall be collected, attenuated and disposed of in accordance with Sustainable Urban Drainage Solutions (SuDs) and the Greater Dublin Strategic Drainage Study (GDSDS).

Please see the SuDs manual at: <u>https://www.ors.ie/wp-content/uploads/CIRIA-report-C753-The-SuDS-Manual-v6.pdf</u> and the Greater Dublin Strategic Drainage Strategy (GDSDS) Code of Practice available___at <u>https://www.sdcc.ie/en/download-it/guidelines/greater-dublin-regional-code-of-practice-for-drainage.pdf</u>

As part of the Taking in Charge process the Developer shall provide a Surface Water Management Plan that shall include the key construction, operation and maintenance requirements for all SuDS features incorporated into the development.

- 6.1.1 Wexford County Council recognize that there is a wide variety of surface water management systems that comply with both SuDs and the GDSDS. Therefore, Wexford County Council will determine during the Planning Stage what will be the nature of the surface water management system most appropriate to the site. However, in general Wexford County Council advise that:
 - Permeable paving or porous asphalt will not be permitted as part of the above variety of solutions, even in car parking areas, as the long-term maintenance burden is too great for Wexford County Council to sustain.
 - Permeable paving on driveways or soakways designed to BRE standard in

private gardens will be permitted as part of the above variety of solutions, however maintenance of these provisions shall be incumbent on the homeowner so that these provisions shall be assured into the future.

- Tree pits in the public open spaces will be permitted as part of the variety of solutions.
- Rainfall harvesting will be permitted, provided it can be demonstrated that this storage will be regularly drawn down by the household. However, inclusion of rainwater storage such as garden water butts will not be considered, as the consumption of this storage cannot be guaranteed.
- No part of the site shall be allowed to flood above ground in the 1 in 30- year storm event.
- Long-term storage shall be permitted provided it is properly protected from unauthorized access.
- Short-term flooded storage in green areas shall be designed so as not to pose a hazard.
- The outlet rate for the surface water discharge from the site shall be no more than Qbar (*Qbar* is the *mean* annual flood flow from a rural catchment as defined by HR Wallingford) or 2 litres per second per hectare, whichever is the greater, except in instances where the catchment downstream of the development is known to be prone to flooding and in these instances the requirement will be whichever is the lesser. This will be determined during the planning process and the value of 2 litres per second per hectare may be raised to 4 litres per second per hectare in rural areas or another figure determined during the planning the planning process. In determining the storage required the outlet rate shall take full account of the hydraulic head applied to the flow control device, including whether or not the outlet is submerged by flow in the receiving watercourse.
- Surface Water Attenuation systems can be made up in parts throughout a site and this arrangement will facilitate the Taking in Charge of each phase of the Development.
- Prior to Taking in Charge the Developer and Designer may be required to vouch design information to demonstrate compliance with the above SuDs Manual and the GDSDS.
- Underground attenuation tanks must be completely accessible for ease of

maintenance and cleaning. *Stormtech* or crate type tanks are not acceptable under any circumstances.

 All surface water inlet devices (gullies, filter drains), conveyance systems (pipes, swales if permitted at Planning Stage), long term storage, attenuation systems and outlet controls shall be fully designed by specialist designers to recognized design codes, including but not limited to SuDs and the GDSDS.

Notwithstanding the above all Surface Water Management Systems shall:

- (i) Confirm that the design has been carried out by or under the supervision and direction of Chartered Engineer(s) named on a register maintained pursuant to Section 7 of the Institution of Civil Engineers of Ireland (Charter Amendment) Act 1969, who are competent to carry out the design and has in place Professional Indemnity Insurance for an amount of at least €1,500,000 (one million, five hundred thousand euros) specific to this type of design work.
- (ii) The design of open spaces incorporating swales, open channels and open pond attenuation arrangements within housing developments shall take account of the General Principles of Prevention as set out in the Safety, Health and Welfare at Work (Construction) Regulations current at the time the design is undertaken.
- (iii) The design of the Surface Water Management System shall take particular care to eliminate the risks associated with open spaces intended to be flooded, swales, open channels and open pond attenuation arrangements within housing developments.
- (iv) The Engineer responsible for the design of the Surface Water Management System shall certify that the system has been designed having exercised the level of skill, care and diligence to be expected of an appropriately qualified and competent engineer experienced in carrying out equivalent services for developments of a similar size, scope, complexity, value and purpose to the Development.
- (v) Be designed to take the live and superimposed dead loads imposed on buried features such as pipes (cover), perforated pipes in filter drains or buried tanks, whether this is traffic or green area backfill.
- (vi) Be designed with appropriate security measures of the buried tank systems. This shall include suitably secure covers over the maintenance accesses for prevention of falls and facilitate convenient access by jetting and suction tankers. The covers shall be a minimum heavy duty D400 cast iron manhole

cover over a second lightweight locked cover within easy reach of the surface and with fall arrestor bars spaced to allow the suction hose to access silt in the tanks. Other designs are permitted and will be considered, but all confined spaces or manual handling issues shall be recorded in the Safety File in Appendix 6.

- (vii) An upstream grit trap and oil interceptor, complete with an operations and maintenance manual shall be incorporated in the Safety File. A Class 1 (Oil and Petrol) Bypass Separator with oil level alarms in accordance with UK Environment Agency Pollution Prevention Guidelines PPG3 April 2006 and compliant with I.S. EN 858-1 is required.
- (viii) Have an easily accessible flow control device chamber.
- (ix) A full detailed site specific "As Constructed" file with photographic evidence of actual site installation (including detail on stone, geotextile, dimensions etc...) shall be kept in the maintenance file from the date of installation and be made available for the Taking in Charge process.
- (x) Until the site is taken in charge, the storm tank shall be maintained regularly, and records kept that can be presented as part of the Taking in Charge process.
- (xi) All access and maintenance chambers should have suitable accessible covers.
- (xii) Certificates of compliance with manufacturers guidelines must be submitted.
- **6.1.2** Only drainage infrastructure which has been constructed to the required standard will be taken in charge.
- **6.1.3** All defects identified during post construction surveys must be rectified at the Developer's expense before the infrastructure is taken in charge.
 - (i) All drainage proposals should include a full surface mains and surface water attenuation design.
 - (ii) The proposals should demonstrate that the surface water drainage outfall location and the receiving waters have the capacity to take the additional flows generated by the Development.
 - (iii) On completion of construction works, all storm water drains, manholes, gullies and any other surface water infrastructure shall be thoroughly cleansed, ensuring that no construction material reaches the receiving

waters. They shall be maintained in a clean and serviceable condition, prior to being taken in charge.

- (iv) A condition survey shall be carried out all storm water drains, manholes, gullies and any other surface water infrastructure at the Developer's expense to the requirement of the Local Authority. This is to include a CCTV survey and a written report as specified in the latest edition of the WRC (Water Research Council).
- (v) Detailed "as-constructed" drainage layouts, both .pdf format and a digital copy, (AutoCAD and Shapefile format), are to be submitted by the Developer to the Local Authority for written approval. The as-constructed package must include the following:
 - Manhole's Easting and Northing co-ordinates (in ITM format) cover and invert level, upstream and downstream pipe diameter, material and direction of flow.
 - The layout should be accurately positioned on the latest published version of the Ordnance Survey 1:1000 series.
 - All dimensions shall be metric.
 - All levels must be related to Ordnance Survey Datum, Malin Head, and clearly identifying the benchmark used.
- (vi) Drawings shall be in ITM, and shall be supplied in PDF, AutoCAD and in Shapefile formats.
- (vii) Wexford County Council may require quality control checks to be carried out on site, to verify the "as-constructed" package, under the supervision of the Local Authority.

6.2 Water Services

- 6.2.1 Generally, the development shall only be considered for Taking in Charge where water mains, surface water sewers, foul water sewers and drains have been constructed in accordance with planning permission. Taking in Charge of water services infrastructure will be in accordance with the current Memorandum of Understanding with Uisce Éireann.
- **6.2.2** These elements shall generally be considered for Taking in Charge only in conjunction with roads, footpaths, public lighting and other public services referred to in this policy.
- **6.2.3** The water mains, and the foul and surface water collection systems, shall comply with the technical requirements included in the Water Services Guidelines set out in Appendix 9.

- 6.2.4 Since 1/1/2014, Uisce Éireann are the Water Authority and are responsible for the operation of the water and wastewater public networks. Uisce Éireann introduced a new "self-lay" connections policy in April 2018 and all connections to the public network carried out under the self-lay policy are subject to Taking in Charge through the Quality Assurance (QA) Control at construction stage as supervised by Uisce Éireann. For the purpose of this Taking in Charge policy, there will be two scenarios- legacy estates for estates on old connection agreements and newer estates which will be called Uisce Éireann self-lay estates.
- 6.2.5 Uisce Éireann Self Lay Estates: All Water Services will comply with the relevant Uisce Éireann Code of Practice and the requirements of the connection agreement. The Taking in Charge of water services within these estates is through the Uisce Éireann QA process.
- 6.2.6 Residential developments that are covered under a Self-Lay agreement do not require any involvement from the Local Authority (LA) regarding water and/or wastewater infrastructure as these developments are directly supervised by the UÉ QA Field team and upon UÉ's issuing of a "Conformance Certificate", the assets are then "vested" directly to UÉ as part of the Connection Agreement with the Developer. The conformance certificate is provided to the Developer by UÉ which allows physical connection to the UÉ network and at this point the vesting occurs.
- 6.2.7 Legacy Estates: Water infrastructure shall comply with the requirements of planning permission and the recommendations for Site Development works for Housing Areas issued by Department of the Environment and Local Government in line with the previous TIC Policy of Wexford County Council (2008).
- 6.2.8 Developer Provided Infrastructure (DPI): Developer Provided Infrastructure is stand-alone water or wastewater infrastructure that was permitted in the past to facilitate housing development in the absence of permanent public infrastructure. At present the Taking in Charge of DPI is excluded from the Memorandum of Understanding with Uisce Éireann. The resolution of DPI estates to allow for taking in charge is being progressed through the Multi-Annual Resolution Fund for DPI and will not be considered outside of this process.
- **6.2.9** It is the aim of WCC to reduce the carbon footprint of public infrastructure, to this end the creation of clusters of WWPSs is to be avoided. WWPSs located within 500m of any existing WWPS will generally not be permitted, and the developer will be required to develop, agree with Wexford County Council and Uisce Éireann, and implement a rationalisation plan such that no net increase in the number of WWPSs occurs. This may require the developer to obtain

necessary wayleaves across third party lands to allow gravity only sewer solutions and/or to upgrade an existing WWPS (public or private) to the requirements of WCC and Uisce Éireann. Where it obviates the need for a new WWPS, WCC will be favourable to the use of sections of sewers at shallow depths provided appropriate protection measures are employed in accordance with Uisce Éireann requirements, similarly sections of sewers at depths up to 5m which would obviate the need for a WWPS will also be acceptable to WCC where appropriate.

6.2.10 Site water services (surface, foul, water) shall be extended to the boundary of developments to facilitate future connections from adjacent zoned land.

6.3 CCTV Survey & Manhole Survey

- **6.3.1** A CCTV survey/manhole survey of the collection systems must be submitted to the County Council at the time of lodging an application form for taking in charge or phased development for Taking in Charge.
- **6.3.2** The survey shall be completed at the Developers expense.
- **6.3.3** The sewers to be surveyed shall be thoroughly cleaned out first.
- **6.3.4** The CCTV Survey shall be carried out using a camera, which is capable of measuring distances from one manhole to another.
- **6.3.5** The CCTV survey report shall conform to the standards set out in the WRC Manual on Sewer Condition Classification. The report shall include a summary of any defects in the systems. Any defects in the systems shall be corrected by the Developer at his own expense, resurveyed and the new survey submitted to the County Council, prior to taking in charge. High-resolution photographs and quality DVD recordings shall supplement the printed report.

6.4 As-Constructed Drawings

- 6.4.1 A drainage layout plan of as-constructed sewers, prepared to Map Drain format, showing a detailed survey of each manhole, sewer structure and a digitised layout of the as-constructed housing estate shall be submitted on CD with the Taking in Charge application.
- **6.4.2** The manhole survey and digitised layout of the estate shall be prepared to national grid co- ordinates. The invert and cover levels of the manholes shall be indicated relative to Malin ordnance datum.

- **6.4.3** Longitudinal Sections must be submitted for the collection systems. Sections must include ground levels, invert levels, pipe size, and pipe gradient.
- **6.4.4** The manhole referencing used in the as-constructed drawings shall be consistent with that used in the CCTV survey and manhole survey.
- **6.4.5** As constructed drawings shall indicate the location and route of all connections from sewers to individual properties.
- **6.4.6** As constructed plans and longitudinal sections of water mains shall be submitted; the drawings shall include locations of all sluice valves, scour valves, air valves, hydrants, meters, water service control units clearly indicated. Route, diameter and class of water pipelines should be indicated. Bulk meter type (electronic or mechanical) and bypass arrangements, if applicable, should be indicated.

6.5 Collection Systems/Private Treatment Plants

- **6.5.1** Collection systems, which are connected to an existing public system, shall be taken in charge, subject to compliance with the requirements of this document.
- **6.5.2** Collection systems shall include, but are not limited to, attenuation tanks, pump sumps, pipelines etc., the design of which shall be certified by a qualified Chartered Engineer.
- 6.5.3 In the case of foul sewage collection systems, which shall in future be connected to a public system, the developer shall be required to enter into a satisfactory arrangement for the maintenance and operation of the system in the interim. No new connections may be made to the system without the express written approval of the Uisce Éireann.
- 6.5.4 Foul sewage collection systems, which are not part of a present or future public system, shall not be taken in charge by the Local Authority e.g. temporary connections to a temporary treatment plant.

6.6 Water Service Connections

6.6.1 All water mains, valves, stopcocks, meters and fire hydrants are to be located in public footpath or roadway, insofar as possible. Stopcocks and Water Service Control Units shall not be located in private driveways. Stopcocks and Water Service Control Units (water meter boxes) shall not be located in private driveways. A separate meter box in accordance with Uisce Éireann standard detail shall be fitted at each connection to the public water main.

- **6.6.2** The water service connection for each house shall be taken in charge as far as the stopcock i.e. including the stopcock. The householder will be responsible for the service from the stopcock to, and including, the internal building system.
- **6.6.3** Developers shall note that foul and surface sewer service connections will not be taken in charge.

6.7 Flood Risk

- 6.7.1 Where it is known from the Council's records that certain locations are liable to flooding, the developer must put in place appropriate measures to prevent a re-occurrence of flooding within the development prior to the development being considered for taking in charge.
- 6.7.2 In areas where the Council has no records of flooding but considers that a flood risk exists, the Developer must provide a flood risk assessment where requested do so by Wexford County Council, in order for the Taking in Charge application to be further considered Any recommendations arising from the assessment and considered necessary by Wexford County Council must be put in place by the Developer prior to the development being taken in charge.
- **6.7.3** Notwithstanding Section 6.27 above, Wexford County Council may, at its absolute discretion, assume control of the water mains and the foul and surface water sewers pursuant to the provisions of Section 43 of the Water Services Act 2007, as provided for in Sections 1.1.6, 1.2.3 above, where compelling reasons to do so exist.

6.8 Open Spaces

- **6.8.1** Wexford County Council shall consider Taking in Charge of public open spaces. Wexford County Council shall not be responsible for grass cutting or maintenance of grass verges, incidental ornamental/landscaped areas, shrubberies, sports areas or playgrounds, unless such playgrounds are prescribed as a facility under the planning permission and which will be available to the general public, by the planning authority by way of planning condition.³ (Per Circular Letter PD 1/08 dated 26th February 2008.)
- **6.8.2** Notwithstanding Section 6.8.1, the Taking in Charge of the development shall only be considered where the development and landscaping of open spaces has been carried out in accordance with the planning permission granted and to a safe and satisfactory standard.

- **6.8.3** Upon taking in charge, Wexford County Council will take responsibility for the trees located within green areas in the development. This does not extend to the pruning of trees for the preservation of natural light but does extend to the pruning of trees for the preservation of street lighting. Maintenance will be carried out on dead boughs, removal of dead trees, but will not be carried out for aesthetic reasons.
- **6.8.4** If a development has an adjoining watercourse running along the site boundary or a watercourse running through it then Wexford County Council will take responsibility for the maintenance of that watercourse and any protection measures installed by the Developer in compliance with the planning permission and the design of the Project Supervisor Design Process (PSDP) for the Site Development Works. These protection measures will be sufficiently robust to prevent access by unauthorized persons to the watercourses. These protection measures shall be designed and certified by a suitably qualified engineer acting as the Project Supervisor Design Process (PSDP). The certification shall cover all aspects of the protection measures including durability, climbability, potential for undermining, exact location, fixity etc. The certification and associated relevant information shall be copied to the Safety File in Appendix 5.

Access for maintenance of watercourses shall be designed into the scheme prior to an application for planning consent and also may be conditioned in a consent of planning.

7 Playgrounds

- **7.1** Wexford County Council shall generally take in charge play areas prescribed by a condition of planning permission, where a satisfactory ongoing maintenance arrangement is in place, including financial provisions where appropriate.
- 7.2 Notwithstanding Section 7.1 the taking in charge of the development as a whole, shall only be considered where the construction of playgrounds has been carried out in accordance with the planning permission granted and any relevant standards. In particular, playgrounds must be constructed in accordance with European Safety Standard EN1177 and furnished with equipment in accordance with European Safety Standard EN1176. Compliance with these standards must be certified by a Chartered Engineer or Architect in order for the development to be considered for taking in charge.

8 Boundary Treatments

- 8.1 All boundary treatments must be in compliance with the planning permission(s).
- **8.2**Upon taking in charge Wexford County Council is responsible for boundary treatments between public open space (green areas) and undeveloped lands, whether these undeveloped lands are woodlands, farmland, public roads, watercourses, green areas of other developments or any other land use.
- **8.3** Residents are responsible for their boundary treatments with public open space (green areas) within the Development.
- 8.4 Residents are responsible for their boundary treatments with undeveloped lands, whether these undeveloped lands are woodlands, farmland, public roads, watercourses, green areas of other developments or any other land use.
- 8.5 At Wexford County Council's sole discretion if a boundary treatment is not considered sufficiently secure, robust or durable enough to be fit for purpose, or has deteriorated to such an extent as to not be fit for purpose, then Wexford County Council reserves the right to require improvements to boundary treatments prior to taking in charge.

Appendix 1 Application Form - Developer

COMHAIRLE CHONTAE LOCH GARMAN

WEXFORD COUNTY COUNCIL

APPLICATION TO HAVE DEVELOPMENT TAKEN IN CHARGE BY WEXFORD COUNTY COUNCIL (Developer) Name: Address Telephone No. : **Development Name:** Development Location **Developer's Name**: (if different to above) **Developer's Address**: (if different to above)

O.S. Map No. : Planning Ref. Nos. :

Development Contribution Receipt No.:	
Connection Fee Receipt No.:	
No. of Houses:	
No. of Apartments:	
No. of Commercial Units:	
If Phased Development, Unit numbers req.	

