

**Habitats Directive Appropriate Assessment Screening Report &  
Screening Determination**

**One Bedroom Bungalow -  
33 Market Place**



**Cork County Council**  
Comhairle Contae Chorcaí

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# 1 Introduction

This document includes the Habitats Directive Screening Assessment and Screening Determination of Cork County Council to construct a new one bedroom bungalow (33 Market Place) on a back garden site in Kanturk. The assessment is based on project drawings and details prepared by Architects Department of the Housing Directorate of Cork County Council.

Part XAB of the Planning and Development Act as amended, provides for the implementation of the EU Habitats Directive, and Section 177 of the Act, requires Planning Authorities to assess the impacts of land use plans and on proposed developments on sites that are designated for the protection of nature (European Sites<sup>1</sup>) prior to the giving consent for development of such projects. This is to determine whether or not the projects could have negative consequences for the habitats, or plant and animal species for which these sites are designated. This assessment process is called a **Habitats Directive Assessment** (HDA). The requirements emanate from Article 6(3) of the Habitats Directive which states

*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.*

EU and National Guidance sets out two main stages to the assessment process which are as follows:

## **Stage One: Screening**

The process which identifies what might be likely impacts arising from a project or a plan on a Natura 2000 site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. No further assessment is required if no significant impacts on Natura 2000 sites are identified to be likely to arise, during the screening stage. The findings of the screening assessment are normally contained in a **Habitats Directive Screening Report**.

## **Stage Two: Appropriate Assessment**

Where the possibility of significant impacts has not been discounted by the screening process, a more detailed assessment is required. This is called an Appropriate Assessment, and is completed by the Competent Authority, being authority delegated to give consent for the project. It involves the compilation of a **Natura Impact Statement** by the project proponent, which is a report of scientific evidence and data relating to European sites for which significant negative impacts have not been previously screened out. This is used by the Competent Authority to identify and classify any implications of the project for these sites in view of their conservation objectives. The Appropriate Assessment must include a determination as to whether or not the project would adversely affect the integrity of any European site or sites. The project may only be consented if adverse effects on the integrity

of European sites can be ruled out during the Appropriate Assessment process. The project may not be consented on foot of an Appropriate Assessment, if it is found that it will give rise to adverse impacts on one or more European sites, or if uncertainty remains in relation to potential impacts on one or more European sites.

The directive provides for a **derogation procedure** which can allow a plan or project to proceed in spite of a finding that the plan or project could / would give rise to adverse effects on the overall integrity of one or more Natura 2000 sites. Derogation procedures can only be progressed in very limited circumstances which are set out in Article 6(4) of the Directive (see below).

**Habitats Directive Article 6(4)**

*If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

EU and National Guidance identifies the procedures which must be followed in circumstances where a derogation from the Habitats Directive is sought to allow a project or a plan to proceed, despite a finding that it will give rise to adverse effects on the integrity of one or more Natura 2000 sites. These procedures can only be invoked where it has been shown that there are no alternative ways to implement the plan/project which avoid adverse effects on the integrity of one or more European sites, where it has been demonstrated that there are imperative reasons of overriding public interest for which the plan/project must proceed and where measures have been developed and provided to compensate for any losses to be incurred. These further stages are described below.

**Stage Three: Assessment of alternative solutions**

In circumstances where the potential for a plan or project to give rise to adverse effects on the integrity of a European site or sites has not been ruled out during the appropriate assessment process, it can only be considered for authorisation where it is demonstrated that there are no alternative solutions and that there are Imperative Reasons of Overriding Public Interest (IROPI) which can allow the plan or project to proceed. Stage three of a Habitats Directive Assessment involves the assessment of alternative solutions.

**Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain**

The fourth stage of the Habitats Directive Assessment process involves demonstrating that Imperative Reasons of Overriding Public Interest exist, and the assessment of the compensatory measures which are proposed to be implemented. In every case in which a local authority envisages approving or proceeding with a plan or project on grounds of IROPI, the Minister for Culture, Heritage and the Gaeltacht must be consulted.

The assessment may stop at any of the above stages if significant impacts on Natura 2000 sites can be ruled out.



Regulation 250 of the Planning and Development Regulations requires the Local Authority to complete Habitats Directive Screening in respect of development it proposes to progress.

This document presents the outcomes of the screening assessment of Cork County Council in respect of the new one-bedroom bungalow (33 Market Place). All European sites within or close to the proposed works site, or that might have an ecological linkage to the proposed development have been identified and screened to determine whether there is potential for this project to give rise to significant impacts on the qualifying features of these sites.

## **2 Proposed Works**

It is proposed to develop a one bed single-storey unit with an existing back garden site. The proposal also provides for all associated groundworks, including the removal of a section of wall on the Linnorm Estate side.

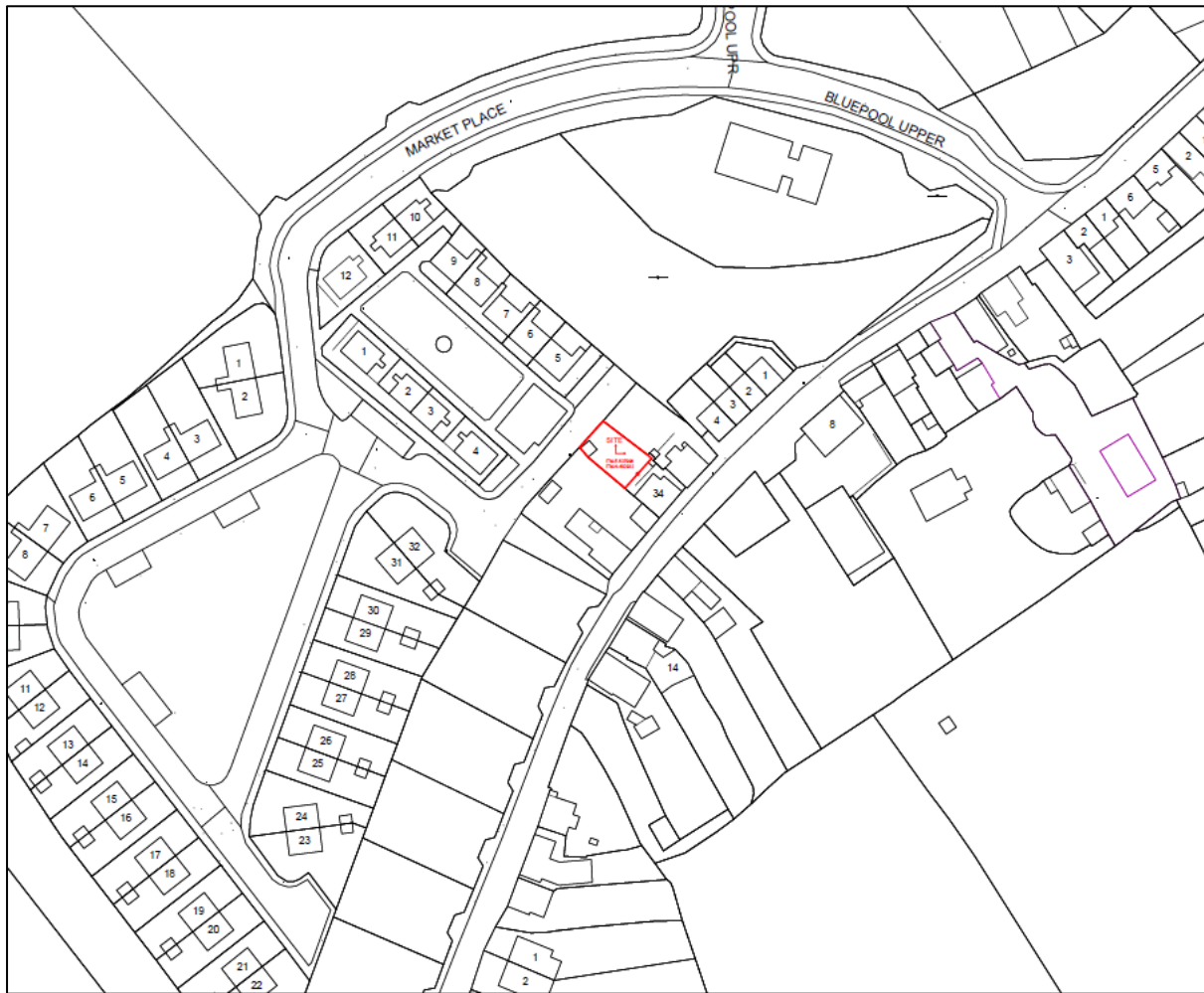
It is proposed to discharge surface water into the storm drainage in the road beside the site, which is connected to the existing system for Linnorm Estate.

Wastewater is to be directed to the Kanturk Public Wastewater Treatment Plant for treatment and disposal. An Irish Water pre-connection application has been submitted. The EPA licenced WWTP has a Plant Capacity PE of 3500, the treatment type is 3P - Tertiary P removal.

## **3 Site Details**

The subject site measures approximately 0.02ha. The dwelling is proposed to be built within the back-garden of 34 Bluepool Upper and open on to the Linnorm Estate on the L-5067, which is just off Market Place in Kanturk. The site is bound by private dwelling property to the east and west, with a private dwelling (34 Upper Bluepool). Currently, a wall separates the proposed site from the Linnorm Estate.

**Figure 1:** Location of proposed development in Market Place, Kanturk



There are no natural watercourses on site and the site is not located within an area which is identified to be at risk of flooding. The site lies approximately 252m to the west of the Allow River (Figure 3). According to current monitoring data (2013-2018, EPA), this section of the Allow, Allow\_060 monitoring waterbody is at Poor Status and is At Risk of failing to meet its WFD objectives. According to the EPA, the main pressures leading to a poor ecological status for Allow\_060 are industry, agriculture, urban wastewater and hydromorphological pressures.

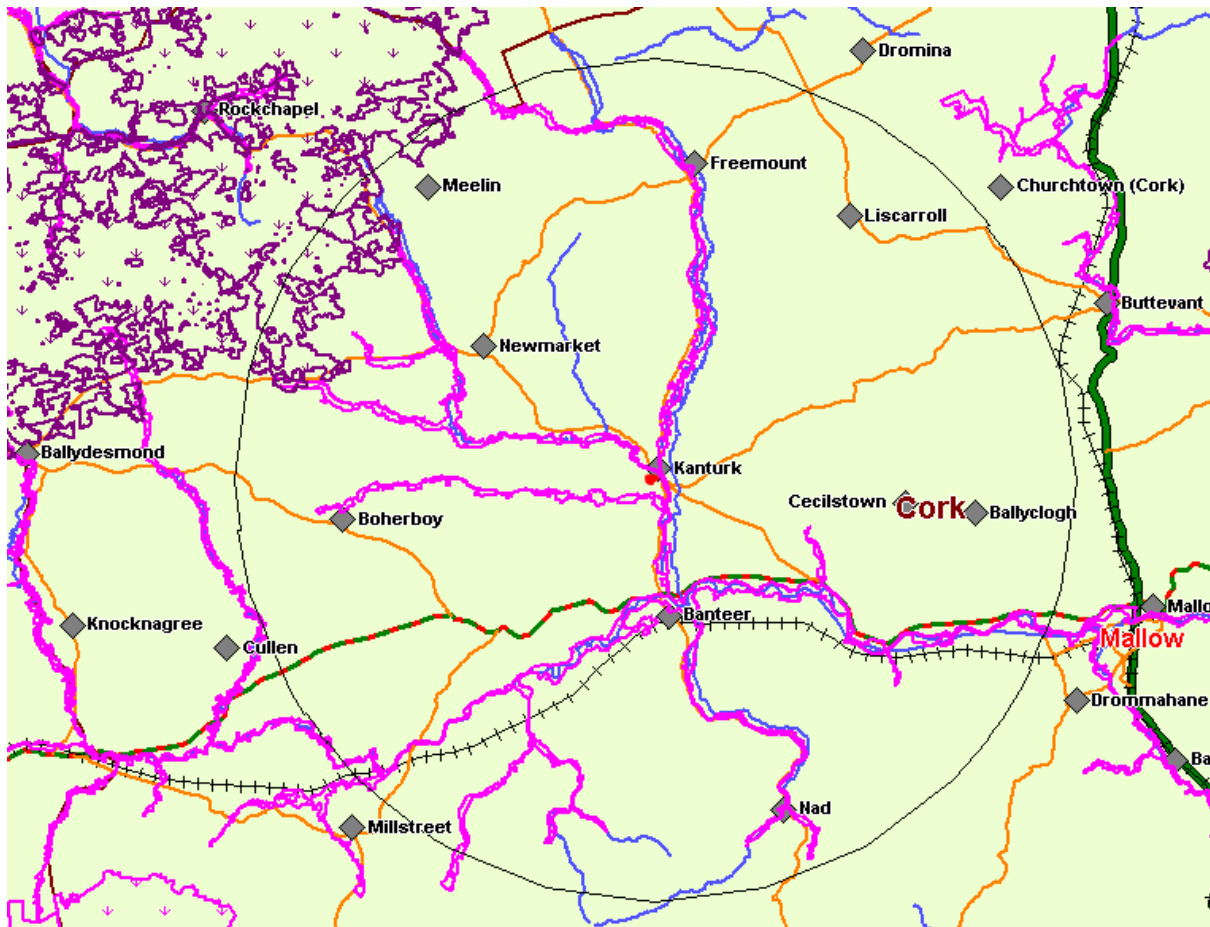
## 4 EU Sites, Habitats & Species

The site does not overlap with any European site. There are two European Sites within 15km of the site where works are proposed. These are set out in Table 1 and shown on Figure 1. Consideration is given to potential for the proposed works to give rise to negative effects on these sites below. No other sites have been identified which could be affected by the proposed development.

**Table 1 European Sites within 15km of the proposed development**

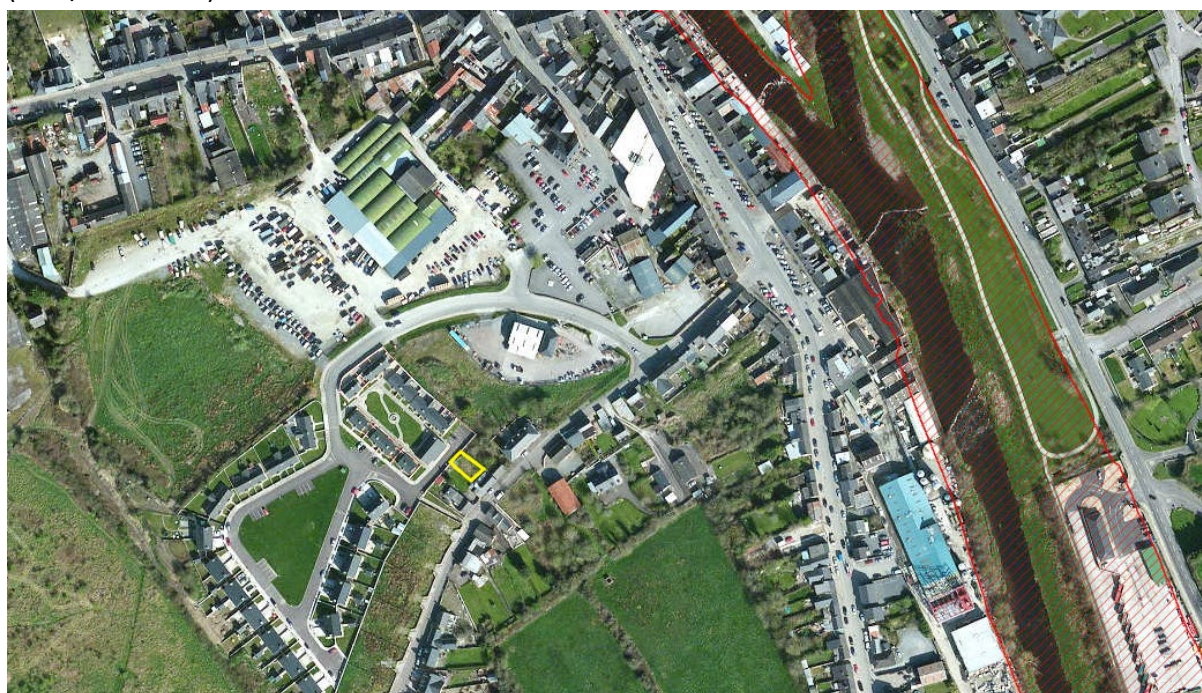
Site Code	Site Name	Distance from proposed works
002170	Blackwater River (Cork/Waterford) Special Area of Conservation	245m
004161	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA	11.6km

**Figure 2:** Location of the proposed development (red dot) relative to the Blackwater River (Cork/Waterford) SAC (pink pattern) and the Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. These are the only European sites within 15km of the proposed site.



Given the distance and absence of ecological or hydrological connections, the potential for the development to give rise to significant negative impacts on the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA can be screened out.

**Figure 3:** Location of proposed site (yellow outline) relative to the Allow River. Blackwater River (Cork/Waterford) SAC indicated with red hatch.



The proposed development is located approximately 245m for the River Allow, which forms part of the Blackwater River (Cork/Waterford) Special Area of Conservation (site code: 2170). The SAC is designated for 18 qualifying interests. Listed below. Known to occur in the vicinity of the site are in **bold**.

Qualify Interest	Conservation Objective
<ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Perennial vegetation of stony banks [1220]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>• Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</li> <li>• <b><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</b></li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <b><i>Petromyzon marinus</i> (Sea Lamprey)</b></li> </ul>	<p>To maintain the favourable conservation condition of the following habitats and species:</p> <ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Perennial vegetation of stony banks [1220]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>• Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <b><i>Lampetra planeri</i> (Brook Lamprey) [1096]</b></li> <li>• <b><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</b></li> <li>• <b><i>Salmo salar</i> (Salmon) [1106]</b></li> <li>• <i>Trichomanes speciosum</i> (Killarney Fern) [1421]</li> </ul> <p>and to restore the favourable conservation condition of the following habitats and species:</p> <ul style="list-style-type: none"> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British</li> </ul>



<p>[1095]</p> <ul style="list-style-type: none"> <li>• <b>Lampetra planeri (Brook Lamprey) [1096]</b></li> <li>• <b>Lampetra fluviatilis (River Lamprey) [1099]</b></li> <li>• Alosa fallax fallax (Twaite Shad) [1103]</li> <li>• <b>Salmo salar (Salmon) [1106]</b></li> <li>• <b>Lutra lutra (Otter) [1355]</b></li> <li>• Trichomanes speciosum (Killarney Fern) [1421]</li> </ul>	<p>Isles [91A0]</p> <ul style="list-style-type: none"> <li>• Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</li> <li>• <b>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</b></li> <li>• <b>Petromyzon marinus (Sea Lamprey) [1095]</b></li> <li>• Alosa fallax fallax (Twaite Shad) [1103]</li> <li>• <b>Lutra lutra (Otter) [1355]</b></li> </ul> <p>The status of <i>Taxus baccata</i> woods of the British Isles as a qualifying Annex I habitat for the Blackwater River (Cork/Waterford) SAC is currently under review.</p> <p>NPWS Conservation Objectives Version 1.0, Date: July 2012</p>
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In summary, therefore, the relevant qualifying interests of the Blackwater River SAC, in regard to the proposed development are Freshwater Pearl Mussel (*Margaritifera margaritifera*), Atlantic Salmon (*Salmo salar*), Brook Lamprey (*Lampetra planeri*), River Lamprey (*Lampetra planeri*), Sea Lamprey (*Petromyzon marinus*) and Otter (*Lutra lutra*).

## 5 Screening Assessment

This section of the report examines whether the proposed project has the potential to negatively impact on the conservation status of the above listed qualifying interests of Blackwater River (Cork/Waterford) Special Area of Conservation

As set out in the NPWS and EU guidance, the favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The Conservation Objectives for qualifying interests for which Blackwater River SAC is designated and their associated targets are set out below.

Qualifying Interest	Conservation Objective	Target
Freshwater Pearl Mussel ( <i>Margaritifera margaritifera</i> )	Restore favourable conservation condition	Maintain distribution
		Restore to 35,000 adult mussels
		Recruitment - Restore to least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length
		Adult mortality - No more than 5% decline from previous number of

		live adults counted; dead shells less than 1% of the adult population and scattered in distribution
		Restore suitable habitat in more than 35km and any additional stretches necessary for salmonid spawning
		Restore water quality- macroinvertebrates: EQR greater than 0.90; phytobenthos: EQR greater than 0.93
		Restore substratum quality- filamentous algae: absent or trace (<5%)
		Restore substratum quality- stable cobble and gravel substrate with very little fine material; no artificially elevated levels of fine sediment
		Oxygen availability - Restore to no more than 20% decline from water column to 5cm depth in substrate
		Flow regime - Restore appropriate hydrological regimes
		Maintain sufficient juvenile salmonids to host glochidial larvae
Sea Lamprey ( <i>Petromyzon marinus</i> )	Restore favourable conservation condition	Extent of anadromy - Greater than 75% of main stem length of rivers accessible from estuary. See map 10 for recorded distribution
		Population structure of juveniles - At least three age/size groups present
		Juvenile density at least 1/m <sup>2</sup> in fine sediment
		No decline in extent and distribution of spawning beds.
		Availability of juvenile habitat - More than 50% of sample sites positive.
Brook Lamprey ( <i>Lampetra planeri</i> )	Maintain the favourable conservation condition	Distribution - Access to all water courses down to first order streams
		Population structure of juveniles - At least three age/size groups of brook/river lamprey present
		Mean catchment juvenile density of brook/river lamprey at least 2/m <sup>2</sup> in fine sediment
		No decline in extent and distribution of spawning beds
		Availability of juvenile habitat - More than 50% of sample sites positive.
River Lamprey ( <i>Lampetra fluviatilis</i> )	Maintain the favourable conservation condition	Distribution - Access to all water courses down to first order streams
		Population structure of juveniles - At least three age/size groups of brook/river lamprey present
		Mean catchment juvenile density of brook/river lamprey at least 2/m <sup>2</sup> in fine sediment
		No decline in extent and distribution of spawning beds
		Availability of juvenile habitat - More than 50% of sample sites positive.
Atlantic Salmon ( <i>Salmo salar</i> )	Maintain the favourable conservation condition	Distribution: extent of anadromy - 100% of river channels down to second order accessible from estuary
		Adult spawning fish - Conservation Limit (CL) for each system consistently exceeded
		Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 min sampling
		No significant decline
		No decline in number and distribution of spawning redds due to anthropogenic causes
		Water quality - At least Q4 at all sites sampled by EPA
Otter	Restore favourable conservation condition.	No significant decline in Otter distribution.
		No significant decline in extent of terrestrial territory available to Otter
		No significant decline in extent of marine territory available to Otter
		No significant decline in extent of freshwater habitat available to

		Otter
		No significant decline in extent of lake/lagoon habitat available to Otter
		No significant decline in number of couching sites and holts.
		No significant decline in availability of fish prey species.
		No significant increase in barriers to connectivity.

NPWS Conservation Objectives Version 1.0, Date: July 2012

The potential for the proposed project to give rise to negative effects on the qualifying interest species for which this site is designated has been assessed and is set out below. Consideration has been given to the conservation objectives which have been set for the qualifying interest habitats and species, and the targets which have been set to achieve these. Taking account of same, particular focus has been given to activities which could:

- give rise to direct effects on qualifying interest habitat (e.g. direct interventions within the SAC;
- cause significant disturbance to qualifying interest species of the SAC;
- negatively influence natural hydrological processes; or
- negatively impact water quality (e.g. risk of introduction of toxic contaminants, or risk of causing increased nutrient levels in receiving water);

Further consideration of the potential for the project to give rise to any such impacts is set out below:

**Physical Interventions/Direct Effects:** No works or interventions are proposed within the SAC accordingly the risk of the proposed development giving rise to direct effects on habitats or species which are qualifying interests of the EU sites can be ruled out.

**Risk of Disturbance to Species:** The proposed development site is sufficiently distant from the SAC to be satisfied that neither activities associated with the development, nor post construction use of the dwelling poses any risk of causing disturbance to qualifying interest species of either the SAC. The location of the site within the curtilage of the existing estate, away from Allow River negates any possibility that the site would be likely to support species which are associated with the SAC, and therefore it is considered that there is no risk of ex situ impacts to the relevant species arising.

**Risk of Project Negatively Influencing Natural Hydrological Conditions:** No works are proposed within either Natura 2000 site. There is no direct surface water linkage between the development site and the SAC and there is no proposal to create one. The proposed development site is approximately 240m from the Allow River. Figure 3 shows the location of the proposed development in relation to the Natura 2000 sites.

#### **Water Pollution Risks:**

*Surface water:* There is no direct hydrological link between the site and the Blackwater River SAC and with the presence of buffers (e.g. lawns and roadway) to help safeguard the SAC from the proposed development, no significant water quality impacts as a result of the proposed development are expected as a result of contaminated surface water run-off.

*Waste-water:* It is proposed that the development will connect to the existing public wastewater infrastructure. While the WWTP is noncompliant for Ammonia. It is compliant for orthoP, BOD and SS. The plant has capacity and is not causing an adverse impact on water quality.

## 6 Screening Determination

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the objective information provided in this report, it is concluded beyond reasonable scientific doubt that the proposed works, individually or in combination with other plans/projects will not have a significant effect on a European site (Natura 2000 site). It is therefore considered that a Stage 2 Appropriate Assessment under Section 177V of the Planning and Development Act 2000 (as amended), is not required.

### Reasons for Determination

- No works or interventions are proposed within the SAC.
- The proposed development site is sufficiently distant from the SAC to be satisfied that neither activities associated with the construction of the development, nor post construction use of the new dwelling poses any risk of causing disturbance to qualifying interest species of the SAC.
- Given that there is no surface water linkage to the Allow River, there is no potential pathway for introducing silt or potentially toxic contaminants to the SAC via surface water during the construction or post construction stages.
- A hydrological connection will be established between the development site and the river by linking the new house to the Kanturk WWTP. While the WWTP is noncompliant for Ammonia. It is compliant for orthoP, BOD and SS. The plant has capacity and if treatment plant is compliant with ELVs.

## 7 References

### NPWS Site Data

Information relating to individual Natura 2000 sites including Article 17 Conservation Assessment Reports for Habitats and Species In Ireland (2013), individual site synopses, Natura 2000 data forms, and information relating to the qualifying features and conservation objectives of individual sites was sourced from the NPWS database ([www.NPWS.ie](http://www.NPWS.ie)).

Guidance used in the preparation of this report included the following:

European Communities, Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Communities, 2000.

European Communities, Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Communities, 2001.



Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. 2009.

# **1 no Housing Unit**

## **No. 33 Market Place, Kanturk, Co. Cork**

### **Planning Report**



**Cork  
County Council**  
Comhairle Contae Chorcaí

## **Proposed Development**

This report relates to a Cork County Council application to seek approval for Part 8 Planning Exemption under 'Planning and Development (Section 179A) Regulations 2023' for the construction of 1 no. housing unit at No. 33 Market Place, Kanturk, County Cork.

An existing old cottage at 34 Bluepool Upper has been refurbished recently by the council and the large garden reduced to a more appropriate size for ambulant special needs tenants. The reduction of the garden created a new plot bounding the internal public road of the Market Place and Linn Gorm developments. It is proposed that 1no. new single storey unit be developed on the site. This is considered to be a vacant infill site.

## **Policy Context**

The proposed development is located within the settlement boundary of the town of Kanturk as defined by the County Development Plan 2022 and the land is zoned for *"existing residential/mixed residential and other uses"*.

## **Public and Private Open Space**

Existing communal open space provision is available to the southwest of the site. Rear garden private open space is indicated as 49sqm for this two-bedroom housing unit. This is considered to be acceptable.

## **Services**

Cork County Council Architect's Dept. has made initial pre-connection enquiries with Irish Water in regard to water and foul drainage infrastructure. Irish Water have confirmed that connection to the network is feasible without infrastructural upgrade for both Water and Wastewater connections.

To comply with Objective WM11-10 and paragraph 11.10.4 in the Cork County Development Plan 2022, a softer engineered or 'nature-based approach' shall be used to manage rainfall runoff on the site by managing and treating surface water above ground rather than sending rainfall below-ground into drains, pipes, attenuation tanks and other 'hard engineering' solutions.

The approach aims to maximise the retention and/or infiltration of storm water runoff on-site and eliminate discharges to the public drainage system, thereby mitigating the drainage impact of the proposed development. Detailed supporting calculations for the design of the soakaways are included in a submitted Drainage Impact Assessment.

## **AA Screening**

A 'Habitats Directive Appropriate Assessment Screening Determination' report has been provided as part of submitted documents. Based on the Appropriate Assessment Screening process, it has been determined that no likely significant effects will arise on any European sites.

### **EIAR Screening**

An EIA assessment has been carried out – see Appendix A – and this concluded that based on a preliminary examination of the nature, size or location of the development, there is no real likelihood of significant effects on the environment and EIA is not required.

### **Exemption Status**

In considering whether or not the proposed development constitutes exempt development under Section 179(A) of the Planning and Development Act 2000 (as amended), the proposed development is considered against the requirements and criteria set out in this section of the Act.