Chartered Engineers/Architects Certificates of Compliance	Details/References
Planning, open space, boundaries etc.	
Sewers and surface water systems	
Waters Mains	
Public Lights	
Pump Stations/ Booster Pumps/WWTP etc.	
Attenuation	
Roads and services	
As Constructed Drawings	Details/References
Electronic copy submitted	
2* Hard Copies	
Site Layout Drawings	Details/References
Indicate extent of roads and lands to be taken in charge	
Indicates house numbers where applicable	
Details pre-existing topography, services, water courses etc.	
Existing wayleaves or other burdens on lands - Copy of agreements	
Water Services	Details/References
Under self-lay agreements provide copy of Uisce Éireann Completion Certificate.	
Watermains	Details/References
Plan of watermain	
Longitudinal sections of watermains	
Locations of all sluice valves, scour valves, air valves, hydrants, meters, water service control units must be clearly indicated	
Route, diameter and class of water pipelines indicated	

Indicate details of bulk meter type	
(electronic or mechanical) and bypass arrangements if applicable	
Confirmation of depth of water services for adequacy of cover	
Foul Sewers	Details/References
Plan of sewers	
Longitudinal sections showing gradient of pipeline, pipe diameter and pipe type	
Location of manholes including finished ground/cover level and invert level to be identified on plan	
Comment on the grade, standard and condition of all covers and frames	
Indicate location and route of all connections from sewers to individual properties	
Test Certificates Water	Details/References
WCC leak detection & Hydrant inspection	
Water pipelines - pressure tests (at 1.5 times working pressure)	
Water Losses (minimum night flow should not exceed 6I/dwelling/hour)	
Sewer pipelines - Air tests to BE EN 1610	
Surveys Water Network	Details/References
	Details/References
Surveys Water Network All valves and hydrants to be opened and checked for compliance with standards and dipped to crown of pipe to ascertain adequacy of cover. Chamber Clean,	Details/References
Surveys Water Network All valves and hydrants to be opened and checked for compliance with standards and dipped to crown of pipe to ascertain adequacy of cover. Chamber Clean, Hydrants capped etc. 1:10 stop valves to be opened and checked for compliance with specification and depth	Details/References
Surveys Water Network All valves and hydrants to be opened and checked for compliance with standards and dipped to crown of pipe to ascertain adequacy of cover. Chamber Clean, Hydrants capped etc. 1:10 stop valves to be opened and checked for compliance with specification and depth of cover.	

	Г
Dye tests- premises to be subject to dye test	
Infiltration test- Guideline: Infiltration shall not exceed 0.5 litres/linear metre of pipeline/metre nominal bores over a period of 30 minutes.	
Surveys Surface Water Network	Details/References
CCTV Survey-with reports including classification of all defects and defect grading.	
Manhole Survey–Photographic survey, with clear reference no's marked & identifiable both on drawing & in-situ. comments on benching, infiltration, cover/frame type and cover slab integrity and flushness with surface, accessibility, subsidence, cracking, ponding if present and checked for compliance with specification	
Details & location of gullies, type of cover & frame and checked for compliance with specification.	
Presence of any water ponding on finished road surface	
Check of manholes for presence of foul sewage or other grey/wastewater	
 Details of Attenuation installed, Design, type of system installed, certification of installation, Chartered Engineers Certification and checked for compliance with specification. Maintenance file with full detailed site specific "As Constructed drawings" with photographic evidence of actual site installation (including detail on stone, geotextile, dimensions etc.) from the date of installation. Records of the maintenance of the storm tank. Certificates of compliance with manufacturers guidelines must be submitted. 	
Way-leaves and Easements	Details/References
Land ownership detail of roads & common areas etc.	
Copies of all way-leaves, burdens, land transfers and other document pertinent to development to be submitted.	

Service History	Details/References
Detail significant watermain leaks / bursts / issues	
Detail significant surface & foul sewers blockages / bursts / issues	
Flooding risk or details of previous incidents	
Detail other known risks/issues (environmental/safety/other)	
Pumping Stations & Wastewater Treatment Plants	Details/References
Water Pumping Station (include MPRN)	
Wastewater Pumping Station (include MPRN)	
As constructed drawings and specifications to include type and size of pumps; wiring diagrams for control panel and switch gear; telemetry system; lifting equipment including certification of same. O&M, Safety File, details of service history	
Rising main details	
Reports associated with supervision of installation	
Operational arrangements (By whom)	
Performance issues-Where Council have intervened	
MPRN and account holder details from electricity account	
Actual or estimated annual consumption supported by electricity bill.	
Details of maintenance agreement, with service reports, repairs undertaken & maintenance inspection records	
Public Lighting	Details/References
As constructed drawings and specifications to include type of lantern, spacing's, column details, wiring layout, cabling type, minipillar fit-out, column fusing etc. and associated certification of same. O&M, Safety File, details of service history	
GMPRN and account holder details from electricity account	
MPRN for each Mini Pillar, address & no of lights connected to each, No of Circuits etc.	
Current Test Record Sheet for installation (RECI) or similar	

Roads, Footpath & Open Space	Details/References
Thickness and specification of wearing course, basecourse, sub-base etc.	
Reports associated with supervision of construction.	
Thickness and specification of footpath, presence of cracks, trips etc.	
Boundaries constructed in compliance with grant of planning permission	
Open space constructed in compliance with grant of planning permission	
Details of gas installation	
Other underground services, eg telecoms, broadband, etc.	

Note: Please submit an electronic copy and one hard copy of all reports, drawings, surveys etc with completed form.

Comments or Further information supplied

Signed:		
Developer		
Date:		

QUALIFICATIONS OF CERTIFYING CHARTERED ENGINEER / ARCHITECT

Name of certifying Chartered Engineer / Arc Qualification of certifying Chartered Enginee	
Architect:	
Qualification year and Issuing Authority:	

PROFESSIONAL INDEMNITY INSURANCE DETAILS OF CERTIFYING CHARTERED ENGINEER / ARCHITECT

Indemnity issued by:			
Indemnity issued in the name of			
Indemnification limit (euro):			
Commencement and expiry date	es of policy: From:	То:	

I certify that the above information is correct Name of certifying person: **Appendix 2 Application Form – Homeowners**

COMHAIRLE CHONTAE LOCH GARMAN



WEXFORD COUNTY COUNCIL

APPLICATION TO HAVE DEVELOPMENT TAKEN IN CHARGE BY WEXFORD COUNTY COUNCIL (Homeowners)

(ALL SECTIONS MUST BE COMPLETED)

SECTION 1: APPLICANT DETAILS			
Name:			
Address			
Telephone No:			
E Mail (optional):			
I have been appointed to act on behalf of the undersigned homeowners (Section 4) in correspondence arising out of this application.	all		
Signed:			
Date:			

SECTION 2: DEVELOPER DETAILS			
Developer's Name:			
Developer's Address:			

	SECTION 3: DEVELOPMENT DETAILS	
Planning Ref. Nos No. of Houses: _		No. of
TMPRN Number(s) (or electricity bill)		
Waste Water Treatment: Public sewer Shared treatment plant Individual treatment plants		

Please return to:

Planning Section, Wexford County Council, Carricklawn, Wexford, Y35 WY93

SECTION 4: HOMEOWNER DETAILS

Name	Address	Are you the owner of the property?	Signature

Please note the following:

- Please ensure that the name of each house owner making the request for taking in charge is clearly printed and that the application is signed by each house owner.
- An owner for the purpose of this policy is the person (or persons) listed as the registered owner(s) on the Property Registration Authority folio at the date of application for taking in charge.
- > This application must be completed by the majority of the owners of the houses in the development.

Appendix 3 Assessment Protocol

Assessment Protocol

- 1. Within 2 weeks from receipt of the request for taking in charge, Wexford County Council will acknowledge receipt of the request and accompanying documentation submitted.
- 2. Wexford County Council shall within 8 weeks of receipt of a valid taking in charge application carry out a comprehensive inspection of the Development.
- 3. The inspection shall consider all aspects of the Development to be taken in charge.
- 4. Wexford County Council shall refer the Taking in Charge application with completed Schedules 1 and 2 to Uisce Éireann with recommendation as to whether application is Category A or Category B under the MoU unless directly supervised by Uisce Éireann.
- 5. Within 2 weeks of receipt of an agreed response from Uisce Éireann in accordance with Uisce Éireann's Taking in Charge Protocol, notify the Developer, if applicable, in writing of all outstanding issues remaining to be addressed.
- 6. The Developer, will within 4 weeks of receipt of details of outstanding issues from Wexford County Council, arrange for completion of the said works, and notify Wexford County Council when works are completed. If works cannot be carried out within the specified period, the Applicant must notify the Council as to when the works will be completed.
- 7. The Council will, within 4 weeks of being notified of completion of the works arrange for a follow up inspection of the development to determine the satisfactory completion of the said outstanding issues as identified at (6).
- 8. Should the works identified at (6) above not be completed at the time of a follow up inspection, the developer shall be notified in writing and shall carry out the outstanding works that remain within four weeks of said notification.
- 9. A fee of €500 shall apply to each subsequent inspection required following the first "follow up"inspection, i.e. third inspection.

- 10. Where, during the course of re-inspections, new issues emerge that were not apparent at the time of the initial inspection the Council may consider these for inspection and inclusion in the Taking in Charge process. If further inspections are required solely as a result of "new" issues referred to above, the re-inspection fee set out in (ix) above shall not apply to the first subsequent inspection required.
- 11. When, following the final inspection of the Development Wexford County Council is satisfied that the Development is completed in accordance with the terms of this Policy and all relevant standards and permissions, Wexford County Council will initiate the statutory procedures under Section 11 of the Roads Act 1993.

Appendix 4 Assessment Protocol – Flow Diagram

Assessment Protocol – Flow Diagram.

TIC request received by Wexford County Council from Developer/Majority of Homeowners.

Within 2 weeks, acknowledge receipt of TIC request.

Where WCC is satisfied that the development can be considered for TIC, it shall within 8 weeks of receipt of the valid TIC request, carry out a comprehensive inspection of the development.

Wexford County Council refers TIC application with completed Schedules 1 and 2 to Uisce Éireann with recommendation as to whether application is Category A or Category B under the MoU unless directly supervised by Uisce Éireann.

Within 2 weeks of receipt of an agreed response from Uisce Éireann in accordance with Uisce Éireann's Taking in Charge Protocol, notify the Applicant. In writing of all outstanding issues remaining to be addressed.

The Applicant will within 4 weeks of receipt of details of outstanding issues from the Council, arrange for completion of said works & notify the Council when the works are complete. If the works cannot be carried out within that period, the Applicant must notify the Council as to when the works will be completed.

The Council will within 4 weeks of being notified of completion of the works arrange for a follow up inspection of the development to determine, in consultation with Uisce Éireann, the satisfactory completion of the outstanding issues. Should any works remain outstanding, the Applicant shall be notified in writing and requested to carry out those works within 4 weeks of said notification.

When WCC is satisfied that the development is completed to a satisfactorystandard and in accordance with the terms of this Policy & all relevant standards & permissions, the proposal to "Declare a Public Road" should be advertised and following a public consultation period a report should be submitted to the next Municipal/ Borough monthly meeting for approval.











Appendix 5 Safety File for the Estate Development

1.Safety File

- 1.1 A completed copy of the Safety File for the Development shall be submitted to Wexford County Council as part of the taking in charge process. This copy to be certified by the Project Supervisor Design Process who holds professional indemnity insurance.
- 1.2 The Project Supervisor Design Process shall be the competent person as set out in the Safety, Health and Welfare at Work (Construction) Regulations 2006.
- 1.3 The regulations place an obligation on the PSDP (Project Supervisor Design Process) to prepare a Safety File. The Safety File must contain "relevant health and safety information to be taken into account during any subsequent construction work following completion of the project".

The Safety File is an Operations and Maintenance File, so that it would include, for example drawings as well as information on the completed project, including attenuation systems, electrical work, pipework, the position of overhead lines and similar matters. The safety file is intended to have an almost indefinite lifespan.

2. Contents of Safety File

The Safety File will inter alia contain the following:

- (1) Construction Specification
- (2) Certification from appropriate persons as to:-
 - (a) adequacy of design for plant and equipment,
 - (b) commissioning and installation of plant and equipment,
 - (c) structural design (including foundations) of all elements to be taken in charge,
 - (d) as constructed drawings,
 - (e) details of particular risks,
 - (f) maintenance manual and history of all plant and equipment.

Appendix 6 Roads Minimum Standards

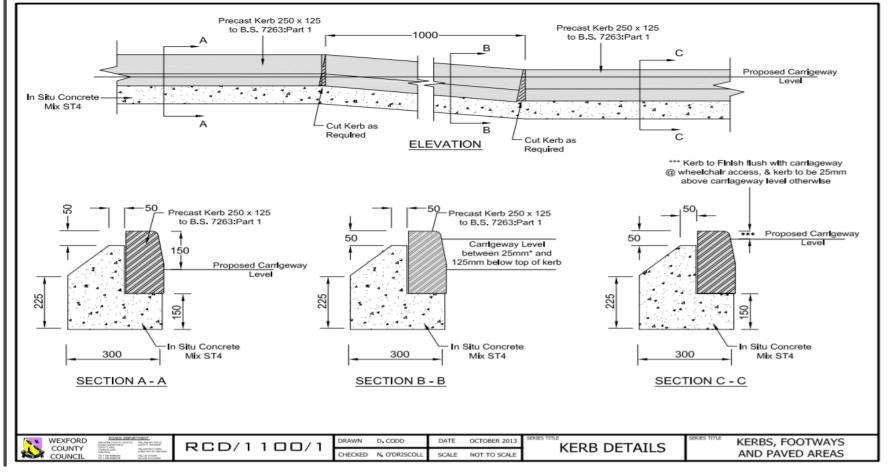
		Paveme	nt Layers		
		Resid	dential	Commercial/Arterial Route	Regional
Bound layers		Cul de sac - Home Zone	Spine Rd - Heavily Trafficked	Industrial Estates/Link roads	AADT > 3000 vehicles
-					
Surface course	Minimum compacted thickness:	40mm	40mm	40mm	40mm
(Single course)	Chip size range:	10mm	10mm or 14mm	10mm or 14mm	10mm or 14mm
	Material name:	SMA surf (IS EN 13108-5)	SMA surf (IS EN 13108-5)	SMA surf (IS EN 13108-5)	SMA surf (IS EN 13108-5)
	Alternatively:		HRA (IS EN 13108-4)	HRA (IS EN 13108-4)	HRA (IS EN 13108-4)
Binder course	Minimum compacted thickness:	100mm	60mm	60mm	60mm
(Single course)	Chip size range:	20mm	20mm	20mm	20mm
	Material:	AC 20 dense bin (IS 13108-1)	AC 20 dense bin (IS 13108-1)	AC 20 dense bin (IS 13108-1)	AC 20 dense bin (IS 13108-1)
Base course	Minimum compacted thickness:		80mm	120mm	220mm (2 layers)
(Single or double course)	Chip size range:		32mm	32mm	32mm
	Material name:		AC 32 dense base (IS 13108-1)	AC 32 dense base (IS 13108-1)	AC 32 dense base (IS 13108-1)
	Minimum bituminous thickness:	140mm	180mm	220mm	320mm
			(Designer should be cognisant of Fig	pure 4.2 of DN-PAV-03021 Dec 2010)	
Unbound layers					
Sub-base	Minimum compacted thickness:	150mm	150mm	150mm	150mm
	Material name:		Refer to TII publication - Series	800 (Including Clauses 801-804)	
Capping	Compacted thickness:	Rei		. CBR, plate compaction, water tables,	etc)
	Material name:		Refer to TII publication - DN-PAV-032	1 (i.e. Class 6F2/6F1, water tables, etc)	
* 1			Coloured Surface Course Options		
Surface course	Material description	Red SMA	Buff SMA	Black SMA with Red Chip	
(Single course)	For use on:	DEMURS	Cul de sacs, DEMURS	Traffic Calming Ramps	
	Min compacted thickness	40mm	40mm	40mm	
	Chip size range	10mm only	10mm only	10mm only	
	Min chip PSV value	55	55	55	
	Material name	SMA surf PMB (IS EN 13108-5)	SMA surf PMB (IS EN 13108-5)	SMA surf PMB (IS EN 13108-5)	
	Chip colour	Red	Buff	Red	
	Aggregate colour ratio	Chips >4mm: Coloured Aggregate	Chips >4mm: Coloured Aggregate	Chips >4mm: Coloured Aggregate	
	Pigment colour	Red	Buff	n/a	
	Pigment % in mix	5% (Typically)	5% (Typically)	None	
	Binder After treatment	Black	Clear	Black	
	After treatment Protected from Traffic	None 4hrs min	None 4hrs min	None	
bioko s	Protected from Traffic	4nrs min	4nrs min	2hrs min	
Notes	ante aboue must be approved le actuerce	hu Wexford County Council	Poads Department		
	nents above must be approved in advance	by wexiona County Council	Roads Department		
	with current IS EN 13108 and SR28				
 Design must be signed off by a contract of the second secon		s support and must be been anoth-	Improved!		
	ver than 2.5%, it is considered unsuitable for			eut (detes and approv	times included)
 wextord county council require 	that 2 days advance notice by email be giv	en by the developer to wcc in advance	e or all bituminous work being carried	out juates and approx	times included)
6 Corec will be required past come	pletion to verify laying depths and proper of	compaction; and shall be taken in acce	relance to the requirements of BE FO40	97 Clause	



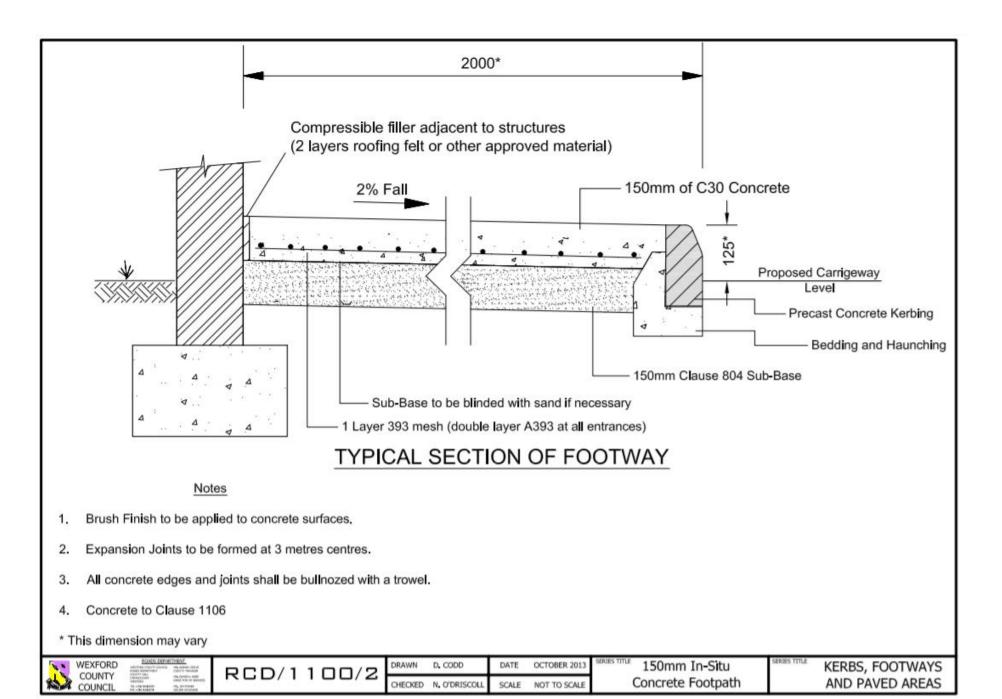
Helpful notes for Builders and Inspectors