The proposed development is classified as ‘Housing Development’ on Council owned lands which are within the settlement boundary for Kanturk and zoned for “existing residential/mixed residential and other uses” as per the CDP 2022. The lands are serviceable. An EIAR is not required. As AA has been screened out by the relevant competent expert within Cork County Council, it is considered that the proposed development meets the provisions of Section 179(A) of the Planning and development Act and would therefore be classed as exempt from the Part 8 process.

### **Conclusion**

The proposed redevelopment of the subject site is considered to be in accordance with the core strategy and objectives of the County Development Plan 2022 having regard to its location within the settlement boundary and on appropriately zoned lands, and as such represents the proper planning and sustainable development of the area.

## Appendix A: EIS Assessment

<b>Establishing if the proposal is a 'sub-threshold development':</b>	
Planning Register Reference:	None provided.
Development Summary:	To construct one 2 bedroom dwelling
Was a Screening Determination carried out under Section 176A-C?	No, Proceed to <b>Part A</b>
<b>A. Schedule 5 Part 1</b> - Does the development comprise a project listed in Schedule 5, <b>Part 1</b> , of the Planning and Development Regulations 2001 (as amended)? (Tick as appropriate)	
No	Proceed to <b>Part B</b>
<b>B. Schedule 5 Part 2</b> - Does the development comprise a project listed in Schedule 5, <b>Part 2</b> , of the Planning and Development Regulations 2001 (as amended) <b>and</b> does it meet/exceed the thresholds? (Tick as appropriate)	
<p>Yes, the project is of a type listed <b>but</b> is <i>sub-threshold</i>:</p> <p>Class 10 'Infrastructure projects'. The threshold is the construction of more than 500 dwelling units. The proposed development is for 1 housing unit which is substantially below this threshold.</p> <p>The proposed project is considered to be an urban development within other parts of a built-up area. The proposed development is below the 10 hectares threshold in other parts of a built up area, therefore an EIAR is not required to be produced in accordance with Schedule 5 Part 2 (10) (b) (iv).</p>	<b>Proceed to Part C</b>
<b>C. If Yes</b> , has Schedule 7A information/screening report been submitted?	
No, Schedule 7A information/screening report has not been submitted by the applicant	<b>Preliminary Examination required</b>

<b>Preliminary Examination:</b>		
The planning authority shall carry out a preliminary examination of, at the <b>least, the nature, size or location of the development.</b>		
	<b>Comment:</b>	<b>Yes/No/ Uncertain:</b>
<p><b>Nature of the development:</b> <i>Is the nature of the proposed development exceptional in the context of the existing environment?</i></p> <p><i>Will the development result in the production of any significant waste, or result in significant emissions or pollutants?</i></p>	<p>No, this is predominately a residential area.</p> <p>If constructed, the proposed residential development is considered to be modest in scale and will not generate excessive waste beyond the typical municipal type and quantities expected in a domestic setting.</p>	<b>No</b>
<p><b>Size of the development:</b> <i>Is the size of the proposed development exceptional in the context of the existing environment?</i></p> <p><i>Are there cumulative considerations having regard to other existing and/or permitted projects?</i></p>	<p>The size of the proposal is small and there are no existing or permitted projects that could give rise to cumulative impacts.</p>	<b>No</b>
<p><b>Location:</b> <i>Is the proposed development located on, in, adjoining or does it have the potential to impact on an ecologically sensitive site or location?<sup>1</sup></i></p> <p><i>Does the proposed development have the potential to affect other significant environmental sensitivities in the area?</i></p>	<p>The Blackwater River (Cork/Waterford) Special Area of Conservation is located 245m from the subject site.</p> <p>The Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is located 11.6km from the subject site.</p> <p>The Habitats Directive Appropriate Assessment Screening Determination states that that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of any European site, in view of the sites Conservation Objectives.</p>	<b>No</b>
<b>Preliminary Examination Conclusion:</b>		
<p>Based on a preliminary examination of the <b>nature, size or location</b> of the development, there is no real likelihood of significant effects on the environment.</p> <p>EIA is not required.</p>		

<sup>1</sup> Sensitive locations or features includes European sites, NHA/pNHA, Designated Nature Reserves, land designated as a refuge for flora and fauna, and any other ecological site which is the objective of a CDP/LAP (including draft plans).

**CLIENT:****PROJECT:**

Dwelling at No. 33 Market Place,  
Kanturk

**DOCUMENT TITLE:**

Drainage Impact Assessment

**DJF Engineering Services Ltd.**

Tramore House, Reeveswood, Douglas Road, Cork, Ireland

Tel: 021-2392424 • Email: [info@djfes.com](mailto:info@djfes.com) • Web: [www.djfes.com](http://www.djfes.com)

Current Issue	Date	Issue Description	Approvals	
			By	Approved
A	10/11/23	Planning Issue	SH	FM
B	16/11/23	Planning Issue	SH	FM
C	24/01/24	Planning Issue	SH	FM

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- 1.1 Background.....3
- 1.2 Scope .....3
- 2.0 Site .....5
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- 2.2 Site Topography.....5
- 2.3 Adjacent Land Use .....5
- 2.4 Existing Services.....5
- 3.0 Storm Water Drainage.....6
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- 5.0 Waste Water .....11
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**Appendix 1** Irish Water Confirmation of Feasibility





## 1.0 INTRODUCTION

### 1.1 Background

Cork County Council wish to obtain planning permission for a new house at Market Place, Kanturk, Co. Cork.

Cork County Council have engaged DJF Engineering Services Ltd. to provide Engineering services in relation to the preparation of the planning submission for this development.

### 1.2 Scope

This Drainage Impact Assessment (DIA) has been prepared to demonstrate how the development successfully uses Sustainable Urban Drainage Systems (SuDS) and nature based solutions to manage Storm Water within and adjacent to the site.

This DIA has been prepared as per the requirements of the Cork County Development Plan 2022 and the guidance given in Cork County Council Advice Note 1 Storm Water Management published in December 2022.

As the proposed development is for less than 10 residential units and/or less than 500 square meters of new or additional non-residential floorspace, the development is considered to be a "Small-Scale Development".

Table 1 *Nature Based Solutions and Small-Scale Development* of Advice Note 1 states that a DIA for development of less than 10 residential units and/or less than 500 square meters of new or additional non-residential floorspace should include, but is not limited to, the following:

- Full drainage details, drawings, and calculations.
- A SuDS statement incorporating Cork County Council SUDS Selection Hierarchy Sheet for Small Scale Development, showing how design of SuDS have been integrated successfully into the Storm Water management plan for the site.
- All new developments must allow for Climate Change as set out in Table 11.4 of Chapter 11. (For additional technical advice refer to the Cork County Council Strategic Flood Risk Assessment (SFRA) and the Greater Dublin Strategic Drainage Strategy Technical Documents, Volume 5, Climate Change).
- Show how the 4 pillars of SuDS (Water Quantity, Water Quality, Amenity and Biodiversity) are achieved.

The DIA also outlines the Engineering approach taken for the proposed development in relation to including Waste Water, Water, and Flooding.

## 2.0 SITE

### 2.1 Location

The proposed site is located on Cork County Council lands at Market Place, Kanturk, Co. Cork within an existing residential development. The site is part of the rear garden of the old cottage at 34 Bluepool Upper, backing onto Market Place and Linnorm. The cottage is owned by CCC and is occupied. The only access to the site is via Market Place.

### 2.2 Site Topography

This is a small infill site approx.. 10m wide by 15m long. The site is generally level approximately 83.70m above sea level. The existing site levels are lower than the surrounding sites.

### 2.3 Adjacent Land Use

The proposed site is an infill site in what was previously a rear garden. The site is surrounded by residential properties.

### 2.4 Existing Services

Market Place is served by existing water supply pipes, wastewater drainage, electrical services and telecom/data services.

### 3.0 STORM WATER DRAINAGE

#### 3.1 Storm Water Discharge Philosophy

In order to comply with Objective WM11-10 and paragraph 11.10.4 in the Cork County Development Plan 2022, a softer engineered or 'nature-based approach' shall be used where feasible to manage rainfall runoff on the site i.e., by managing and treating Storm Water above-ground rather than sending rainfall below-ground into drains, pipes, attenuation tanks and other 'hard engineering' solutions.

The approach aims to maximise the retention and/or infiltration of storm water runoff on-site and minimise discharges to the public drainage system, thereby mitigating the drainage impact of the proposed development.

The limited size of the site does not permit the use of on site soakaways or other infiltration devices.

However, other SuDS measures are proposed.

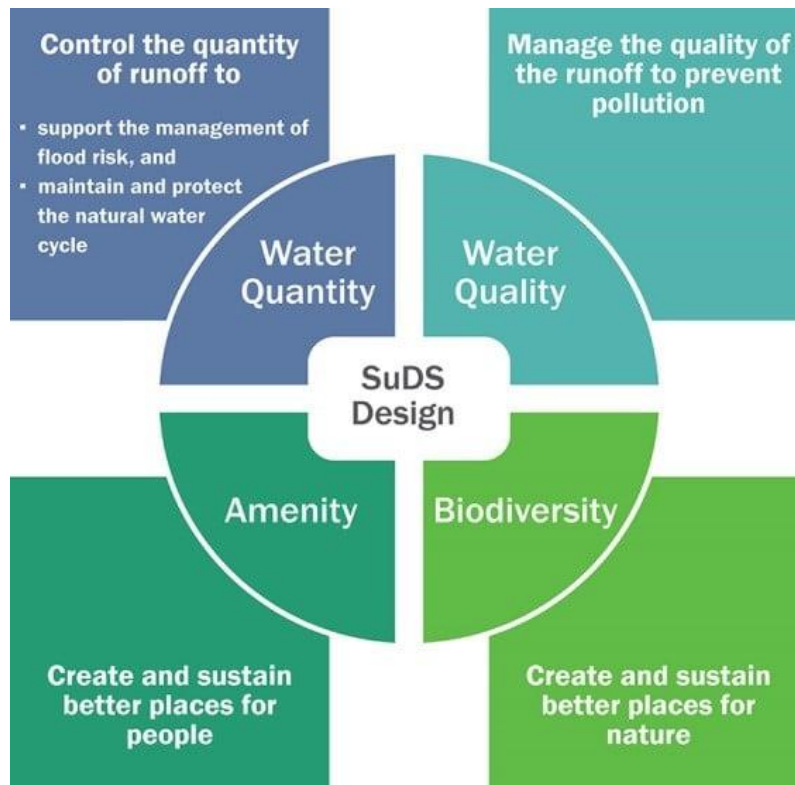
The table overleaf sets out the SuDS measured proposed for this development.

## SuDS Selection Hierarchy for Small-Scale Development

SuDS Measure	Image	Measures to be used on site	Rationale for selecting/not selecting measure including discharge rate applied with supporting calculations
Water butt – 150L capacity or more (based water use demand) with means of overflow		Yes for rainwater pipes	Cost effective measure, which can be securely positioned on the rear elevations
Permeable paving – consider for all hard paved areas without heavy traffic		No	Due to the small size of the site, paving widths are narrow and can drain onto landscaped or gravel areas, which will reduce the discharge of Storm Water from the site
Bio-retention planter – disconnect downpipe connection into drains and allow roof runoff into planter with means of overflow		No	Limited space available Planters will require tenant maintenance
Green / Blue Roof – requires a minimum substrate depth (growth medium) of at least 80 mm excluding the vegetative mat		No	No suitable roofs on the development
Rain garden - disconnect downpipe/RWP into the planted flower bed		Yes (partially)	Planted areas receiving rainwater pipes directly may lead to localised ponding and increased tenant maintenance. However, paving will drain onto landscaped areas, which will reduce the discharge of Storm Water from the site
Soakaways discharging Storm Water collected from roofs and impermeable paving into the ground		No	Sites is too small for discharging Storm Water to ground via soakaways

### 3.2 SuDS Pillars

The four pillars of SuDS are Water Quantity, Water Quality, Amenity and Biodiversity.



#### Water Quantity

This pillar is achieved by controlling the quantity of runoff from the site of the development through feasible SuDS measures in particular the use of water butts.

#### Water Quality

This pillar is achieved by having minimal runoff into the public Storm Water system or watercourse from the development where feasible in order to mimic the natural catchment and groundwater recharge and manage the quality of runoff to prevent pollution. However, the site available for this development is too small and too close to existing structures to allow sufficient space for a soakaways or similar infiltration devices.

### **Amenity**

This pillar is achieved by creating and sustaining better places for people. The proposed development has green spaces where feasible and is close to existing open green spaces in Market Place.

### **Biodiversity**

This pillar is achieved by creating and sustaining better places for nature. The proposed development has green spaces where feasible and is close to existing open green spaces in Market Place.

#### 4.0 FLOOD RISK ASSESSMENT

The site is in Flood Risk Zone C and is not at risk of coastal or fluvial flooding. Neither is the elevated site at risk of flooding from nearby streams or drainage ditches or from pluvial flooding (once the site levels are raised as proposed).

Therefore, it is considered that flood risk is not an issue for this development.

The proposed design considers the impact of Storm Water flood risks on drainage design. Flood risk from sources other than fluvial and tidal have been reviewed and the proposed floor level has been set to be above adjacent ground levels.

Storm Water discharge from the development is proposed to be drained to ground via suitably designed infiltration soakaways (as noted above and as demonstrated in the appendices) with no discharge to the existing public drainage system.

There is no consequential increase in flood risk due to the proposed development.

Given that the site is not at risk of flooding and the proposed development does not increase flood risks, no further flood risk assessment is proposed.



## 5.0 WASTE WATER

Uisce Eireann have confirmed that a wastewater connection for the proposed development is feasible.

There is an existing wastewater pipe on the road next to the site. As this is relatively shallow, it is proposed to raise the road level locally by forming a raised crossing table to provide increased cover to the new foul connection pipe. This localised table will also provide improved accessible access to the site.

All proposed works are to be in accordance with Irish Water Code of Practice for Waste Water Infrastructure.

For further details, please refer to the drawings and the Irish Water Confirmation of Feasibility in the appendix.

## 6.0 WATER

Uisce Eireann have confirmed that a water supply connection for the proposed development is feasible.

All proposed works are to be in accordance with Irish Water Code of Practice for Water Infrastructure.

For further details, please refer to the drawings and the Irish Water Confirmation of Feasibility in the appendix.

As there are existing fire hydrants positioned within 46m of the proposed house, no additional fire hydrants are proposed.

# Appendix 1

## Irish Water Confirmation of Feasibility

## CONFIRMATION OF FEASIBILITY

Joanne Crossland  
Cork County Council  
Architects Department County Hall  
Carrigrohane Road  
Cork  
T12R2NC  
Ireland

**Uisce Éireann**  
Bosca OP448  
Oifig Sheachadta na  
Cathrach Theas  
Cathair Chorcaí

**Irish Water**  
PO Box 448,  
South City  
Delivery Office  
Cork City.

[www.water.ie](http://www.water.ie)

2 November 2022

**Our Ref: CDS22004596 Pre-Connection Enquiry  
33 Market Place, Kanturk, Cork**

Dear Applicant/Agent,

### **We have completed the review of the Pre-Connection Enquiry.**

Irish Water has reviewed the pre-connection enquiry in relation to a Water & Wastewater connection for a Single Domestic of 1 unit(s) at 33 Market Place, Kanturk, Cork, (the **Development**).

Based upon the details provided we can advise the following regarding connecting to the networks;

- **Water Connection**
  - Feasible without infrastructure upgrade by Irish Water
  - Current Records for the Watermain Layout do not reflect the accurate positioning of the Watermain layout therefore a Watermain Extension of approx. 65 metres (subject to Further review at Connection Application Stage) may be required to service the development with the costs borne fully by the developer.
- **Wastewater Connection**
  - Feasible without infrastructure upgrade by Irish Water
  - In the case of wastewater connections this assessment does not confirm that a gravity connection is achievable. Therefore a suitably sized pumping station may be required to be installed on

your site. All infrastructure should be designed and installed in accordance with the Irish Water Code of Practice.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Irish Water infrastructure. Before the Development can be connected to our network(s) you must submit a connection application and be granted and sign a connection agreement with Irish Water.

As the network capacity changes constantly, this review is only valid at the time of its completion. As soon as planning permission has been granted for the Development, a completed connection application should be submitted. The connection application is available at [www.water.ie/connections/get-connected/](http://www.water.ie/connections/get-connected/)

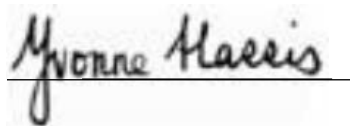
### Where can you find more information?

- **Section A** - What is important to know?
- **Section B** - Details of Irish Water's Network(s)

**This letter is issued to provide information about the current feasibility of the proposed connection(s) to Irish Water's network(s). This is not a connection offer and capacity in Irish Water's network(s) may only be secured by entering into a connection agreement with Irish Water.**

For any further information, visit [www.water.ie/connections](http://www.water.ie/connections), email [newconnections@water.ie](mailto:newconnections@water.ie) or contact 1800 278 278.

Yours sincerely,



**Yvonne Harris**  
**Head of Customer Operations**

## Section A - What is important to know?

What is important to know?	Why is this important?
<b>Do you need a contract to connect?</b>	<ul style="list-style-type: none"> <li>• Yes, a contract is required to connect. This letter does not constitute a contract or an offer in whole or in part to provide a connection to Irish Water's network(s).</li> <li>• Before the Development can connect to Irish Water's network(s), you must submit a connection application <u>and be granted and sign</u> a connection agreement with Irish Water.</li> </ul>
<b>When should I submit a Connection Application?</b>	<ul style="list-style-type: none"> <li>• A connection application should only be submitted after planning permission has been granted.</li> </ul>
<b>Where can I find information on connection charges?</b>	<ul style="list-style-type: none"> <li>• Irish Water connection charges can be found at: <a href="https://www.water.ie/connections/information/charges/">https://www.water.ie/connections/information/charges/</a></li> </ul>
<b>Who will carry out the connection work?</b>	<ul style="list-style-type: none"> <li>• All works to Irish Water's network(s), including works in the public space, must be carried out by Irish Water*.</li> </ul> <p>*Where a Developer has been granted specific permission and has been issued a connection offer for Self-Lay in the Public Road/Area, they may complete the relevant connection works</p>
<b>Fire flow Requirements</b>	<ul style="list-style-type: none"> <li>• The Confirmation of Feasibility does not extend to fire flow requirements for the Development. Fire flow requirements are a matter for the Developer to determine.</li> <li>• <b>What to do?</b> - Contact the relevant Local Fire Authority</li> </ul>
<b>Plan for disposal of storm water</b>	<ul style="list-style-type: none"> <li>• The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters.</li> <li>• <b>What to do?</b> - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.</li> </ul>
<b>Where do I find details of Irish Water's network(s)?</b>	<ul style="list-style-type: none"> <li>• Requests for maps showing Irish Water's network(s) can be submitted to: <a href="mailto:datarequests@water.ie">datarequests@water.ie</a></li> </ul>

<p><b>What are the design requirements for the connection(s)?</b></p>	<ul style="list-style-type: none"> <li>The design and construction of the Water &amp; Wastewater pipes and related infrastructure to be installed in this Development shall comply with <b><i>the Irish Water Connections and Developer Services Standard Details and Codes of Practice</i></b>, available at <a href="http://www.water.ie/connections">www.water.ie/connections</a></li> </ul>
<p><b>Trade Effluent Licensing</b></p>	<ul style="list-style-type: none"> <li>Any person discharging trade effluent** to a sewer, must have a Trade Effluent Licence issued pursuant to section 16 of the Local Government (Water Pollution) Act, 1977 (as amended).</li> <li>More information and an application form for a Trade Effluent License can be found at the following link: <a href="https://www.water.ie/business/trade-effluent/about/">https://www.water.ie/business/trade-effluent/about/</a></li> </ul> <p>**trade effluent is defined in the Local Government (Water Pollution) Act, 1977 (as amended)</p>

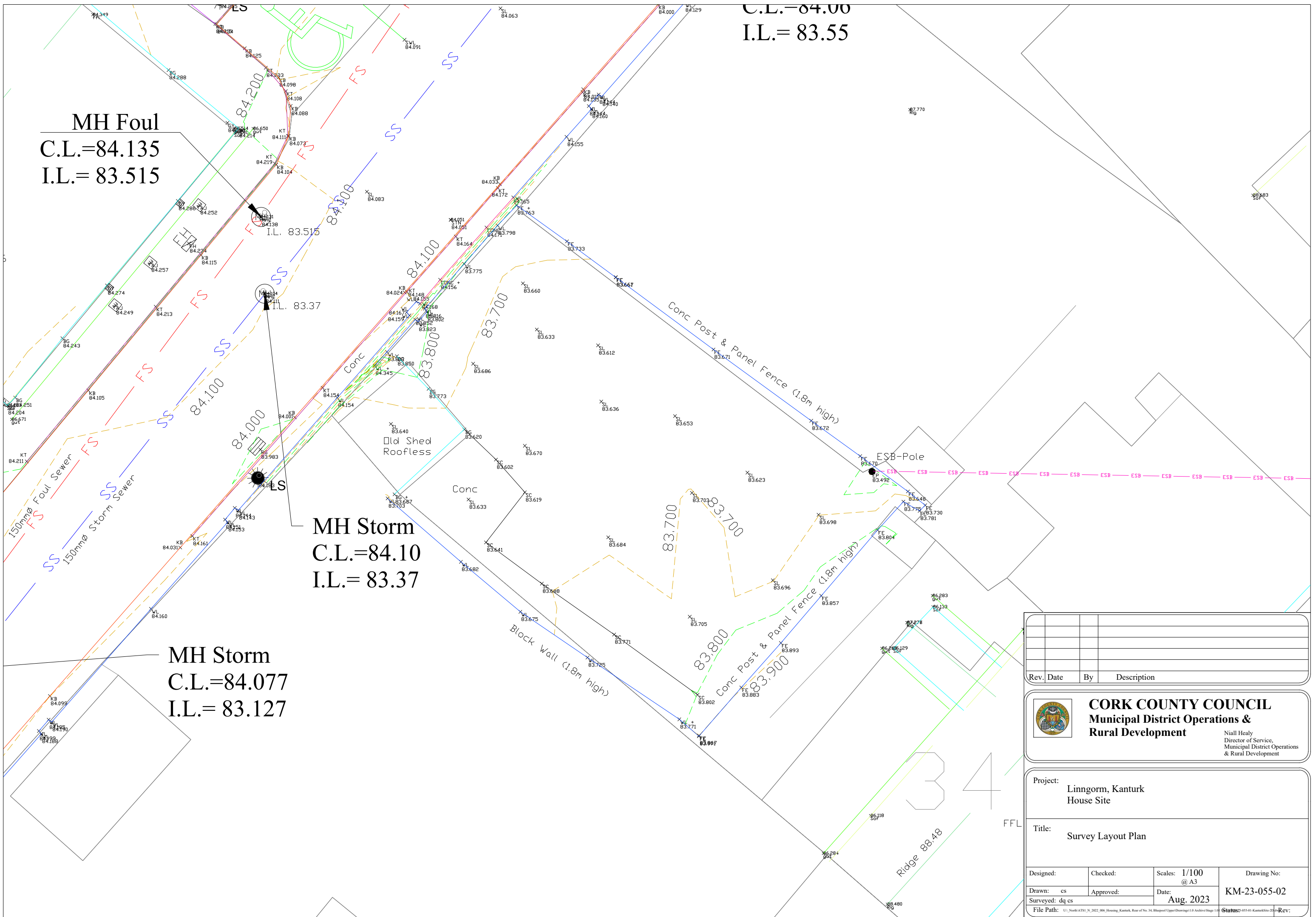


C.L.=84.00  
I.L.= 83.55

MH Foul  
C.L.=84.135  
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MH Storm  
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MH Storm  
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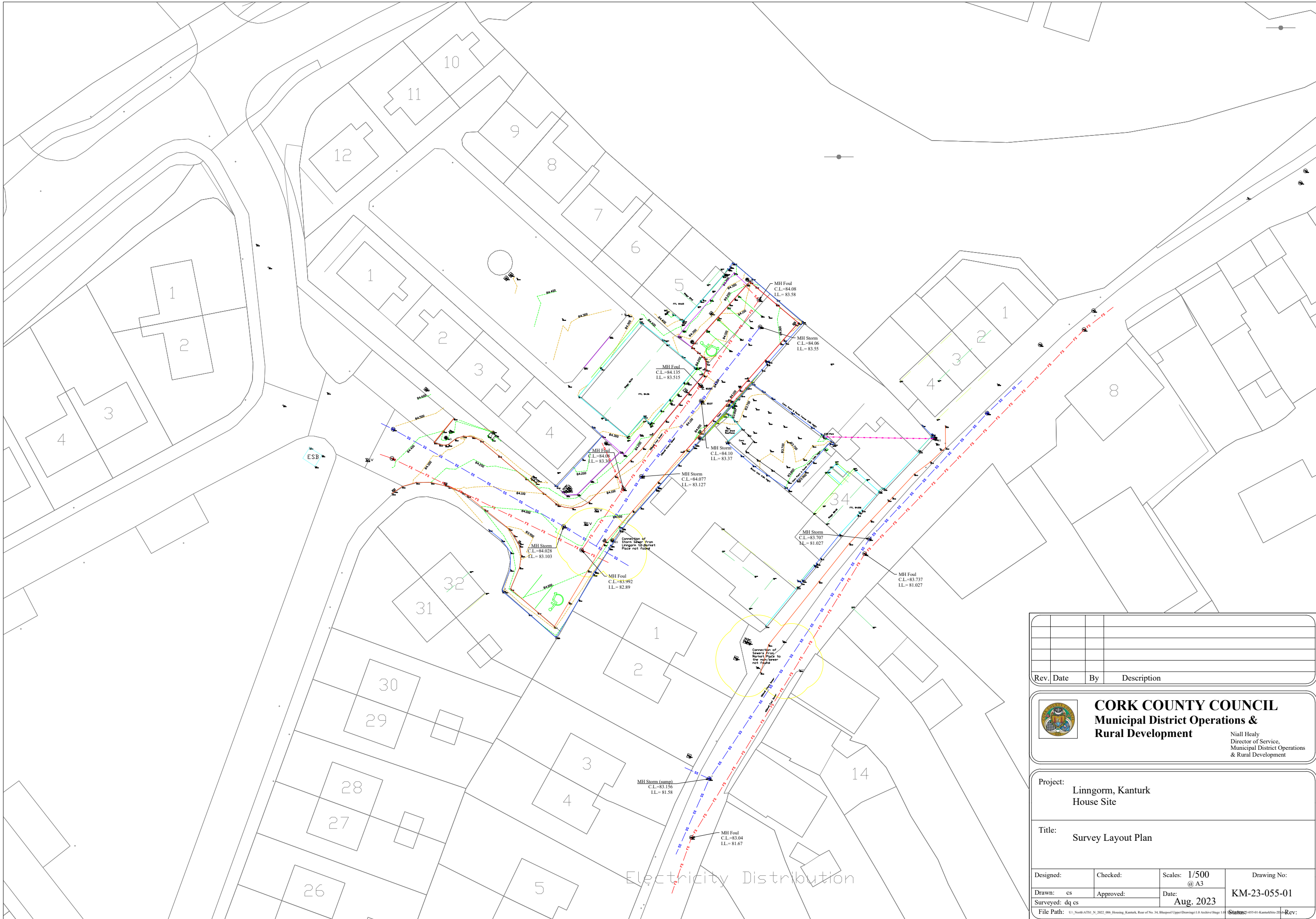
Rev.	Date	By	Description

**CORK COUNTY COUNCIL**  
**Municipal District Operations & Rural Development**  
 Niall Healy  
 Director of Service,  
 Municipal District Operations & Rural Development

Project: Linngorm, Kanturk House Site  
 Title: Survey Layout Plan

Designed:	Checked:	Scales: 1/100 @ A3	Drawing No:
Drawn: cs	Approved:	Date: Aug. 2023	KM-23-055-02
Surveyed: dq cs			
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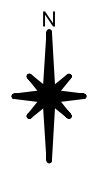
Rev.	Date	By	Description


**CORK COUNTY COUNCIL**  
**Municipal District Operations & Rural Development**  
 Niall Healy  
 Director of Service,  
 Municipal District Operations & Rural Development

**Project:** Linnorm, Kanturk House Site  
**Title:** Survey Layout Plan

Designed:	Checked:	Scales: 1/500 @ A3	Drawing No:
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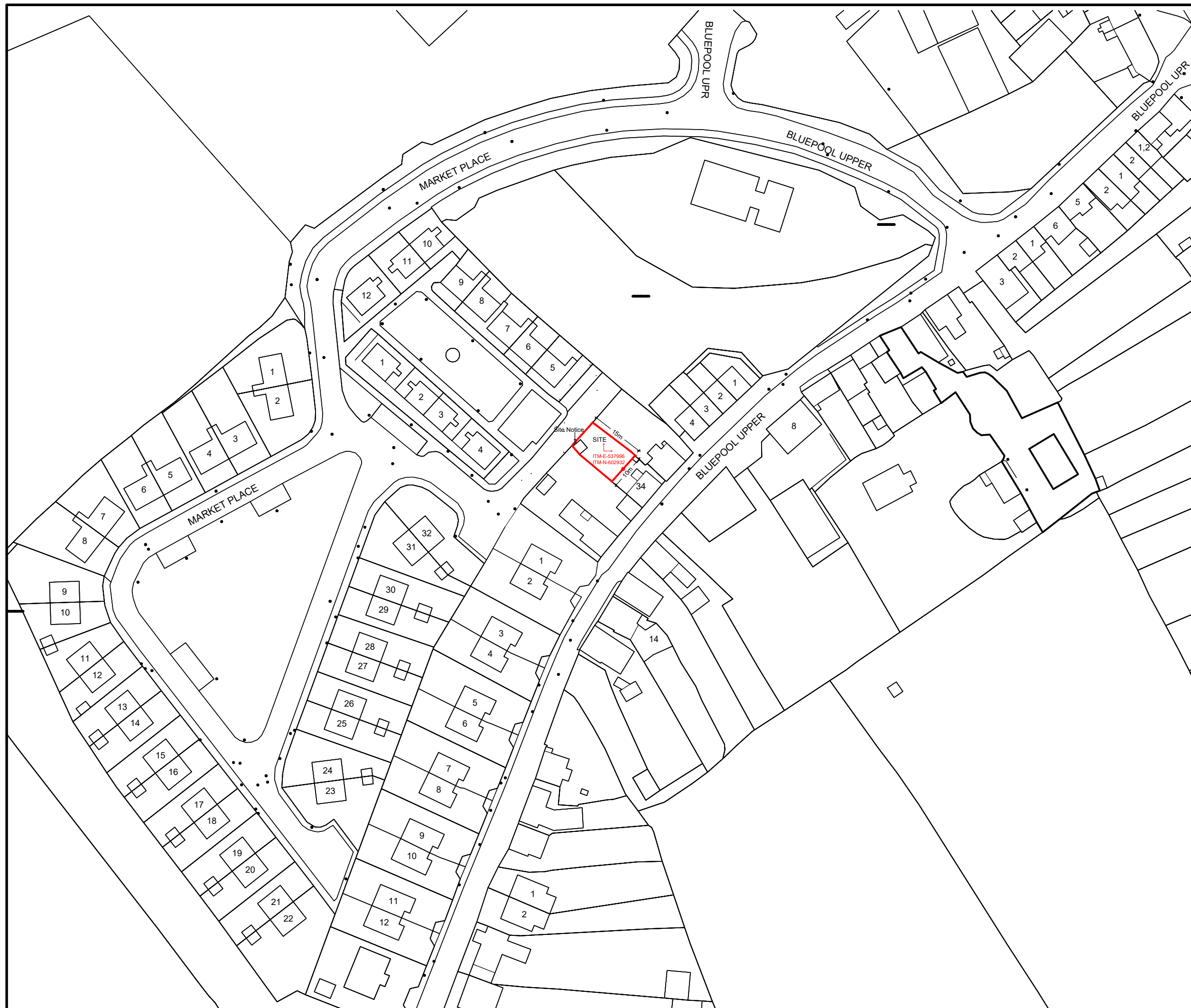
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 5. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL SPECIFICATION DOCUMENTS.



**SITE OUTLINED IN RED**

Site Area - 151m<sup>2</sup>  
 (0.0151 Hectares or 0.037 Acres)

Ordnance Ireland Sheet Number -  
 5885-03  
 ITM-537996 - 602932



Rev. No.	Revision Description	Date

Project Stage: Single Stage Submission

Project Title: No 33 Market Place, Kanturk.  
 (Rear of 34 Bluepool Upper)

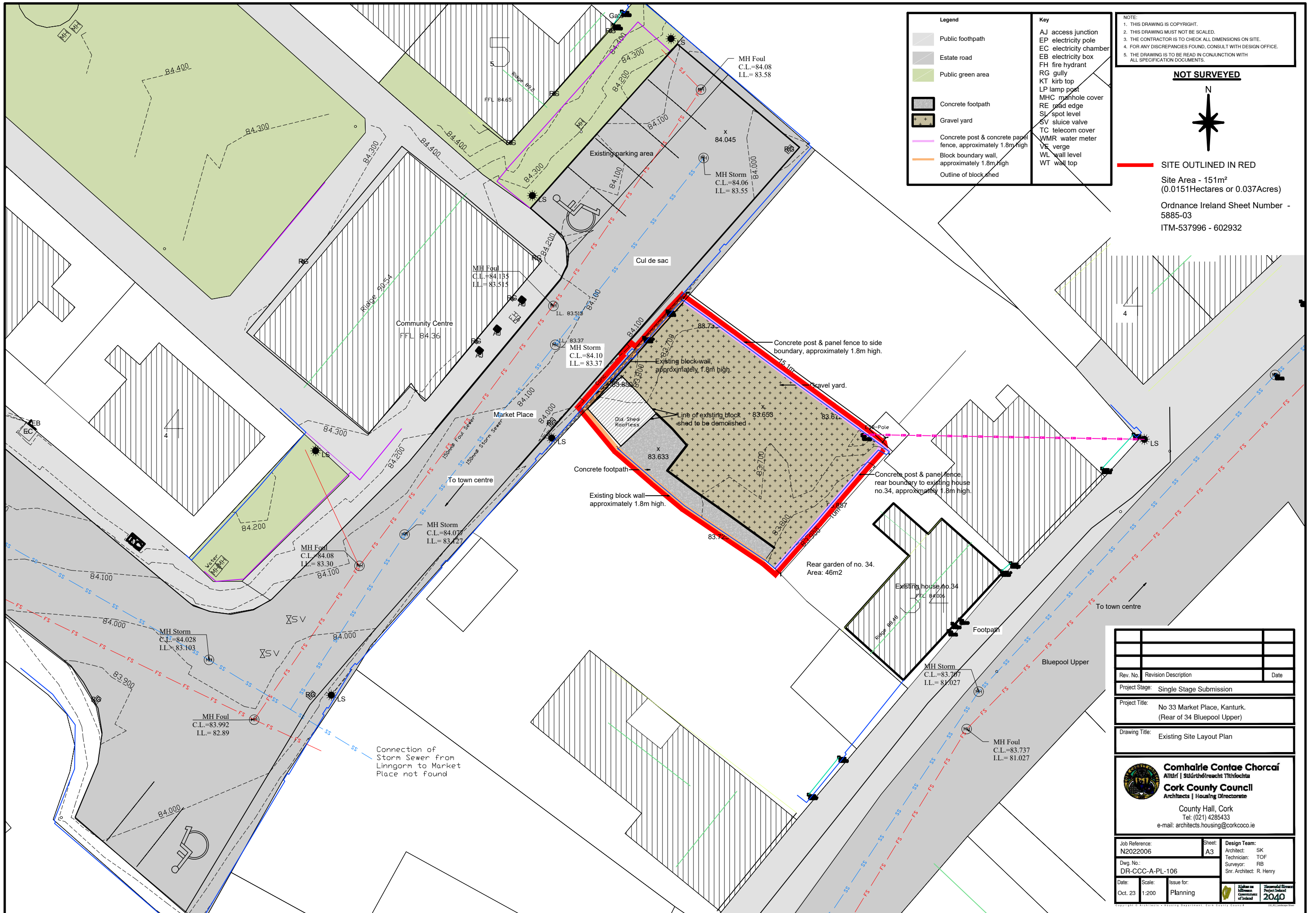
Drawing Title: Site Location Plan

**Comhairle Contae Chorcaí**  
 Alltairí | Stúdíó Treacht Tithíochta  
**Cork County Council**  
 Architects | Housing Directorate

County Hall, Cork  
 Tel: (021) 4285433  
 e-mail: architects.housing@corkcoco.ie

Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK Technician: TOF Surveyor: RB Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-100	Date: Oct. 23	Scale: 1:1000
Date: Oct. 23	Scale: 1:1000	Issue for: Planning





Legend	Key
	AJ access junction
	EP electricity pole
	EC electricity chamber
	EB electricity box
	FH fire hydrant
	RG gully
	KT kirb top
	LP lamp post
	MHC manhole cover
	RE road edge
	SL spot level
	SV sluice valve
	TC telecom cover
	WMR water meter
	VE verge
	WL wall level
	WT wall top

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**NOT SURVEYED**



**SITE OUTLINED IN RED**  
 Site Area - 151m<sup>2</sup>  
 (0.0151Hectares or 0.037Acres)  
 Ordnance Ireland Sheet Number - 5885-03  
 ITM-537996 - 602932

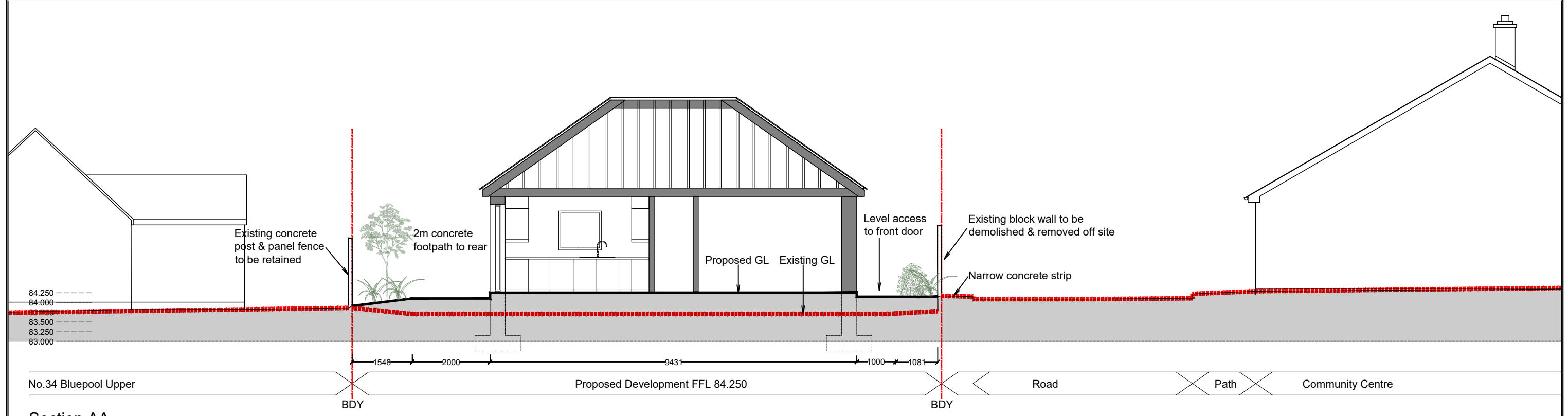
Rev. No.	Revision Description	Date
Project Stage:	Single Stage Submission	
Project Title:	No 33 Market Place, Kanturk. (Rear of 34 Bluepool Upper)	
Drawing Title:	Existing Site Layout Plan	
<b>Comhairle Contae Chorcaí</b> Alltairí   Stúdíó Treacht Tithíochta <b>Cork County Council</b> Architects   Housing Directorate County Hall, Cork Tel: (021) 4285433 e-mail: architects.housing@corccoco.ie		
Job Reference:	Sheet:	Design Team:
N2022006	A3	Architect: SK Technician: TOF Surveyor: RB Snr. Architect: R. Henry
Dwg. No.:	DR-CCC-A-PL-106	
Date:	Scale:	Issue for:
Oct. 23	1:200	Planning
Published on Behalf of the Government of Ireland <b>2040</b>		



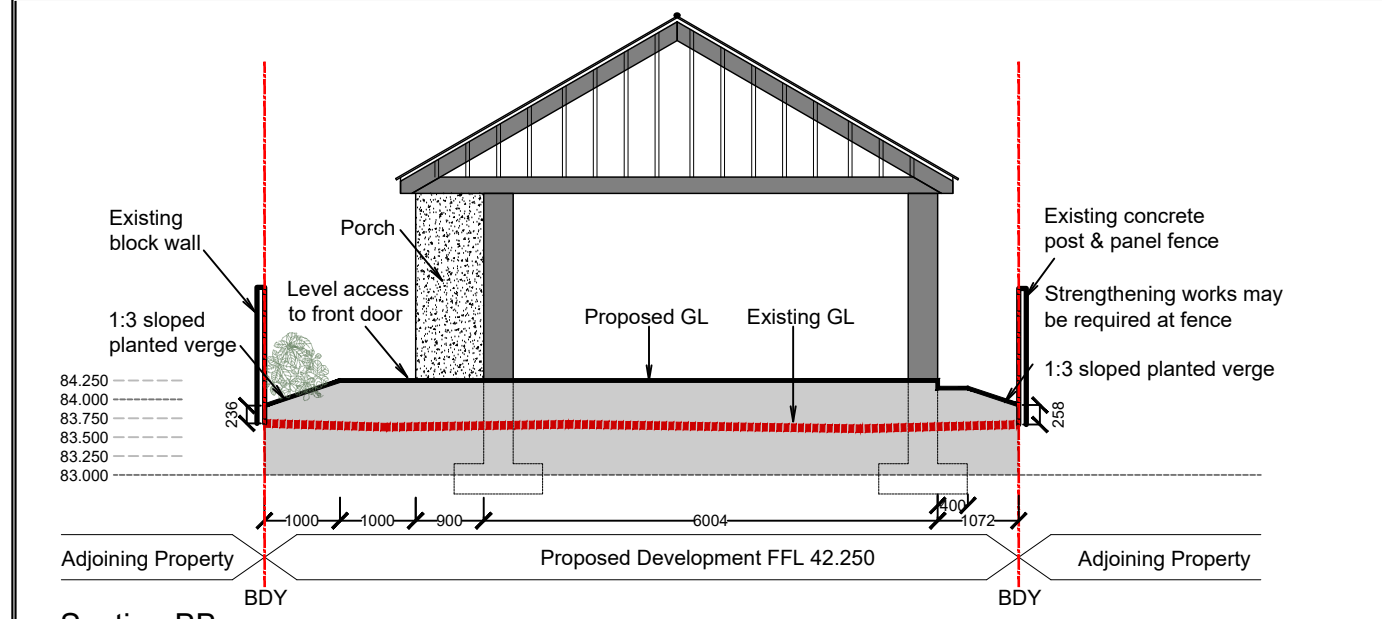


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**NOT SURVEYED**






Section AA



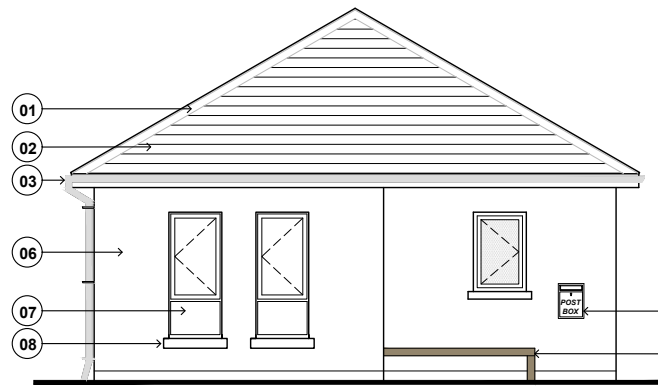
Section BB

**Legend**

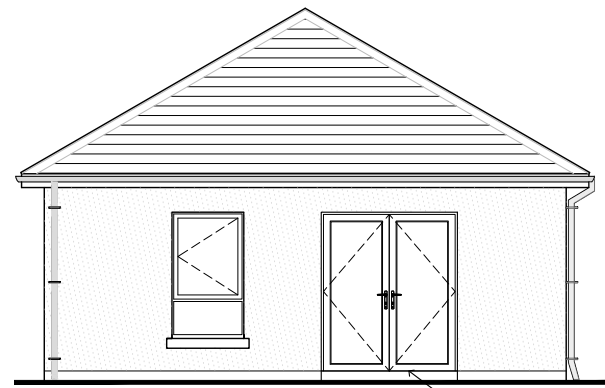
- | Site Boundary
- - - - - Proposed Ground Line
- - - - - Existing Ground Line

Rev. No.	Revision Description	Date
Project Stage: Single Stage Submission		
Project Title: No 33 Market Place, Kanturk, (Rear of 34 Bluepool Upper)		
Drawing Title: Site Sections AA & BB		
 <b>Comhairle Contae Chorcaí</b> Alltair   Stúráthóireacht Tithíochta <b>Cork County Council</b> Architects   Housing Directorate County Hall, Cork Tel: (021) 4285433 e-mail: architects.housing@corkcoco.ie		
Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK, Technician: TOF, Surveyor: RB, Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-140	Date: Oct. 23	Scale: 1:100
Date: Oct. 23	Scale: 1:100	Issue for: Planning
 Planning		 2040

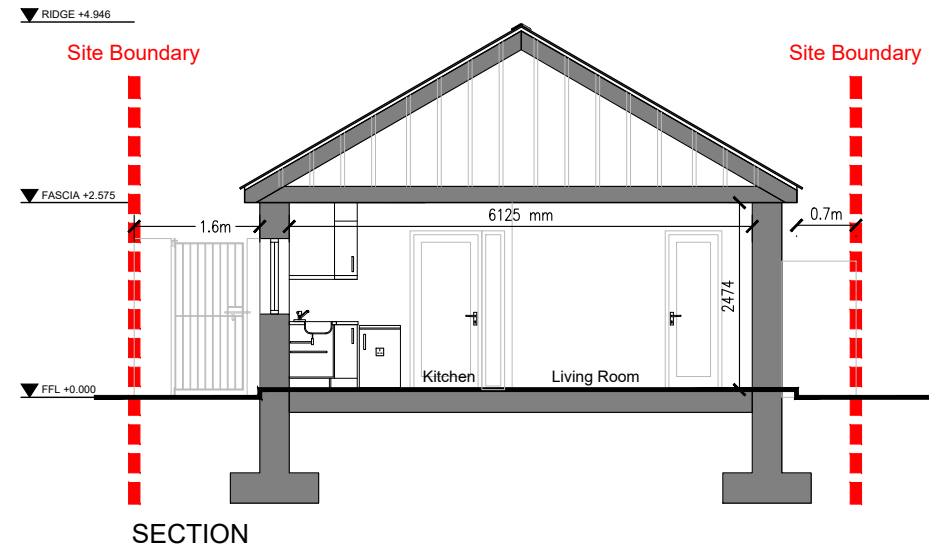
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Front Elevation - North West



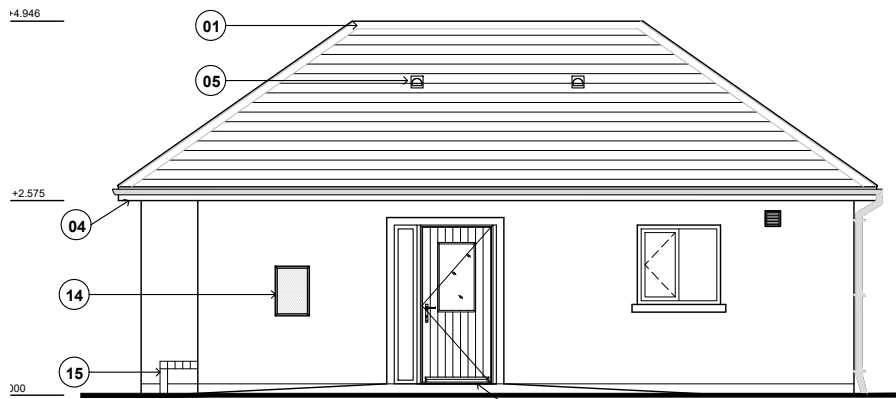
Rear Elevation - South East



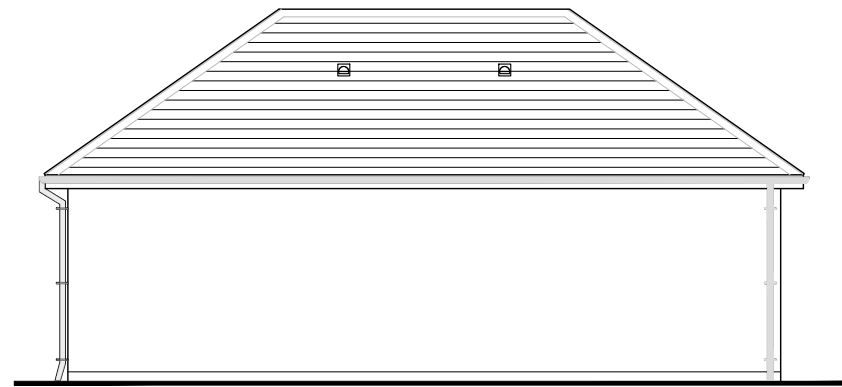
SECTION

**LEGEND:**

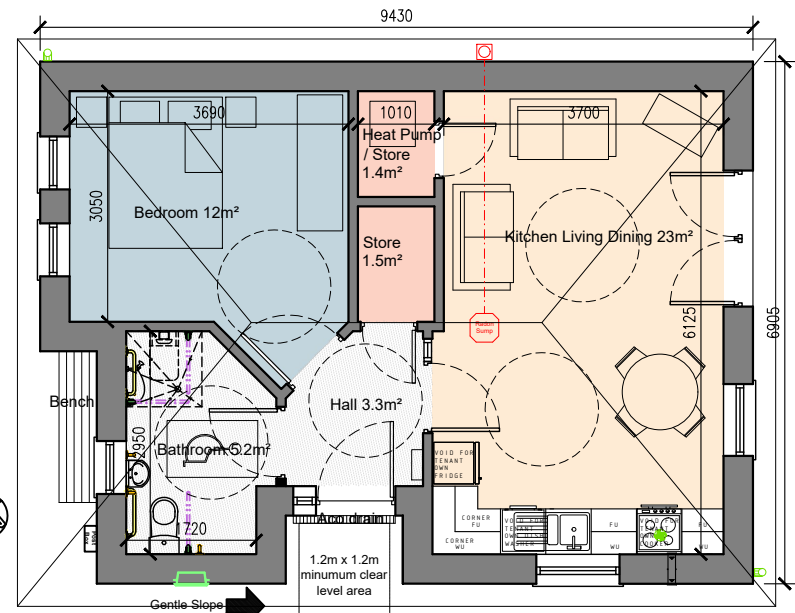
- 01: Fibre cement ridge tile
- 02: Fibre cement slate to blue-black in colour
- 03: Rain Water Goods: 155mm wide, 98mm depth uPVC half round gutters & 82mm black uPVC round downpipes.
- 04: Eaves: Projecting black uPVC fascia, soffit & verge.
- 05: In line roof vents.
- 06: Walls: Smooth plaster finish to front & side elevations. Wet dash finish to rear elevation. Painted plinth.
- 07: Windows: Double glazed with uPVC frames.
- 08: Cills: Precast concrete cill.
- 09: Front Door: Composite engineered door with a painted hardwood finish to selected colour.
- 10: Rear Door: uPVC.
- 11: Galvanised steel gates.
- 12: Outdoor fan unit for heat pump. To M&E specification.
- 13: Wall mounted post box.
- 14: ESB meter box.
- 15: Timber bench.
- 16: Mechanical cooker vent to M&E specification.



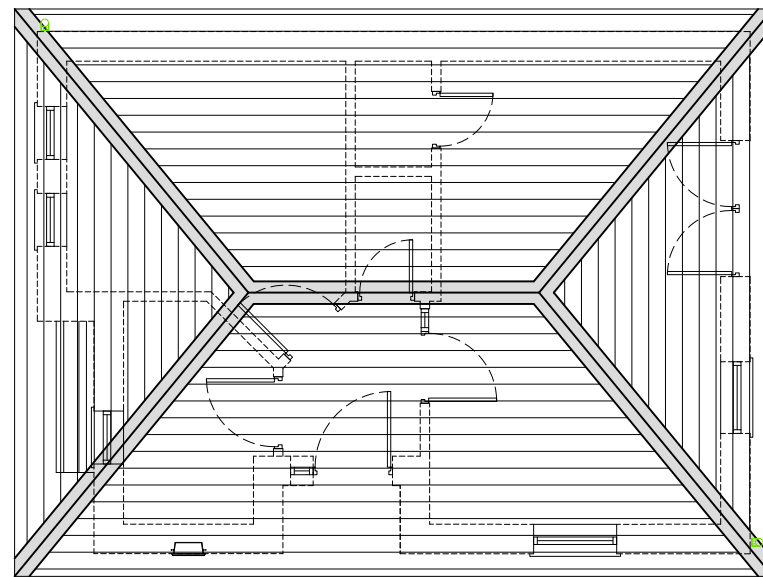
Side Elevation - South West



Side Elevation - North East



Ground Floor Plan  
Area: 48.5m²



Roof Plan

1 BED/ 2P HOUSE (1 STOREY)	TARGET GROSS FLOOR AREA (M²)	MINIMUM MAIN LIVING ROOM AREA (M²)	AGGREGATE LIVING AREA (M²)	AGGREGATE BEDROOM AREA (M²)	STORAGE AREA (M²)
	(M²)	(M²)	(M²)	(M²)	(M²)
MINIMUM	44	11	23	11	2
PROPOSED	48.5	11.6	23	12	2.9


Rev. No.	Revision Description	Date
----------	----------------------	------

Project Stage: Single Stage Submission

Project Title: No.33 Market Place, Kanturk.  
(Rear of 34 Bluepool Upper)

Drawing Title: Plans, Elevations & Sections.