Developers/Builders and their staff who are in	nvolved in the construction of Road Pavements should be very familiar with	the contents of the following documents:	
TII - DN-PAV-03021			
	s 800 - Unbound materials (CC-SPW-00800)		
	sport, laying, compaction and product-type testing protocol		
	Per () (0) (18) eer (Per eer () Per eer () P		
Notwithstanding the information contained in	the above documents. WCC TIC section draw particular attention to the ite	I ms below where reoccurring problems are being regularly encountered at construction stage:	
Item	Problems	Remedy	Reference
Capping			
Material	Drying out	Avoid stock-piling	Series 800 Clause 802/1
Laying	Being laid in layers greater than 225mm	Remind ground workers of the max layer depth	Series 800 - Clause 802 - Laying
	Laid too high - decreasing the subbase layer depth	Better quality control by Builder, and supervision of Sub-Contractor	
Compaction	Incorrect procedures being employed	Compaction to be carried out to specification for unbound mixtures	Series 800 - Clause 802 - Table 8/4
Sub-base			
Material	Seperation of large and fine aggregate; not being placed to specification	Avoid stock-piling; random spot-checks, turn away trucks with segregated material	Series 800 - Clause 802 - Transport
Laying	Irregular surface profile	Sub-base to be machine laid; finished layer must have a closed blinded finish	Series 800 - Clause 802 - Laying
Compaction	Incorrect compaction procedures being employed	Compaction to be carried out to specification for unbound mixtures	Series 800 - Clause 802 - Table 8/4
Base			
Material	Segregation of material being loaded; cold material delivered to site	Better quality control by Builder, and supervision of Sub-Contractor; temp control	BS 594987 Clause 4.1 & 4.2
Laying	Laying during unsuitable weather conditions (i.e. heavy rain, cold temps)	Better programming	BS 594987 Clause 6.1, 6.2, 6.3 & 6.4
Compaction	Incorrect compaction procedures being employed	Compaction to be carried out to specification for bound mixtures	BS 594987 Clause 9.1, 9.2 & 9.3
Binder course & Surface course			
Protection of the exposed surface (Base)	Contaminated, open texture filled with clay/dirt	Prevention in the first instance; housekeeping; reduce time between laying courses	BS 594987 Clause 5.1
Bond coat between every bituminous course	Not being applied; not being verified; WCC must receive notice of laying	Min bond coat - 0.7litres/m ² ; solution must be allowed to oxidise & become tacky	BS 594987 Clause 5.5
Material	Segregation of material being loaded; cold material delivered to site	Better quality control by Builder, and supervision of Sub-Contractor; temp control	BS 594987 Clause 4.1 & 4.2
Laying	Laying during unsuitable weather conditions is completely unnacceptable	Better programming & quality control by Builder, and supervision of Sub-Contractor	BS 594987 Clause 6.1, 6.2, 6.3 & 6.4
Compaction	Incorrect compaction procedures being employed	Compaction requirements for bound materials must be met	BS 594987 Clause 9.1, 9.2 & 9.3
Joints			
Longitudinal	Mats not laid tightly together; joint holding water (freeze/thaw issues)	Better quality control by Builder, and supervision of Sub-Contractor	BS 594987 Clause 6.8
Edge-sealing			
Kerbs and other edges	No evidence sealing is being carried out	Better quality control by Builder, and supervision of Sub-Contractor	BS 594987 Clause 6.9
Topsealing:			
Longitudunal joints	TII/WCC do not approve top-sealing with standard bitumen seal	Material must have min SRV (Skid Resistance Value) value of 55 (i.e. overbanding product)	
Temperatures			
Min on Arrival	See Table A.1 (Range 110-140° C)	Material & mix dependent	BS 594987 Table A.1
Min immediately prior to Rolling	See Table A.1 (Range 80-110 [°] C)	Material & mix dependent	BS 594987 Table A.1
Gradients	Ponding	Min 1:100 longitudinal; 1:40 crossfall	

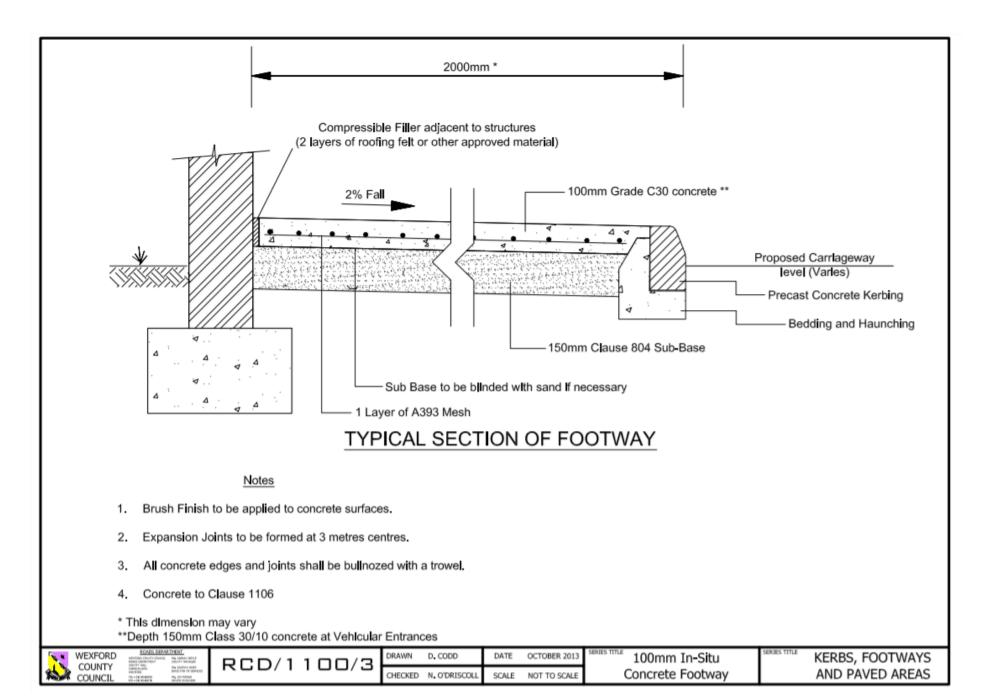
Appendix 7 Combined Roads Drawings



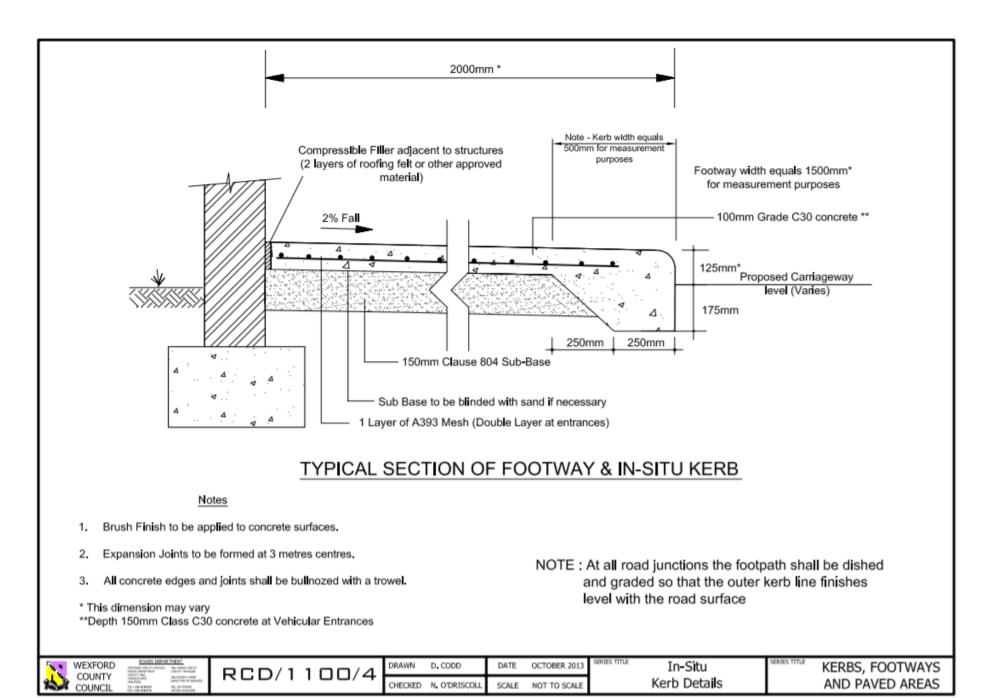
















Wexford County Council

Public Lighting Specification

Second Issue April 2020

Adhering to this specification does not ensure compliance with relevant international and national standards, best practise guidance, or with safety and health legislation. Clients, designers, and contractors should make themselves aware of their own statutory duties under Irish safety and health legislation.

Compliance with this specification does not ensure design approval by Wexford County Council.

This specification supersedes previous specifications used within the county. It is the intention of Wexford County Council to review and update this specification regularly.



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Document Control

Issue Date	Prepared By	Approved By
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Wexford County Council would like to thank Redmond Analytical Management Services Ltd. for their technical assistance in preparing this specification.



Introduction

Wexford County Council intend to ensure that all projects with a public lighting element will provide a sustainable, energy efficient lighting solution. This document refers to international and national standards, along with codes of practice, and best practice documents that designers must comply with in order to meet our required standards.

Whilst this document does not intend to specify lighting equipment, it does intend to stipulate a minimum performance standard for all the equipment utilised within public lighting installations.

This document does not specify a specific lighting category with which designers should comply, rather designers should select appropriate lighting levels from the pertinent standard with which to light their projects and confirm this selection with Wexford County Council prior to undertaking the design. This latitude is to enable the competent lighting designer scope to produce appropriate, compliant, and energy efficient lighting solutions.

Objectives

Public lighting is an important addition to the built environment. Lighting gives a sense of safety and security to our residential areas and vibrancy to our commercial centres. Public lighting makes navigating about our community easier through the hours of darkness, improves traffic flow and raises general safety.

Public lighting infrastructure in the county places a considerable burden on the local authority's resources and therefore it is in everyone's interests that this infrastructure is as energy efficient and maintenance friendly as possible.

Wexford County Council's *Public Lighting Specification* lays down how the lighting task should be approached for all applications within the county regardless of whether the lighting is to be taken in charge or not.

This public lighting specification supersedes all previous public lighting specifications published by Wexford County Council. The guidance offered for public lighting layouts within *Recommendations for Site Development Works for Housing Areas* is no longer acceptable.

1 General Requirements

Wexford County Council, Roads Department, situated at County Hall, Carricklawn, Wexford, is the official lighting authority for transport infrastructure, housing, industrial and commercial developments in county Wexford.

All lighting schemes for transport infrastructure, housing, industrial or commercial developments carried out by developers or their contractors in county Wexford shall comply with the requirements of, and be approved by either, Roads Department or Planning Department, Wexford County Council, irrespective of whether the lighting is to be taken in charge or not.

This specification sets down appropriate standards and technical specifications which shall be complied with by anyone undertaking public and private developments or, undertaking upgrades to the existing network.



The approach to the design process shall be the same regardless of the project being a new build or an upgrade of the existing lighting infrastructure.

All exterior lighting shall comply to the Irish Standard for public lighting *I.S. EN 13201-2:2015* (CEN/CENELEC, 2016) while observing the latest *ETCI* regulations and *ESB Networks* distribution system interface requirements.

Lighting designs for major traffic routes and junctions shall follow the guidance provided within *DN-LHT-03038 Design of Road Lighting for the National Road Network* along with the associated *Transport Infrastructure Ireland* design manuals.

In addition, designers should observe the general guidance offered in *BS* 5489-1:2013 *Code of Practise for the Design of Road Lighting Part 1: Lighting of Roads and Public Amenity Areas* (British Standards Institute, 2012). Particularly regarding photopic scotopic correction, locating columns and the calculation of maintenance factors.

Where special circumstances occur that require deviation from this document, these deviations shall be clearly agreed in writing with Wexford County Council in advance of any work commencing on site and as such, must be adhered to for any public lighting installation to be taken in charge by Wexford County Council.

LED luminaires shall only be considered for public lighting applications. Luminaires shall be capable of CMS control by replacing the PECU with a communications node.

Traffic lights and lighting associated with pedestrian crossings shall have a separate *MPRN* number to public lighting.

Lighting designers shall approach the design task in a holistic manner, sympathetic to the nature and location of the project. Consideration shall be given to the people who will use and live with the lighting installation. Care will be taken, as far as practicable, by the lighting designer to ensure that the impact on flora and fauna will be minimised.

Specifications and requirements for the various individual components that make up a general lighting infrastructure is laid out in *appendages A* through *G*. Any detail of an individual lighting design not covered should be brought to the attention of Wexford County Council for clarification.

1.1 Appropriate Lighting Design

Adherence to Wexford County Council's public lighting specification, or approval of the lighting design by Wexford County Council does not imply compliance with any standard, or that the lighting infrastructure is fit for purpose. It will be the duty of the developer to investigate and remedy any issues identified by Wexford County Council or its agents during any phase of design approval, construction, inspection, or commissioning. Lighting infrastructure shall only be approved, or taken in charge, upon any required remedial work being completed.

Lighting designers shall be aware of their duty to provide appropriate, sustainable, energy efficient lighting solutions in line with the relevant international and national standards, statutory instruments, codes of practice and the codes of conduct of the professional bodies of which they are members.

The developer and contractor shall ensure that the lighting design approved by Wexford



County Council be installed as per the approved design. Any changes to the approved lighting design shall be undertaken by the lighting designer and submitted to Wexford County Council for approval.

It is the intention of Wexford County Council that all lighting installed within the region be appropriate to the local environment, the task for which illuminance is provided, be energy efficient and sustainable. The lighting infrastructure shall not impact negatively on the local landscape, residents, visitors, or the flora and fauna.

The developer shall provide the lighting designer with any environmental impact assessment, wildlife survey and any other information relevant to allow the lighting designer to provide appropriate measures to mitigate against damage or nuisance caused by light trespass in an appropriate manner.

The lighting design shall not place luminaires in line with, or directly above windows or the doors of residences.

2 Safety and Health

- 2.1 The developer shall comply with all the duties laid down in the *Safety, Health and Welfare at Work (General Applications) Regulations 2007* (Department of Enterprise, Trade and Employment, 2007).
- 2.2 The developer shall comply with all the duties laid down in the *Safety, Health and Welfare at Work (Construction) Regulations 2013* (Department of Jobs, Enterprise and Innovation, 2013).
- 2.3 All persons employed on the installation of public lighting must have received appropriate safety and health training in accordance with the *Safety, Health and Welfare at Work Act 2007* (Department of Enterprise, Trade and Employment, 2007) and *The Safety Health and Welfare at Work (Construction) Regulations 2013* (Department of Jobs, Enterprise and Innovation, 2013) and training in roadside working in accordance with Part 13 of the *Safety, Health & Welfare at Work (Construction) Regulations 2013* (Department of Jobs, Enterprise and Innovation, 2013) as amended, the *Code of Practice for avoiding Danger from Overhead Electricity Lines* (ESB Networks, 2019), and the *Code of Practise For Avoiding Danger From Underground Services* (Health and Safety Authority, 2016).
- 2.4 Any person who carries out specific works on public lighting in proximity to ESB networks is to hold an appropriate public lighting *Safety Approval Certificate* confirming that he is trained and competent to carry out such works.
- 2.5 Account shall be taken of any traffic management measures that may be required during the installation of public lighting schemes. This includes the requirement that a traffic management plan be designed by a holder of a current valid *Traffic Management Designer CSCS card* and implemented on site by a current valid *CSCS Signing, Lighting and Guarding* on roads license holder.



3 Client and Designer Duties

- 3.1 Developers and/or their agents shall ensure they comply with their statutory duties defined in the *Safety, Health and Welfare at Work (Construction) Regulations 2013,* particularly those duties detailed in *Part 2, Section 7 (2) and (5)* (Department of Jobs, Enterprise and Innovation, 2013).
- 3.2 Designers submitting lighting designs shall ensure they comply with their statutory duties defined in the *Safety, Health and Welfare at Work (Construction) Regulations 2013*, particularly those duties detailed in *Part 2, Section 15* (Department of Jobs, Enterprise and Innovation, 2013).
- 3.3 The Safety, Health and Welfare at Work (Construction) Regulations 2013 clearly states that the client (developer) has a statutory duty to appoint a 'competent designer' to undertake all design work. This statutory duty applies to lighting and associated electrical infrastructure design. The appointed 'competent designer' must comply with their statutory duties which are clearly defined in *S.I.* 291. These statutory duties also apply to designs that are offered on an advisory basis and regardless to the contractual arrangements between the designer and the developer or client.
- 3.4 Designers must prepare, record and store written documentation clearly showing how design decisions are arrived at. Under *S.I. 291* the designer must share (if requested) such records with others that have an interest in the project. Wexford County Council clearly has an interest in all designs carried out for installation in its locale and may request such records from designers.
- 3.5 Wexford County Council reserve the right to have lighting designers demonstrate their competence to undertake lighting and associated electrical infrastructure designs, before approving that specific design. If Wexford County Council is not satisfied with a designer's competence, the lighting design will be rejected.
- 3.6 Developers and their agents should be aware that 'designs' offered on an 'advisory basis' or on a *pro bono* basis still have to comply with the statutory duties defined in the *Safety, Health and Welfare at Work (Construction) Regulations 2013* (Department of Jobs, Enterprise and Innovation, 2013).

4 Works to Partial Circuits

4.1 All works to partial circuits will be subject to the full testing and certifying requirements of the *National Rules for Electrical Installations* (Electro-Technical Council of Ireland, 2016), or later versions.

Attention shall be given to the requirements of *Annex 63B paragraph 1*. "Should the installer become aware of any defect in any part of the installation that would impair the safety of the new work, the client must be informed in writing thereof. No new work should commence until these defects have been made good." (Electro-Technical Council of Ireland, 2016).

4.2 Where existing hardware (columns, supply cabinets, etc.) are to be relocated/reused or in any way retained, the contractor must certify that all retained hardware is structurally sound and without damage to the protective coatings.



- 4.3 All due care must be taken in the protection of existing hardware. Any damage to existing equipment (both electrical and structural) must be reported to the local authority and it is the contractor's responsibility to supply and replace any damaged equipment in the course of their works.
- 4.4 Prior to the disconnection of any existing public lighting installations, a full *Risk Assessment* shall be undertaken regarding the impact of the interruption of the street lighting provision on all users pedestrian, cyclist and vehicular. If deemed necessary, temporary lighting shall be provided.
- 4.5 Where the interruption of the street lighting provision cannot be avoided by the phased scheduling of works, written agreement must be sought from Wexford County Council for permission to temporarily power down and re-energise sections of the circuits on a phased basis.
- 4.6 If granted, the permission referenced above in no way absolves the contractor from his previously stated responsibilities regarding the inspection and testing of the renewed circuits.
- 4.7 All electrical installation work is to be carried out by a contractor registered with *RECI* or *ECSSA*.
- 4.8 All waste is to be disposed of in accordance with the *WEEE Directive*.

5 Lighting Design for New Projects

- 5.1 Lighting designers shall refer to Wexford County Council's *Public Lighting Specifications* and ensure they comply fully with all requirements.
- 5.2 Lighting designs shall comply with Wexford County Council's *Public Lighting Specifications* even if there is no intention for the lighting infrastructure to be taken in charge by Wexford County Council.
- 5.3 Lighting designers shall select an appropriate lighting classification using the selection process detailed in *S.R. CEN/TR 13201-1:2014* (CEN/CENELEC, 2015). The lighting designer should then liaise with Wexford County Council to confirm the lighting classification.
- 5.4 Overall uniformity (U_O) has a significant impact on the visual quality of a lighting installation, and a high U_O value has a positive effect on user safety. Therefore, where a lighting classification does not state a value for U_O , the minimum value for U_O shall be taken to be 20%.
- 5.5 When designing to *P* classifications, the lighting designer shall apply a product specific scotopic photopic adjustment to the calculation, in line with the guidance offered in *A.3.3.3* of *BS 5489-1:2013* (British Standards Institute, 2012).

The minimum permitted lighting level with residential developments shall not be less than *I.S. EN 13201-2:2015 P4* at full output.

When designing to a P4 classification, the minimum illuminance level shall not fall



below 1_{LUX} , including the scotopic photopic adjustment. At minimum, an overall uniformity of 20% shall be achieved.

Dimming by 25% from 00:00 to 06:00 shall be applied to all residential lighting projects. However, should the designer's risk assessment find that dimming is not appropriate, this shall be agreed in writing with Wexford County Council.

Overall uniformity (U_0) shall not fall below 20% unless in exceptional circumstances and only with the agreement of the local authority.

- 5.6 Lighting calculations shall be undertaken in accordance with *I.S. EN 13201-3: 2015 Calculation of Performance* (CEN/CENELEC, 2015).
- 5.7 Lighting designers shall select an appropriate luminaire based on the luminaire specification in Appendix G and on an energy consumption assessment in accordance with the requirements of *I.S. EN 13201-5:2015 Energy Performance Indicators* (CEN/CENELEC, 2015).

Wexford County Council will reject luminaires or designs that they believe to be inefficient energy consumers.

5.8 Lighting designers shall refer to the following Regulations, Standards, and Guidance Documents:

S.I No. 291 of 2013: Safety, Health and Welfare at Work (Construction) Regulations 2013.

National Rules for Electrical Installations ET 101: 2008 Fourth Edition or later.

I.S. EN 13201:2015 Road Lighting, the suite of documents as appropriate.

BS 5489-1:2013 Code of Practice for the Design of Road Lighting. Part 1: Lighting of Roads and Public Amenity Areas.

Housing Schemes: Guidebook for ESB Networks Standards for Electrical Services (Revision 5).

Relevant guidance documents available from the *Institution of Lighting Professionals* as appropriate.

Relevant guidance documents available from the *Society of Light and Lighting* as appropriate.

- 5.9 Lighting designers shall approach the design process in a holistic manner, taking account of lighting levels in the general area and at the access points to the project/development. Maintenance access and longevity of installation shall be central to the design.
- 5.10 Lighting designers shall pay attention to the *General Principles of Prevention* (Department of Jobs, Enterprise and Innovation, 2013) both for construction and for future maintenance.
- 5.11 Careful consideration shall be given to future maintenance requirements.



Particularly access for maintenance crews to the lighting equipment, including safe ingress and egress to the equipment location.

Where access by *MEWP* is difficult, or which would require the lengthy reversing of vehicles, then raise and lowering columns shall be used.

- 5.12 The design should represent the planned construction phases and should be selfcontained within each construction phase.
- 5.13 No component of the lighting infrastructure shall stand on, or pass under, private property.
- 5.14 Consideration shall be given to the protection of persons from striking columns, both in motorised vehicles and cycles. Column set back guidance offered in *4.3.3.3* of *BS5489-1:2013* (British Standards Institute, 2012) shall be observed.

Public lighting columns represent a potential hazard to cyclists, vehicle drivers and their passengers. When shared surfaces are used, such as in *Homezones* and car parks, a suitable method of protection from the risk of public lighting column strikes shall be offered that does not conflict with the ethos of shared surface design principles. Barriers, bollards or other such structures are not acceptable protection methods. The project architect shall ensure therefore, that enough space is allocated within the development to allow for sufficient column setbacks.

Where appropriate setbacks cannot be achieved, or appropriate remedial measures cannot be taken, then passively safe columns and associated electrical disconnects shall be used in accordance with *I.S. EN 12767:2007*.

5.15 The effects of planned and existing trees and tall shrubs shall be considered during the design process to ensure that they do not block light and cause excessive shadowing. A minimum clearance from the widest part of the mature tree canopy equal to the column height, shall be used to ensure light distribution is not inhibited.

In new developments, the economic and appropriate locating of columns shall take priority over planned tree planting. Whilst the local authority recognises the importance of trees and planting within the streetscape, it shall not be to the detriment of appropriate lighting levels, or to the efficacy of the lighting infrastructure.

5.16 The temperature at which the luminaire photometry was measured, or derived, shall be stated on the design calculation cover. Photometry measured below 15°C is not acceptable.

All other luminaire test values shall be stated at 25°C.

Wexford County Council reserve the right to review *LM80* reports for the chipset used within the luminaire, and *luminaire thermal test reports* before permitting their use.

5.17 Lighting designers undertaking sports lighting projects shall design to the appropriate sport and competition level as detailed in *I.S. EN 12193:2007 Light and Lighting - Sports Lighting.* Particular attention shall be given to restricting light trespass onto neighbouring properties and to reducing '*skyglow'*. The levels provided in *Table 1* of *5.10 Obtrusive Light* in *I.S. EN 12193: 2007* shall not be



exceeded. Further guidance on the control of light trespass and pollution is available from both *The Institution of Lighting Professionals* and from *The Society of Light and Lighting*.

- 5.18 Illuminated bollards shall not be used.
- 5.19 Ground recessed flood lights shall not be used, unless in exceptional circumstances, and only with the pre-approval of Wexford County Council.
- 5.20 Pedestrian and cycle routes that link areas, or form parts of overall routes shall be illuminated in line with the lighting levels planned in the area. Pedestrian routes that are by their nature for amenity should not be illuminated.

6 Lighting Design for Upgrade Projects

No changes may be made to existing lighting infrastructure owned or operated in any way by Wexford County Council without the permission of an appropriate local authority staff member.

No upgrade or luminaire replacement may take place without a lighting design having been completed by a competent lighting designer and approved by Wexford County Council.

The lighting design process for upgrade and renewal projects shall follow the same rules as detailed in section 5 above with additional steps as follows:

- 6.1 An aboveground site survey shall be undertaken. The survey shall record the following information and be provided to Wexford County Council.
 - 6.1.1 A geo referenced drawing showing the lighting column, customer supply cabinets, midi pillars and cable access chambers. These locations shall be recorded with at least 1m accuracy.
 - 6.1.2 The geo location and direction of any overhead power lines close to the intended lighting installation, where the public lighting will be installed by any method other than on distribution network poles. These locations shall be recorded with at least 1m accuracy.
 - 6.1.3 A spreadsheet shall be produced showing:
 - Column or network pole type.
 - Column height.
 - Bracket details, including inclination, outreach and uplift dimensions.
 - Luminaire lamp type i.e. SON or SOX.
 - The visual condition of the pole or column and any bracket.
 - The presence or absence of an interface box on network poles.
 - The height and orientation of column doors.
 - Any issues regarding column siting, particularly regarding setbacks.
 - Any column or service cabinet that is overgrown.



- Any detail that may affect the safe use or retention of the network pole, column, bracket or service cabinet.
- Any detail that may affect the safety of people in the area.
- Any defect that is recognised during the survey as a hazard should be reported immediately to Wexford County Council, providing as much information regarding the defect and the equipment location as possible.
- 6.1.4 Alternatively, the above information may be gathered using an electronic interface with the council's infrastructure database.
- 6.2 A lighting classification shall be determined as detailed in 5.3 above. This classification shall be based on the current usage of the road. Regard shall be given to adjoining lighting levels to ensure lighting levels remain within two steps of each other. If the steps in classifications are greater than two, transition zones will be required.

7 Lighting Carparks

The lighting levels for carparks shall be selected from *Table 5.9* in *I.S. EN 12464-2:2007* (CEN/CENELEC, 2006) and care shall be taken to select the appropriate classification based on vehicular movements rather than the size of the carpark.

Care shall be taken to ensure that light sources are arranged to prevent glare to the car park users, and to minimise nuisance light to neighbouring properties.

8 Dimming

Dimming shall be considered for each lighting design, regardless of the application. The designer shall consider the dimming amount along with the hours of dimming, which should be based on the needs of the user, the location and the nature of the area being illuminated. Lighting in areas where there is a risk of anti-social behaviour shall not be dimmed, and the intention not to dim be approved in writing with Wexford County Council.

While the current unmetered tariffs specify dimming percentiles, it should not be taken that dimming by those percentages is appropriate. All designs with a dimming element shall have lighting level calculations showing the achieved lighting levels after dimming.

There are several dimming profiles available, a selection of which are shown in *Figure 1*.



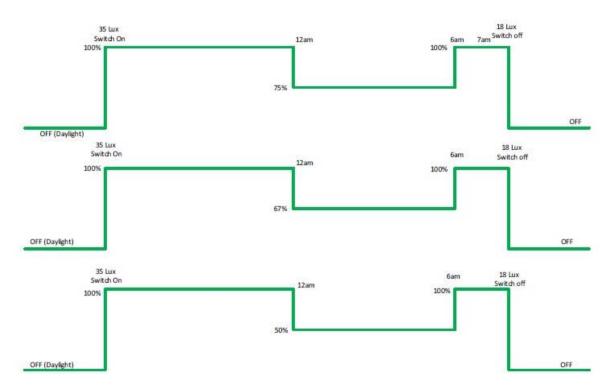


Figure 1: Dimming Profiles

8.1 Dimming Luminance Lighting

Dimming of traffic route lighting shall be done in steps of lighting classes i.e. *M4* dimmed to *M5* in line with the reduction in traffic flow. Care shall be taken that dimming of the lighting does not create steps in lighting classes greater than two with any surrounding lighting. Transition zones will be used if steps between lighting classes are greater than two.

The lighting design calculation shall show the lighting level at full output and for each dimming step included in the design. The designer shall state the lighting classification complied with for each step. The lighting classification type shall remain constant during the dimming regime, for example, an *M* classification at full power shall be retained during all stages of dimming, only the luminous intensities may change.

8.1 Dimming Illuminance Lighting

The dimming profile and hours dimmed may vary with the nature and location that is being illuminated. Care shall be taken that dimming of the lighting does not create steps in lighting classes greater than two with any surrounding lighting. Transition zones will be used if steps between lighting classes are greater than two.

- 8.2.1 The dimming regime on traffic route conflict areas shall match the main traffic route lighting dimming regime and shall always remain one class above the main traffic route lighting. The lighting design calculation shall be replicated to show each dimming class and state the lighting classification achieved.
- 8.2.2 Any dimming of standalone conflict zones shall be done in steps of classification level. Care shall be taken that dimming of the lighting does not create steps in lighting classes greater than two classes with any surrounding lighting. Transition zones will be used if steps between lighting



classes are greater than two. The lighting design calculation shall be replicated to show each dimming class and state the lighting classification achieved.

- 8.2.3 Dimming of residential estates shall be by 25% (profile U14) and the dimming hours shall match the dimming profiles detailed in Appendix H. Dimming by 25% from 00:00 to 06:00 shall be applied to all residential lighting projects. However, should the designer's risk assessment find that dimming is not appropriate, this shall be agreed in writing with Wexford County Council.
- 8.2.4 Use of dynamic lighting systems in residential areas shall not be used as the switching of luminaires in such locations can lead to sleep disruption for people living in the vicinity.

8.2 Dimming Lighting in Amenity Areas

Certain areas lend themselves well to lighting controlled by sensors. The sensor control can be used to detect pedestrians and either turn on luminaires or ramp up dimmed luminaires to full output. The designer shall carefully select the times when luminaires are switching and/or dimming so as the dynamic lighting does not become a nuisance to neighbours. Areas that could be illuminated in such a manner include, walkways and cycle paths in parks or residential areas, walking paths around sports pitches, some car parks and some types of industrial or commercial sites. The lighting design calculation shall be replicated to show each dimming class and state the lighting classification achieved.

8.3 Dimming Lighting in Surface Carparks

Hours of access shall be considered when dimming lighting levels in carparks. If the car park is in use throughout the night, then dimming below *5.9.1* from *I.S EN 12464-2:2007* shall not be considered. If access is not permitted, then the lighting may be dimmed to a level sufficient for security or turned off completely.

For surface carparks illuminated to higher lighting levels, then dimming shall be in steps to ensure compliance with a lower, appropriate lighting class derived from *I.S EN 12464-2:2007 5.9*. (CEN/CENELEC, 2006).

9 Light Source Temperature CCT

Generally, light sources with a CCT in the order of 4,000K in all applications.

For flood lighting applications and lighting in the vicinity of historical features, then a source colour shall be selected after testing on site and with the approval of Wexford County Council.

Light source colour temperature should not be selected on its own as a method of protecting wildlife.

10 Design Approval

10.1 All lighting, lighting infrastructure and electrical designs must be approved in writing



by the Roads Department or the Planning Department of Wexford County Council before any associated works commence on site.

- 10.2 The design approval system is a simple pass or fail process and is designed to encourage sustainable, energy efficient lighting solutions, utilising appropriate modern equipment and technology.
- 10.3 Wexford County Council provides a check list for designers to complete and submit with their design for approval, shown in *Addendum 1*. The list should be completed along with the required supporting documents. Incomplete submissions will not be approved.
- 10.4 All exterior lighting and associated electrical infrastructure must be submitted in the following format:
 - 10.4.1 Lighting Reality[®] (or approved alternative) calculations in soft format. The cover shall show:
 - The identity of the lighting designer, both the individual and the company.
 - The name of the project.
 - The lighting classification designed to at full power, and a second calculation reflecting the designed dimming.
 - The combined maintenance factor for the luminaire and how it was derived.
 - The ambient temperature of the photometry used.
 - 10.4.2 Lighting Reality[®] (or approved equivalent) report in PDF format.
 - 10.4.3 CAD drawing in soft format showing the following information:
 - The site boundary.
 - All landscaping details.
 - All services.
 - All private areas to be hatched and identified.
 - Individually numbered columns with icons of a size to allow accurate assessment of the column positions.
 - PL ducting layout.
 - PL cable access chambers.
 - Individually numbered public lighting midi pillar locations.
 - ESB cabinet locations.
 - Individually numbered single line circuit diagrams.
 - All duct, column foundation or any other detail shall only show Wexford County Council approved versions. Non-approved versions shall not be included in any drawing submitted to contractors.
 - 10.4.4 Technical specifications for the proposed equipment, and if requested, *luminaire thermal test reports* and *LM80* reports.
 - 10.4.5 Written details outlining the OEM warranty and the procedure for transferring warranty to Wexford County Council when the development is



presented for taken in charge.

10.4.6 Electrical cable calculations for each circuit.

10.4.7 Energy consumption calculations reflecting any designed dimming regime.

- 10.5 The substitution of *PDF* type files over requested soft copy versions prevent Wexford County Council from fulfilling their statutory duties detailed in *S.I.* 291 and are therefore not acceptable.
- 10.6 Work shall not commence on site until after approval for the design has been granted by Wexford County Council.
- 10.7 Any revisions or alterations to the approved lighting design must be submitted to Wexford County Council for approval before being undertaken on site.

11 Electrical Connection

11.1 Electrical loads for public lighting shall be designed so that a single-phase supply is sufficient and must not exceed 2kVA per connection point, so as to allow an unmetered connection to the electrical distribution network.

For larger transport infrastructure, a metered supply will be considered. The designer shall gain approval from Wexford County Council prior to completing the metered electrical design.

- 11.2 Full and complete electrical cable calculations shall be provided for each circuit. Provision shall be made in the calculation to allow for *constant lumen output* luminaires at 100,000 hours. The total kVA for each midi pillar shall be stated.
- 11.3 All electrical supply circuits shall be sized for an additional 25% for future expansion.
- 11.4 In all cases, the developer is responsible for arranging and carrying out the connection to the electrical distribution system.
- 11.5 It is the developer's responsibility to ensure the installation meets all electrical safety requirements and is certified to *ETCI* regulations.
- 11.6 The developer must maintain the installation and pay all electrical bills prior to being taken in charge.
- 11.7 The developer will be liable for all costs associated in making good any faults found during the pre-taking in charge inspection.
- 11.8 No changes shall be made to existing public lighting electrical infrastructure owned or operated in any way by Wexford County Council, without the express permission of an appropriate council staff member.



12 Inspection Process

All new lighting installations shall be inspected by Wexford County Council, or their agents, prior to being taken in charge. A fee will be payable to Wexford County Council for each inspection undertaken. This fee will vary depending on the nature of the installation.

13 Protection of Flora and Fauna

Wexford County Council rightly values the diverse wildlife which exists throughout the urban, rural and coastal regions. Much of this delicate eco structure is protected by national and international laws and as such, cannot be interfered with.

While research into the effects of light, and types of light is still ongoing, it is agreed that the strip of light evident in street lighting is in effect, a barrier to many species, regardless of the colour temperature of the light source. This includes, but is not limited to nesting areas, bat roosts, bat hunting areas, bat commuting routes, rivers, spawning grounds, and other such locals.

It is the developer's duty to ensure that any lighting installation will not interfere in any way with protected, or endangered species or their habitats.

Conclusion

Wexford County Council believes that adhering to the standards and specifications identified in this document will result in a sustainable and energy efficient lighting infrastructure that brings value and security to residents and the general public using amenities in the county.

The energy efficiency measures stipulated will greatly assist in meeting the European Communities' energy efficiency targets for 2020 and the planned targets for 2030, as well as meeting the statutory requirements defined in the *European Union (Energy Efficiency) Regulations 2014* (Department of Communications, Energy and Natural Resources, 2014).

Please contact us if there is any aspect of Wexford County Council's public lighting strategy that requires clarification.



References

British Standards Institute , 2010. *BS 7654:2010. Specification for single-phase street lighting cutout assemblies for low-voltage public electricity distribution systems. 25 A rating for highway power supplies and street furniture.* London: British Standards Institute.

British Standards Institute , 2013. *BS EN 60529:1992+A2:2013. Degrees of protection provided by enclosures (IP code).* London: British Standards Institute.

British Standards Institute, 2002. *BS EN 62262:2002. Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code).* London: British Standards Institute.

British Standards Institute, 2010. BS 7657:2010. Specification for cut-out assemblies up to 100 A rating, for power supply to buildings. London: British Standards Institute.

British Standards Institute, 2012. *BS 5489-1:2013 Code of practice for the design of road lighting Part 1: Lighting of roads and public amenity areas.*. Seventh ed. London: s.n.

British Standards Institute, 2013. BS EN 40-3-1:2013. Lighting columns. Design and verification. Specification for characteristic loads. London: Britsh Standards Institute.

British Standards Institute, 2013. Low-voltage fuses. Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application). Examples of standardized systems of fuses A to K BS HD 60269-2:2013, BS 88-2:2013. London: British Standards Institute.

CEN/CENELEC, 2006. *I.S. EN 12464-2:2007 Lighting of Work Places - Part 2: Outdoor work Places.* Dublin: National Standards Authority Ireland.

CEN/CENELEC, 2015. *I.S. EN 13201 - 5: 2015 Road Lighting - Part 5: Energy performance Indicators.* Dublin: National Standards Authority Ireland.

CEN/CENELEC, 2015. *I.S. EN 13201 - 5:2015.* Dublin: National Standards Authority Ireland. CEN/CENELEC, 2015. *Road Lighting - Part 1: Guidelines on selection of lighting classes.* Updated May 2016 ed. Dublin: National Standards Authority of Ireland.

CEN/CENELEC, 2016. *I.S. EN 13201-2:2015.* Dublin: National Standards Authority Ireland. Department of Communications, Energy and Natural Resources, 2014. *The European Union (Energy Efficiency) Regulations 2014 S.I. No 426 of 2014.* Dublin: The Stationary Office.

Department of Enterprise, Trade and Employment, 2007. S.I. No 299 of 2007 Safety, Health and Welfare at Work (General Applications) Regulations 2007. Dublin: The Stationary Office.

Department of Jobs, Enterprise and Innovation, 2013. S.I. 291 Safety, Health and Welfare at Work (Construction) Regulations 2013. Dublin: The Stationary Office.

Electro-Technical Council of Ireland, 2016. *National Rules for Electrical Installations.* Fourth Edition ed. Dublin: Electro-Technical Council of Ireland.

ESB Networks, 2019. *Code of Practise for Avoiding Danger from Overhead Electricity Lines.* Second ed. Dublin: s.n.

ESBN, 2008. National Code of Practise for Customer Interface. 4 ed. Dublin: ESBN.



European Committee for Electrotechnical Standardisation , 2009. *BS EN 60598-1:2008. Luminaires* . *General requirements and tests.* London: British Standards Institute.

Health and Safety Authority, 2016. *Code of Practise for Avoiding Danger from Underground Services.* Dublin: Health and Safety Authority.

International Organisation for Standardisation, 2015. *EN 1461 2009. Hot dip galvanized coatings on fabricated iron and steel articles -- Specifications and test methods.* Dublin: National Standards Authority of Ireland.

National Standards Authority of Ireland, 2015. *I.S. EN ISO 9001: 2015. Quality Management Systems - Requirements.* Dublin: National Standards Authority of Ireland.



Appendix A Cable and Ducting Specification

- A.1 All cables are to be installed in ducting. Ducting shall not run through, or below private property.
- A.2 No jointing of cables will be accepted in any circumstances.
- A.3 Two core *NYCY* must be used throughout the installation, size to be selected by appropriate calculations, but a minimum of 6mm² shall be used.

Luminaires shall be pre-wired by the manufacturer.

A.4 Ducts must be single walled, colour red, high density polyethylene (H.D.P.E.). The duct shall have a nominal 100mm diameter. For runs shorter than 1m, flexible duct of 50mm is acceptable.

The duct must have the words "Public Lighting" stamped at 1m intervals. The letters must be 9mm in height.

A.5 Ducting shall be laid in fully coupled unbroken lengths and shall run directly between the column pots and/or midi pillar. 8kN draw wires must be provided at all termination points.

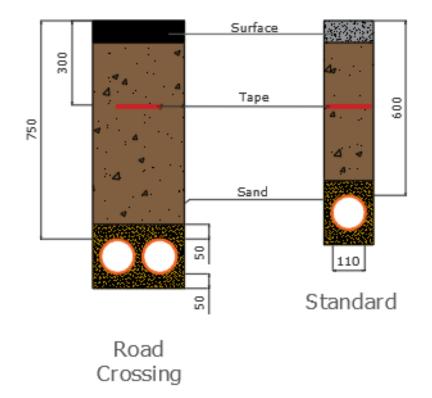


Figure 2: Road crossing duct detail



Ducting shall be laid to the appropriate depth as mandated by *ETCI* regulations and surrounded by sand before burying with appropriate material as shown in *Figure 2*.