**Conhairle Contae Chorcaí**  
 Ailtirí | Stúirthóiríocht  
**Cork County Council**  
 Architects | Housing Directorate  
 County Hall, Cork  
 Tel: (021) 4285433  
 e-mail: architects.housing@corkcoco.ie

Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK Technician: TOF Surveyor: RB Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-200	Date: Oct. 23	Scale: 1:100 Issue for: Planning



Proj Name	New Dwelling at 33 Marketplace Kanturk		Cork County Council
Proj Address	Marketplace, Kanturk		Engineering Design Team, Housing Directorate,
Proj No.	N2022006		County Hall, Cork
Proj Status	Planning		tel - 353 086 0849134 email - john.fleming@corkcoco.ie



**Drawings**

Proj Engineer	John Fleming	Issued by -	Engineering Design Team (EDT) Mech & Elec	DSD	
				day	5
				month	10
				year	2023

Drg Reference & Drg No.	Drawing Title	Scale	Sheet	
DR-CCC-ME-PL-1001	General Services	N/A	A3	√
N2022006-DR-CCC-PL-121	Site Services	1:200	A3	√
N2022006-DR-CCC-ME-PL-200	Electrical Layout	1:50	A3	√
N2022006-DR-CCC-ME-PL-201	Lights & Fire Alarm	1:50	A3	√
N2022006-DR-CCC-ME-PL-241	Mechanical Services	1:50	A3	√
N2022006-DR-CCC-ME-PL-256	Drains & Ducting	1:50	A3	√
N2022006-DR-CCC-ME-PL-271	Mechanical Extraction Ventilation	1:50	A3	√

**Purpose Of Issue**

Stage I - Submission	
Stage II - Appointment of Consultants	
Stage II - Project Design	
Stage II -Submission	
179A system	X
Stage III - Tender BoQ	
Stage III - Submission DOE,C&LG	
Stage III - Tender	
Stage IV - Working Drawings	
Stage IV - As Built	

**Distribution**

Name	Company/Individual	copies
Contractors		Print
Quantity Surveyor		Print
Engineer - Services		Email
Engineer - Structural		DWG
Consultants		CD
Main Contractor		PDF
Planning Department	X	Print
Department of Housing, Planning, Community and Local Government		Email















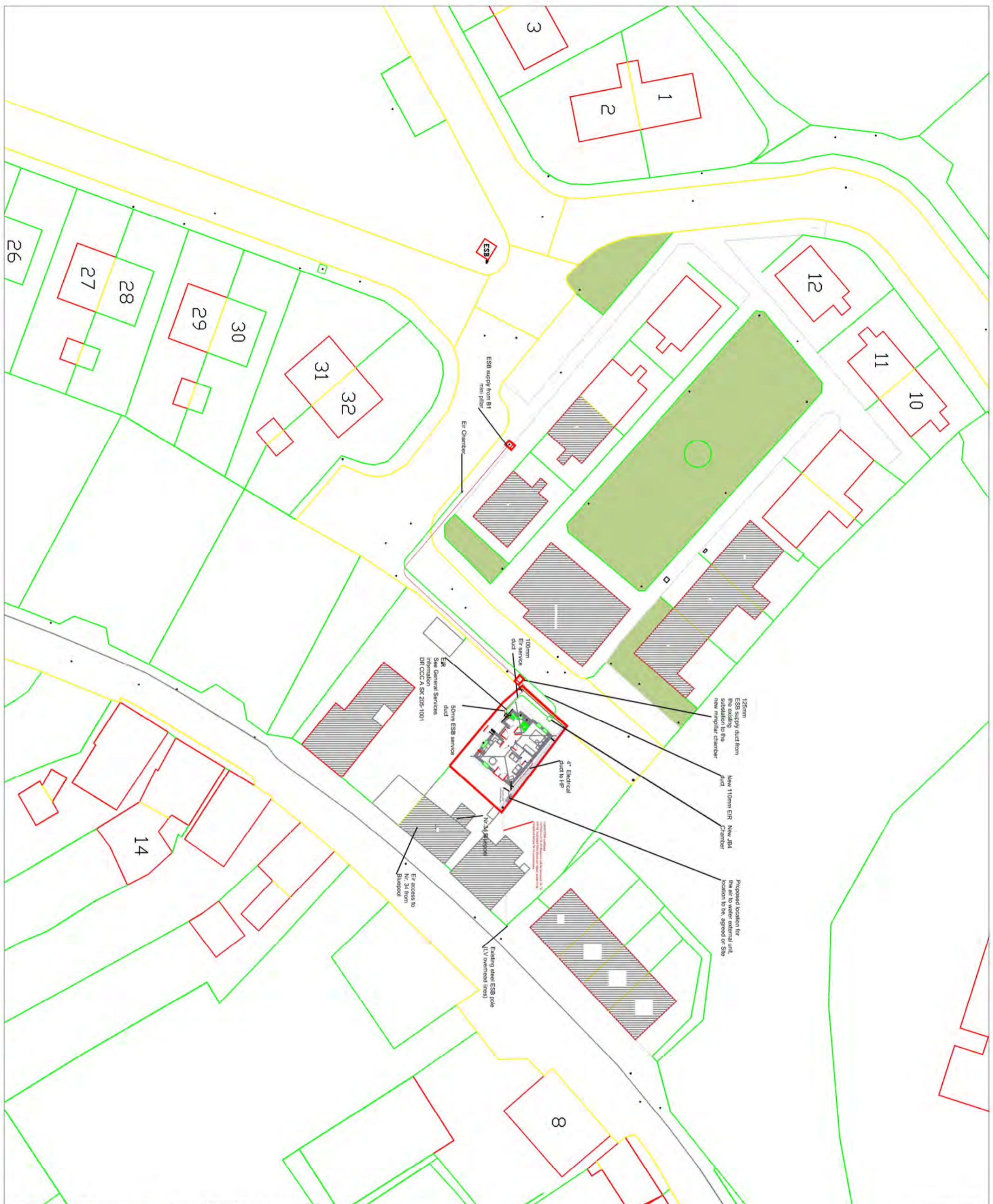



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5. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL SPECIFICATION DOCUMENTS



-  MP Minipillar
-  MMP Micropillar
-  125mm ESB supply duct
-  50mm ESB service duct
-  110mm EIR service duct
-  EIR JB4 inspection chamber
-  Public lighting service duct
-  Public lighting service duct
-  ESB pole
-  JB 26 Chamber



P02 ESB & Eir ducting, B1 minipillar & Enclosure		Oct 23
Rev. No.	Revision Description	Date
Project Stage: Planning		
Project Title: Nr. 33 Marketplace, Kanturk		
Drawing Title: Site Services, ESB & Eir		
 <b>Conhairle Contae Chorcaí</b> Toghlu Dáiligh   Stairiannach   Teicneolaíoch <b>Cork County Council</b> Caplaíntaíocht   Stairiannach   Stairiannach County Hall, Cork Tel: (021) 4278891		
Job Reference: N2022006	Sheet: A3	Design Team: J Planning
Dwg No.: DR/CC-ME-PL-121	Engineer: Technician	3rd Engineer: K. Jones
Date: Oct 2024 15:00	Scale: Planning	2024

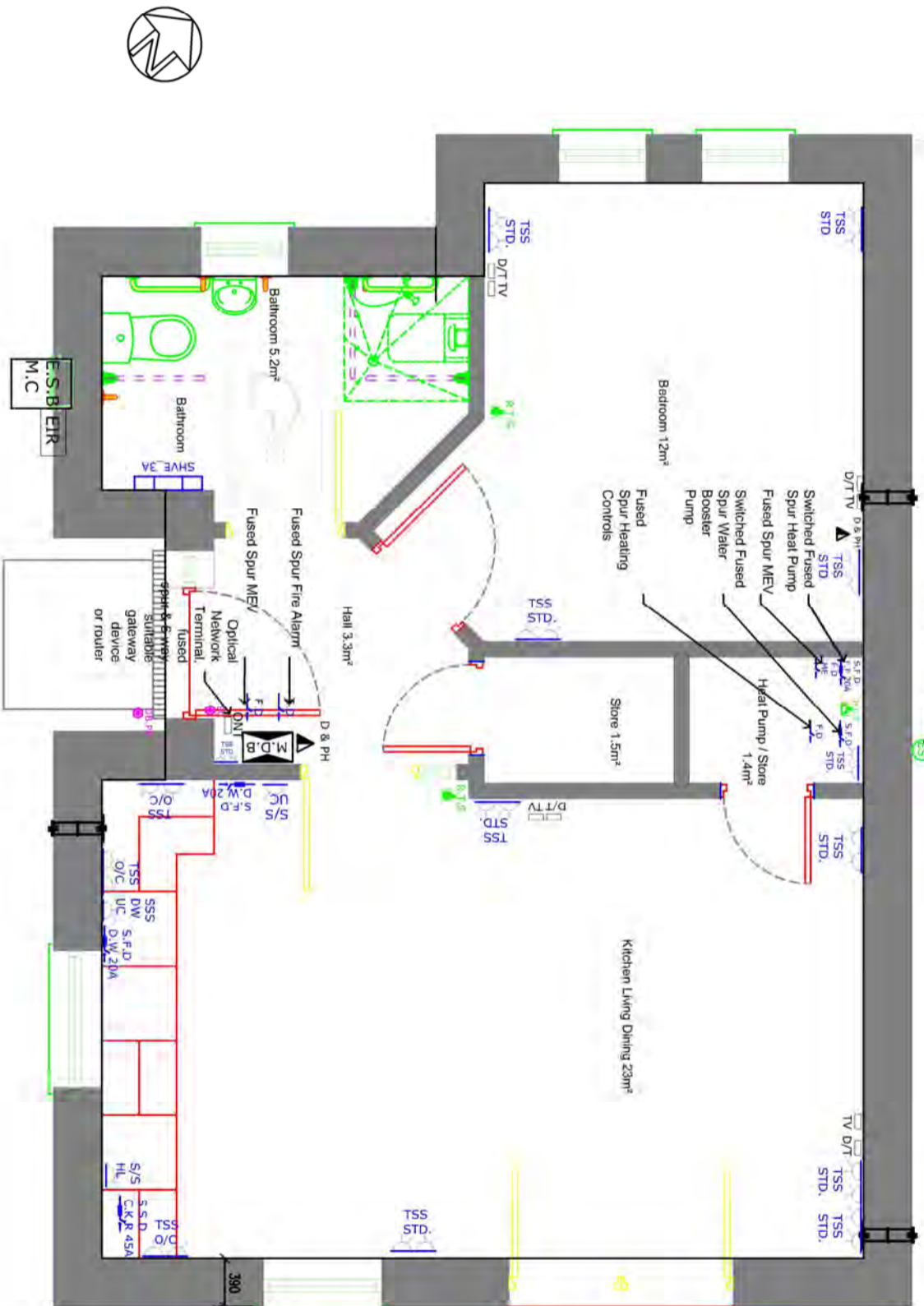


Legend: Electrical Services

- 1.5 Single Switched Socket 400mm FFL
- 1.5.1 Single Switched Socket High Level
- 1.5.2 Extractor Fan
- 1.6 Single Switched Socket 400mm FFL Under Counter
- 1.7 Double Switched Socket 400mm FFL
- 1.8 Double Switched Socket 1200mm FFL
- 1.9 Double Switched Socket Under Counter 400mm FFL
- 1.10 Switched Fused Disconnection (Spur)
- 1.11 Switched Fused Disconnection (Spur) 16A Dish Washer 20A
- 1.12 Fused Disconnection (Spur) Booster Pump Isolator Heat Pump EXT
- 1.13 Fused Disconnection (Spur) 45A Shower
- 1.14 Switched Disconnection (Spur) 45A Cooker
- 1.15 Data & Telephone
- 1.16 TV Junction Box
- 1.17 Access Terminating Box
- 1.18 Data & Telephone Box
- 1.19 Fibre Terminal Box
- 1.20 External Terminating Unit
- 1.21 Heating control unit
- 1.22 Room temperature stat
- 1.23 Telephone
- 1.24 TV socket
- 1.25 Motorised Valve
- 1.26 Switch 1 Gang 1 Way
- 1.27 Switch 1 Gang 2 Way
- 1.28 Switch 2 Gang 1 Way
- 1.29 Switch 3 Gang 1 Way
- 1.30 Door Bell Push Button
- 1.31 Door Bell Chime
- 1.32 Shaver Light
- 1.33 Smoke Head
- 1.34 Heat Detector
- 1.35 Carbon monoxide detector
- 1.36 Fire Alarm Control Switch
- 1.37 Mechanical Extraction Control Switch
- 1.38 External Temperature Sensor
- 1.39 Ceiling Rose
- 1.40 LED Bulk Fitting Head External
- 1.41 LED Bulk Fitting Head Internal
- 1.42 Main Distribution/Consumer Unit
- 1.43 ESS Meter Cabinet
- 1.44 EIR Incoming
- 1.45 Electric Vehicle Charging Point, Isolator & Charger complete with DCI Protection

Proposed layout zone/room/destination board for 33 Market Place, Kanturk

Room	Zone	Room	Zone	Room	Zone	Room	Zone	Room	Zone
Main Switching	20A	20A	20A	20A	20A	20A	20A	20A	20A
Surge Protection	20A	20A	20A	20A	20A	20A	20A	20A	20A
Cooker	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO
HP Oil	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO	RCBO
Door	HP	HP	HP	HP	HP	HP	HP	HP	HP



Lockable Isolator  
Heat pump External  
R HP EXT

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Final locations to be agreed on site  
The drawings detail the functional requirements and arrangements of the services

Distribution boards/consumer unit manufactured from materials complying EN 61439, erected at a height not greater than 2.5m to the top of the highest protective device to include 2 pole isolator switch, over current protection, surge protection, arc fault detection.

The electrical equipment used in this install shall comply with the European product standard(s) which includes I.S. EN, HD or an I.S. implementing HD, in absence of these standards the following appropriate standard(s) shall apply:  
Irish Standards (I.S.); or IEC standards not approved in CENELEC, or national standard(s) of another country.  
Where there are no applicable standards, the item concerned shall be selected by special agreement between the persons specifying the installation and the installer.  
The resulting degree of safety of the installation shall not be less than obtained by compliance with I.S. 10101 (2020).

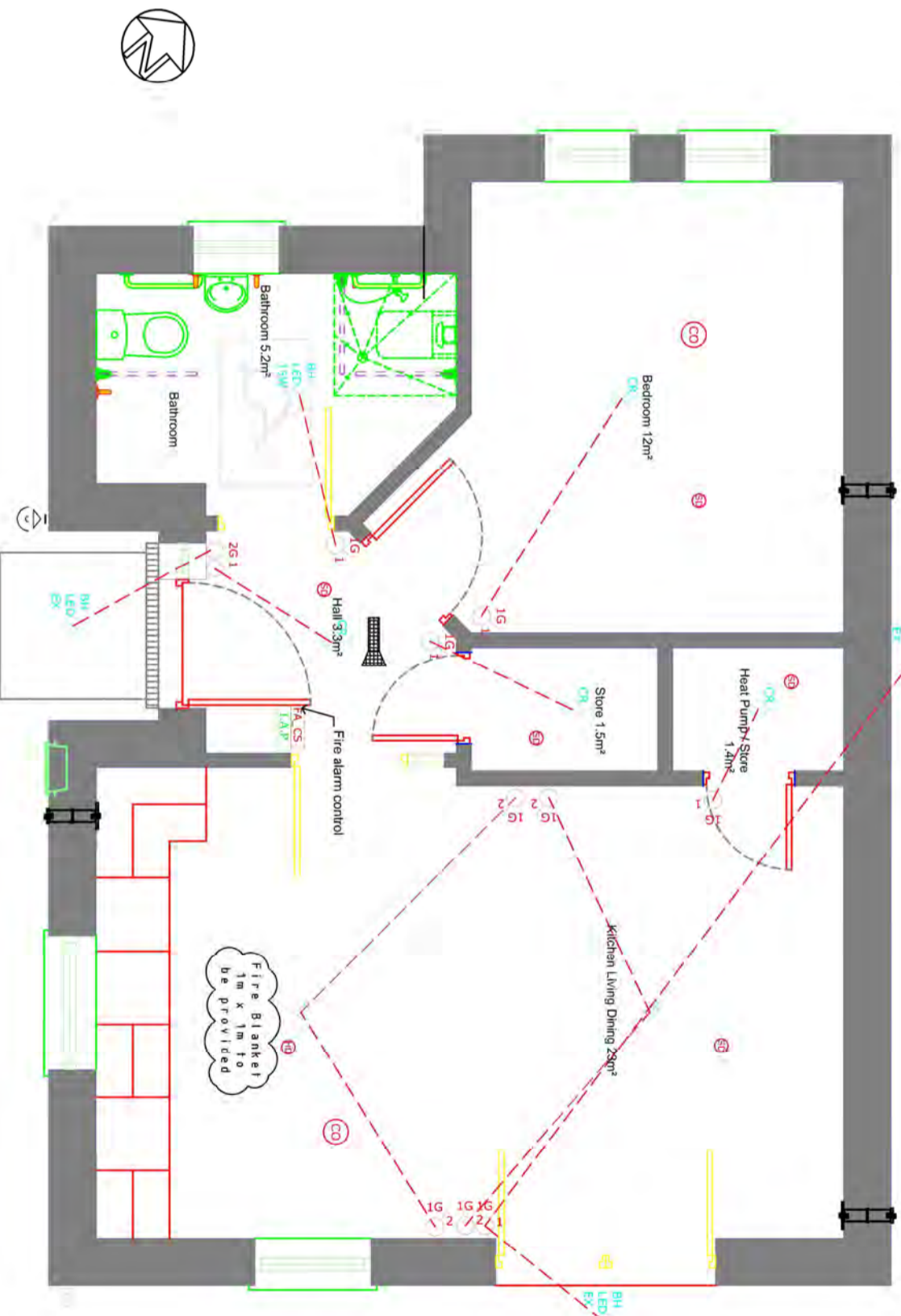
Job Reference: N2022006	Design Team: JC
Dwg No.: DR-CCC-ME-P-200	Engineer: JF
Date: 15/01/2022	Sr Architect: R. Henry
Scale: 1:50	Issue for: Tender
Sheet: A3	Scale: 1:50

**Contraire Contae Chorcaí**  
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**Cork County Council**  
 Architects / Housing Directorate  
 County Hall, Cork  
 Tel: (021) 4285453  
 e-mail: architects.housing@contraire.ie



Legend, Electrical Services


-  Single Switched Socket 400mm FFL
-  Single Switched Socket High Level, Extractor Fan
-  Single Switched Socket 400mm FFL, Under Counter
-  Double Switched Socket 400mm FFL
-  Double Switched Socket 1200mm FFL
-  Double Switched Socket Under Counter 400mm FFL
-  Switched Fused Disconnection (Spur)
-  Fused Disconnection (Spur) 16A
-  Switched Fused Disconnection (Spur) Dish Washer 20A
-  Fused Disconnection (Spur) Booster Pump Isolator Heat Pump EXT
-  Fused Disconnection (Spur) 45A Shower
-  Switched Disconnection (Spur) 45A, Cooker
-  Data & Telephone
-  TV Junction Box
-  Access Terminating Box
-  Data & Telephone Box
-  Fibre Terminal Box
-  Data Patch Panel
-  Data Point
-  External Terminating Unit
-  Heating control unit
-  Room temperature stat
-  Telephone
-  TV socket
-  Motorised Valve
-  Switch 1 Gang 1 Way
-  Switch 1 Gang 2 Way
-  Switch 2 Gang 1 Way
-  Switch 3 Gang 1 Way
-  Door Bell Push Button
-  Door Bell Chime
-  Shower Light
-  Smoke Head
-  Heat Detector
-  Carbon monoxide detector
-  Fire Alarm Control Switch
-  Mechanical Extraction Control Switch
-  External Temperature Sensor
-  Ceiling Rose
-  LED Bulk Fitting Head External
-  LED Bulk Fitting Head Internal
-  Main Distribution/Consumer Unit
-  ESB Meter/Cabinet
-  EIR Incoming
-  Electric Vehicle Charging Point, Isolator & Charger complete with DCL Protection



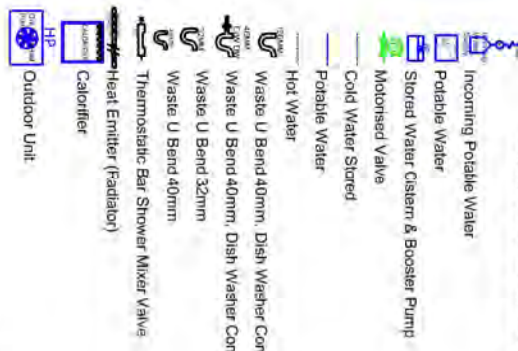
The electrical equipment used in this instal shall comply with the European product standard(s) which includes I.S. EN, HD or an I.S. implementing HD, in absence of these standards the following appropriate standard(s) shall apply: Irish Standards (I.S.), or IEC standards not approved in CENELEC, or national standard(s) of another country. Where there are no applicable standards, the item concerned shall be selected by special agreement between the persons specifying the installation and the installer. The resulting degree of safety of the installation shall not be less than obtained by compliance with I.S. 10101 (2020).

Distribution boards/consumer unit manufactured from materials complying EN 61439, encased at a height not greater than 2.15m to the top of the highest protective device, to include 2 pole isolation switch, over current protection, surge protection, arc fault detection.

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<p>Project Title: No. 33, Market Place, Kanturk</p>	
<p>Drawing Title: Lumens Switching, Fire Alarm</p>	
 <p><b>Contraile Contae Chorcaí</b> Aidlinn (Súiríneoireacht) Tionscail <b>Cork County Council</b> Ardinreach / Housing Directorate County Hall, Cork Tel: (021) 4285433 e-mail: ardinreach.housing@cccork.ie</p>	
<p>Job Reference: N2022006</p>	<p>Design Team: Architect: JC Engineer: JF</p>
<p>Dwg No.: DR-CCC-ME-P-216</p>	<p>Surveysor: R. Henry Sr Architect: R. Henry</p>
<p>Date: 15/01/2022</p>	<p>Scale: 1:50</p>
<p>Issue No: 1</p>	<p>Sheet: A3</p>
<p>Tender: [Blank]</p>	<p>Rebuilt Ireland</p>





Calculated general ventilation rate based on occupancy of the dwelling (TGD F - 1.2.2.2): @ 5 l/s plus 1 l/s person = 5 + (4\*2) = 13

Calculated general ventilation rate based on internal floor area of the dwelling (TGD F - 1.2.2.2): 48.5m<sup>2</sup> at 0.3 l/s/m<sup>2</sup> (0.3 x 48.5) = 14.55 l/s

General ventilation rate of the dwelling is the greater of the above = 14.55 l/s

Overall Minimum Boost Extract Ventilation Rate Requirement, (TGD F - 1.2.2.2) (1 x 13) + (1 x 8) = 21 l/s

25% Capacity Requirement over General Ventilation Rate of the Dwelling (TGD F - 1.2.2.2) 4.55 x 1.25 = 18.18 l/s

The total capacity of the Ventilation System is the greater of the above = 21 l/s

Room with MEV extract grid (s) Room general extract airflow rate (l/s) adjusted proportionally  
 Kitchen = 9.5 l/s  
 Toilet & Shower = 5.5 l/s

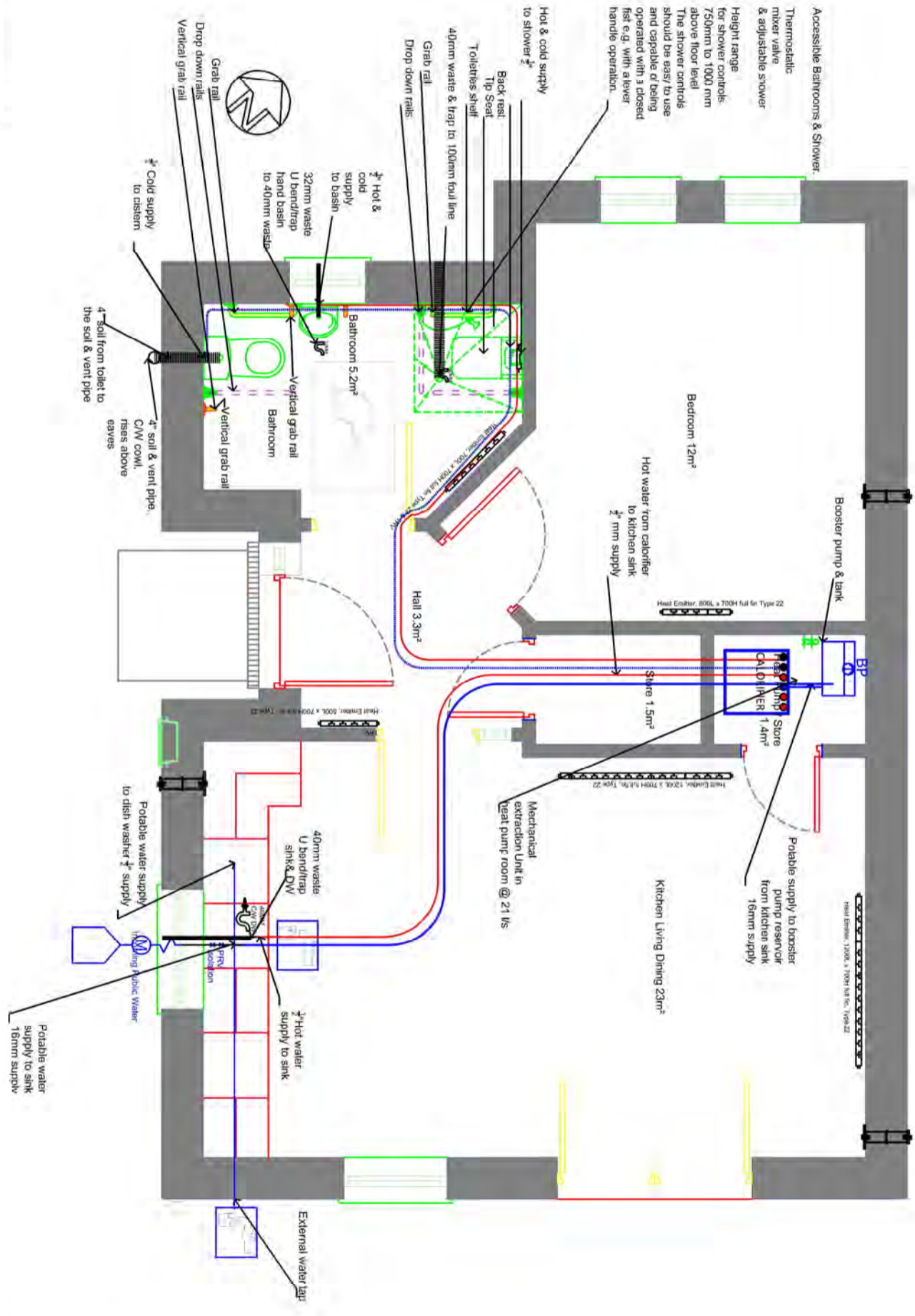
Heat loss and emitters have been sized to S.R. 50-1:2021 NSAI Building Services - Codes of Practice - Part 1 Water Based Heating Systems in Dwellings and Heat loss calculation and radiator sizing for heat pump systems (SEAI)

The flow temperature of heat pump is calculated at around 45°C with a return temperature of 40°C, the heat emitters detailed in the drawing have been sized using a conversion factor and a typical emitter manufacturer with a ΔT of 50°C, the contractor should obtain conversion factors for low temperature emitters from the supplier/manufacturer and agree with the engineer. Higher output emitters (increased fins and surface area) influence the final size selection.

Heat Emitter Selection			
Heat Emitter Based on Low Flow & Return Temperature Annex H, S.R. 50-1:2021 NSAI Building Services - Codes of Practice - Part 1 Water Based Heating Systems	Design Heat Emitter Degree C	Heat Loss Rooms Waste	Proposed Emitter Based on Low Flow & Return Temperature Annex H, S.R. 50-1:2021 NSAI Building Services - Codes of Practice - Part 1 Water Based Heating Systems
Kitchen/Living/Dining Room	21.5	14.55	5098
WC Shower Room	1.5	338	22
Hall	21.5	286	22
Bedroom	21.5	395	22

Heat Emitter Selection	
Calorifier Internal Hot Water Storage	150L
Booster Pump & Cold Water Store	212L

Heat Pump	
Soil System/kitchen	3.5
MW	3.5




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- Notes
1. Final locations to be agreed on site
  2. Drawing to be read in conjunction with other relevant service drawings and specifications
  3. Soil and vent pipe-work below ground level shall be the remit of the main contractor
  4. Mechanical contractor shall be responsible for all connections to sanitary ware and fitting of same
  5. All exposed wastes, traps and supports within the toilet area must be metal manufacture and chrome plated
  6. Access/inspection covers at the base of stacks above floor level.