All ducts shall be marked with electrical marking tape at 300mm below finished ground level.

Draw wires of at least 8kN must be provided in all ducts.

- A.6 Cable access chambers shall be provided where ducts take acute turns, or in any instance where they cross beneath any surface used by vehicles, including any shared surfaces.
- A.7 At road crossings and under shared surfaces such as *Home zones*, spare ducting shall be provided. Ducting setback in relation to road edge will vary depending on the set back of rooted lighting columns.
- A.8 Ducting shall be properly coupled.



Appendix B Cable Access Chamber Specification

B.1 Access chambers must be provided at all access points for road crossings, acute bends in duct runs, duct junctions, and under shared surfaces and *Home zone* surfaces.

Access chambers shall only be installed in *Group 2* areas suitable for loading class i.e. *C250* in footways, pedestrian areas and comparable areas. D400 to be used at all trafficked locations.

Chambers shall be deep enough that ducts shall not rise or fall on their approach.

- B.2 At road crossings and under shared surfaces spare ducting shall be provided. Ducting setback in relation to road edge will vary depending on the set back of rooted lighting columns. Spare ducts shall run between access chambers under road crossings and shared surfaces and *Home zone* surfaces.
- B.3 Access chambers shall be 450mm square as a minimum. Larger sizes may be required when numerous public lighting supply cables pass through, or where the maximum bend radii of the cables demand a larger area.
- B.4 High strength engineering bricks or cast in situ concrete or standard concrete blocks shall be used to construct the manhole chambers directly under the cover and frame. Prefabricated chamber boxes shall not be used.
- B.5 The chamber cover manufacturer shall be registered with and certified by either *NSAI*, *British Standards Institute of Quality Assurance Services* or *Lloyds Register Quality Assurance Register* for the design, manufacture, supply and verification of chamber covers under their quality assessment schedule to *ISO 9001* (National Standards Authority of Ireland, 2015).
- B.6 The cover shall be lockable in place. There shall be provision for replacements of bolt and nut if damaged.

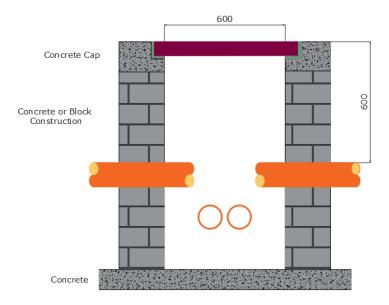


Figure 3: Cable access chamber



Appendix C Column and Bracket Specification

C.1 All columns shall be of the same type within any one scheme. Tubular or octagonal steel columns which comply are acceptable and shall be protected against corrosion by hot-dip galvanising to *ISO EN 1461* (International Organisation for Standardisation, 2015).

Bespoke or decorative columns will only be permitted by prior agreement with the Senior Executive Engineer in the Roads Department or the Planning Department of Wexford County Council.

C.2 All lighting columns shall be designed to the *EN 40* and in accordance with *BD94/07* (British Standards Institute, 2013) for a minimum 25 year life for a *Terrain Category* of TC3 and reference the relevant 10 minute mean wind velocity.

Column specification and associated windage calculations must include for a 1.5m square sign and assume a 1.5m bracket length, even where the current design does not call for a sign or bracket.

C.3 The lighting column manufacturer shall be registered with and certified by either NSAI, British Standards Institute of Quality Assurance Services or Lloyds Register Quality Assurance Register for the design, manufacture, supply and verification of road lighting columns and brackets under their quality assessment schedule to ISO 9001 (National Standards Authority of Ireland, 2015).

The quality assurance certification shall relate to the specific lighting column material being proposed. Wexford County Council reserves the right to request proof of certification from the proposed column manufacturer.

C.4 All octagonal columns must be fabricated with longitudinal welding only.

All tubular columns must incorporate an anti-rotational device.

C.5 A vertical cable entry slot with smooth edges, rounded at top and bottom and measuring 150mm X 75mm shall be provided in the column root. The entry slot shall be in line with the column door opening. The top of the entry slot shall be at 300mm below ground level as shown in *Figure 4*.

A bituminous coating to a level 250mm above finished ground level shall protect the planted portion and above of both the inside and outside of each column.

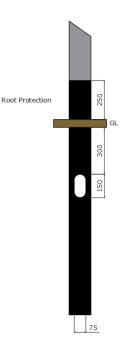


Figure 4: Cable slot detail



C.6 For octagonal columns, the door opening shall have a welded-in frame with an allround weather strip. A flat steel door of minimum thickness 3mm secured by two triangular head bolts shall be fitted.

For all other columns, the door opening shall be plasma cut. Twin bolts shall be used. Receiving sockets shall be adjustable using non-corrosive materials to allow for interchangeable doors. Appropriately sized weather strips shall be integral to the column, behind the door.

The locking triangular head bolts shall have a narrow neck under the head to take a retaining washer. The bolt threads shall be lightly greased to prevent seizing or binding. Bolts must be secured to an 8mm nut welded in place.

Nuts held by compression or clipped in place shall not be accepted.

- C.7 All doors shall be of a standard size and be fully interchangeable. They shall not require any site adjustment or modification to fit each column properly. They shall be a minimum of 385mm x 90mm.
- C.8 A baseboard, with a minimum working area equal to the door opening, shall be fitted in each column and shall be treated with intumescent varnish to prevent fire propagation.

The clearance between baseboard and inside face of door when secured shall not be less than 100mm. The baseboard must be capable of being removed and replaced. Baseboard fixings shall be recessed below the surface of the board so as not to impede the fixing of electrical equipment to the baseboard. An earth terminal shall be provided in a readily accessible position at the bottom of the opening.

C.9 Columns located in areas inaccessible to standard maintenance equipment must be hinged. Gear must be accessible by lowering the column only.

All hinged columns must be delivered with a standard anti-vandal locking screw as standard.

The hinged column must only be capable of being lowered with a universal lever.

C.10 Where columns are to be installed into parks and green spaces and hinged columns are deemed inappropriate, vehicular access must be provided for maintenance actions. The minimum paved width required for the maintenance truck fitted with a hoist is 3.5m. The paved width shall be laid out in such a manner that the maintenance vehicle does not have to reverse to egress the area.

The paved path must have sufficient structural strength to support the weight of the truck and the pressure of the truck stabilisers without incurring damage.

C.11 The use of outreach brackets on new installations is usually not necessary and should only be used where installation geometry is challenging. Columns shall be fitted with a spigot to suit the selected design luminaire.

Where outreach brackets are required for lighting performance reasons, both the columns and brackets assemblies shall conform to the deflection requirements of *Class 2* as defined in *IS EN 40-3-3* (British Standards Institute, 2013).



C.12 The removable bracket arms for the columns shall be of steel construction and protected against corrosion by hot dip galvanising to *BS EN 1461* (International Organisation for Standardisation, 2015).

Bracket arms and column shaft shall be of the sleeve fitting type, with the bracket fitting snugly over the column.

- C.13 For tubular columns, the bracket shall be secured by eight hexagonal headed stainless-steel screws, minimum diameter 8mm. Brackets used for columns greater than 8 metres must have 8mm nuts welded to the outer face of the bracket wall to enable secure fixing.
- C.14 Where there are shared surfaces, the designer must design out the risk presented by columns. If this cannot be achieved, passive safe columns along with electrical disconnect systems of an appropriate type shall be used. The designer must consult with Wexford County Council and approval granted before the system is specified.

The project architect shall ensure that the requirements for safe positioning of public lighting columns and midi pillars shall be provided for at an early stage of the design process.



Appendix D Supply Cabinet Specification

D.1 Customer supply pillars shall be installed in land that is open to the public and never on private property.

ESB customer service pillars and midi pillars shall be installed a minimum of two metres apart as shown in *figure 5*. If this is not physically possible and only with the explicit permission of ESB Networks and Wexford County Council Public Lighting Section these may be installed closer together and equi-potentially bonded in accordance to *ET101* (Electro-Technical Council of Ireland, 2016), or later versions.

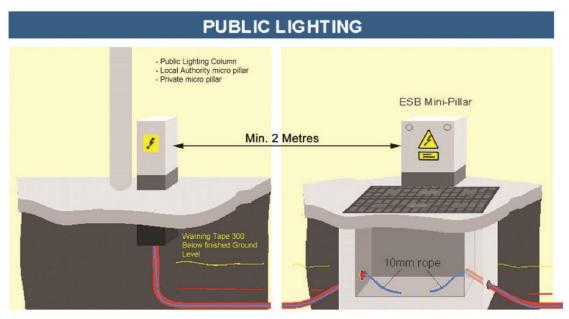


Figure 5: Pillar spacing

- D.2 Earthing for the customer service pillar should be in accordance with the ESB National Code of Practice for Customer Interface 4th edition 2008.
- D.3 The midi pillar (customer unmetered supply pillar) shall have typical dimensions of 150mm x 250mm x 600mm. Extension plates, or root assembly, typically 320mm deep shall be fitted at the bottom to enable firm cementing into the ground. Photographic evidence of correct installation shall be provided for each midi pillar and be available if requested by Wexford County Council.

The extension plate, including the planted portion below ground and 50mm of the above ground shall be protected by a bitumous coating.

- D.4 The midi pillar shall be fitted with a single flat plate door nominally 220mm wide x 510mm high, with a triangular, captive head locking bolt.
- D.5 The midi pillar shall be vented. The venting shall be such that it protects against direct ingress of rain.
- D.6 The midi pillar shall be protected against corrosion by hot dip galvanising in accordance with *BS EN 1461* (International Organisation for Standardisation, 2015) and shall be properly vented.

A baseboard, approximately 20mm thick and treated with intumescent varnish shall be



mounted in each pillar.

- D.7 All supply pillars shall have a high voltage symbol attached to the front panel.
- D.8 The main over current protective device shall be provided by a 32 amp rated high rupturing capacity type cut-out with a minimum rupturing capacity (short circuit level) of no less than 16KA to *BS HD 60269-2:2013, BS 88-2:2013* (British Standards Institute, 2013).

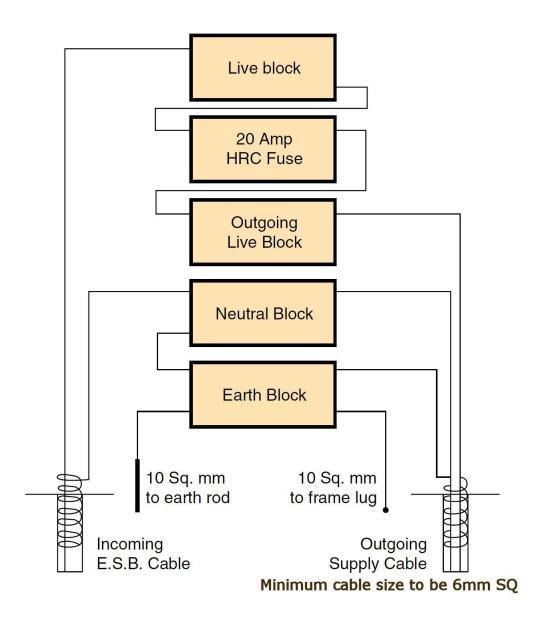


Figure 6: Midi pillar electrical schematic

D.9 Each outgoing circuit shall be individually fused by means of a 20A HRC cut-out type fuse.



- D.10 The live contacts of all fuse bases should be shrouded so accidental contact with live metal cannot be made when the fuse carrier is withdrawn. Terminals shall have a serrated bore to ensure good contact with all types of conductors. The use of M.C.B.'s shall not be accepted in public lighting columns or pillars.
- D.11 Each midi pillar must be earthed using an earth rod and the supply neutralised. The earth rod shall be either a bare copper or hot dipped galvanised iron pipe or rod of at least 16mm diameter. It shall be driven vertically into the soil for a length of not less than 1.2m.

If ground conditions do not allow driving an earth rod, then a horizontal earth electrode can be used. It shall consist of 4.5m of bare copper or galvanised iron rod of 16mm diameter, or at least 4.5m of bare copper or galvanised steel wire of at least 25mm² cross sectional area buried in the soil at least 500mm deep.

In certain ground conditions, *ESB Networks* may require additional earth procedures. Developers should check with *ESB Networks* to confirm their requirements.

inspection cover.

- D14.2 Protected against corrosion by a suitable weatherproof tape.
- D14.3 All to be buried underground after inspection to avoid damage by vandals.



Appendix E Column Installation

E.1 All columns shall be installed and oriented so that the access door faces away from oncoming traffic as shown in *Figure 7*.

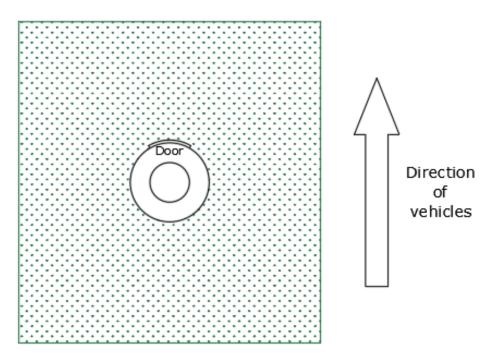


Figure 7: Door positioning

Columns must be erected securely and vertically in the exact positions indicated in the design drawings. Columns found to be in positions other than design locations, unless previously agreed with Wexford County Council must be relocated to the design positions.

- E.2 Where columns are to be situated in the vicinity of overhead high-tension cables, approval must be sought from the *ESBI Design Office* as to the exclusion zone with regards to the intended column height. Proof of this approval will be sought by Wexford County Council prior to taking in charge.
- E.3 Columns are to be installed in line with the recommended minimum clearances from the edge of the carriageway to the face of the lighting columns in *4.3.3.3 Table 2 of BS5489; 2013* (British Standards Institute, 2012). Or as stipulated by *TII* design documents for traffic routes.
- E.4 Columns shall be erected in line with the recommendations of *EN40-1* (British Standards Institute, 2013) regarding planting depths of columns. The contractor shall confirm with the column manufacturer/supplier the recommended depth for the root of the proposed columns.
- E.5 Columns shall be erected by planting their root portions in excavation of suitable size and secured. The excavated hole shall be pumped free of water prior to any filling with concrete.
- E.6 Where sleeves are used, they must have an outside diameter of 300mm minimum for 6m columns. This size may increase with increasing column base widths. Sleeves shall be installed such that the top of the sleeve finishes below the cable entry slot. Sleeves must be of a ridged construction.



E.7 Where the rooting depths to *EN40-1* (British Standards Institute, 2013) are unachievable due to existing services or ground conditions, flange mounted columns may be used only with the prior written approval of Wexford County Council.

Where flanges are approved for use, they must comply with EN40-1 (British Standards Institute, 2013).

A full set of design calculations for the structural base for the mounting of the flange, shall be undertaken by a competent person and must be submitted for Wexford County Council records.

- E.8 All columns shall be set such that the centre of the column door is 1.5m above the finished ground level as shown in *Figure 8*.
- E.9 Close electrical protection of the column shall be provided by a 25A rated cut-out loaded with a 6A fuse incorporating a *cam lever* single pole disconnection. The cut-out will use a separate neutral and earth.

The cut-out must provide ingress protection to *IP 21* as defined by *EN 60529* (British Standards Institute , 2013).

Residual circuit devices or miniature circuit breakers shall not be used.

- E.10 The column shall be earthed from the incoming cable via a 6mm² PVC cable which will be connected to the column by a crimped lug.
- E.11 All columns shall have a switch fitted for testing purposes that bypasses the luminaire PECU. The switch shall be mounted securely on the column baseboard. The switch shall be 5 Amp rated and be protected to *IP42* (British Standards Institute , 2013).

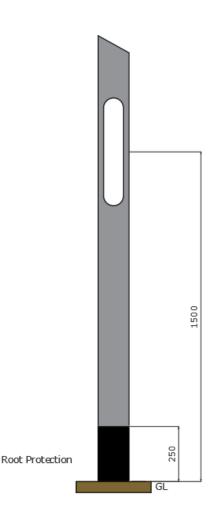
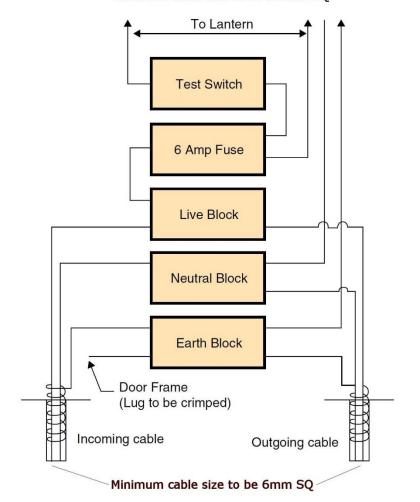


Figure 8: Column door height.

E.12 All components required for connection shall be firmly fixed to the column back board in a tidy and professional manner.

All conductors shall be stripped to the appropriate length to allow for connection. No exposed conductors shall be allowed.





Minimum cable size to be 2.5mm SQ

Figure 9: Column Electrical Schematic



Appendix F Electrical Design

- F.1 The electrical services design for the scheme shall be undertaken to comply with the relevant sections of *ETCI* National Rules. In particular the requirements set out in section 714 of *ET* 101: 2008 (Electro-Technical Council of Ireland, 2016), or later.
- F.2 A detailed cable design shall be undertaken to match the calculated electrical load which would typically allow up to nine luminaires to be supplied per phase. An additional capacity of 25% shall be included for future extensions.

The provision of earth loop/fault level calculations and circuit disconnection (fuse rupture times) shall be undertaken by the electrical contractor.

Public lighting schemes requiring cable lengths in excess of 200 meters require careful design to meet the earth loop impedance requirements of *ET 101: 2008* (Electro-Technical Council of Ireland, 2016), or later.

- F.3 It is the duty of the installation contractor to ensure that disconnection/fuse rupture times shall be in compliance with those set out in *ET 101: 2008* (Electro-Technical Council of Ireland, 2016), or later.
- F.4 The contractor shall be responsible for the planned installation meeting the requirements of the *National Rules for Electrical Installations*. In particular, that the maximum volt drop is not exceeded, that the equipment installed is of sufficient rating for the prospective fault current, that the disconnection time is satisfactory, that the cables are of satisfactory current carrying capacity for the load under running and starting conditions and that the protective devices discriminate fully.
- F.5 Miniature Circuit Breakers (MCB's) shall not be used in columns or pillars.
- F.6 The main supply point switch fuse shall be a *BS 88 HRC* (British Standards Institute, 2013) fuse rated appropriately to the number of downstream circuits.
- F.7 The fuses and circuit breakers shall have a minimum rupture capacity of *16kA*. All outgoing circuits shall be individually fused by means of a *20A HRC* cut-out type fuse.
- F.8 Space shall be allocated for the ESB supplied cut-out and isolator as per the ESBN National Code of Practice for Customer Interface (ESBN, 2008).
- F.9 Close protection of street lighting lanterns to be provided by a 25A rated cut-out loaded with a 6A fuse incorporating a cam lever double pole disconnection rated to *IEC 60947*.

The cut-out shall comply with a minimum degree of protection of *IP21* internally and *IP42* (British Standards Institute , 2013) externally and be moulded in a material which conforms to *BS 7654* (British Standards Institute , 2010).

All terminals shall be formed from solid brass and be electroplated for temperature rise stability. Terminals shall have a serrated bore to ensure good contact with all types of conductors.

F.10 Switches for testing purposes shall be installed, either horizontally or vertically, in each public lighting column. These switches shall be so wired as to override the photoelectric cell during daylight hours.

The switches shall be 5A rated and must clearly indicate the "ON/OFF" position.

Switches must have a minimum rating of *IP42* (British Standards Institute , 2013).

Switches shall be securely mounted in an accessible position on the baseboard.



F.11 Connector (Link) blocks shall be used for the termination of all conductors of underground cables in columns. The Connector blocks shall conform to BS 7657:2010 (British Standards Institute, 2010) and rated 100Amp for use on live and neutral connections. Each block shall incorporate five serrated cable bores (terminals) each capable of accepting cable sizes up to 35mm². The metal terminal block shall remain captured within its moulding when the cover is removed.