Final Locations to be agreed on site  
 The drawings detail the functional requirements and arrangements of the services

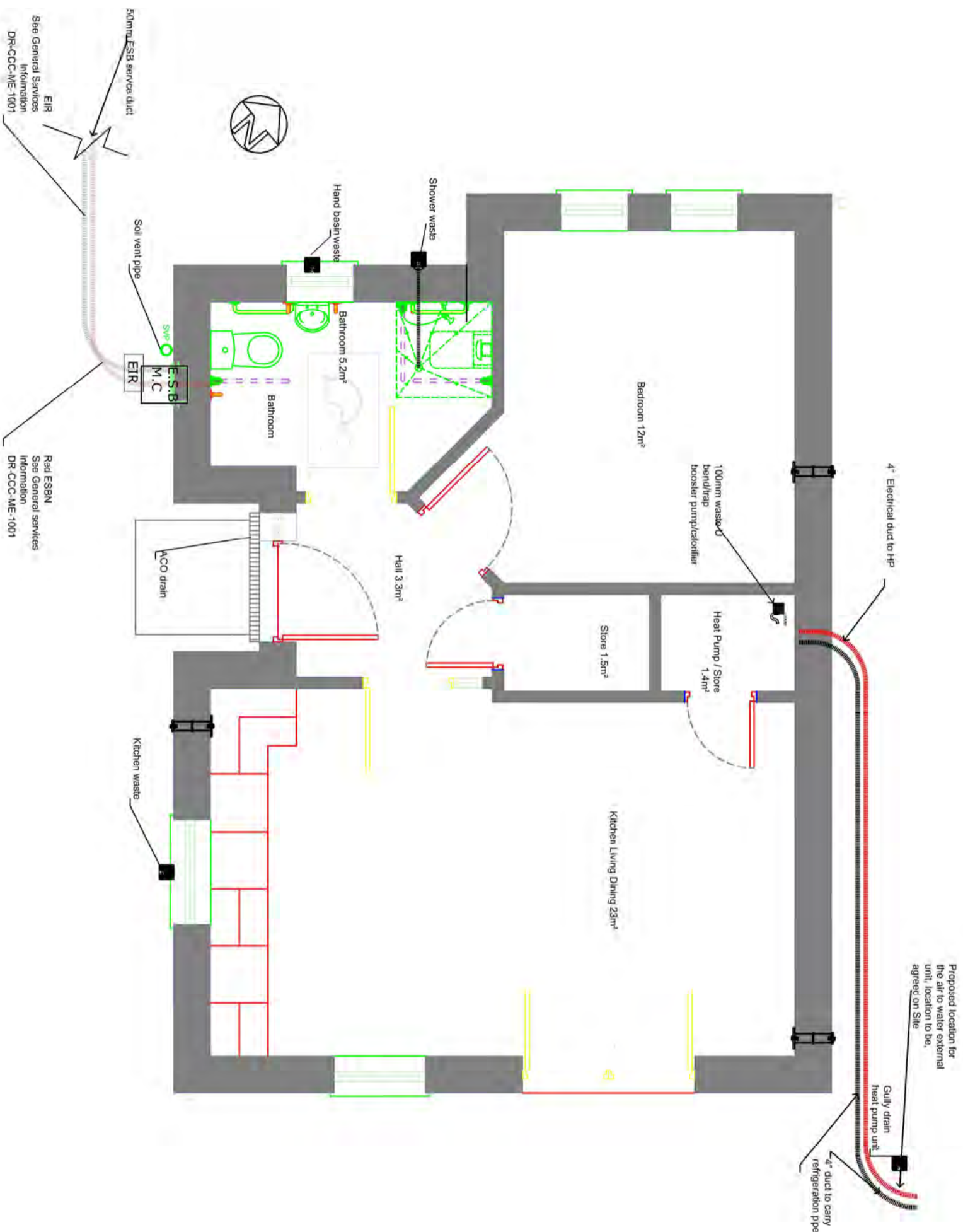
Job Reference:	N2022006	Design Team:	JC
Dwg No.:	DR-CCC-ME-P-241	Engineer:	JF
Date:	13/01/2022	Sr Architect:	R. Henry
Scale:	As shown	Issue No.:	1
Tender:	13/01/2022	Sheet:	A3


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 Ardán Iomairteach Technicéir  
 Cork County Council  
 County Hall, Cork  
 Tel: (021) 4285433  
 e-mail: architects.housing@cccork.ie

Ventilation heat loss calculations based on S.R. 50-1:2021 NSAI building services - codes of practice - part 1 water based heating systems in dwellings  
 Building fabric heat loss calculations based on S.R. 50-1:2021 NSAI building services - codes of practice - part 1 water based heating systems in dwellings  
 Heat emitters based on Low Flow & return temperature annex H, S.R. 50-1:2021 NSAI building services - codes of practice - part 1 water based heating systems



- Drainage Legend**
- 100 waste Lines
  - 100mm vent line
  - 100mm Storm line
  - 40mm waste to shower
  - 40mm waste to kitchen si
  - 32mm waste to hand basi









Proposed location for the air to water external unit, location to be agreed on site

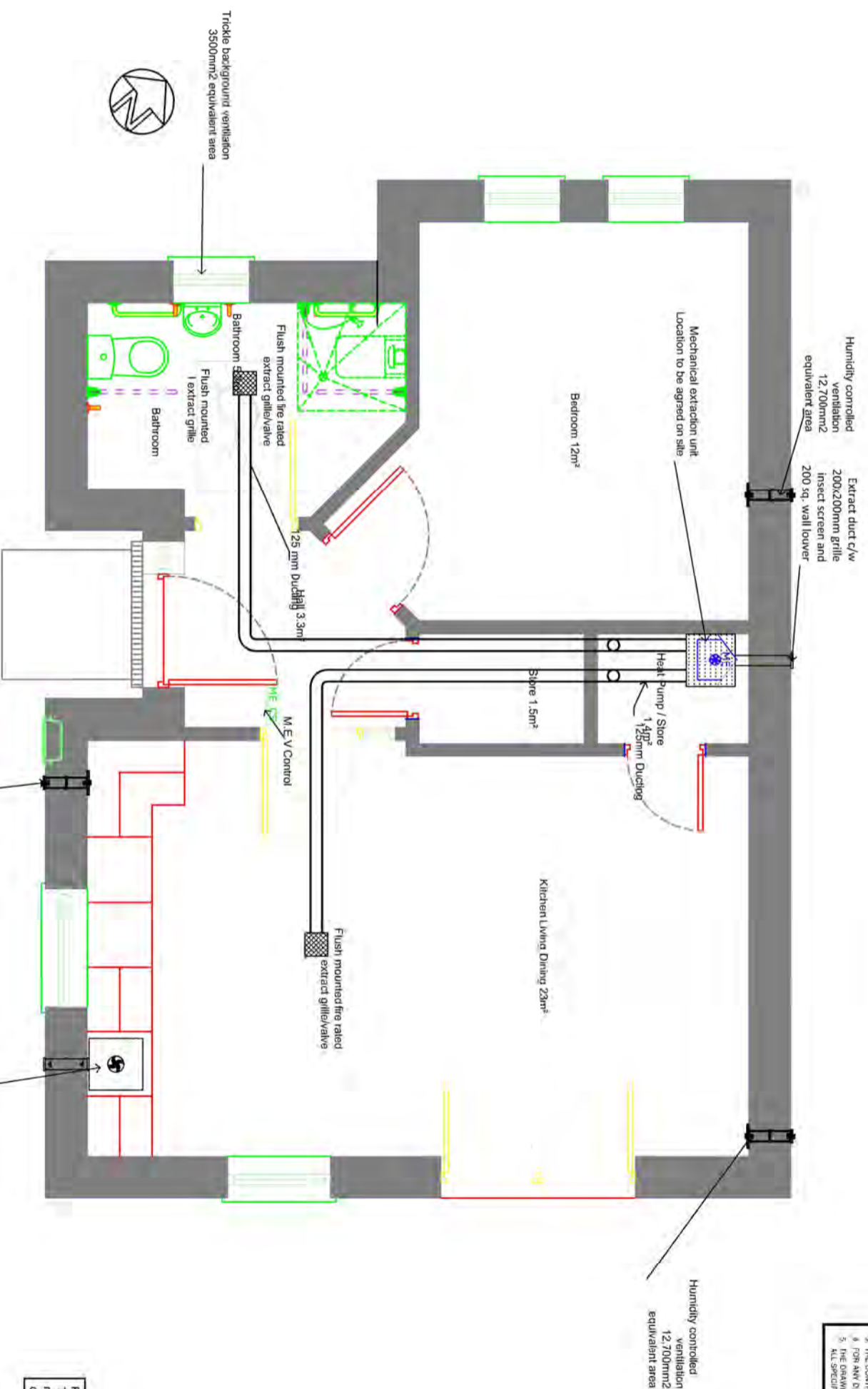
Final locations to be agreed on site. The drawings detail the functional requirements and arrangements of the services

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<p><b>Contraire Contae Chorcaí</b>          An tAinm (Súiríneoireacht) Teicniúil  <b>Cork County Council</b>          Architects / Housing Directorate          County Hall, Cork          Tel: (021) 4285433          e-mail: architects.housing@conkco.co.ie</p>		<p><b>Design Team:</b>          Architect: J.C.          Engineer: J.F.          Sr Architect: R. Henry</p>	
<p>Job Reference: N2022006          Dwg No.: DR-CCC-ME-P-256          Date: 1/50</p>	<p>Issue for: Tender          Scale: 1:50</p>	<p>Sheet: A3          of 3</p>	<p>Rebuilt Ireland</p>
<p>Project Title: No. 33, Market Place, Kanturk</p>			
<p>Drawing Title: Drainage &amp; Ducting</p>			
<p>Rev. No. 01          Revision Description: Planning</p>	<p>Date:</p>		

Legend: Mechanical Extraction

-  Mechanical extraction unit
-  Flush mounted demand control extract grille
-  Humidity controlled demand/ventilation
-  7000mm<sup>2</sup>/2500mm<sup>2</sup> equivalent area
-  Stainless steel kitchen extract hood
-  Mechanical extraction control



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Calculated general ventilation rate based on occupancy of the dwelling (TGD F - 1.2.2.2): @ 5 l/s plus 4 l/s person = 5 + (4\*2) = 13

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Room with MEV extract grid (s) Room general extract airflow rate (l/s) adjusted proportionally  
Kitchen = 9.5 l/s  
Toilet & Shower = 5.5 l/s

Minimum total equivalent area of background ventilators providing general ventilation 42,000mm<sup>2</sup> + 7000mm<sup>2</sup> / 10m<sup>2</sup> > 70m<sup>2</sup>  
Background ventilators = 42,000mm<sup>2</sup>

Ventilation/heat Loss calculations based on S.R. 50-1 2021 NSAI building services - codes of practice - part 1 water based heating systems in dwellings Building Fabric heat Loss calculations based on S.R. 50-1 2021 NSAI, Building services - codes of practice part 1 water based heating systems in dwellings Heat emitters based on Low flow & return temperature annex H, S.R. 50-1 2021 NSAI building services - codes of practice - part 1 water based heating systems

Ventilation by: Buildings Regulations 2019 Technical Guidance Document F Ventilation

 <p><b>Cork County Council</b> County Hall, Cork Tel: (021) 428433 e-mail: architects.housing@ccc.co.ie</p>		<p><b>Conhairle Contae Chorcaí</b> Aitheiní Iomairteach Teicniúil County Hall, Cork Tel: (021) 428433 e-mail: architects.housing@ccc.co.ie</p>	
Job Reference:	N2022006	Design Team:	JC
Dwg No.:	DR-CCC-ME-P-271	Architect:	JF
Date:	13/01/2022	Surveyor:	R. Henry
Scale:	1:50	Sr Architect:	R. Henry
Issue No:	1	Sheet:	A3
Tender:		Revised:	





**DRAINAGE NOTES:**

1. Refer to architectural drawings for all setting out of internal below ground drainage & for cover & invert levels.
2. The Contractor shall be responsible for checking all dimensions and levels shown against all other drawings pertaining to this part of the works.
3. Refer to architects drawings for locations of rainwater downpipes, soil vent pipes and soil stacks.
4. All internal pipework to be concrete encased.
5. All external pipework with less than 900mm cover to crown in unpaved areas and 1200mm cover to crown in paved areas to be concrete encased.
6. Concrete encasement to consist of minimum 150mm grade C12/15 leanmix concrete.
7. Rocker pipes should be provided at all locations where:
  - 7.1. A pipe enters or leaves a manhole, pumping station or other rigid structure.
  - 7.2. A pipe enters or leaves a concrete encasement.
  - 7.3. At any location as directed by the Engineer.
  - 7.4. Rocker pipe joint to be located no more than 150mm from the outside face of the structure to which the pipework is serving.

The effective length of the rocker pipe should be:

  - Pipe diameter 150mm to 600mm: 0.60m
  - Pipe diameter 600mm to 750mm: 1.00m
  - Pipe diameter greater than 750mm: 1.25m
8. All rocker pipes are to be formed by cutting and trimming a length of spigot & socket pipe to form a spigot at the cut end, thereby forming spigot & socket joints at both ends of the rocker pipe.
9. All manholes shown are precast concrete with minimum 150mm concrete surround unless noted otherwise.
10. Road gullies to be precast concrete with "LION" lockable type covers, with ductile iron grating D400 to comply with I.S. EN 124:2015-2.
11. All lines to road gullies to be 150mm Ø UPVC pipes unless noted otherwise.
12. All foul pop-ups to be 100mmØ UPVC unless noted otherwise.
13. All foul spurs to pop-ups to be 100mm Ø UPVC SN4 @ 1:40 falls unless noted otherwise.
14. All internal manholes to have lockable double sealed covers & frames.(KMHD 600L in stainless steel by Richmond Trading or equivalent)
15. All manhole covers to be Class D Heavy Duty ductile iron cover. Cover and frame to I.S. EN 124:2015-2.
16. Channel drain to be type ACO Multi Drain Heelguard with stainless steel QuickLock Grating or equivalent. Load Class B125 at front doors, Load Class C250 everywhere else.
17. All spurs to rainwater pipes to be 100mm Ø UPVC SN4 @ 1:40 falls unless noted otherwise.
18. Storm lines between manholes to be 225mm Ø Ridgidrain ADS Polyethylene Pipes or equivalent unless noted otherwise.
19. Foul lines between manholes to be 150mm Ø UPVC SN8 Unless Noted Otherwise. All internal foul lines to be 100mm Ø UPVC SN4 @ 1:40 falls unless noted otherwise.
20. All foul lines from internal gullies to be 100mm Ø UPVC SN4 @ 1:40 falls unless noted otherwise.
21. All foul lines from inspection chamber at site boundary to mainline to be 100mm Ø UPVC SN8 @ 1:40 falls unless noted otherwise.
22. All spur connections shown on lines to be 45° 'Y' bends unless noted otherwise.
23. All French Drains to be 150mm Ø perforated UPVC pipe wrapped in geotextile typically laid above retaining wall footings and surrounded in minimum 200mm of clean washed stone unless noted otherwise.
24. All drainage materials and workmanship to comply with local authority & DJF Specification.

25. Setting out of pop-ups internally to be coordinated by Contractor in conjunction with Architects Drawings.
26. All Design and Installation Forms are to be included in the Handover File.

**GENERAL NOTES:**

1. These Notes are to be read in conjunction with all other Tender, Construction and Contract Drawings, Details, Specifications, Bill of Quantities and Documents.
2. The Contractor is to ensure that all works will be undertaken in accordance with good building practice and current Building Regulations (including Technical Guidance Documents A to M inclusive and all relevant amendments).
3. If in doubt, request clarification from DJF.

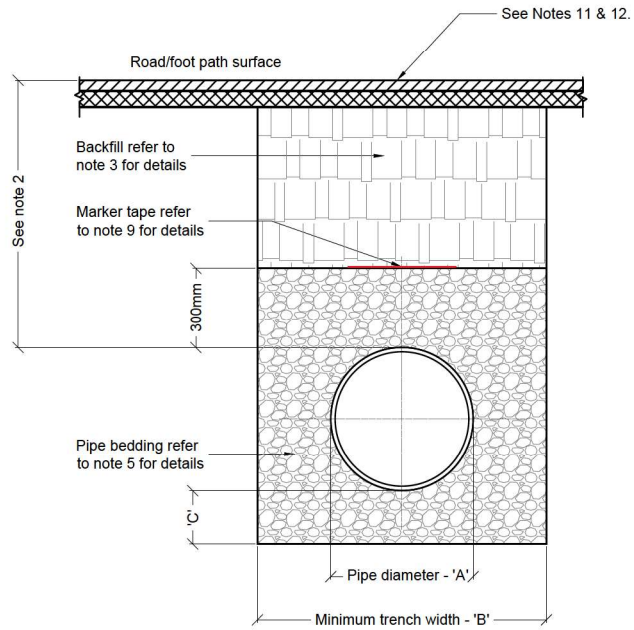


Status	<b>CONSTRUCTION</b>
Client	<b>DETAILS</b>

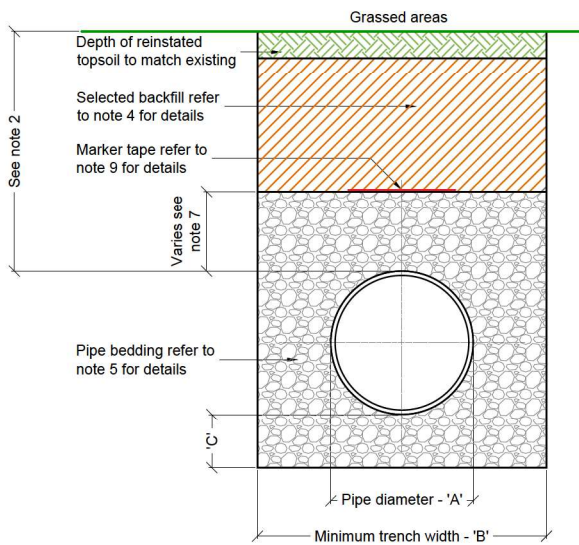
Project Title	<b>Notes</b>
Drawing Title	<b>General Drainage Notes</b>

0 ISSUED FOR CONSTRUCTION	FH   SH   26.03.21
REV   DETAILS	BY   CWD   DATE
Drawing No.	Rev
<b>5000-01-002</b>	<b>0</b>
Scales	
<b>N.T.S</b>	<b>-A4</b>





**Trench Backfill and Bedding**  
**Cross section in roads**  
 Scale N.T.S



**Trench Backfill and Bedding**  
**Cross section in grassed areas**  
 Scale N.T.S

- All dimensions are in millimeters (mm) unless noted otherwise.
- The minimum depth of cover from the finished surface to the crown of gravity pipes without protection should be as follows:
  - Gardens and pathways without any possibility of vehicular access - depth not less than 0.5m. (this would normally relate to drains in private property, shallow pipes of this nature are undesirable and should be installed in accordance with the current building regulations).
  - Driveways, footways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross vehicle weight in excess of 7.5 tonnes - depth not less than 0.75 m.
  - Driveways, footways, parking areas and narrow streets without footways (e.g. mews developments) with limited access for vehicles with a gross vehicle weight in excess of 7.5 tonnes - depth not less than 0.9 m.
  - Depths of sewers in gated estates shall be similar to that outlined above.
  - Agricultural land and public open space - depth not less than 0.9 m.
  - Other roadways, highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes - depth not less than 1.2m.
- Clause 804 / 808 material in accordance with the Transport Infrastructure Ireland specification for road works is to be used as backfill material where the sewer main is located in roads, footpaths or when the nearest part of the trench is within 1m of the paved edge of the roadway. Clause 804 / 808 is to be compacted as per clause 802 of the Transport Infrastructure Ireland specification for road works. Clause 808 is to be used within 500mm of cement bound materials, concrete pavements, concrete structures or concrete products. Otherwise clause 804 may be used. Alternative backfill material to that described above (clause 804 or clause 808) of the pipe trench will only be allowed by Engineer where the roads authority in whose functional area the development is located, provides written approval to the developer to the use such alternative material evidence of this written approval to be provided to Engineer in advance of the commencement of works.
- Selected excavated material complying with the requirements of "acceptable material" as outlined on clause 601 of the TII specification for roadworks, table 6/1, class 8, class 2. May be used in green-field areas above granular pipe surround material subject to review by Engineer.
- Pipe bedding shall comply with WIS 4-08-02 and IGN 4-08-01. The pipe bedding granular material shall be 14mm to 5mm (d/D 2/14) graded aggregate or 10mm (d/D 4/10) single sized aggregate to is EN 13242.
- In soft ground conditions (CBR < 5) the material should be excavated and disposed of in accordance with the waste management act and clause 804 / 808 material in accordance with the Transport Infrastructure Ireland specification for road works shall replace the excavated material, wrapped in geo-textile wrapping. Alternatively, special pipe support arrangements, including piling etc. may be required where the depth of soft material is excessive. Such arrangements shall be subject to assessment by Engineer before advancing with the work.
- In green field areas, type B backfill (selected excavated material complying with the requirements of "acceptable material" as outlined on clause 601 of the TII specification for roadworks, table 6/1, class 8, class 2. ) will be allowed above the side haunch granular material in the case of rigid pipes. A granular surround of a minimum, depth of 150mm above the crown of the pipe is required for flexible pipes and type B material may be used as backfill above this. All rising mains in greenfield areas shall have a minimum cover of 300mm of granular material above the external crown of the pipe.
- Pipes shall not be supported on stones, rocks or any hard objects at any point along the trench. rock shall be excavated to a depth of 150mm below the actual depth of the trench with the void filled with clause 804 / 808 material in accordance with the Transport Infrastructure Ireland specification for road works. The granular material shall be laid above this void backfill material.
- Non degradable marker tape should be installed at the top of pipe bedding layer for sewers and rising mains. it should run continuously around manholes. In the case of non metal pipe material, the marker tape should incorporate a trace wire which is linked to fittings and terminated at the waste water pumping station (if provided) and the discharge manhole.
- Trench widths for pipe sizes ≤80mm may be <500mm, subject to consideration being given to the trench depth, health & safety & construction access requirements.
- New road construction & surface finish to be to Engineer/Irish Water requirements.
- Existing road reinstatement to comply with current version of "guidelines for managing openings in public roads" by the Dept. of Transport, Tourism & Sport, or Transport Infrastructure Ireland requirements

Pipe diameter 'A' (mm)	Trench width 'B' (mm)
≤80 rising main	see note 10.
100	500
150 - 200	600
>200 - 350	750
>350 - 450	900

Pipe diameter 'A' (mm)	Depth of bedding 'C' (mm)
≤100	100
150 - 450	200

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- If in doubt, request clarification from DJF.

Irish Water Detail STD-WW-07

Where services are intended to be taken in charge by a Service Provider, Service Provider Details take precedence over the above details.

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Client

**DETAILS**

Project Title

**Underground Services**

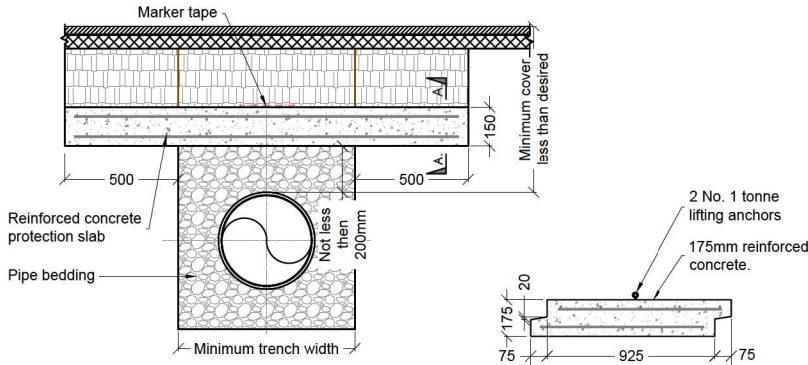
Status

**CONSTRUCTION**

Drawing Title

**Trench Backfill and Bedding**

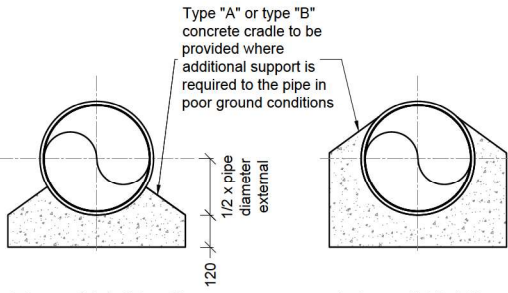
0	ISSUED FOR CONSTRUCTION	PH 025	26/03/21
REV	DETAILS	BY	DATE
Scales	N.T.S	Drawing No.	5000-02-009
	-A3	Rev	0



Reduced Cover

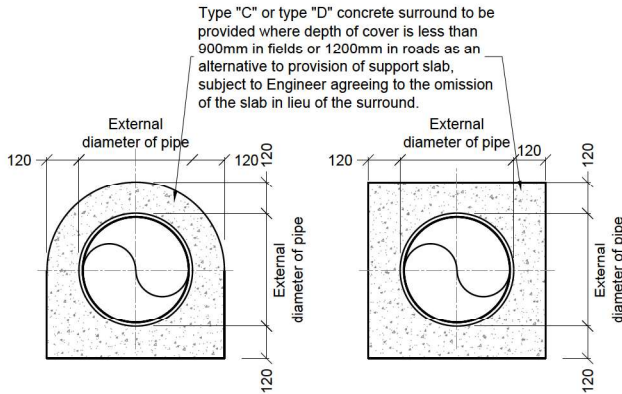
Protection Slab Detail  
Scale N.T.S

Section A-A  
Scale N.T.S



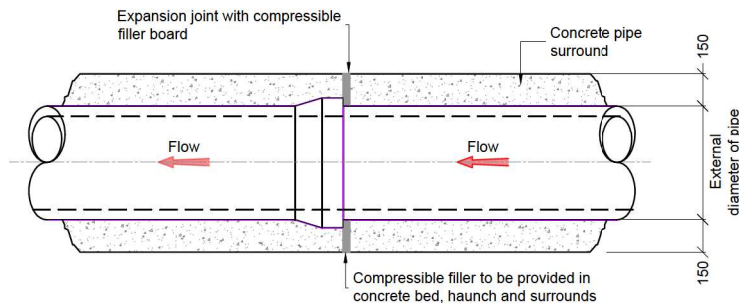
Type 'A' (Bed)  
Scale N.T.S

Type 'B' (Haunch)  
Scale N.T.S



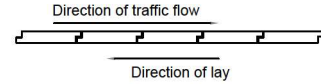
Type 'C' (Surround)  
Scale N.T.S

Type 'D' (Surround)  
Scale N.T.S



Spigot and Socket Joint  
Scale N.T.S

- For any slabbing works to be carried out within the vicinity of the pipeline, a method statement is to be submitted for review by Engineer.
- Marker tape to be placed above the slab and along the direction of the pipeline
- Concrete to be grade C30/35
- Minimum cover to steel reinforcement = 40mm
- Slabs to be designed for use under a HB25 load in accordance with BS5400-2. Design to be submitted to Engineer for assessment prior to installation.
- The soil on which the slab rests must have a CBR of 4% or greater. Where the CBR is less than 4% the material shall be removed and replaced with imported granular material as approved by Engineer.
- If direction of pipeline and direction of traffic flow are parallel, the direction of lay of the slab is to be against the direction of traffic flow.



- If pipeline protection slab is to be used solely for impact protection & overall depth of cover is greater than 1.2m, the distance between underside of slab & top of pipe may be increased after consultation with Engineer.
- All dimensions are in millimeters (mm) unless noted otherwise.
- Concrete bed and haunches may be required to provide additional support in poor ground conditions. Proposals to be provided to Engineer with geotechnical report supporting their use.
- Concrete surrounds shall have a minimum thickness of 150mm with an absolute minimum depth of cover above the external crown of the pipe of 750mm.
- All concrete to be in accordance with IS EN 206 and to be grade C16/20 to IS EN206
- The haunches and surrounds to be formed using form work to provide a rough cast finish.
- Expansion joints in the concrete shall be provided at all pipe joints to allow for pipe flexibility, compressible filler board to be in accordance with BS EN 622-1 and BS EN 622-4, and to be 18mm thick.
- Polyethylene and uPVC pipes shall be wrapped in plastic sheeting having a composition in accordance with BS 6076 before being cast into concrete.
- Bituminous material shall not be put in contact with PE or PVC pipes.

**GENERAL DETAIL NOTES:**

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Irish Water Detail STD-WW-8

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Client  
**DETAILS**

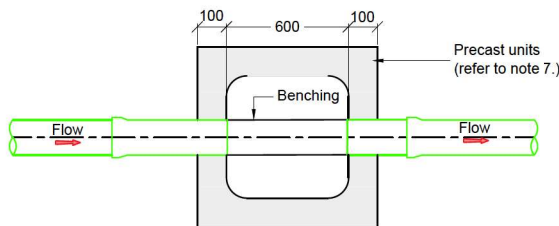
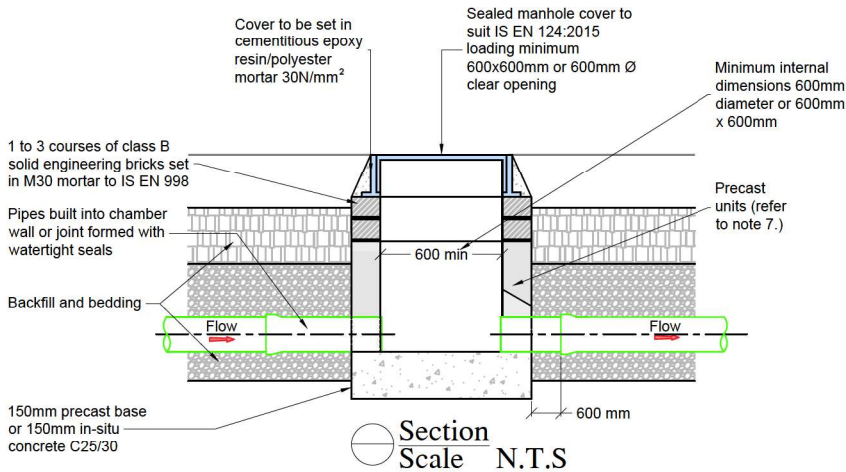
Project Title  
**Underground Services**

Status  
**CONSTRUCTION**

Drawing Title  
**Concrete Protection Slab, Bed, Haunch, and Surround, to Pipes**

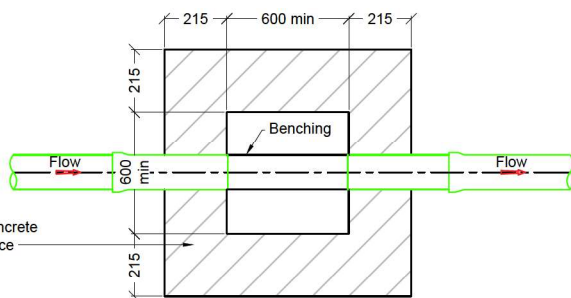
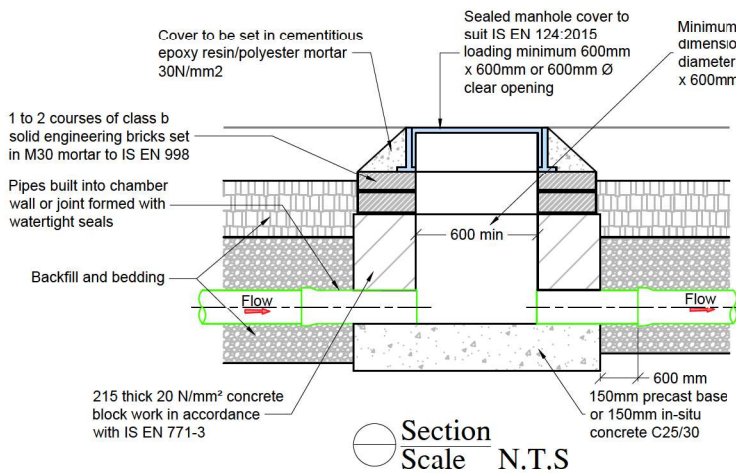
ISSUED FOR CONSTRUCTION	REV	DATE
0		28.03.21
Scale	Drawing No.	Rev
N.T.S	-A3	5000-02-010 0



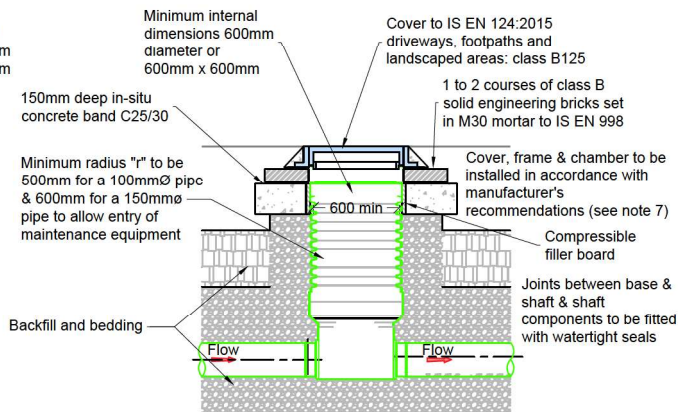


Section Inspection Chamber (Precast Concrete Construction)  
Scale N.T.S

1. All dimensions are in millimetres (mm) unless noted otherwise.
2. An inspection chamber should be located at or within 1m of the property boundary at the upstream end of each service connection on the private side of the curtilage, if practicable, consult with Engineer on alternative locations.
3. Service connection from public sewer to property boundary is a public asset. Pipe upstream of the property boundary is a private drain and should be constructed in accordance with the building.
4. Access points should be located so that they are accessible and apparent to the maintainer at all times for use. They should avoid rear gardens or enclosed locations and should never be overlain with surface dressing, topsoil, etc.
5. Covers and frames shall be suitable for road and traffic conditions subject to review by Engineer.
6. 200mm all around, 100mm deep concrete plinth around covers in green areas.
7. Proprietary prefabricated chamber units may also be used, subject to review by Engineer - see detail below.
8. Chambers shall be surrounded by a minimum of 150mm compacted clause 804 or clause 808 material.
9. Maximum depth from cover level to invert of pipe = 1.2m. Internal dimensions greater than 600 x 600mm or 600mm Ø required where depth exceeds 1.2m - consult with Engineer.
10. Smaller inspection chambers with internal dimensions of 450mm Ø OR 450 x 450mm may be permitted subject to approval by Engineer where confined physical conditions exist.
11. Prefabricated units should have water tight joints and should be interlocking to prevent lateral movement of individual sections of the unit



Section Inspection Chamber (Block Work Construction)  
Scale N.T.S



Proprietary inspection chambers to be installed in accordance with manufacturer's recommendations

Section - Proprietary Inspection Chamber to EN 13598-2 (Flexible material)  
Scale N.T.S

(Maximum depth from cover level to soffit of pipe: 1.2m)

GENERAL DETAIL NOTES:

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4. If in doubt, request clarification from DJF.

Irish Water Detail STD-WW-13

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Client

**DETAILS**

Project Title

**Underground Services**

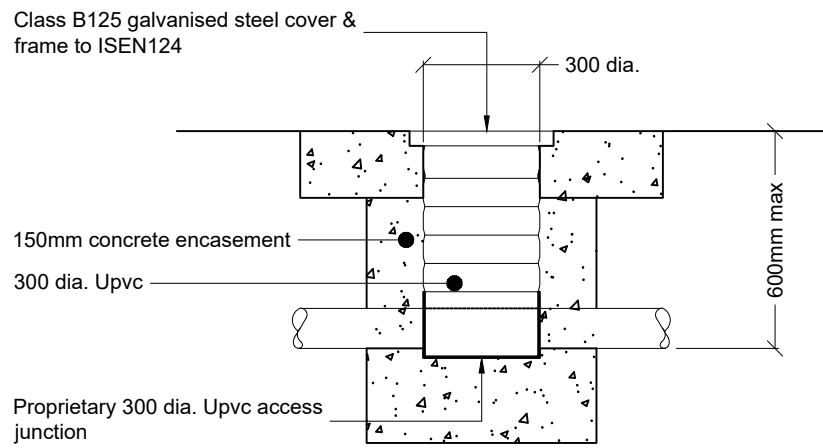
Status

**CONSTRUCTION**

Drawing Title

**Private Side Inspection Chamber**

0	ISSUED FOR CONSTRUCTION	RD   FH   26.03.21
REV	DETAILS	BY   DATE
Scales	Drawing No.	Rev
N.T.S	-A3	5000-02-019 0



**Typical Access Junction detail**  
Scale 1:20

- GENERAL DETAIL NOTES:**
1. This Detail is not to be scaled.
  2. This Detail is to be read in conjunction with all other Tender, Construction and Contract Drawings, Details, Specifications, Bill of Quantities and Documents.
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Client

**DETAILS**

Project Title

**Underground Services**

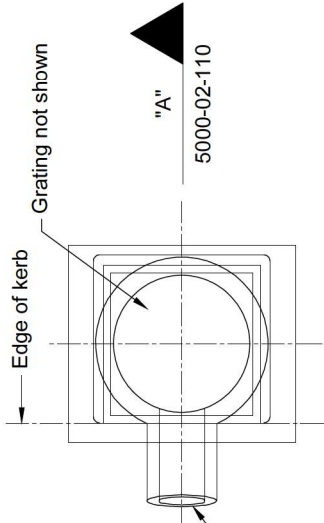
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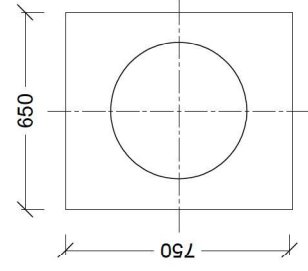
Drawing Title

**Access Junction**

A	ISSUED FOR INFORMATION	PH	SH	15.11.23
REV	DETAILS	BY	CHKD	DATE
Scales	Drawing No.	Rev		
N.T.S	-A3 5000-02-070	A		



Plan View  
Scale NTS

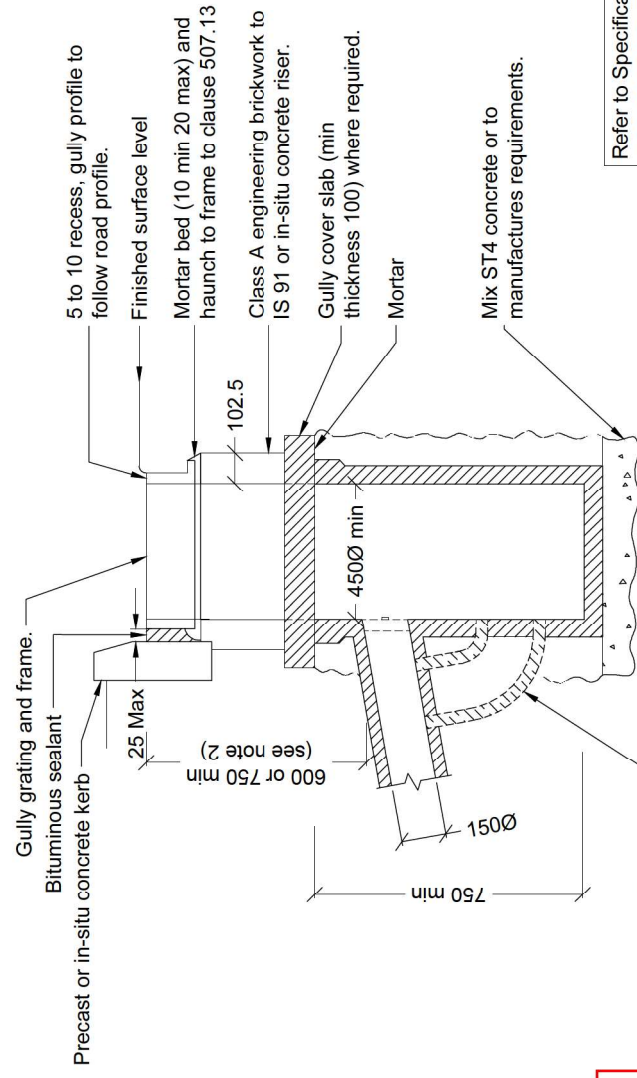


Gully Cover Slab  
Scale NTS

Notes:

- All dimensions are in millimeters.
- The minimum depth from the top of the grating to the top of the gully outlet is to be 750 when the connecting pipe is under a carriageway or a hard shoulder and 600 elsewhere.
- Precast concrete gullies and cover slabs shall be to IS EN 1917 or BS 5911-6.
- Where a gully has a trap the stoppers shall comply with the requirements of BS 5911-4 and IS EN 1917.

Outlet position to be as detailed on the drainage drawings.



Section A - A  
Scale NTS

Untrapped outlet shown in outline. Trapped outlet and plug shown dotted.

**GENERAL DETAIL NOTES:**

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- If in doubt, request clarification from DJF.

Refer to Specifications, Project Drawings, Standard Detail Drawings and other General Note Drawings for additional information.

Refer to TII Document CC-SCD-00510

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Client

**DETAILS**

Project Title

**Underground Services**

Status

**CONSTRUCTION**

Drawing Title

**Drainage  
Precast Concrete Gully**

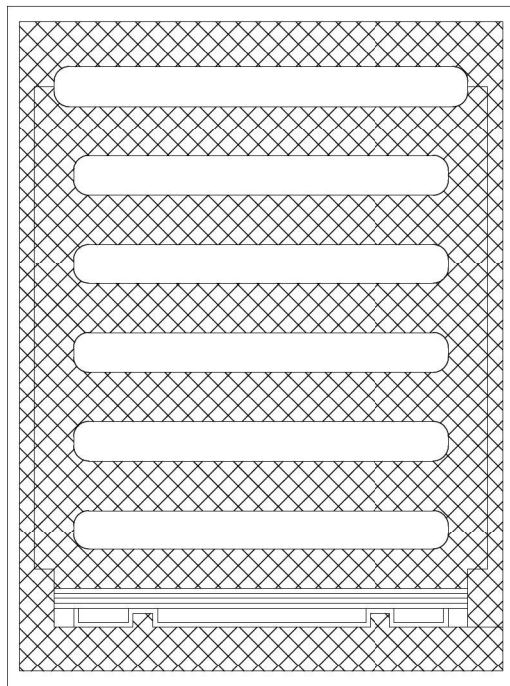
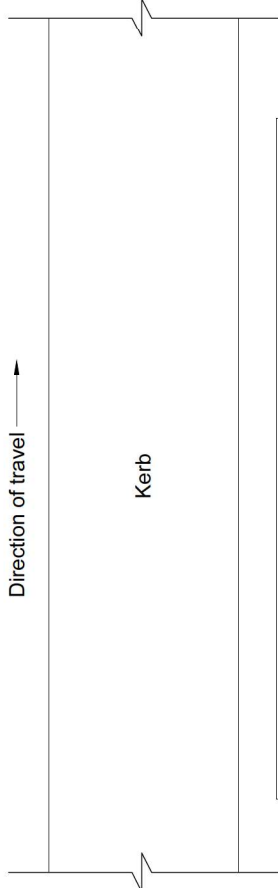
REV	DATE	BY	CHKD	DATE
0	ISSUED FOR CONSTRUCTION			

Scales

Drawing No.	Rev
<b>-A4</b>	
<b>5000-02-110</b>	<b>0</b>

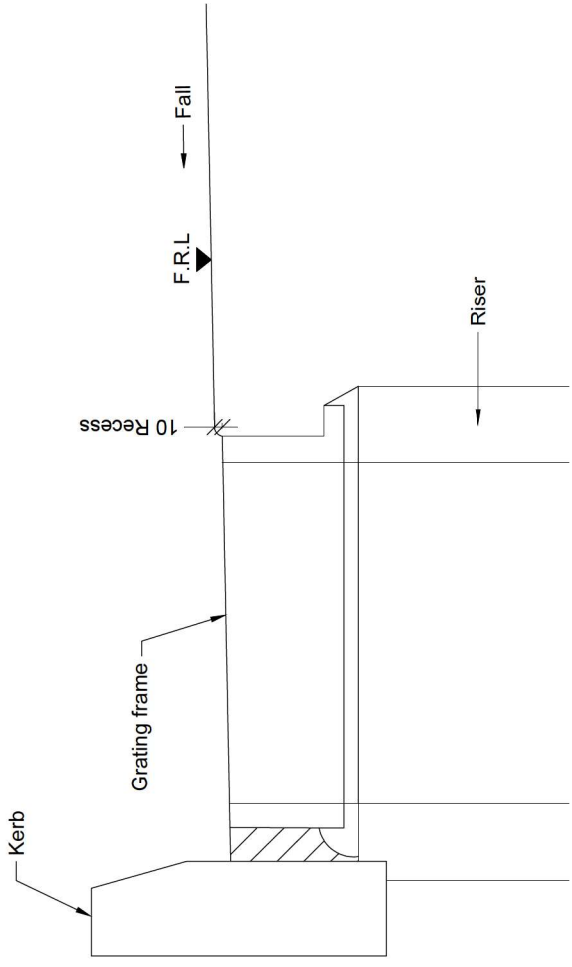


A4



Notes:

1. All dimensions are in millimetres.
2. Gully grating to comply with IS EN 124:2015-2
3. Gully grating to be provided with a locking in accordance with clause 508.4.



Indicative Gully Grating Detail  
Scale NTS

Gully Profile  
Scale NTS

TII Document CC-SCD-00512

- GENERAL DETAIL NOTES:**
1. This Detail is not to be scaled.
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 Tel: (081) 2282424 Email: info@djf.ie.com Web: www.djf.ie.com

Client

**DETAILS**

Project Title

**Underground Services**

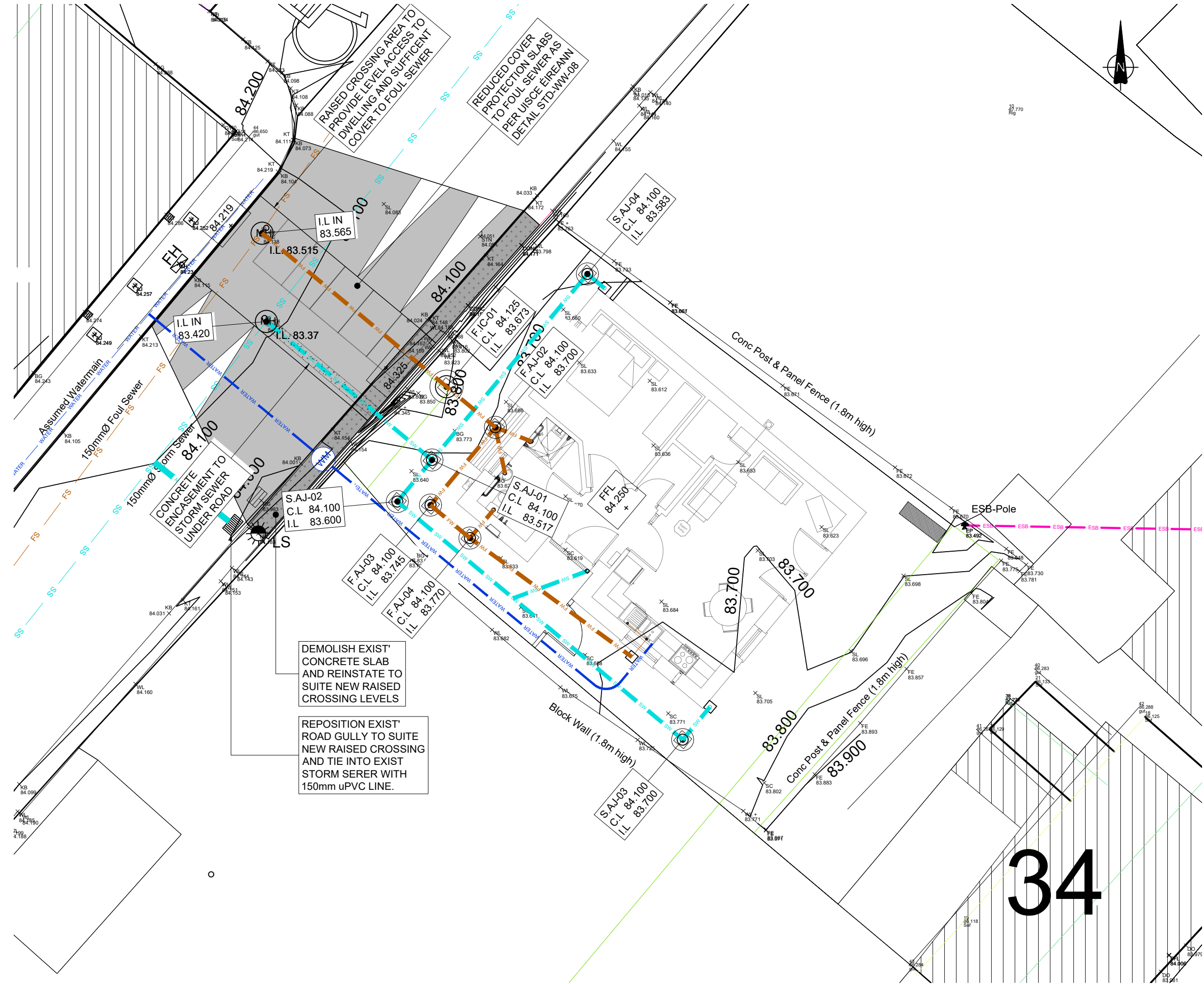
Status **CONSTRUCTION**

Drawing Title **Drainage Gully Grating**

REV	DETAILS	ISSUED FOR CONSTRUCTION	BY	DATE	REV
0					

Scales	Drawing No.	Rev
<b>N.T.S</b>	<b>5000-02-112</b>	0
	<b>-A4</b>	



UTILITIES LEGEND

- WATER — EXISTING WATERMAIN (ASSUMED)
- FS — EXISTING FOUL SEWER
- SS — EXISTING STORM SEWER
- WM WATER METER AS PER UISCE ÉIREANN DETAIL STD-WW-03
- IC PROPRIETARY FOUL INSPECTION CHAMBER AS PER UISCE ÉIREANN DETAIL STD-WW-13
- AJ PROPRIETARY ACCESS JUNCTION
- WATER — PROPOSED 25mm OD MDPE PE80 MAINS WATER DISTRIBUTION PIPE.
- FW — PROPOSED 100mm uPVC FOUL SEWER UNLESS NOTED OTHERWISE
- SW — PROPOSED 100mm UPVC STORM SEWER UNLESS NOTED OTHERWISE
- 84.219 + PROPOSED LEVELS



DEMOLISH EXIST' CONCRETE SLAB AND REINSTATE TO SUITE NEW RAISED CROSSING LEVELS

REPOSITION EXIST' ROAD GULLY TO SUITE NEW RAISED CROSSING AND TIE INTO EXIST STORM SERER WITH 150mm uPVC LINE.

34

A	ISSUED FOR PLANNING	FH   SH	15.11.23
REV	DETAILS	BY	CHKD   DATE

Status **PLANNING**

Project Title  
**Proposed Housing Development  
Market Place, Kanturk.**

Drawing Title  
**Drainage Layout**

Scales	Drawing No.	Rev
1:100 -A3	5004-101	A



CLIENT:

PROJECT:

**Social Housing  
Site Assessment**

DOCUMENT TITLE:

**Market Place, Kanturk  
Utility Services & Ground  
Conditions Report**



**DJF Engineering Services Ltd.**

Tramore House, Reeveswood, Douglas, Cork, Ireland

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Issue	Date	Issue Description	Approvals	
			By	Approved
A	05/01/2024	Client Issue	SH	FM



## **Contents**

- 1.0 Introduction**
- 2.0 Ground Conditions**
- 3.0 Geophysical, Utilities & GPR Survey**
- 4.0 Potential Abnormals**
- 5.0 Foundations**
- 6.0 Water & Sewerage**
- 7.0 Finished Floor Levels**
- 8.0 Ground Floor Slabs**

## 1.0 Introduction

**1.1** Cork County Council proposes to develop a number of new infill social housing schemes on a number of council owned sites across Cork County at the following locations:

1. Clontead Beg, Coachford
2. Hegarty Street, Millstreet
3. St. Olan's Place, Aghabullogue
4. Dean McNamara Place, Newtownshandrum
5. Market Place, Kanturk
6. Model Village, Dripsey
7. Church Road, Durrus
8. Cloughduv

To this end the Council appointed DJF Engineering Services Ltd. to undertake an initial assessment of ground conditions, site servicing and initial foundation selection.

This report relates to the site at Market Place, Kanturk.

## 2.0 Ground Conditions

**2.1** IGSL Geotechnical carried out a site investigation at the site. Their report is included in the appendices.

**2.2** The trial pit revealed MADE GROUND to a depth of 0.6m below ground level, overlying stiff, sandy, gravelly, CLAY. From 1m below ground level, the clay deposits were coarser and included subrounded to subangular cobbles. The natural soils continue to coarsen with depth grading to clayey, sandy GRAVEL below 2.2m depth.

**2.3** Strip foundations bearing on the firm to stiff sandy, gravelly, CLAY subsoils below the made ground and original topsoil are recommended.

### **3.0 Geophysical, Utilities & GPR Survey**

**3.1** Following discussions with Cork County Council, a utility survey was not carried out at the site. However, information on existing services including manhole invert levels was surveyed by Cork Council. This is included on the Architectural drawings in the appendices.

**3.2** The following services were found in the vicinity of the site:

- Foul sewer
- Water supply main
- Storm water sewer
- Eir and other comms
- Overhead Electrical lines

### **4.0 Potential Abnormals**

**4.1** The following potential abnormal items arose from the above investigations:

- Raising existing hardstanding to form a raised road crossing table and also to provide increased cover to new foul and storm pipes
- Works to existing boundaries including wall strengthening/raising etc.
- Site filling

## 5.0 Foundations

- 5.1 It is assumed that the imposed bearing pressures from the proposed residential units will not exceed 50kPa, which is a typical value for a conventional 2-storey housing.
- 5.2 Strip foundations bearing on the firm to stiff sandy, gravelly, CLAY subsoils below the made ground and original topsoil are recommended.
- 5.3 Initial sketch designs of typical likely foundations are included in the appendices.
- 5.4 The recommended formation level for the dwelling is 82.975m AOD.
- 5.5 External walls to have foundations with 900mm x 300mm with A393 mesh bottom.
- 5.6 Internal walls to have foundations with 700mm x 300mm with A393 mesh bottom.

## 6.0 Water & Sewerage

- 6.1 Cork County Council submitted a Pre-Connection Enquiry Form to Irish Water for this site.
- 6.2 A Confirmation of Feasibility confirming that both Water and Wastewater connections are feasible was received from Irish Water and is included in the appendices.

## 7.0 Finished Floor Levels

- 7.1 Using the same level datum as shown on the topographical survey drawing received, we would recommend the finished floor level for the dwelling at this site be at 84.250m AOD.
- 7.2 The relatively high level of the existing foul sewer dictates that the floor level be at this level, which is higher than the existing site levels.

## 8.0 Ground Floor Slabs

- 8.1 Made ground, organic material and topsoil are to be stripped from the footprint of the proposed dwellings and hardstanding areas.
- 8.2 Due to the relative depths of fill below the proposed floor level, a suspended slab is recommended. Initial sketch design details are included in the appendices.

## **Appendices**

<b>Appendix 1</b>	Desk Study
<b>Appendix 2</b>	Architectural Drawing
<b>Appendix 3</b>	Survey Drawing
<b>Appendix 4</b>	Geotechnical Investigation Report
<b>Appendix 5</b>	Irish Water Confirmation of Feasibility
<b>Appendix 6</b>	Foundation Sketches

# APPENDIX 1

## DESK STUDY





**DJF ENGINEERING SERVICES LTD  
PROJECT NOTE**

<b>Doc Nr:</b>	<b>5011-M0-005</b>
<b>Date:</b>	11/07/23

<b>PROJECT</b>	<b>CorkCoCo - Site Investigations</b>	<b>DJF JOB NR</b>	<b>5011</b>
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**NOTE TYPE:**

<b>Notes to File (NF)</b>		<b>Phone Call (PC)</b>		<b>Site Report (SR)</b>	
<b>Meeting Notes (MN)</b>		<b>Memo (MO)</b>	✓	<b>Design Review (DR)</b>	

**Desktop Study – Kanturk**



## Kanturk

**Address & Eircode:** No 33 Market Place, Kanturk. (Rear of 34 Bluepool Upper) P51 Y1R0 (Nearest)

**Co-ordinates:** (Lat) 52° 10' 28.8876" N (Long) 8° 54' 23.8356" W,  
X (Easting) 138033 : Y (Northing) 102893

**Approx. elevation:** (85 m)

### Aerial photo



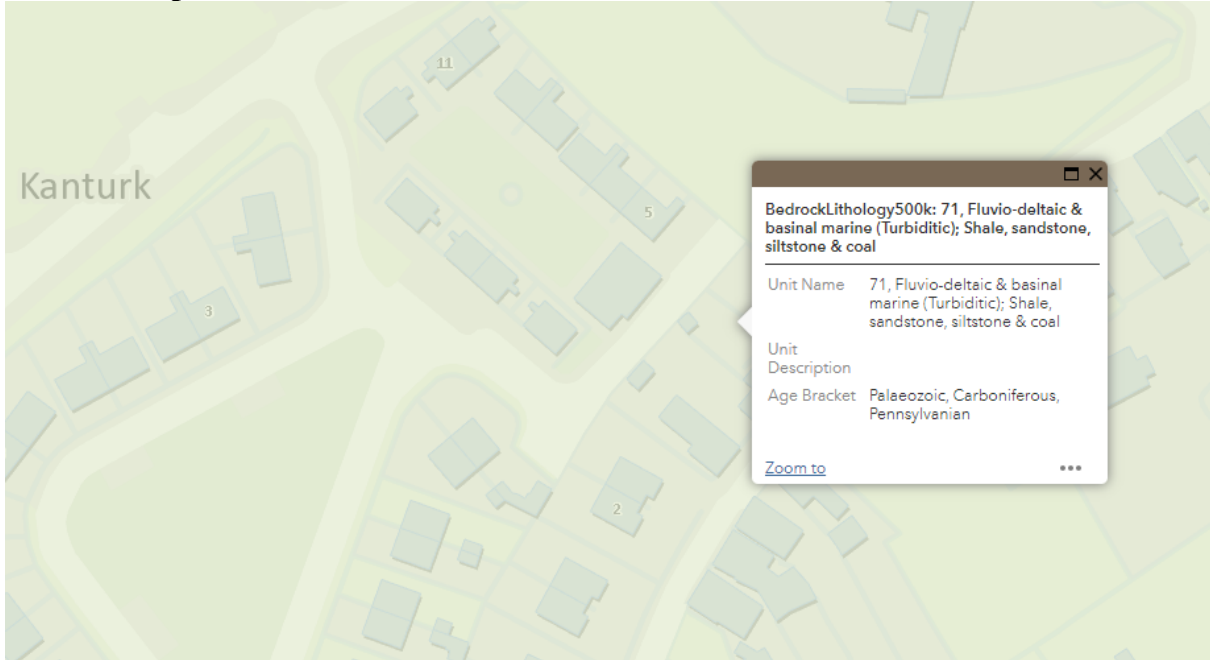
A screenshot of an aerial photo from Google Maps with the proposed site highlighted in red.

## Street view



A photo of a street view of the road leading to the housing estate from site visit (2023.05.10)

## Bedrock map



A screenshot of the bedrock map from GSI.ie. The types of rock on this site include sandstone, conglomerate and siltstone.

## Soil map



SIS National Soils	
<b>Kilrush</b>	
Association_Name	Kilrush
Association_Unit	0700b
Association_Symbol	700b
Texture_Substrate_Type	Fine loamy drift with siliceous stones
Ha	14491.29369772
Drainage	Poor
Texture	Fine loamy
Depth	>80
SOC	159.73063383

A screenshot of the soil map from [gis.epa.ie](http://gis.epa.ie). The type of soil on this site is coarse loamy drift with siliceous stones.