Connector blocks shall be solidly mounted on the column baseboards. Conductors shall not share the same terminal where spare ways are available in a connector block.

- $\begin{array}{ll} \text{F.12} & \text{Switching control of public lighting systems shall be achieved by means of photocell control.} \\ & \text{Each individual lantern shall be switched "ON" from dusk to dawn. } 35_{\text{LUX}} \, \text{switch on and } 18_{\text{LUX}} \, \text{switch off.} \end{array}$
- F.13 The PECU shall be designed to fit the NEMA socket provided on each lantern.



Appendix G LED Luminaire Specification

- G.1 The luminaire shall be designed specifically to be used with LED light sources. It shall comply with all relevant EN standards and EC directives required by the CE *Community Marketing Directive*.
- G.2 Products must be tested in laboratories independently accredited to *EN 60598* and *ISO/IEC 17025*.

Product quality and standard measurements will be based on *IEC/PAS 62717* and *IEC/PAS 62722*.

Products must be designed to *EN 60598* (European Committee for Electrotechnical Standardisation , 2009) by organisations independently accredited to that standard.

G.3 A *TM21* report must be provided as part of the design submission package.

An *LM80* report must be supplied as part of the design submission package.

- G.4 The luminaire shall be supplied with surge protection of no less than 10kVa and shall be the first component in the luminaire's internal circuitry.
- G.5 The light source shall be modular and replaceable on site. The module should be fixed in such a way as to maximise heat transfer from the LED chip and its respective board.
- G.6 The LED colour temperature shall be appropriate to the application. Correlated Colour Index in the order of 4,000K, or 3,000K, depending on use.
- G.7 The optic assembly will be protected to *IP66* as defined by *EN 60529* (British Standards Institute , 2013)
- G.8 The lumen depreciation factor shall not exceed 0.9 at 100 000 hours at 25°C ambient. Luminaires that do not meet this requirement may be considered on an individual basis.
- G.9 The driver shall be housed in a dedicated, separate chamber within the lantern. The enclosure will be protected to a minimum of *IP65* as defined by *EN 60529* (British Standards Institute , 2013). The *IP* rating must be capable of being maintained throughout the design life of the lantern.
- G.10 The driver shall be *DALI* registered and capable of communication and interaction with a *CMS* communication module should it be required in the future.

The manufacturer shall ensure that the driver is compatible with the LED array being used, and that the driver complies with all appropriate regulations, standards, quality criteria and directives.

- G.11 Drivers shall utilise *Constant Lumen Output* as standard. Energy consumption and connected load shall be based on the average load over the products design life.
- G.12 Drivers shall have over temperature protection and provide power factor correction of no less than 0.9.
- G.13 The luminaire shall be constructed from die cast aluminium and powder coated in grey. All coloured components of the luminaire shall be of the same colour code *(RAL)* and have the same visual appearance when viewed together.

Other colours will be considered for decorative lighting applications.

G.14 The luminaire will be constructed in a robust manner and be suitable to use in the intended



application and location. The lantern shall have a minimum impact resistance of *IK08* (British Standards Institute, 2002).

- G.15 A signed declaration of conformity, along with certificates for ENC compliance and EMC Directive compliance shall be provided. The equipment will be fully compliant with RoHS requirements.
- G.16 The weight and projected side area should be stated for the luminaire with all equipment and angle of installation considered in order to calculate column load.

The weight of the luminaire shall not exceed 15kg.

G.17 Covers or openings on the luminaire required to be opened during the installation or maintenance of the light point must be captive when open.

All screws or fixtures required to be opened during installation or maintenance of the product must be protected against corrosion and seizure for the design life of the luminaire.

- G.18 LED failure fraction shall not be greater than 5% of the LEDs installed in the lantern over the design life of the lantern.
- G.19 The luminaire shall provide thermal protection for all its components to ensure the luminaire and its components operate within the stated temperature parameters through the design life of the lantern.
- G.20 Ambient temperature related to lantern performance and tests will be in the range of -35°C to +55°C. Lumen depreciation factor will be stated at 25°C.
- G.21 Electrical connection terminals shall be indelibly marked to indicate all wiring connections and use shrouded screws. Control equipment shall bear a clear circuit diagram in order to indicate all component connections in a concise manner.

An additional terminal will be required to enable overriding of the PECU by means of a 'line to test'.

G.22 Operating voltages shall be clearly marked within the enclosure.

Electrical terminals shall be capable of terminating three core 2.5mm² flexible cable.

Any link cables, connector blocks and plug & socket arrangements must be of a suitable IP rating for their location and application and comply with all standards or directives.

G.23 The complete luminaire including all component parts shall be guaranteed by the manufacturer for a minimum of ten years. Full written details of the warranty must be provided with the design submission.

A method statement defining how the warranty claims process should be accessed by Wexford County Council, or its agents, written by the manufacturer on the manufacturer's headed paper and signed by an identified director, must be provided with the design submission.

- G.24 Photometric performance, including lumen output used in designs shall be at an ambient temperature of 25°C. An *LM79* report shall be available if requested by Wexford County Council.
- G.25 Decorative luminaires will be considered individually, but they shall generally comply with the same requirements as a functional luminaire.
- G.26 Circuit Wattage (connected load) averaged for constant lumen output shall be stated for each luminaire variation proposed.



Drive current and power factor shall be stated for each luminaire variation proposed.

G.27 The luminaire will be individually switched via a 7 pin NEMA socket, with all communication and power connections made at the time of assembly by the manufacturer.

A three pin PECU shall be used to switch the luminaire. The switch value shall be 35/18 lux.

Decorative luminaires shall utilise a miniature PECU with a 35/18 lux switching value. While the driver shall be enabled for dimming and communication via the *DALI* protocol, the communication cable shall not be connected.

- G.28 All luminaires shall have an indelible manufacturing data label affixed inside the driver compartment, clearly visible without the need to remove components. The label shall show the following information:
 - Manufacturer name.
 - Model number/code.
 - Date of manufacture.
 - Batch number, if relevant.
- G.29 All luminaires will be pre-wired by the manufacturer and shall not require opening by the contractor during installation.

The following cable sizes shall be used:

Up to 6m mounting ~ 1.5mm² 3 core *PVC/PVC*.

Over 6m mounting ~ 2.5mm² 3 core *PVC/PVC*.

- G.30 The manufacturer shall provide the following information in accordance with the Lighting Industry Liaison Group's *A Guide to the Specification of LED Lighting Products*:
 - Rated input power, identifying the amount of energy consumed by the lantern, including its power supply in Watts.
 - Rated luminous flux in lumens in absolute photometric values. Absolute photometry results in a LOR=1.
 - Lantern efficacy in lumens per Watt.
 - Luminous intensity distribution.
 - Correlated colour temperature in Kelvin.
 - Rated colour rendering index (CRI).
 - Rated chromaticity co-ordinate values. Initial and maintained.
 - Maintained luminous flux.
 - Rated life in hours of the LED module and the associated rated lumen maintenance.
 - Failure fracture corresponding to the rated life of the LED module within the lantern.
 - Ambient temperature for the lantern.



Appendix H Taking in Charge

H.1 It is the developer's responsibility to ensure that the lighting infrastructure installed is safe and fit for purpose.

H.2 Wexford County Council will not take in charge any lighting infrastructure that does not meet the minimum standards and specifications laid down in this document, national codes of practise, international standards or statutory requirements.

H.3 The developer shall take date stamped photographs of the duct and pot installation and provide these to Wexford County Council, or their agents, as part of the inspection process.

H.4 A full inspection of the public lighting infrastructure will be undertaken by a representative or agent of Wexford County Council, the cost of which will be borne by the developer.

Should any deficiencies be found, they must be put right at the developer's cost before the lighting will be taken in charge, subject to further inspections at the developer's cost.

H.5 Wexford County Council shall not be liable for any maintenance or energy costs incurred prior to taking public lighting infrastructure in charge.

H.6 Lighting equipment shall not be operated prior to inspection and approved permanent connection. It must not be operated as site lighting.

H.7 Temporary connections shall not be undertaken.

H.8 The developer or the designer/contractor should compile the following information essential for the Council's inspectors to complete their task and submit it, prior to inspection:

Copy of written approval of original design submission and written approval of any changes.

'As constructed' geo referenced CAD drawing in soft format showing the following information:

- Street Names
- House numbers
- Individually numbered column locations. The icon scale should be such that set back can be accurately assessed
- Ducting locations
- Cable access chambers
- Individually numbered micro pillar locations
- ESB cabinet locations
- Individually numbered single line circuit diagrams
- Private areas not to be taken in charge shall be hatched and identified.



Addendum 1 Designer Checklist

To ensure that your public lighting design application meets all requirements, please complete the following check list and attach all required documentation. Approval will not be granted if documents are missing or incomplete.

No lighting infrastructure installation may commence until written approval has been received.

Project name:	
Project location:	
Developer:	
Developer contact details:	
Planning register number:	
Lighting designer:	
Designer contact details:	
Lighting class selected:	

Approval for your lighting design cannot be processed or approved without the following documentation. Please confirm it has been completed and attached with your application:

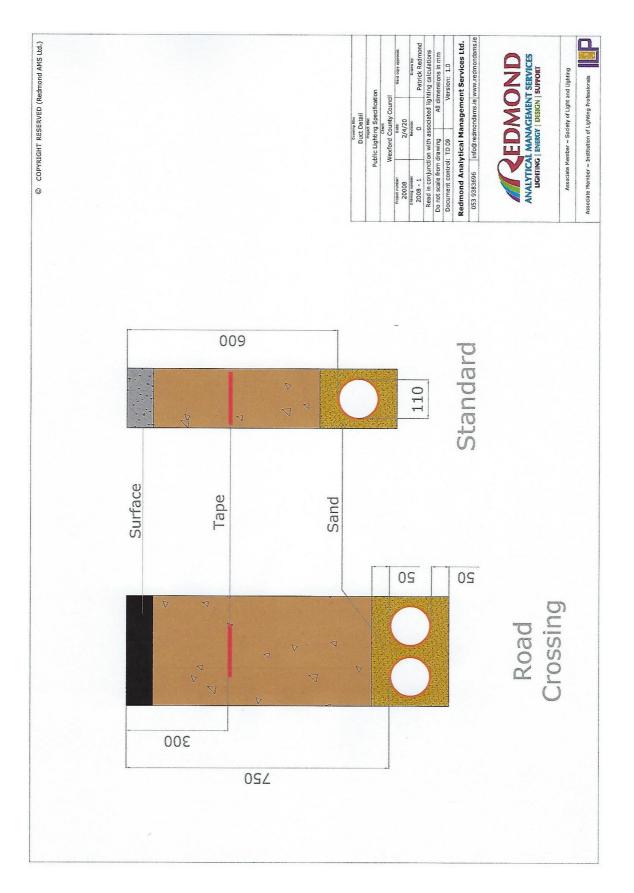
Lighting Reality [®] calculation in soft format		
Lighting Reality [®] report in PDF format]	
CAD drawing in soft format]	
Showing:		
The site boundary		
Private areas hatched and identified		
Landscaping features such as trees		
Individually numbered column locations		
Ducting run locations		
 Cable access chambers 		
Individually numbered micro pillar locations		
 ESB cabinet locations 		
> Individually numbered single line circuit diagrams		
 All other services 		
Technical specifications for the proposed equipment inclu Written details of warranties and access to warranty prov	•	

Technical specifications for the proposed equipment including TM 21 and LM80 report	
Written details of warranties and access to warranty procedure	
Voltage drop calculation for each circuit	
Energy calculations reflecting the designed dimming profile	
Designers risk assessment report	

Sign	
Print	
Date	

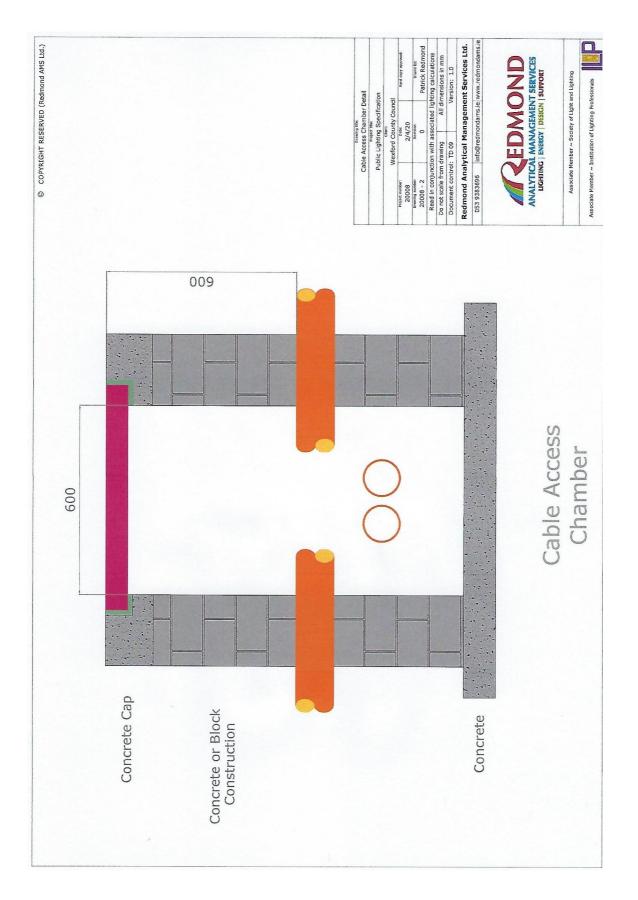


Duct Detail

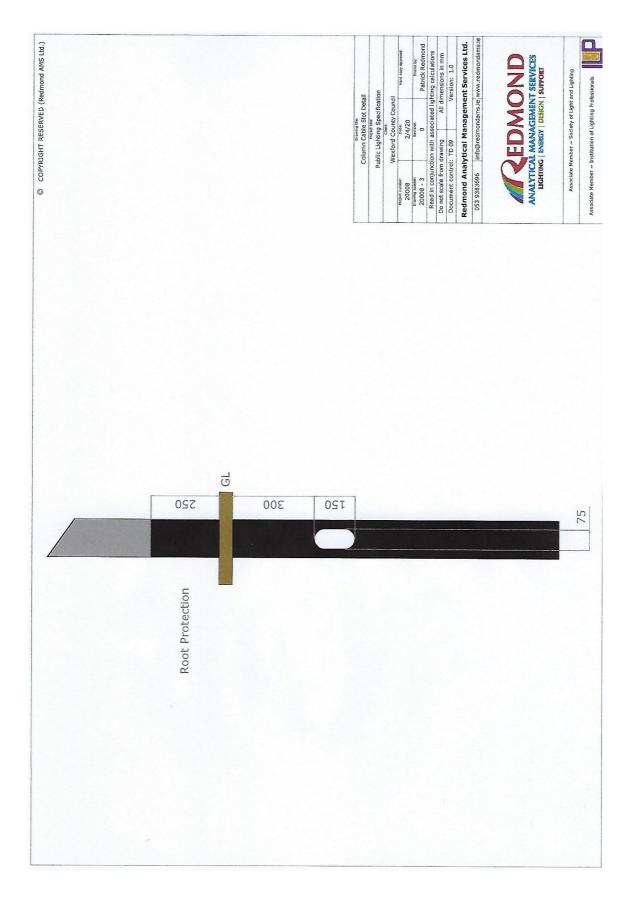




Cable Access Chamber Detail



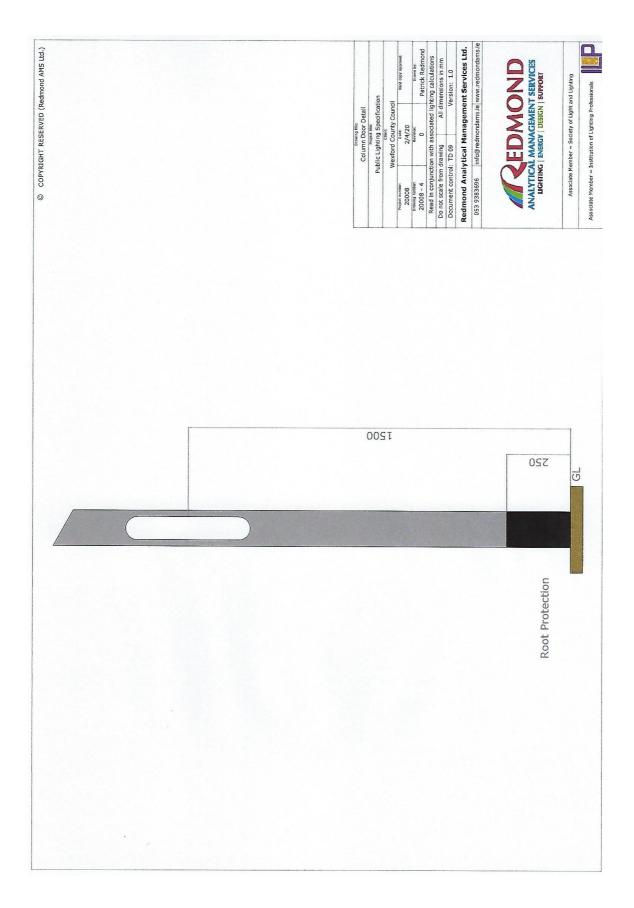
Column Root Protection Detail





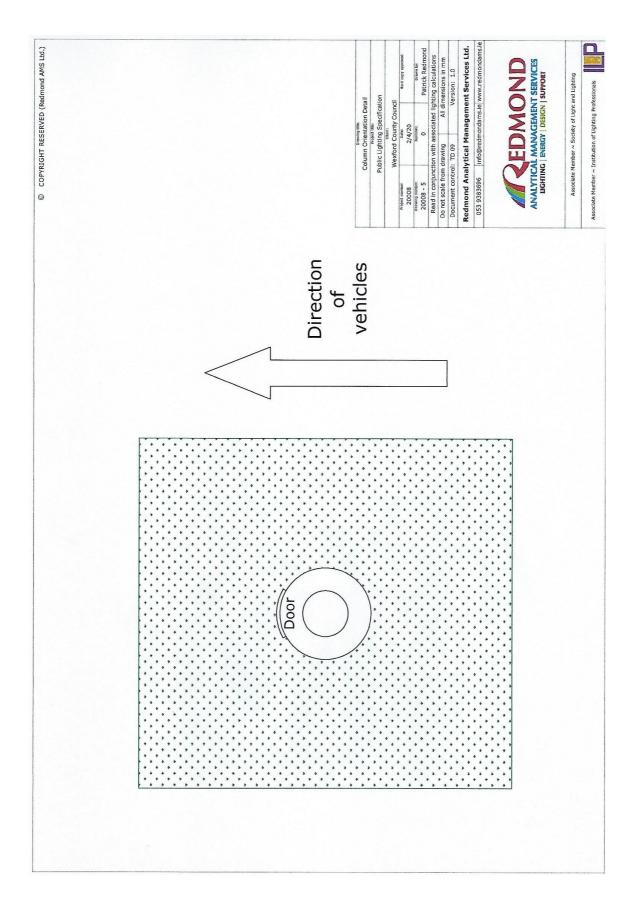


Door Height Detail





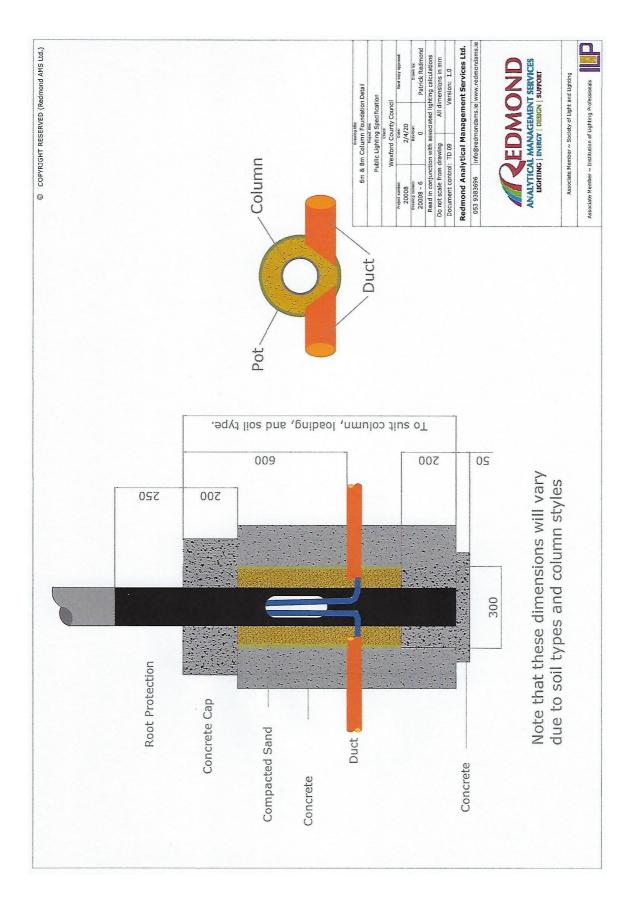
Addendum 6 Column Orientation Detail





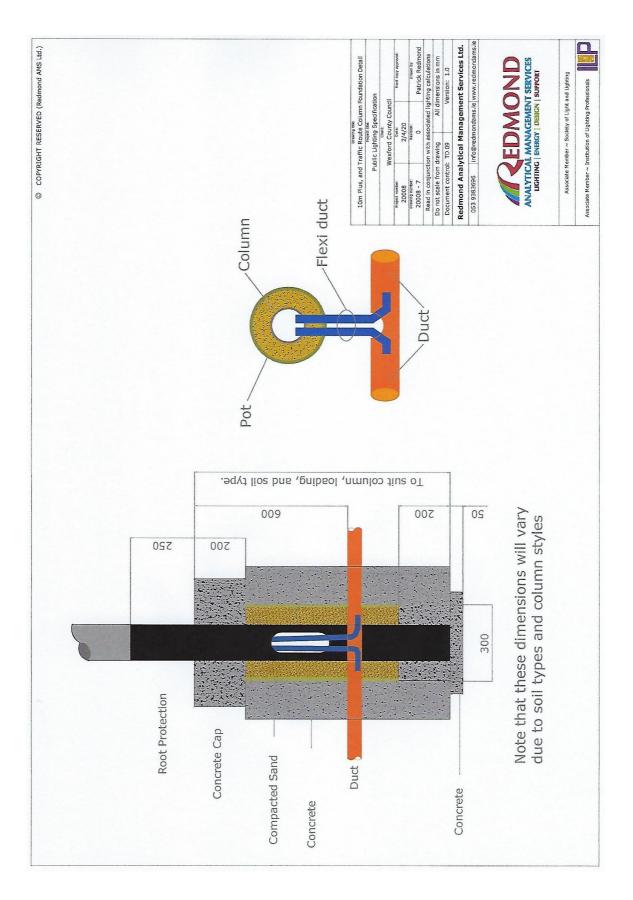
Addendum 7 6m & 8m C

6m & 8m Column Foundation Detail





10m and all Traffic Route Column Foundation Detail





Appendix 9 Technical Requirements for Water Services

Technical Requirements for Water Services

1. Water Main Requirements

Specific conditions relating to water mains shall include the following:

1.1The developer shall provide a bulk water meter at the connection point to the public water main

1.2Water Service Control Units (Water Meter Boxes) shall be installed on all water service connections. These shall be located outside the curtilage, but not in the driveway, of each individual housing site.

The WSC unit shall be located in the footpath and shall include a stopcock in the unit. The stopcock shall be capable of being opened/closed without removal of the top of the WSC unit.

1.3 Individual water supply services shall be provided for each apartment. Domestic control units to Uisce Éireann specification shall be provided on each service.

1.4 Leak Detection Surveys must be conducted on all developments applied to be taken in charge. The leak detection survey must be accompanied by a report. The report must contain but is not limited to the following.

- \circ Brief.
- Procedures and Methodology used.
- Leak detection results.
- Water Audit Flow results. Data logging must be put in place for a minimum of one week prior to the taking in charge application. A flow graph must be produced illustrating the flow figures through the bulk meter supplying the development to be taken in charge.
- 1.5 The County Council reserve the right to establish the integrity of the system by monitoring water use within the development to be taken in charge. All water leakage within the development to be taken in charge must be located and repaired by the developer at his own expense.

1.6 The developer shall submit to the Planning Authority



- Clear layout of location of watermains with pipe size and Material clearly indicated.
- CSV file of all water fittings
- A. Hydrants
- B. All Valves with valve type indicated
- C. Stopcocks/Meters
- D. Bulk Meter
- CSV file must be in the format: Item ID, Easting, Northing, Invert Level Elevation, Cover Level Elevation, Miscellaneous notes. <u>All Data in ITM to vertical Datum to Malin</u> <u>Head OD.</u>

2. Collection Systems

The following minimum specific requirements shall apply:

- 2.0 A separate storm water and foul water system shall be provided.
- 2.1 Separate sewer service connections shall be provided for each dwelling house.
- 2.2 Shared drainage pipes (back yard services) located in private property will not be taken in charge.
- 2.3 All manhole access covers in public property shall be 600mm dia. circular ductile iron, CE Marked and certified to I.S. EN 124 and Loading Class D400. Covers shall be hinged and shall not require rotation in plane to open. Covers requiring specialised or proprietary lifting keys shall not be permitted.
- 2.4 All manholes constructed in blockwork shall be rendered internally and externally with granolithic render.
- 2.5 All manholes shall be benched in smooth granolithic render.
- 2.6 All precast manholes shall be 1200mm in diameter.
- 2.7 Manhole construction shall comply with the attached appropriate manhole details.
- 2.8 All connections to sewers shall be made in the top left or right quadrant of the pipe by using coring equipment and a proper saddle.
- 2.9 Intrusions greater than 5 mm. shall not be permitted.
- 2.10 Where a foul sewer is located in any part of a site not to be taken in charge, the applicant/developer must provide way leave agreements to allow Wexford County Council/ Uisce Éireann access for future maintenance at their own cost.
- 2.11 The developer shall provide the following on completion of the development.
- Details of water and air tests carried out on foul water sewers.
- * Infiltration test for manholes.



- * CCTV survey to Wexford County Councils specification including location map and condition report. A full copy of the results shall be uploaded to Sharefile or other WCC digital system by forwarding to the Planning Authority. All defects must be rectified to the satisfaction of Wexford County Council.
- (i) As constructed drawing showing layout of drainage pipes within the estate with pipe sizes and materials clearly marked and background mapping.
- (ii)CSV file of all
- A. Manhole locations Including Cover levels and Inverts.
- B. Pump stations Valve Chambers
- C. Treatment plants (legacy where permitted)
- D. Percolation Areas
- E. Discharge points Surface water and Treated water
- (iii) CSV file must be in the format: Item ID, Easting, Northing, Invert Level Elevation, Cover Level Elevation, Miscellaneous notes. <u>All Data in ITM to vertical Datum to Malin Head OD.</u>
- (iv) All of above shall be certified by a Chartered Engineer, with professional indemnity insurance. The provision of above information shall be the subject of a bond at planning stage.

2.12 On completion of the construction works, all sewers (including tanks, sumps etc.) for taking in charge shall be thoroughly cleaned and all deleterious matter removed. They shall be maintained in a clean and serviceable condition by the developer until they are taken in charge by Wexford County Council.

3.0 Pumping Stations and Treatment Plants¹

The following minimum specific requirements shall apply.

- 3.1 Emergency foul water overflow capable of holding and returning 12 hours dry weather flow into the works, minimum capacity 25m³.
- 3.2 All WWPS/WWTPs shall be provided with 3-phase mains electrical supply with dedicated ESB meter in a stand-alone ESB specification metering pillar located in a publicly accessible area (i.e. not within any fenced/secured compound or control building).
- 3.3 Access for vehicular traffic.
- 3.4 Health and welfare facilities for plant operatives in particular washing facilities.
- 3.5 Alerter system to call out emergency response in the event of plant breakdown.
- 3.6 Anti-intruder perimeter fencing appropriate to the plants surroundings.

¹ Only applies to legacy estates in specific agreement with the planning permission and this policy. Pumping stations constructed under Uisce Éireann self-lay agreement must comply with Uisce Éireann Code of Practice.



- 3.7 Control panels fitted with a socket to accept a supply from a generator.
- 3.8 The following extra specific facilities shall be provided at Treatment plants:
- 3.9 Capacity to measure inflows and outflows and to take influent and effluent samples.
- 3.10 Separate valve chamber of reinforced in-situ or precast concrete construction with ductile iron non-return and isolation valves per pump, and Bauer coupling, and drainback with proprietary rubber type non-return valve.
- 3.11 Automatic recording of the principal operating parameters of the particular process.
- 3.12 Duty and standby units for all equipment essential to the correct functioning of the process.
- 3.13 Sludge holding tanks, sealed and suitable for connection to a sludge tanker, capable of holding 3 months sludge output from the plant. It must also be fitted with the means to filter the gases given off from the sludge holding tank before releasing them into the environment.
- 3.14 6A certificate of compliance shall be provided for the electrical installation stating that the installation is in accordance with the current edition of the Institute of Electrical Engineers wiring regulations.
- 3.15 Access covers to sumps/valve chambers to BS9124 standard to be flush/recessed type rather than upstand type.
- 3.16 Lifting chains to be stainless steel and provided with certification for lifting capacity and lifting davit to be in place.
- 3.17 Control panels for WWPS/WWTP shall be WiMES compliant, located within an insulated powder-coated galvanised steel (Qualisteelcoat specification) securable kiosk mounted on a reinforced concrete plinth complete with high and low level ventilation, heater, internal and external (appropriately IP rated) LED lighting, and IP65 rated power sockets
- 3.18 External lighting is to be provided.
- 3.19 Duty and standby pumps which are proprietary well-proven robust type, designed for pumping raw sewage, pedestal mounted, jacketed, and with non-clogging impellors with Hours run meters for each pump and ammeters.
- 3.20 Flow meter to be provided on the outlet of pump stations.
- 3.21 A commissioning report from the plant supplier or from an agreed third party shall be prepared to the satisfaction of the local authority before the plant is brought into operation. The developer will be required to obtain the necessary feed source for the plant in order to enable its performance to be measured.



- 3.22 Safety file documentation in accordance with Appendix VI is to be provided.
- 3.23 All confined spaces must be identified and labelled appropriately.
- 3.24 Health and welfare facilities for plant operatives must be provided in particular washing facilities i.e. a tap with running water.



Appendix 10 Memorandum Between Wexford County Council and Uisce Éireann

Uisce Éireann became Uisce Éireann on the 16th December 2022

8th December 2015

Wexford County Council and

Uisce Éireann

MEMORANDUM OF UNDERSTANDING

in connection with the development of a process

for the taking in charge of residential estates connected to the Uisce Éireann owned or controlled water and wastewater network and excluding Developer Provided Infrastructure

("MoU")



1.0 Introduction

This Memorandum of Understanding (MoU) between the parties covers the process for Takingin Charge of water services assets of residential estates to the point of transfer of the water service assets to Uisce Éireann. This MoU and associated protocol should be implemented in conjunction with existing Local Authority Taking in Charge policies.

The MoU relates to the Taking in Charge of water services assets within the attendant grounds of the development provided by Developers that connects directly to public water/wastewater infrastructure and excludes stand-alone developer provided water services infrastructure.

In the preparation of the MoU it is accepted that the parties are dealing with a range of legacyissues that exist on housing developments nationally that are either unfinished, inadequately completed and/or not taken in charge and progress has been further complicated by liquidations, receiverships, negotiations with surety providers and other matters.

The parties to this MoU recognise and agree that the taking in charge of residential estates connected to the public network will result in infrastructure at varying levels of compliance with standards or conditions attached to grants of planning permission being taken in charge. The parties note and agree the respective responsibilities as outlined in DECLG circular PL 5/2014, dated 5th November 2014, under which this MoU has been prepared. The MoU has been prepared to comply with current legislation. Where there is any conflict, the legislation shall prevail.

2.0 Mechanism for Taking in Charge

The local authorities (LAs) shall take in charge the residential estates pursuant to Section 180 of the Planning and Development Act 2000 (as amended), having regard to the contents of the DECLG circular PL5/2014, dated 5th November 2014.

The Local Authority and Uisce Éireann will work together to advance Taking in Charge of an estate with reference to the Planning Permission, existing Taking in Charge Policies and Department guidelines as applicable.

The water and wastewater assets shall then be transferred to Uisce Éireann (UÉ) by MinisterialOrder under the Water Services (No 2) Act 2013 Part 2 Section 12.

3.0 Implementation of Taking in Charge

To facilitate the Taking in Charge and transfer of water services assets to Uisce Éireann a working group has been established comprising representatives from the Local Authorities and Uisce Éireann. The role of the working



group was to develop the MoU and associated protocol for Taking in Charge of the waterservices assets of residential estates.

The LAs shall consult and work with Uisce Éireann to ensure the implementation of the agreed protocol for the Taking in Charge process and transfer of water services assets within the attendant grounds of the development to Uisce Éireann.

The protocol attached to this MoU outlines the procedure for taking in Charge that should befollowed.

4.0 Categories of Residential Estates

All applications are to be assessed prior to categorisation. The following Categories of residential estates to be Taken in Charge have been identified:

Category	Action
A Estates satisfactorily completed in accordance with Planning Permission; includingthose subject to Special Resolution Fund	Commence the statutory process to take in charge and subsequent transfer of water services assets to Uisce Éireann
B Estates not completed to the satisfaction of the Planning Authority in accordance with the Planning Permission	Assess condition and agree a resolution plan if required to allow the taking in charge process to commence

5.0 Resolution Plan (relates only to estates which fall under Category B as detailed in Section 4.0 above)

A resolution plan between the local authority and Uisce Éireann shall be prepared for the residential estates setting out a clear methodology for Taking in Charge and will be carried outon an estate by estate basis. This shall become a written agreement between the LA and Uisce Éireann and the agreement shall ensure that;

• there is a reasonable and equitable approach in relation to funding from sources such as the development bonds or other planning security and developer/receiver, for remedial works to the development.

• the integrity of the public infrastructure is ensured and acceptable service levels are achieved for the residents of the estate.

For the avoidance of doubt the remediation costs in relation to water services will be addressed by Uisce Éireann and the remediation costs for roads, surface water, footpaths, public lighting and open space will be addressed by the relevant LA.

In accordance with best practice every endeavour shall be made to carry out the Uisce



Éireann and LA related remediation works concurrently. Both parties acknowledge that is an option whereby one party may undertake works independent of the other.

6.0 Process for Taking in Charge

The process for Taking in Charge is defined in the protocol attached to this MoU.

7.0 Finance

The financing options available to complete outstanding work and facilitate Taking in Chargeare as follows;

Option 1	Where the developer, receiver or other party is still in place he shall complete the outstanding work and LA will facilitate Taking in Charge in accordance with the Planning and Development Act 2000 (as amended).
Option 2	Where the developer, receiver or other party has not completed the outstanding works the LA shall draw on developer bonds, sureties and including pursuing enforcement action if viable in order to complete outstandingwork.
Option 3	Where there are no funds available or there is a shortfall in finances from option 2 above the LA shall consult with Uisce Éireann and agree the best course of action and the apportionment of costs for the completion of outstanding works with regard to the respective liabilities of the parties and all in accordance with Circular PL5/14, dated 5th November 2014.

8.0 Exclusions

The following developments are excluded from this MoU

• Residential estates that are served by stand alone infrastructure such as wells, water treatment plants and wastewater treatment plants and associated pumping stations that were provided by developers as part of housing developments and



where such infrastructure cannot be connected to the water and wastewaternetworks for which Uisce Éireann is responsible.

• Holiday developments, gated developments, multi-used (mixed use) developments of other such developments or other such developments precluded by the LA's Taking in Charge policies or Development Plans.

9.0 Disputes

Should any disagreement arise pertaining to this MoU or its implementation the parties should first meet in an attempt to resolve the issue. Should no agreement arise both parties shall refer to section 12 of the SLA on dispute avoidance and resolution.

10.0 The Parties

Names and Addresses of the parties including to person responsible Signed for and on behalf of Wexford County Council

Signed for and behalf of Uisce Éireann



Taking in Charge Protocol

Lead	Procedure
Planning Authority	1. Taking in Charge application received by Planning Authority.
Planning Authority	2. Planning Authority part completes Schedule 1.
Planning Authority	3. Planning Authority refers TIC application to Water Services / Roads etc for comments and sends email to Uisce Éireann notifying of receipt of TIC Application.
Water Services on behalf of Uisce Éireann	1. Water Services carry out inspection using Schedule 2 checklist - Complete form with available information.
Water Services on behalf of Uisce Éireann	2. Water Services return completed Schedule 2 to Planning Authority with recommendation and Planning Authority complete Schedule 1.
Planning Authority	6. Planning Authority refer application with completed Schedule 1 and Schedule 2 to nominated Uisce Éireann representative with recommendation as to whether application is Category 1 or Category 2 as outlined in the Memorandum of Understanding.
Uisce Éireann	Uisce Éireann Issue No-objection (NO), No objection except as noted (NON)or Not Accepted (NA) response to Planning Authority with regardto categorisation.
Planning Authority Category A : On receipt of NO or NON response Planning Authorityto proceed with bringing application to Council for approval.	
Uisce Éireann / Planning Authority	Category B : On receipt of NO or NON response from Uisce Éireann Nominated representative in Uisce Éireann engage with Planning Authority to agree appropriate steps for Taking in charge - resolution plan etc.
Uisce Éireann / Planning Authority	On receipt of NA response re categorisation from Uisce Éireann the Planning Authority and Nominated Representative of Uisce Éireann engage to resolveNA issues.



Uisce ÉireannUisce Éireann will endeavour to engage with
the Planning Authority within the following
timeframes.Category A:Uisce Éireann to respond within
10 working days of notification.10 working days of notification.Category B:
Uisce Éireann to commence engagement
with Planning Authoritywithin 20 working
days of notification.Not Accepted (NA) responses. Uisce Éireann to
commence engagement with Planning
Authority within 10 working days from issue of
NA responseand Planning Authority and Uisce
Éireann to agree category within a further 10
days.



Appendix 11 Relevant Legislation

* The Extracts from Revised Acts reproduced here are (unannotated) administrative consolidations prepared by the Law Reform Commission in accordance with its function under the Law Reform Commission Act 1975. They are not official extracts and cannot be relied on in legal proceedings but are included here as an aid to understanding this Taking in Charge Policy.

Section 180 Planning and Development Act 2000

(1) Subject to subsection (7), where a development for which permission is granted under section 34 or under Part IV of the Act of 1963 includes the construction of 2 or more houses and the provision of new roads, open spaces, car parks, sewers, water mains or service connections (within the meaning of the Water Services Act 2007), and the development has been completed to the satisfaction of the planning authority in accordance with the permission and any conditions to which the permission is subject, the authority shall, where requested by the person carrying out the development, or, subject to subsection (3), by the majority of the owners of the houses involved, not later than 6 months after being so requested, initiate the procedures under section 11 of the Roads Act, 1993.

(2) (a)Notwithstanding subsection (1), where the development referred to in subsection (1) has not been completed to the satisfaction of the planning authority and enforcement proceedings have not been commenced by the planning authority within 4 years beginning on the expiration, as respects the permission authorising the development, of the appropriate period, within the meaning of section 40 or the period as extended under section 42, as the case may be, the authority shall, where requested by the majority of owners of the houses involved, comply with section 11 of the Roads Act, 1993, except that subsection (1)(b)(ii) of that section shall be disregarded.

(b) In complying with paragraph (a), the authority may apply any security given under section 34(4)(g), or a condition attached to a permission under section 9(4) of the Planning and Development (Housing) and Residential Tenancies Act 2016 for the satisfactory completion of the development in question.

- (2A) (a) Notwithstanding subsections (1) or (2), where a development referred to in subsection (1) has not been completed to the satisfaction of the planning authority and either—
 - enforcement proceedings have been commenced by the planning authority within 4 years beginning on the expiration, as respects the permission authorising the development, of the appropriate period, or



(ii) the planning authority considers that enforcement proceedings will not result in the satisfactory completion of the development by the developer, the authority may in its absolute discretion, at any time after the expiration as respects the permission authorising the development of the appropriate period, where requested by a majority of the owners of the houses in question, initiate the procedures under section 11 of the Roads Act 1993.

(b) In exercising its discretion and initiating procedures under section 11 of the Roads Act 1993, the authority may apply any security given under section 34(4)(g), or a condition attached to a permission under section 9(4) of the Planning and Development (Housing) and Residential Tenancies Act 2016 for the satisfactory completion of the development in question.

(c) The initiation of procedures under section 11 of the Roads Act 1993 shall not preclude the planning authority concerned from pursuing, under the Planning and Development Acts 2000 to 2018 or otherwise, a developer for the costs incurred by that authority in respect of works undertaken on a development to enable it to be taken in charge by that authority.

(3) (a) The planning authority may hold a plebiscite to ascertain the wishes of the owners of the houses.

(b) The Minister may make or apply any regulations prescribing the procedure to be followed by the planning authority in ascertaining the wishes of the owners of the houses.

(4) (a) Where an order is made under section 11(1) of the Roads Act 1993 in compliance with subsection (1) or (2), the planning authority shall, in addition to the provisions of that section, take in charge —

(i) (subject to paragraph (c)), any sewers, watermains or service connections within the attendant grounds of the development, and

(ii) public open spaces or public car parks within the attendant grounds of the development.

(b) Where an order is made under section 11(1) of the Roads Act 1993 in compliance with subsection (2A), the planning authority may, in addition to the provisions of that section take in charge —

- (i) (subject to paragraph (c)) some or all of the sewers, watermains or service connections within the attendant grounds of the development, and
- (ii) some or all of the public open spaces or public car parks within the attendant grounds of the development, and may undertake,



- (I) any works which, in the opinion of the authority, are necessary for the completion of such sewers, watermains or service connections, public open spaces or public car parks within the attendant grounds of the development, or
- (II) any works as in the opinion of the authority, are necessary to make the development safe,
- (III) and may recover the costs of works referred to in clause (I) or (II) from the developer as a simple contract debt in a court of competent jurisdiction.
- (c) A planning authority that is not a water services authority within the meaning of section 2 of the Act of 2007 shall not take in charge any sewers, watermains or service connections under paragraph (a)(i) or (b)(i), but shall request the relevant water services authority to do so.
- (d) In paragraph (a)(ii), 'public open spaces' or 'public car parks' means open spaces or car parks to which the public have access whether as of right or by permission.
- (e) In this subsection, 'public open spaces' means open spaces or car parks to which the public have access whether as of right or by permission.
- (5) Where a planning authority acts in compliance with this section, references in section 11 of the Roads Act, 1993, to a road authority shall be deemed to include references to a planning authority.
- (6) In this section 'appropriate period' has the meaning given to the term in section 40, as extended under section 42 or 42A as the case may be.
- (7) This section applies to that part of a development for which permission is granted under section 9 of the Planning and Development (Housing) and Residential Tenancies Act 2016 that relates to the construction of houses and the provision of—
 - (a) new roads, open spaces or car parks, or
 - (b) sewers, water mains or service connections, within the meaning of the Water Services Act 2007,

relating to such houses and references to 'development' in other provisions of this section shall be read accordingly.



Section 11 Roads Act 1993

11.—(1) (a) A road authority may, by order, declare any road over which a public right of way exists to be a public road, and every such road shall be deemed to be a public road and responsibility for its maintenance shall lie on the road authority.

(b) Where a road authority proposes to declare a road to be a public road it shall—

(i) satisfy itself that the road is of general public utility,

(ii) consider the financial implications for the authority of the proposed declaration,

(iii) publish in one or more newspapers circulating in the area where the road which it is proposed to declare to be a public road is located a notice indicating the times at which, the period (which shall be not less than one month) during which and the place where a map showing such road may be inspected and stating that objections or representations may be made in writing to the road authority in relation to such declaration before a specified date (which shall be not less than two weeks after the end of the period for inspection),

(iv) consider any objections or representations made to it under *paragraph* (*iii*) and not withdrawn.

(2) The consideration of objections or representations and the making of an order under *subsection (1)* shall be reserved functions.

(3)The Minister may prescribe criteria for the declaration of roads to be public roads and a road authority shall comply with any such prescribed criteria when exercising its functions under this section.

(4) Every national road, regional road, motorway, busway and protected road shall be a public road and it shall not be necessary for a road authority to make an order under *subsection (1)* in relation to any such road.

- (5) A certificate of a road authority that a road is a public road shall be *prima facie* evidence thereof.
- (6) Every road which, immediately before the repeal of an enactment by this Act, was a public road shall be a public road.

Sections 1, 2 and 3 of the LOCAL GOVERNMENT (SANITARY SERVICES) ACT, 1964

Definitions.

1.—In this Act—

"*dangerous place*" means an excavation, quarry, pit, well, reservoir, pond, stream, dam, bank, dump, shaft or land that, in the opinion of the sanitary authority in whose sanitary district it is situate, is or is likely to be dangerous to any person;

"dangerous structure" means-

- (a) any building, wall or other structure of any kind, or
- (b) any part of, or anything attached to, a building, wall or other structure of any kind,

that, in the opinion of the sanitary authority in whose sanitary district it is situate, is or is likely to be dangerous to any person or property;

"the Minister" means the Minister for Local Government.

Powers of sanitary in relation to dangerous places

2.— (1) A sanitary authority may, if they so think fit, as respects any authorities in dangerous place situate in their sanitary district—

(a) carry out, by their servants or agents, such works as will, in the opinion of the authority, prevent the place from being a dangerous place, or

- (b) at the request of the owner (which word means, in this section and in sections 3, 7 to 10 and 18 of this Act, any person (other than a mortgagee not in possession) who is for the time being entitled to sell or otherwise dispose of the fee simple of the land in relation to which the word is used or any term of years for the time being subsisting in respect of the land of which the unexpired residue exceeds one year) who occupies or is entitled to occupy the place or from whom it is held by a person who is not the owner, either—
 - (i) carry out, by their servants or agents, the works aforesaid, and require such owner to make a payment towards the cost of the works of such amount as the authority may consider proper, or
 - (ii) contribute such amount as the authority may consider proper towards the cost of the carrying out of the works aforesaid by such owner,

and for such purposes may, by their servants or agents, enter on any land.

(2) Before proceeding under this section in relation to a place, a sanitary authority shall give a notice to the owner aforesaid of the place stating that the place is a dangerous place and that the authority intend to proceed under this section in relation thereto, specifying the works that, in the opinion of the authority, require to be carried out in relation to the place to prevent it from being a dangerous place and giving an estimate of the cost of such works.

- (3) Whenever a sanitary authority give a notice under this section to any person, the authority shall, within seven days after giving the notice to the person, post a copy of the notice at or near the place to which it relates.
- (4) Where a sanitary authority give a notice under this section in relation to any place—
 - (a) in case the notice is annulled by the District Court, under <u>Section 5</u> of this Act, the authority shall not proceed under this section in relation to the place,
 - (b) in case of any other determination of an application to the District Court under <u>Section 5</u> of this Act in relation to the notice, the sanitary authority shall not proceed under this section in relation to the place until the expiration of fourteen days, or such period asmay be specified by the Court after the date of the determination, and
 - (c) in any other case, the authority shall not proceed under this section in relation to the place until the expiration of twenty-one days after the date of the giving of the notice.
- (5) Subject to subsection (7) of this section, a sanitary authority may claim from the owner aforesaid of a place in respect of which they have carried out works pursuant to subparagraph (i) of paragraph (b) of subsection (1) of this section by demand in writing given to such owner, payment of such amount as may be determined by them under that subparagraph.
- (6) Subject to subsection (7) of this section, where a demand is given to a person pursuant to subsection (5) of this section, the amount claimed in the demand together with interest, at the rate of five per cent per annum, from the date when the demand is given until payment shall, without prejudice to any other method of recovery, be recoverable by the sanitary authority from the person to whom it is given as a simple contract debt in any court of competent jurisdiction.
 - (a) Where the amount claimed in a demand given pursuant to subsection of this section exceeds the amount of the estimate of the cost of the works to which the demand relates contained in a notice given under this section, the amount of the excess shall not be recoverable by the sanitary authority under this section.

Powers of sanitary authorities in relation to dangerous structures

- 3.—(1) A sanitary authority may, if they so think fit, give a notice to the authorities in owner who occupies or is entitled to occupy a dangerous structure situate inrelation to their functional area or from whom it is held by a person who is not the owner and, if he can be ascertained by reasonable inquiry, to the occupier of the structure, requiring such owner, within such period specified in the notice as the authority may consider appropriate—
 - (a) to carry out such works (including the demolition of the structure or any part of it and the clearing and levelling of the site thereof) specified in the notice as will, in the opinion of the authority, prevent

the structure from being a dangerous structure, to remove any debris and to erect a wall or barrier between any open area created by the works and any road, street or public place, and

(b) to terminate or modify any use of the structure or any part thereof,

and such owner, his servants or agents may carry out the works specified in the hotice and may, for that purpose, enter on any land.

- (2)(a) If, in the opinion of a sanitary authority, it is necessary to do so in the interests of the safety of any person, the authority may, by their servants or agents carry out on a dangerous structure situate in their sanitary district such works (including the demolition of the structure or any part of it and the clearing and levelling of the site thereof) as will, in the opinion of the authority, prevent the structure from being a dangerous structure and for that purpose, the authority may, by their servants or agents, enter on any land.
 - (b) Where a sanitary authority enter or propose to enter on any land pursuant to paragraph (a) of this subsection for the purpose of carrying out works on a dangerous structure, they shall, as soon as may be, give to the owner aforesaid and, if he can be ascertained by reasonable inquiry, to the occupier, of the structure a notice stating that they have entered or propose to enter the land and specifying the works that they have carried out or propose to carryout thereon.
 - (3) A notice given by a sanitary authority under subsection (1) of this section may require that the carrying out of the works specified in the notice be commenced forthwith and that they be carried out in accordance with such conditions (if any) specified in the notice as the authority think appropriate and in such manner as may be specified in the notice.
 - (4) A person who having been served with a notice under subsection (1) of this section, does not comply with the terms of the notice shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding one hundred pounds.
 - (5) Where a person upon whom a notice under subsection (1) of this section in relation to a dangerous structure has been served does not comply with the terms of the notice, the District Court may, on the application of the sanitary authority by whom the notice was given, by order—
 - (a) (i) direct the person to carry out, within such time as the Court may consider reasonable and may specify in the order and in accordance with the terms of the notice, the works specified in the notice and authorise the sanitary authority to carry out the works aforesaid if the person does not comply with the provisions of the order, or
 (ii) authorise the sanitary authority to carry out the works specified in

and

the notice.

(b) prohibit the use of the structure or any part of it or prohibit the use of the structure or any part of it for such purpose or purposes as may be

specified in the order.

- (6) Where a person does not comply with an order of the District Court under subsection (5) of this section, he shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding one hundred pounds.
- (7) (a) Where any expenses or costs (including costs in relation to proceedings in the District Court under this section) incurred by a sanitary authority under this section in relation to a dangerous structure are not paid by the owner aforesaid of the structure within fourteen days after a demand in writing therefore has been given to him, the amount claimed in the demand together with interest, at the rate of five per cent per annum, from the date when the demand is given until payment may, without prejudice to any other method of recovery, be recovered from him—
 - by the sale by the authority of any materials resulting from the works carried out by the authority in relation to the structure and the retention by them of so much of the proceeds of the sale as is equal to the amount of such expenses, or
 - (ii) as a simple contract debt in any court of competent jurisdiction.
 - (b) Any surplus moneys arising on a sale pursuant to subparagraph (i) of paragraph (a) of this subsection shall be paid by the authority holding the moneys to the owner of the structure, or, if there is more than one owner, to each owner in such proportions as the owners may agree, or (in default of agreement) as the District Court may, on the application of any such owner, determine.
 - (c) In making a determination under this subsection, the District Court shall have regard to the respective interests, obligations and liabilities in relation to the structure concerned of its owners.
 - (8)(a) Where any costs or expenses incurred by a sanitary authority under this section in relation to a structure have not been paid, the District Court may, on the application of the authority, by order prohibit the repair or letting of the structure or the carrying out of any works on the site on which the structure stood, as the case may be, until payment to the authority of the amount due to the authority in respect of the expenses aforesaid and the costs of the application, and upon payment of the amount aforesaid, the order shall cease to be in force.
 - (b) A person who does not comply with an order of the District Court under this subsection shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding one hundred pounds.
 - (c) A sanitary authority shall keep a register containing particulars of all orders from time to time made under this subsection in relation to structures in their sanitary district and shall keep the register open for inspection at all reasonable times and, if particulars of an

order under this subsection are not entered in the appropriate register, within ten days after the date of the making of the order, the order shall cease to be of any force or effect.

- (9) (a) If, in the opinion of a sanitary authority, it is necessary to do so in the interests of the safety of any person, the authority may require the occupier of, or any person in, a dangerous structure or its curtilage or any structure or its curtilage in the vicinity to vacate the structure or its curtilage and to remove his property (if any) therefrom.
 - (b) If a person does not comply with a requisition of a sanitary authority under paragraph (a) of this subsection, the District Court may, on the application of the authority, by order direct the person to comply with the requisition within such period specified in the order as the Court may think reasonable.
 - (c) A person who does not comply with an order of the District Court under this subsection shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding one hundred pounds.
 - (d) If, upon the making of an order under this subsection directing a person to comply with a requisition of a sanitary authority, the person does not comply with the requisition within the period specified in the order, officers of the authority may, using such force as may be necessary in the circumstances, enter the structure to which the requisition relates and remove the person and his property (if any) therefrom.
 - (e) A sanitary authority may request a member of the Garda Síochána to assist them in the exercise of their powers under paragraph (*d*) of this subsection and the member shall comply with the request.
- (10) A sanitary authority may, if they so think fit—
 - (a) provide other living accommodation for an occupier of a dwelling who has left a dwelling in pursuance of a requisition under subsection.
 (9) of this section,
 - (b) make a grant of such amount as they think proper to such occupier for the purpose of enabling him to obtain other living accommodation.
 - (11) (a) A sanitary authority may, if they so think fit, make a grant of such amount as they think proper to any person who—
 - (i) on or after the 1st day of June, 1963, has left or leaves a dangerous structure at the request of the authority or in pursuance of a requisition under subsection (9) of this section,

- (ii) immediately before such leaving carried on a trade or businessin the structure, and
- (iii) in the opinion of the authority, by reason of such leaving, has suffered or will suffer hardship.
- (*b*) In determining the amount of a grant to a person under this subsection, a sanitary authority shall have regard to the length of the period during which the person carried on a trade or business in the structure in relation to which the grant is proposed to be made.
- (12) Section 274 of the Public Health (Ireland) Act, 1878, shall not apply in relation to the exercise by a sanitary authority of any powers conferred on them by this section.

Section 43 of the Water Services Act 2007

(1) In this section

"connection" means a drain, a distribution system or a service connection and includes part of such drain, distribution system or service connection;

"public road" and "road authority" have the same meanings respectively as in <u>Section 41</u>.

(2)A water services authority may, at its absolute discretion, subject to such conditions as it may decide, provide, repair or replace, or contribute to the cost of providing, repairing or replacing a connection.

(3) Subject to *subsection (4)*, a person who owns or controls a connection, or in whom it is vested, or who has taken it in charge, shall be responsible for its maintenance and renewal, and shall ensure that it is kept in good order and repair, so as to—

- (a) prevent a risk to human health or the environment,
- (b) facilitate the reasonable conservation of water and the proper and effective management of water services, and
- (c) prevent the infiltration or exfiltration of water or wastewater.

(4) Where a person cannot be identified for the purposes of *subsection (3)*, responsibility under that subsection shall lie with the owner or owners of any premises using the connection, in direct proportion to the level of use of the connection to supply water to or convey wastewater from the premises or respective premises, as the case may be.

(5) A water services authority may enter any relevant land and carry out all necessary investigations or works for the purposes of providing, ascertaining the condition of or taking in charge, a connection, or for the purposes of *subsection (6)*.

(6) If, in the opinion of a water services authority, a connection is so defective, foul or neglected as to present a risk to human health, the environment, the reasonable conservation of water or the proper and effective management of water services, or, to permit the infiltration or exfiltration of water or wastewater, the water services authority may, at its absolute discretion—

- (a) direct by notice the person or persons responsible for its maintenance or renewal to carry out such works as it considers necessary, or
- (b) carry out in the first instance, or in the event of failure to comply with a notice under *paragraph* (a), such

works as it considers necessary, and recover the cost of such works from the person or persons responsible for maintenance or renewal of the connection.

(7) If a connection is found on investigation not to be so defective, foul or neglected as to present a risk to human health, the environment, the reasonable conservation of water or the proper and effective management of water services, or, to permit the infiltration or exfiltration of water or waste water, the water services authority which carried out the investigation shall cause such connection to be restored and any opening or excavation made in the course of the investigation to be closed or filled up and any damage done to be made good.

(8)Where—

- (a) a person wishes to install a connection, or
- (b) a person responsible for the maintenance or renewal of a connection wishes, or has been directed under subsection (6)(a), either by himself or herself or by arrangement with a third party to undertake maintenance or renewal works on a connection,

which runs, or is intended to run through, across, under, over or along any public road or place intended for a public road, then he or she may do so, subject to the consent of the road authority in whose functional area the road is situated.

(9)A road authority may attach conditions to the granting of any consent under *subsection (8)* as if the person concerned was a person to whom <u>Section 41</u> (3) applies, which shall be binding on that person or his or her agents as the case may be.

(10)For the purposes of providing any pipe under this section a water services authority shall have the powers mentioned in <u>Section 41</u>.

(11) The Minister may make regulations in relation to notices under *subsection (6)(a)*, and without prejudice to the generality of such regulations, they may include provisions in relation to—

- (a) the action to be carried out under a notice,
- (b) the time limit by which action directed to be carried out under a notice must be completed,
- (c) the quality of materials and workmanship to be employed in any remedial action under a notice,
- (d) powers of entry and investigation by authorised persons, and
- (e) such incidental provisions as are necessary to ensure the effective supervision by a water services

authority of compliance with, or enforcement of, a notice.

(12)A water services authority may, at its discretion and subject to such conditions as it may decide, take in charge a connection, which shall thereafter come under the sole control and responsibility of the water services authority.

(13) (a) Without prejudice to section 180 of the Act of 2000, where a water services authority proposes to take in charge a connection under *subsection (12)*, then it shall by notice inform any person who owns or controls the connection, of its intention to take it in charge, and where the identity of that person cannot be ascertained by reasonable enquiry, a notice for the purposes of this subsection may issue in accordance with Section 19 (5).

> (b) Where, for the purposes of paragraph (a), the identity of the person or persons who owns or controls a connection cannot be ascertained after reasonable enquiry, then the water services authority shall also by notice inform any person who is responsible, in accordance with *subsection (4)*, for the maintenance or renewal of that connection, and notwithstanding *Section 19* such notice may be issued by publication in a newspaper circulating in the area where the connection is located.

(14)A notice under *subsection (13)* may be appealed in accordance with <u>Section 92</u> (8) by the person to whom it is addressed as if it was a notice issued under <u>Section 92</u> (2), and shall be enforceable as if it was issued under that section.

(15) A person to whom a notice under *subsection (13)* is addressed shall, unless he or she waives that right, be entitled to reimbursement, from the water services authority which issued the notice, for the costs of the materials and labour expended by him or her in providing the connection, together with any additional compensation arising from a reduction in the value of his or her interest in the connection concerned.

(16) Where a dispute arises between a person to whom a notice under *subsection (13)* is addressed and the water services authority which issued it, then the matter may be referred by either of them to arbitration as if it was a referral for arbitration under <u>Section 92</u> (15) but only to the extent that it relates to reimbursement or compensation under *subsection (15)* of this section.

- (17) A person who—
 - (a) damages a connection, or

(i) fails to comply with a notice under *subsection* (6)(a), commits an offence. When the development has been taken in

charge Wexford County Council will release that element of the security lodged to secure completion of the works and proceed to take the development or phase of the development in charge

(ii) All reasonable efforts shall be utilised to ensure that formal procedures pursuant to Section 11 of the Roads Act 1993 are completed without undue delay.

(iii) The developer will vest in Wexford County Council (at no cost to the Council) the public areas, which have been designated for taking in charge.