## Historical maps

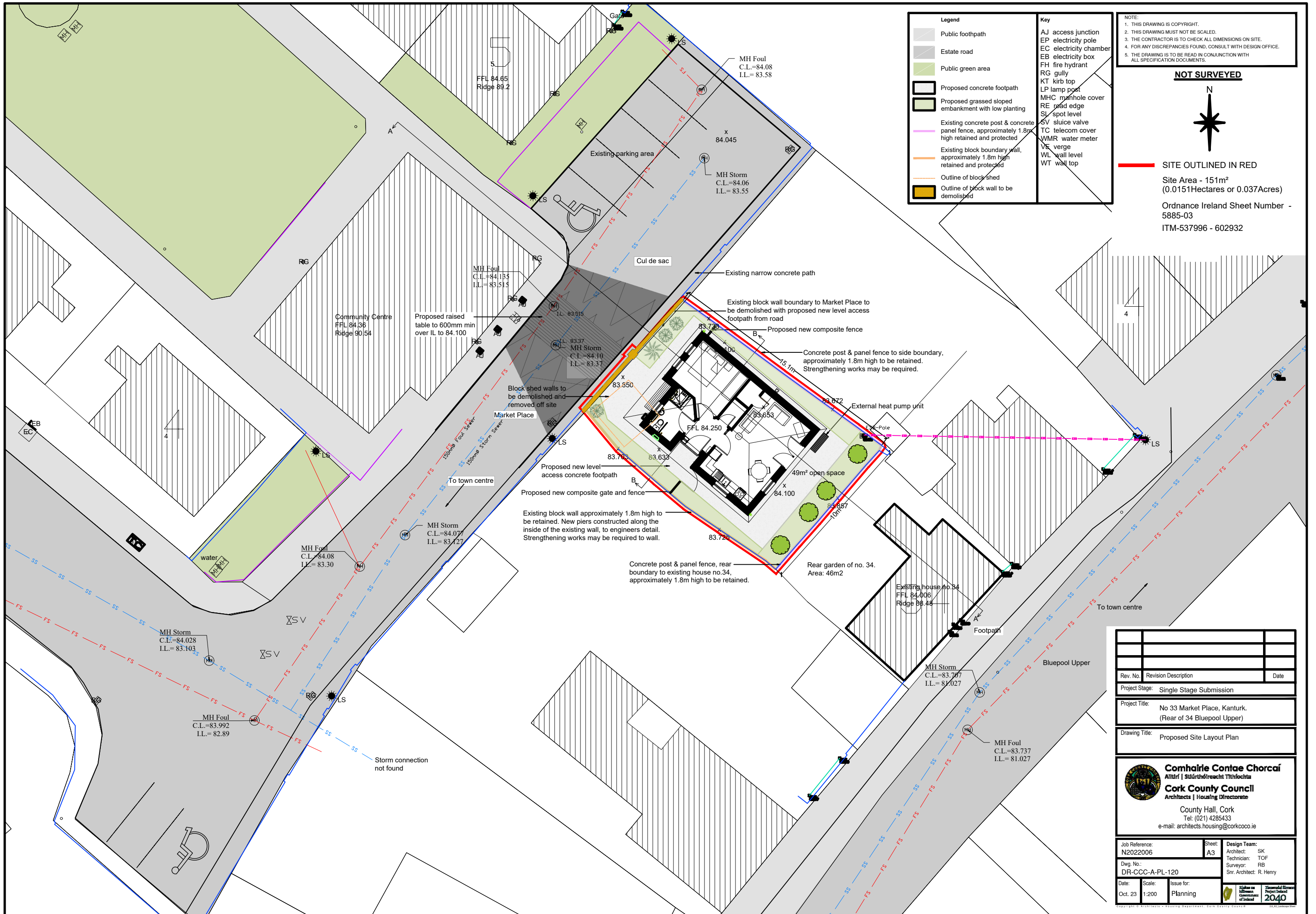


A screenshot of a historical map 25 inch (1888-1913) taken from GeoHive. The proposed site is highlighted in red. The map indicates the site was previously a field.

**APPENDIX 2**

**ARCHITECTURAL DRAWING**





- Legend**
- Public footpath
  - Estate road
  - Public green area
  - Proposed concrete footpath
  - Proposed grassed sloped embankment with low planting
  - Existing concrete post & concrete panel fence, approximately 1.8m high retained and protected
  - Existing block boundary wall, approximately 1.8m high retained and protected
  - Outline of block shed
  - Outline of block wall to be demolished

- Key**
- AJ access junction
  - EP electricity pole
  - EC electricity chamber
  - EB electricity box
  - FH fire hydrant
  - RG gully
  - KT kirb top
  - LP lamp post
  - MHC manhole cover
  - RE road edge
  - SL spot level
  - SV sluice valve
  - TC telecom cover
  - WMR water meter
  - VE verge
  - WL wall level
  - WT wall top

**NOTE:**  
 1. THIS DRAWING IS COPYRIGHT.  
 2. THIS DRAWING MUST NOT BE SCALED.  
 3. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE.  
 4. FOR ANY DISCREPANCIES FOUND, CONSULT WITH DESIGN OFFICE.  
 5. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL SPECIFICATION DOCUMENTS.

**NOT SURVEYED**



**SITE OUTLINED IN RED**  
 Site Area - 151m<sup>2</sup>  
 (0.0151Hectares or 0.037Acres)  
 Ordnance Ireland Sheet Number - 5885-03  
 ITM-537996 - 602932

Rev. No.	Revision Description	Date

Project Stage: Single Stage Submission

Project Title: No 33 Market Place, Kanturk.  
(Rear of 34 Bluepool Upper)

Drawing Title: Proposed Site Layout Plan

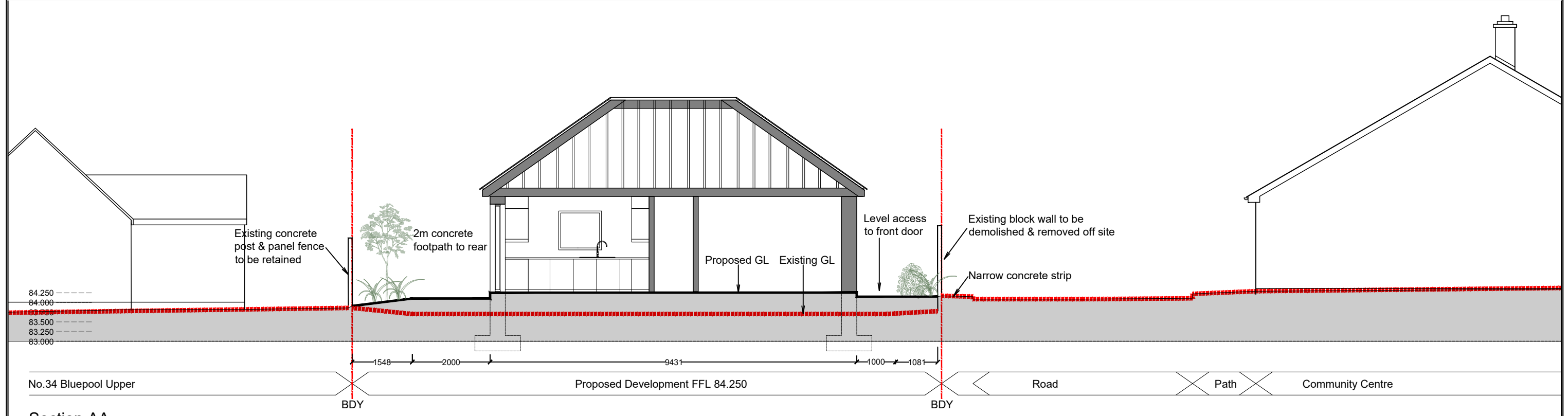
**Comhairle Contae Chorcaí**  
 Alltairí | Stúdíó Treacht Títhíochta  
**Cork County Council**  
 Architects | Housing Directorate  
 County Hall, Cork  
 Tel: (021) 4285433  
 e-mail: architects.housing@corccoco.ie

Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK Technician: TOF Surveyor: RB Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-120	Date: Oct. 23	Scale: 1:200
Date: Oct. 23	Scale: 1:200	Issue for: Planning

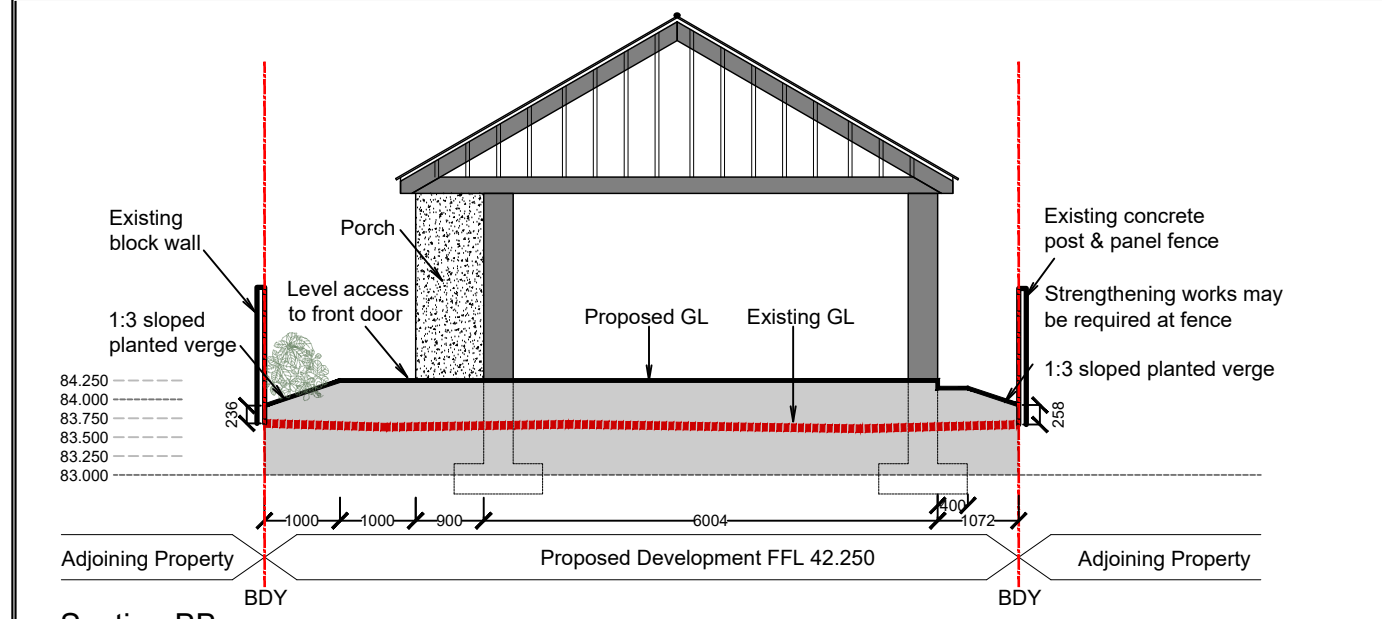


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 5. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL SPECIFICATION DOCUMENTS.

**NOT SURVEYED**






Section AA



Section BB

**Legend**

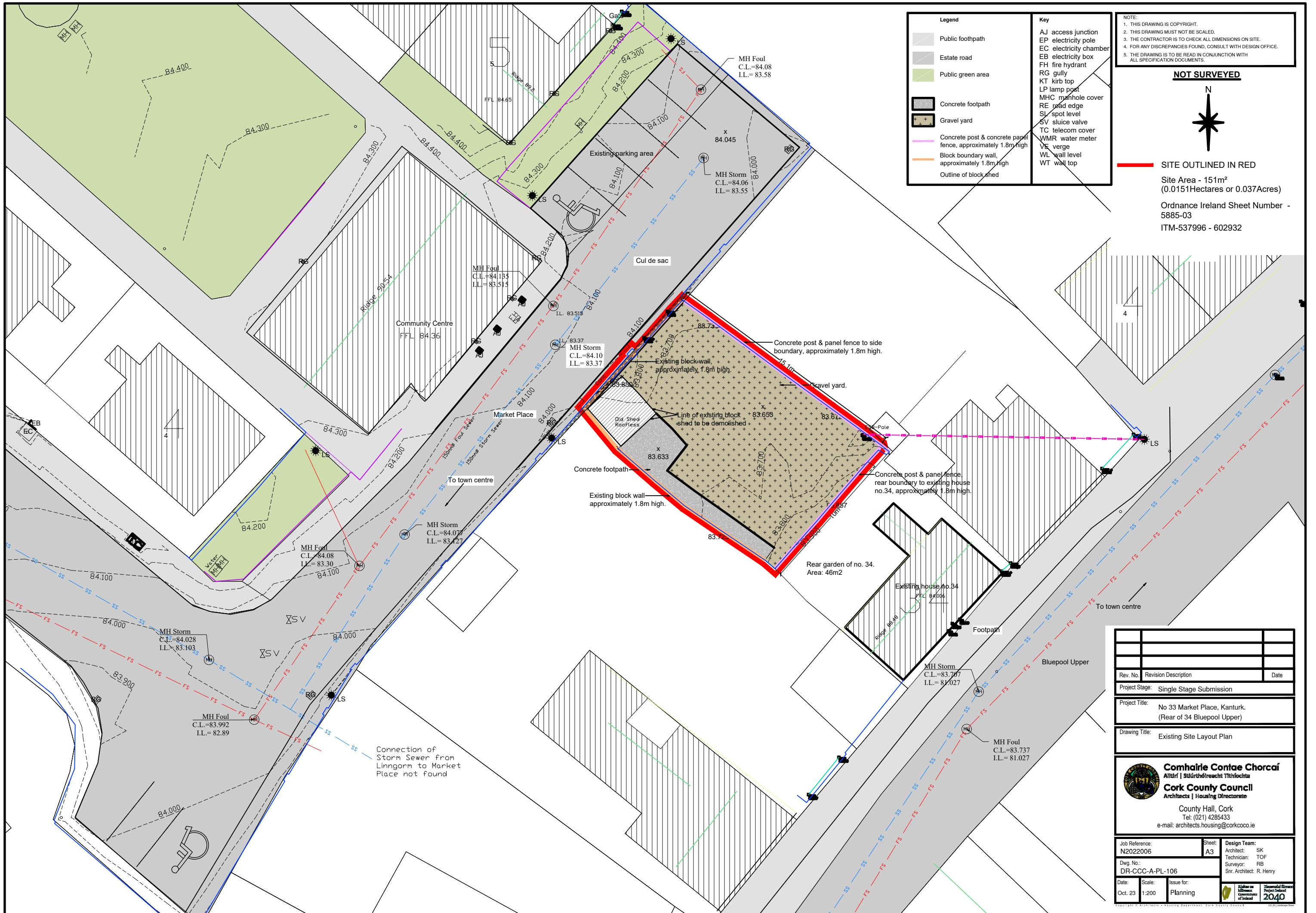
- | Site Boundary
- - - - - Proposed Ground Line
- - - - - Existing Ground Line

Rev. No.	Revision Description	Date
Project Stage: Single Stage Submission		
Project Title: No 33 Market Place, Kanturk, (Rear of 34 Bluepool Upper)		
Drawing Title: Site Sections AA & BB		
 <b>Comhairle Contae Chorcaí</b> Alltairí   Stúráthóiríocht Tithíochta <b>Cork County Council</b> Architects   Housing Directorate County Hall, Cork Tel: (021) 4285433 e-mail: architects.housing@corkcoco.ie		
Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK, Technician: TOF, Surveyor: RB, Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-140	Date: Oct. 23	Scale: 1:100
Date: Oct. 23	Scale: 1:100	Issue for: Planning
 Planning		 2040

**APPENDIX 3**  
**SURVEY DRAWING**







Legend	Key
	AJ access junction
	EP electricity pole
	EC electricity chamber
	EB electricity box
	FH fire hydrant
	RG gully
	KT kirb top
	LP lamp post
	MHC manhole cover
	RE road edge
	SL spot level
	SV sluice valve
	TC telecom cover
	WMR water meter
	VE verge
	WL wall level
	WT wall top

NOTE:  
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 2. THIS DRAWING MUST NOT BE SCALED.  
 3. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE.  
 4. FOR ANY DISCREPANCIES FOUND, CONSULT WITH DESIGN OFFICE.  
 5. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL SPECIFICATION DOCUMENTS.

**NOT SURVEYED**



**SITE OUTLINED IN RED**  
 Site Area - 151m<sup>2</sup>  
 (0.0151Hectares or 0.037Acres)  
 Ordnance Ireland Sheet Number - 5885-03  
 ITM-537996 - 602932

Rev. No.	Revision Description	Date
Project Stage: Single Stage Submission		
Project Title: No 33 Market Place, Kanturk. (Rear of 34 Bluepool Upper)		
Drawing Title: Existing Site Layout Plan		
<b>Comhairle Contae Chorcaí</b> Alltairí   Stúdíó Treacht Tithíochta <b>Cork County Council</b> Architects   Housing Directorate County Hall, Cork Tel: (021) 4285433 e-mail: architects.housing@corccoco.ie		
Job Reference: N2022006	Sheet: A3	Design Team: Architect: SK, Technician: TOF, Surveyor: RB, Snr. Architect: R. Henry
Dwg. No.: DR-CCC-A-PL-106	Date: Oct. 23	Scale: 1:200
Issue for: Planning		
2040		

**APPENDIX 4**

**GEOTECHNICAL INVESTIGATION REPORT**



IGSL Limited

Cork County Council

---

**Cork Housing Projects  
Site E  
Kanturk**

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Interpretative Report

**Report No. 24961-E**

**December 2023**



# Report



**M7 Business Park  
Naas  
Co. Kildare  
Ireland**

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Cork Housing Projects – Site E Kanturk

Project: Cork Housing Projects – Site E Kanturk

Project No. 24961E

Revision	Date	Title		
Rev 0	15/12/2023	Ground Investigation Report		
	Copies	Document Format	Prepared By	Reviewed By
		PDF	Brian Green Chartered Engineer	David Green Chartered Engineer
	To	Cork County Council		
Revision	Date	Title		
	Copies	Document Format	Prepared By	Reviewed By
	To			
Revision	Date	Title		
	Copies	Document Format	Prepared By	Reviewed By
	To			
Revision	Date	Title		
	Copies	Document Format	Prepared By	Reviewed By
	To			

**TABLE OF CONTENTS****Foreword****1.0 Introduction****2.0 Ground Conditions**

- 2.1 Trial Pit
- 2.2 Foundation Inspection

**3.0 Laboratory Testing (Geotechnical)**

- 3.1 Classification
- 3.2 Chemical Analysis

**4.0 Laboratory Testing (Environmental)****5.0 Discussion**

- 5.1 General
- 5.2 Structural Foundations
- 5.3 Floor Slabs
- 5.4 Pavement Design
- 5.5 Groundwater and Trench Stability
- 5.6 Chemical Attack on Buried Concrete
- 5.7 Disposal of Excavated Soils to Landfill

**Appendices**

Appendix 1	Trial Pit Record
Appendix 2	Foundation Pit Record
Appendix 3	Laboratory Test Results (Geotechnical)
Appendix 4	Laboratory Test Results (Environmental)
Appendix 5	Site Plan



## FOREWORD

The following conditions and notes on the geotechnical site investigation procedures should be read in conjunction with this report.

### Standards

The ground investigation works for this project have been carried out by IGSL in accordance with Eurocode 7 - Part 2: Ground Investigation & Testing (EN 1997-2:2007). This has been used together with complementary documents such as BS 5930 (1999), BS 1377 (Parts 1 to 9) and Engineers Ireland Specification & Related Documents for Ground Investigation in Ireland (2006). A new National Annex for use in the Republic of Ireland is currently in circulation for comment and will be adopted in the near future. In the meantime, the following Irish (IS) and European Standards or Norms are referenced:

- o IS EN 1997-2 Eurocode 7: 2007 – Geotechnical Design – Part 2: Ground Investigation & Testing
- o IS EN ISO 22475-1:2006 Geotechnical Investigation and Sampling – Sampling Methods & Groundwater Measurements
- o IS EN ISO 14688-1:2002 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 1: Identification and Description
- o IS EN ISO 14688-2:2004 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 2: Classification Principles
- o IS EN ISO 14689-1:2004 Geotechnical Investigation and Testing - Identification & Classification of Rock, Part 1: Identification & Description

### Reporting

Recommendations made and opinions expressed in this report are based on the strata observed in the exploratory holes, together with the results of in-situ and laboratory tests. No responsibility can be held by IGSL Ltd for ground conditions between exploratory hole locations.

The engineering logs provide ground profiles and configuration of strata relevant to the investigation depths achieved and caution should be taken when extrapolating between exploratory points. No liability is accepted for ground conditions extraneous to the investigation points.

This report has been prepared for Cork County Council, and the information should not be used without prior written permission. The recommendations developed in this report specifically relate to the proposed development. IGSL Ltd accepts no responsibility or liability for this document being used other than for the purposes for which it was intended.

### In-Situ Testing

Standard penetration tests were conducted strictly in accordance with Section 4.6 of IS EN 1997-2:2007. The SPT equipment (hammer energy test) has been calibrated in accordance with EN ISO 22476-3:2005 and the Energy Ratio ( $E_r$ ). A calibration certificate is available upon request. The  $E_r$  is defined as the ratio of the actual energy  $E_{meas}$  (measured energy during calibration) delivered to the drive weight assembly into the drive rod below the anvil, to the theoretical energy ( $E_{theor}$ ) as calculated from the drive weight assembly. The measured number of blows ( $N$ ) reported on the engineering logs are uncorrected. In sands, the energy losses due to rod length and the effect of the overburden pressure should be taken into account (see IS EN ISO 22476-3:2005).

### Groundwater

The depth of entry of any influx of groundwater is recorded during the course of boring operations. However, the normal rate of boring does not usually permit the recording of an equilibrium level for any one water strike. Where possible drilling is suspended for a period of twenty minutes to monitor the subsequent rise in water level. Groundwater conditions observed in the borings or pits are those

appertaining to the period of investigation. It should be noted however, that groundwater levels are subject to diurnal, seasonal and climatic variations and can also be affected by drainage conditions, tidal variations etc.

**Engineering Logging**

Soil and rock identification has been based on the examination of the samples recovered and conforms with IS EN ISO 14688-1:2002 and IS EN ISO 14689-1:2004. Rock weathering classification conforms to IS EN ISO 14689-1:2003 while discontinuities (bedding planes, joints, cleavages, faults etc) are classified in accordance with 4.3.3 of IS EN ISO 14689-1:2003. Rock mechanical indices (TCR, SCR, RQD) are defined in accordance with IS EN ISO 22475-1:2006.

**Retention of Samples**

Samples shall be retained for a period of 60 days following approval of the final factual report, as detailed in the Scope of Works.

## 1.0 Introduction

It is proposed to construct infill housing in a total of eight sites around County Cork.

Investigations of ground conditions were carried out to ascertain foundation requirements for the structures and to assess the suitability of the sub-soils for soakaway purposes. Also required were assessments of soil contamination and classification of subsoils for landfill disposal.

This report describes the ground conditions at Kanturk, and relates this information to the proposed development. The investigation entailed the following fieldworks.

- A trial pit was excavated to ascertain the sub-soil stratification
- An inspection pit was excavated to expose the foundation supporting the south-western boundary wall.

The site location is shown in Figure 1.



Figure 1 – Site Location

## **2.0 Ground Conditions**

### **2.1 Trial Pit**

A trial pit was excavated in the location indicated as TP01 on the site plan enclosed in Appendix 5, while the descriptions and depths of the various soils encountered are shown on the trial pit record enclosed in Appendix 1. Also shown on this record are the depths at which samples were recovered, and the groundwater conditions observed during the course of excavation operations.

The trial pit revealed 0.6 metres of Made Ground, comprising a 0.1m thick surfacing of angular gravel (hardcore) on 0.5 metres of soft to firm dark brown sandy clay, which was intermixed with topsoil and fragments of timber and plastic.

The underlying natural soils comprised stiff mottled grey / brown sandy gravelly clay. Below approximately 1 metre, there was a transition to stiff brown sandy gravelly clay with sub-rounded to sub-angular cobbles.

At a depth of 2.2 metres, the soils became coarser, grading to clayey sandy gravel with sub-rounded to sub-angular cobbles. The trial pit was terminated in these deposits at a depth of 3.0 metres.

A water seepage was observed at the base of the Made Ground (0.6 m) with associated localised instability of side walls.

### **2.2 Foundation Inspection Pit**

The purpose of the inspection pit was to expose the foundation supporting the south-western boundary wall. The inspection pit record is enclosed in Appendix 2

The top of the concrete foundation was exposed at existing ground level. The foundation was c.240mm thick, with a projection of c.100mm from the wall.

### **3.0 Laboratory Testing (Geotechnical).**

#### **3.1 Classification**

The results of plastic and liquid limit tests classify the fine fraction as CLAY of intermediate plasticity (CI), while moisture contents ranged between 12 and 17%.

Particle size analysis of a sample of stiff gravelly clay showed that this material is well graded with a fines (silt/clay) fraction of 47%.

#### **3.2 Chemical Analysis**

Sulphate and pH analyses were conducted on selected samples by a nominated accredited environmental laboratory (Eurofins Chemtest) in accordance with the BRE Special Digest SD1. Results are presented in reports prepared by the laboratory.

The results of chemical testing showed a very low concentration of soluble sulphates of <0.01 g/l in association with a pH value of 8.2.

### **4.0 Environmental Analysis**

Environmental testing was scheduled on a sample of the upper soils in order to screen for inherent contamination and to assess their suitability for disposal to an inert landfill.

The sample was tested in accordance with the RILTA Suite, which is used to determine the suitability of soils for disposal to a landfill. The RILTA suite includes Heavy Metals, Polycyclic Aromatic Hydrocarbons (PAH), TPH-CWG, BTEX, PCB and Total Organic Carbon (TOC) carried out on dry soil samples. Also included are leachate analyses, whereby leachate is generated in accordance with CEN 10:1 specification and this is tested for the presence of recognised contaminants including Heavy Metals, Dissolved Organic Carbon (DOC) and Total Dissolved Solids (TDS). An Asbestos Screen is also included in the RILTA Suite.



## 5.0 Discussion

### 5.1 General

The trial pit revealed approximately 0.6 metres of Made Ground, which was underlain by natural deposits of stiff (high strength) sandy gravelly clay. This material had the apparent strength and composition of Glacial Till. Below approximately 1 m BGL, the clay deposits were coarser and included subrounded to subangular cobbles.

The natural soils continue to coarsen with depth, grading to clayey sandy gravel below approximately 2.2 m BGL.

The trial pit remained mostly stable during excavation, as evident in Photo 1, while slow water ingress at the base of the Made Ground may be the result of surface water infiltration.



Photo 1 – Trial Pit TP01 on completion

### 5.2 Structural Foundations

For purposes of discussion, it is tentatively assumed that the imposed bearing pressures from the proposed residential units will not exceed 50 kPa, which is typical of single-storey dwellings.

Structural foundations can be constructed on the natural stiff (high strength) sandy gravelly clay soils. Based on the results of the trial pit, foundations can be placed within the upper metre, ensuring the removal of any Made Ground and soft / organic upper soils.

### 5.3 Floor Slabs

It is noted that no plate bearing tests were performed in order to measure the moduli of subgrade reaction, which would typically inform a floor slab design. In the absence of this testing, it would be expected that the natural stiff sandy gravelly clay soils will provide sufficient support to a conventional ground bearing slab.

Based on the trial pit, it is expected that a suitable bearing stratum for floor slabs should be attainable within 0.5 to 1.0 metres of current ground level. Monitoring of the excavations will determine the thickness of Made Ground and any organic soils requiring removal, while plate tests should be conducted on the prepared formation to confirm the modulus values.

Proof rolling of the formation (static rolling with roller having a mass per metre width of roll of not less than 5400 kg) is advised to counteract disturbance or loosening due to the bulk excavation works. Under no circumstance should vibratory or dynamic rolling be used on the formation soils as this may lead to dilation and produce 'cow-bellying'.

### 5.4 Pavement Design

In the absence of CBR values (typically derived from plate bearing tests), it is expected that the natural stiff sandy gravelly clay will provide a competent subgrade, once proof-rolled.

Close inspection of the prepared formation in conjunction with plate bearing tests will be essential to verify the design CBR value and to identify any remaining soft or loose upper soils. Where proof rolling fails to achieve acceptable CBR values (i.e. > 2.5%), the capping thicknesses should be designed in accordance with NRA HD 25-26/10 with reference to Section 3.23 ("Soft Subgrades"), removing any excessively soft material (CBR <2.5%) as described and replacing with 6F capping or starter layer material (Class 6A / 6B).

It will be important to maintain a dry subgrade before construction of the capping layer. Drainage measures should be implemented as required before construction.

Stripped subgrade should also be protected from surface water ingress or disturbance from unnecessary pedestrian or vehicular traffic. The time between stripping to formation level and placement of the capping layer should be minimised.

Any proof rolling of the natural subgrade soils should be performed statically using a smooth roller in order to avoid vibratory disturbance. Initial placement of the capping layer should also be carried out using a static roller for the same reason.

A geotextile separator at subgrade level and geogrid reinforcement within the capping layer would be recommended to stiffen the pavement make-up and to cater for variations within the subgrade.

It is important that argillaceous sedimentary rocks (i.e. muddy limestone, calcareous mudstone, shale, etc.) are not used in sub-base, capping or as a starter layer. These have high potential to give rise to degradation (i.e. poor durability and soundness) and slaking and therefore would not be suitable. All granular fills (particularly Series 600 and 800 material) should be thoroughly examined, tested and approved in advance of being used in the pavement construction.

## 5.5 Groundwater and Trench Stability

Groundwater ingress was limited to seepage at the base of the Made Ground, possibly relating to permeation of surface water through the upper fill before becoming “perched” on the much less permeable natural clay soils.

Based on this information, it would be reasonable to expect that shallow excavations for foundations (i.e. within a metre of current ground level) should not experience significant groundwater ingress, although some control of surface water ingress may be necessary.

Where water ingress (or ponding) causes softening of the founding soils, these should be over-excavated (by typically 100 to 150 mm) until a dry base is restored.

While the control of water should not present problems in temporary shallow excavations, it is important to appreciate that the short duration of the trial pits (typically 45 minutes) may not have been sufficient time to permit the groundwater table to establish to its true level.

In addition, trial pits do not provide any information regarding seasonal fluctuations in the water table. It would, therefore, be advisable to ascertain the groundwater conditions closer to commencement of construction.

A key consideration if adopting trench / fill techniques for foundations will be the stability of open excavations. As noted previously, the trial pit remained mostly stable during the period of excavation and therefore, temporary excavations for shallow foundations should also remain stable in the short-term.

Where seemingly stable excavations are left open for extended periods (e.g. drainage trenches), instability is likely to occur as the sidewalls relax, in which case trench control measures will be required.

## 5.6 Chemical Attack on Buried Concrete

The results of Sulphate and pH testing showed very low Sulphate and near-neutral pH levels.

With reference to Table C1 of BRE Special Digest 1: 2005, the level of Sulphate suggests a design Sulphate Class of DS-1. Assuming a static groundwater table, an ACEC (Aggressive Chemical Environment for Concrete) Classification of AC-1s is applicable, since the pH levels are greater than 5.5.

In terms of concrete to I.S. EN 206-1:2013, the chemical testing demonstrates that concrete could be manufactured to Class XA1.

## 5.7 Landfill Disposal of Excavated Soils

The results of WAC analyses showed that the sample tested satisfied the criteria for inert waste as set out in the European Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC.

It is therefore anticipated that surplus soils would be accepted by an inert landfill if removed from site.

It should be noted that the chosen landfill should be furnished with the WAC results in advance of any soils being removed from site. Depending on the extent and depth of excavation, the landfill may require additional testing to achieve the frequency of analysis (i.e. number of samples per unit volume of excavation) that meets their license requirements.

**Appendix 1 Trial Pit Record**





# TRIAL PIT RECORD

**REPORT NUMBER**

**24961E**

<b>CONTRACT</b> Cork Housing Project - Kanturk		<b>TRIAL PIT NO.</b> <b>TP01</b>
<b>LOGGED BY</b> AP		<b>SHEET</b> Sheet 1 of 1
<b>CO-ORDINATES</b> 538,002.11 E 602,931.26 N		<b>DATE STARTED</b> 03/10/2023
<b>GROUND LEVEL (m)</b> 83.73		<b>DATE COMPLETED</b> 03/10/2023
<b>CLIENT ENGINEER</b> Cork, Co. Council DJF	<b>EXCAVATION METHOD</b> Kubota 6T	

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	MADE GROUND: Stone fill angular gravel underlain by Terram		0.10	83.63						
	MADE GROUND: Soft to firm, dark brown slightly sandy, silty, slightly gravelly clay topsoil with plast and timber fragments.		0.60	83.13		AA182125	B	0.40-0.60		
	Stiff grey, mottled brown, slightly sandy, slightly gravelly CLAY. Gravel is fine to coarse sub angular to subrounded mudstone and sandstone.		1.00	82.73		AA182126	Env	0.40-0.60		
	Stiff brown sandy, gravelly cobbly CLAY. Gravel fine to coarse subangular to subrounded mudstone & sandstone. Cobbles subangular to subrounded mudstone, sandstone.		2.00			AA182127	B	0.80-1.00		
	Greyish brown clayey sandy GRAVEL. Gravel is fine to coarse, subangular to subrounded mudstone, sandstone. Cobbles subangular to subrounded mudstone, sandstone.		2.20	81.53		AA182128	B	1.80-2.10		
3.0	End of Trial Pit at 3.00m		3.00	80.73		AA182129	B	2.80-3.00		

**Groundwater Conditions**  
Some Seepage from 0.6m bgl

**Stability**  
Moderate

**General Remarks**

**Appendix 2 Foundation Inspection Pit Record**



# FOUNDATION INSPECTION PIT RECORD

Report Number: 24961E

**Contract:** 24961E-Market place, Kanturk, Co. Cork  
**Location:** E537995.298, N602931.631, (GL)83.719mOD  
**Engineer:** JDF  
**Client:** Cork Co. Council  
**Logged by:** A. Phelan  
**Date:** 03/10/2023

**TRIAL PIT NO.** **FP.1**

**PHOTOS**

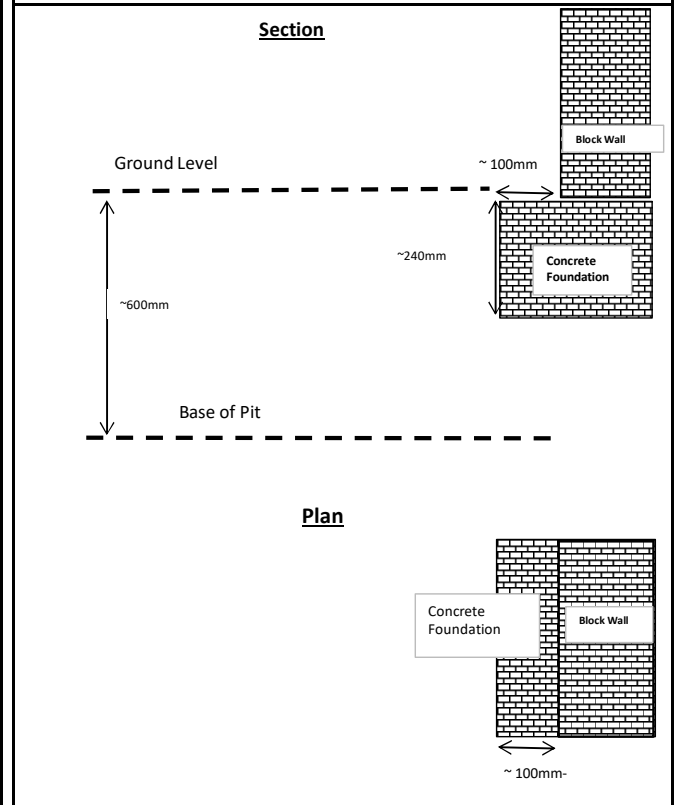
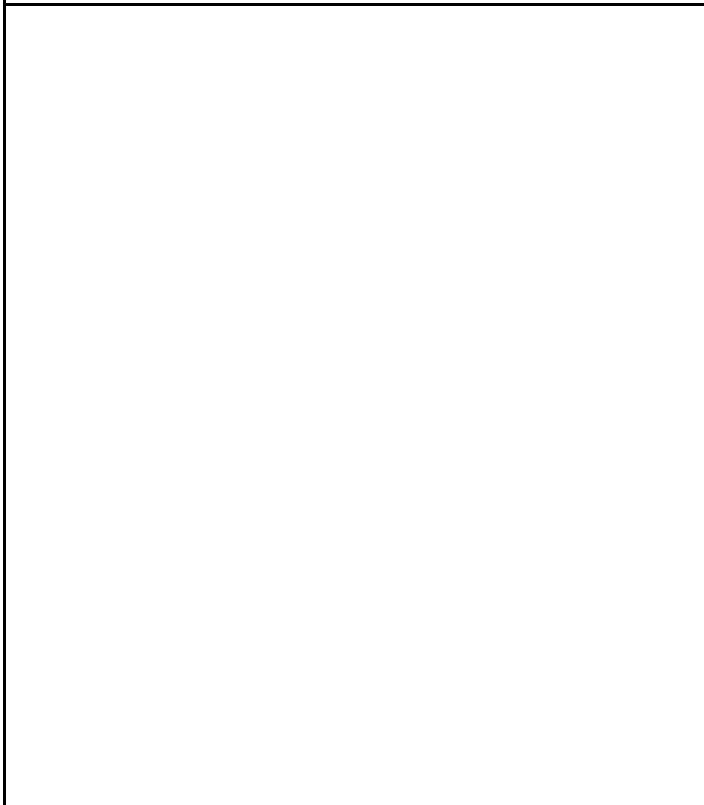


**Summary of ground conditions**

from	to	Description	Ground water
(GL)0.00	0.05	MADE GROUND: Concrete path	Dry
0.30	0.50	MADE GROUND: Firm dark brown s/sandy silty s/gravelly clay (topsoil) plastic & rubble	
0.50	0.60	Stiff grey mottled brown slightly sandy slightly gravelly CLAY with plastic & rubble fragments	
		Sample AA182130 at 0.4m	

**Foundation depth: ~240mm**

**Location:**



**Appendix 3    Laboratory Test Results  
(Geotechnical)**





# TEST REPORT

## Determination of Particle Size Distribution

Tested in accordance with: BS1377:Part2:1990 , clause 9.2 & 9.5\*\*  
(note: Sedimentation stage not accredited)

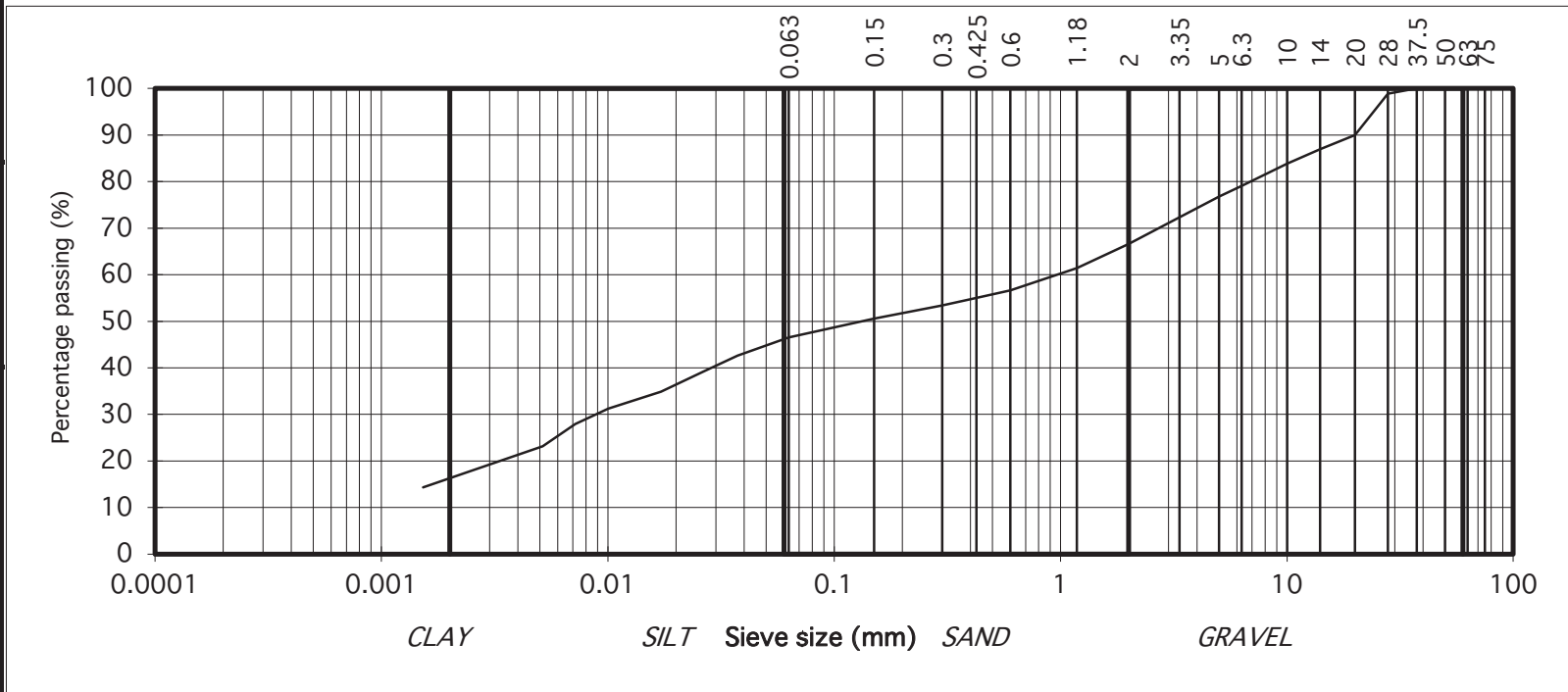


particle size	% passing	
75	100	COBBLES
63	100	
50	100	
37.5	100	GRAVEL
28	99	
20	90	
14	87	
10	84	
6.3	79	
5	77	
3.35	72	SAND
2	67	
1.18	61	
0.6	57	
0.425	55	
0.3	53	SILT/CLAY
0.15	51	
0.063	47	
0.037	43	
0.027	39	
0.017	35	
0.010	31	
0.007	28	
0.005	23	
0.002	14	

Contract No. 24961-E Report No. R151887  
 Contract Name : Site E Kanturk Cork Housing Project  
 BH/TP No. TP02  
 Sample No.\* AA182124 Lab. Sample No. A23/4527  
 Sample Type: B  
 Depth\* (m) 1.80 Customer: Cork Co.Co. DJFES Eng.  
 Date Received 02/11/2023 Date Testing started 02/11/2023  
 Description: Brown slightly sandy, slightly gravelly, CLAY

Results relate only to the specimen tested in as received condition unless otherwise noted. \* denotes Customer supplied information. Opinions and interpretations are outside the scope of accreditation.  
 This report shall not be reproduced except in full without the written approval of the Laboratory.

Remarks Note: \*\*Clause 9.2 and Clause 9.5 of BS1377:Part 2:1990 have been superseded by ISO17892-4:2 Sample size did not meet the requirements of BS1377



<b>IGSL Ltd Materials Laboratory</b>	Approved by:	Date:	Page no:
	<i>[Signature]</i>	04/12/23	1 of 1

**Appendix 4 Laboratory Test Results (Environmental)**



# Amended Report

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**Report No.:** 23-36893-2

**Initial Date of Issue:** 09-Nov-2023      **Date of Re-Issue:** 27-Nov-2023

**Re-Issue Details:** This report has been revised and directly supersedes 23-36893-1 in its entirety

**Client:** IGSL

**Client Address:** M7 Business Park  
Naas  
County Kildare  
Ireland

**Contact(s):** Darren Keogh

**Project:** 24961-E Cork Housing Project

**Quotation No.:** Q20-21693      **Date Received:** 06-Nov-2023

**Order No.:**      **Date Instructed:** 06-Nov-2023

**No. of Samples:** 1

**Turnaround (Wkdays):** 13      **Results Due:** 22-Nov-2023

**Date Approved:** 27-Nov-2023

**Approved By:**

**Details:** Stuart Henderson, Technical Manager

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## Results - Leachate

**Project: 24961-E Cork Housing Project**

<b>Client: IGSL</b>	<b>Chemtest Job No.:</b> 23-36893					
Quotation No.: Q20-21693	<b>Chemtest Sample ID.:</b> 1726745					
Order No.:	Client Sample Ref.: AA182127					
	Sample Location: TP01					
	Sample Type: SOIL					
	Top Depth (m): 0.80					
Determinand	Accred.	SOP	Type	Units	LOD	
pH at 20C	U	1010	10:1		4.0	8.6
Ammonium	U	1220	10:1	mg/l	0.050	< 0.050
Ammonium	N	1220	10:1	mg/kg	0.10	0.58
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01
Benzo[ <i>jj</i> ]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010

## Results - Soil

**Project: 24961-E Cork Housing Project**

<b>Client: IGSL</b>	<b>Chemtest Job No.:</b> 23-36893				
Quotation No.: Q20-21693	<b>Chemtest Sample ID.:</b> 1726745				
Order No.:	Client Sample Ref.:		AA182127		
	Sample Location:		TP01		
	Sample Type:		SOIL		
	Top Depth (m):		0.80		
	Asbestos Lab:		NEW-ASB		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Asbestos By Fibre Counting	U	2192	%	0.001	-
Moisture	N	2030	%	0.020	17
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones and Roots
Soil Texture	N	2040		N/A	Clay
pH (2.5:1) at 20C	N	2010		4.0	[A] 8.2
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	[A] 0.84
Magnesium (Water Soluble)	N	2120	g/l	0.010	[A] < 0.010
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	[A] < 0.010
Total Sulphur	U	2175	%	0.010	[A] 0.042
Sulphur (Elemental)	M	2180	mg/kg	1.0	[A] 1.0
Chloride (Water Soluble)	M	2220	g/l	0.010	[A] < 0.010
Nitrate (Water Soluble)	N	2220	g/l	0.010	< 0.010
Cyanide (Total)	M	2300	mg/kg	0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 4.5
Ammonium (Water Soluble)	M	2220	g/l	0.01	< 0.01
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.065
Arsenic	M	2455	mg/kg	0.5	20
Barium	M	2455	mg/kg	0	95
Cadmium	M	2455	mg/kg	0.10	0.93
Chromium	M	2455	mg/kg	0.5	21
Molybdenum	M	2455	mg/kg	0.5	0.6
Antimony	N	2455	mg/kg	2.0	< 2.0
Copper	M	2455	mg/kg	0.50	27
Mercury	M	2455	mg/kg	0.05	0.28
Nickel	M	2455	mg/kg	0.50	35
Lead	M	2455	mg/kg	0.50	50
Selenium	M	2455	mg/kg	0.25	1.5
Zinc	M	2455	mg/kg	0.50	120
Chromium (Trivalent)	N	2490	mg/kg	1.0	21
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Mineral Oil EPH	N	2670	mg/kg	10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C8-C10	N	2680	mg/kg	1.0	[A] < 1.0



## Results - Soil

**Project: 24961-E Cork Housing Project**

<b>Client: IGSL</b>	<b>Chemtest Job No.:</b> 23-36893				
Quotation No.: Q20-21693	<b>Chemtest Sample ID.:</b> 1726745				
Order No.:	Client Sample Ref.: AA182127				
	Sample Location: TP01				
	Sample Type: SOIL				
	Top Depth (m): 0.80				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
Aliphatic TPH >C10-C12	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C12-C16	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C16-C21	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C21-C35	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C8-C10	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C10-C12	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C12-C16	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C16-C21	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C21-C35	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10
Benzene	M	2760	µg/kg	1.0	[A] < 1.0
Toluene	M	2760	µg/kg	1.0	[A] < 1.0
Ethylbenzene	M	2760	µg/kg	1.0	[A] < 1.0
m & p-Xylene	M	2760	µg/kg	1.0	[A] < 1.0
o-Xylene	M	2760	µg/kg	1.0	[A] < 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.57
Fluorene	N	2800	mg/kg	0.010	[A] 0.41
Phenanthrene	N	2800	mg/kg	0.010	[A] 0.62
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010

## Results - Soil

**Project: 24961-E Cork Housing Project**

<b>Client: IGSL</b>	<b>Chemtest Job No.:</b> 23-36893				
Quotation No.: Q20-21693	<b>Chemtest Sample ID.:</b> 1726745				
Order No.:	Client Sample Ref.: AA182127				
	Sample Location: TP01				
	Sample Type: SOIL				
	Top Depth (m): 0.80				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 1.6
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010
Total Phenols	M	2920	mg/kg	0.10	< 0.10

## Results - Single Stage WAC

**Project: 24961-E Cork Housing Project**

Chemtest Job No: 23-36893 Chemtest Sample ID: 1726745 Sample Ref: AA182127 Sample ID: Sample Location: TP01 Top Depth(m): 0.80 Bottom Depth(m): Sampling Date:				Landfill Waste Acceptance Criteria Limits			
				Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Determinand	SOP	Accred.	Units				
Total Organic Carbon	2625	M	%	[A] 1.9	3	5	6
Loss On Ignition	2610	M	%	0.80	--	--	10
Total BTEX	2760	M	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	M	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 1.6	100	--	--
pH at 20C	2010	M		8.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis			10:1 Eluate mg/l	10:1 Eluate mg/kg	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1455	U	0.0011	0.011	0.5	2	25
Barium	1455	U	< 0.005	< 0.050	20	100	300
Cadmium	1455	U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455	U	0.0021	0.021	2	50	100
Mercury	1455	U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455	U	0.0007	0.0066	0.5	10	30
Nickel	1455	U	0.0011	0.011	0.4	10	40
Lead	1455	U	0.0009	0.0095	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455	U	0.0008	0.0077	0.1	0.5	7
Zinc	1455	U	0.005	0.052	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	64	640	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.3	63	500	800	1000

**Solid Information**

Dry mass of test portion/kg	0.090
Moisture (%)	17

**Waste Acceptance Criteria**

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

<b>Sample:</b>	<b>Sample Ref:</b>	<b>Sample ID:</b>	<b>Sample Location:</b>	<b>Sampled Date:</b>	<b>Deviation Code(s):</b>	<b>Containers Received:</b>
1726745	AA182127		TP01		A	Amber Glass 250ml
1726745	AA182127		TP01		A	Plastic Tub 500g

## Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH at 20°C	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity at 25°C and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH at 20°C	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurement by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easily liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.



## Test Methods

SOP	Title	Parameters included	Method summary
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44 Aromatics: >C5–C7, >C7–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and Trimethylphenols Note: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	Compliance Test for Leaching of Granular Waste Material and Sludge

## **Report Information**

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

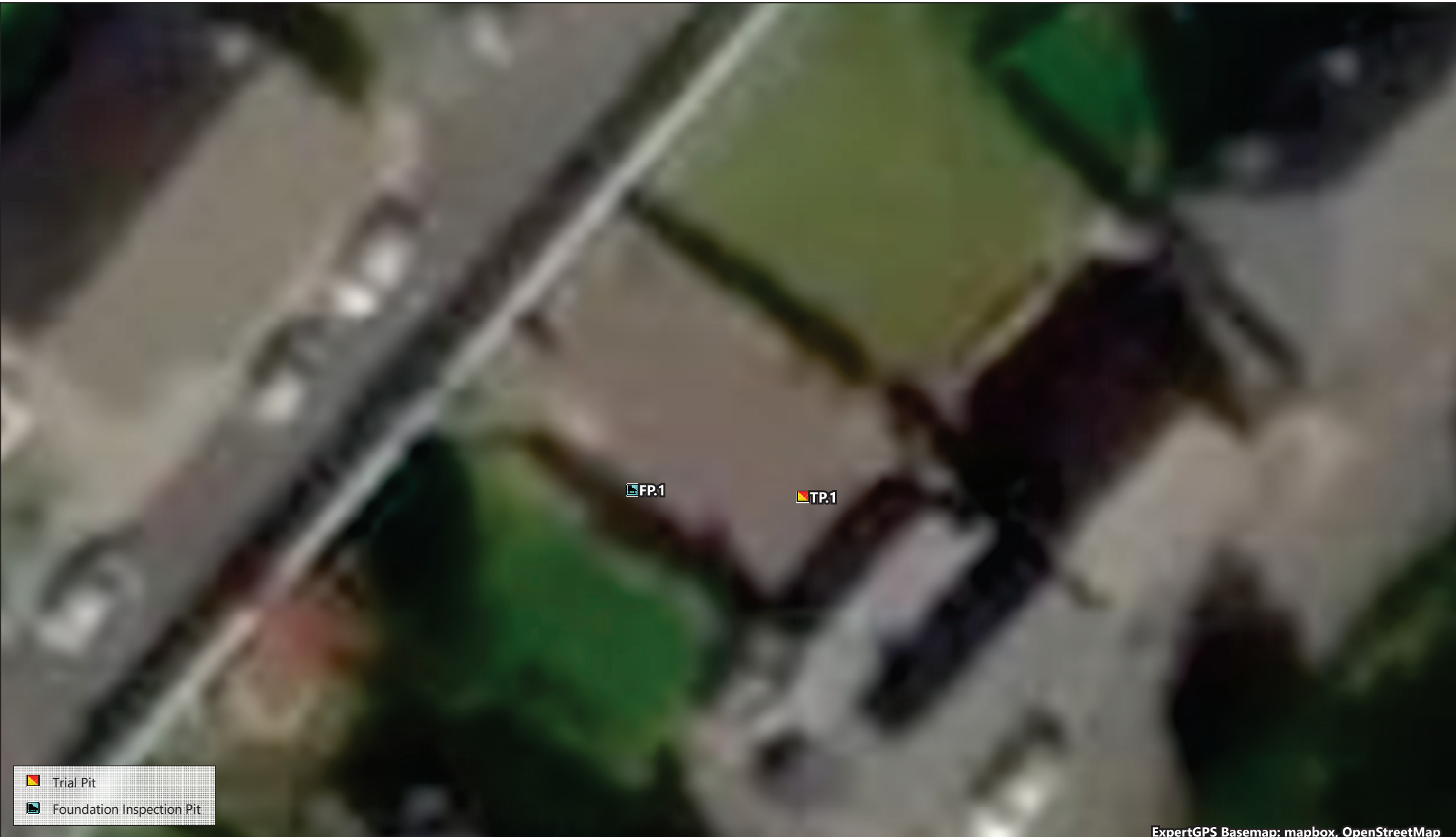
All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)

**Appendix 5 Site Plan**



ExpertGPS Basemap: mapbox, OpenStreetMap

**ExpertGPS**

**24961E Kanturk**



Scale: 1 : 200.



2°28'

## **APPENDIX 5**

# **IRISH WATER CONFIRMATION OF FEASIBILITY**

## CONFIRMATION OF FEASIBILITY

Joanne Crossland  
Cork County Council  
Architects Department County Hall  
Carrigrohane Road  
Cork  
T12R2NC  
Ireland

**Uisce Éireann**  
Bosca OP448  
Oifig Sheachadta na  
Cathrach Theas  
Cathair Chorcaí

**Irish Water**  
PO Box 448,  
South City  
Delivery Office  
Cork City.

[www.water.ie](http://www.water.ie)

2 November 2022

**Our Ref: CDS22004596 Pre-Connection Enquiry  
33 Market Place, Kanturk, Cork**

Dear Applicant/Agent,

### **We have completed the review of the Pre-Connection Enquiry.**

Irish Water has reviewed the pre-connection enquiry in relation to a Water & Wastewater connection for a Single Domestic of 1 unit(s) at 33 Market Place, Kanturk, Cork, (the **Development**).

Based upon the details provided we can advise the following regarding connecting to the networks;

- **Water Connection**
  - Feasible without infrastructure upgrade by Irish Water
  - Current Records for the Watermain Layout do not reflect the accurate positioning of the Watermain layout therefore a Watermain Extension of approx. 65 metres (subject to Further review at Connection Application Stage) may be required to service the development with the costs borne fully by the developer.
- **Wastewater Connection**
  - Feasible without infrastructure upgrade by Irish Water
  - In the case of wastewater connections this assessment does not confirm that a gravity connection is achievable. Therefore a suitably sized pumping station may be required to be installed on



your site. All infrastructure should be designed and installed in accordance with the Irish Water Code of Practice.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Irish Water infrastructure. Before the Development can be connected to our network(s) you must submit a connection application and be granted and sign a connection agreement with Irish Water.

As the network capacity changes constantly, this review is only valid at the time of its completion. As soon as planning permission has been granted for the Development, a completed connection application should be submitted. The connection application is available at [www.water.ie/connections/get-connected/](http://www.water.ie/connections/get-connected/)

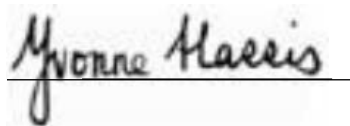
### Where can you find more information?

- **Section A** - What is important to know?
- **Section B** - Details of Irish Water's Network(s)

**This letter is issued to provide information about the current feasibility of the proposed connection(s) to Irish Water's network(s). This is not a connection offer and capacity in Irish Water's network(s) may only be secured by entering into a connection agreement with Irish Water.**

For any further information, visit [www.water.ie/connections](http://www.water.ie/connections), email [newconnections@water.ie](mailto:newconnections@water.ie) or contact 1800 278 278.

Yours sincerely,



**Yvonne Harris**  
**Head of Customer Operations**

## Section A - What is important to know?

What is important to know?	Why is this important?
<b>Do you need a contract to connect?</b>	<ul style="list-style-type: none"> <li>• Yes, a contract is required to connect. This letter does not constitute a contract or an offer in whole or in part to provide a connection to Irish Water's network(s).</li> <li>• Before the Development can connect to Irish Water's network(s), you must submit a connection application <u>and be granted and sign</u> a connection agreement with Irish Water.</li> </ul>
<b>When should I submit a Connection Application?</b>	<ul style="list-style-type: none"> <li>• A connection application should only be submitted after planning permission has been granted.</li> </ul>
<b>Where can I find information on connection charges?</b>	<ul style="list-style-type: none"> <li>• Irish Water connection charges can be found at: <a href="https://www.water.ie/connections/information/charges/">https://www.water.ie/connections/information/charges/</a></li> </ul>
<b>Who will carry out the connection work?</b>	<ul style="list-style-type: none"> <li>• All works to Irish Water's network(s), including works in the public space, must be carried out by Irish Water*.</li> </ul> <p>*Where a Developer has been granted specific permission and has been issued a connection offer for Self-Lay in the Public Road/Area, they may complete the relevant connection works</p>
<b>Fire flow Requirements</b>	<ul style="list-style-type: none"> <li>• The Confirmation of Feasibility does not extend to fire flow requirements for the Development. Fire flow requirements are a matter for the Developer to determine.</li> <li>• <b>What to do?</b> - Contact the relevant Local Fire Authority</li> </ul>
<b>Plan for disposal of storm water</b>	<ul style="list-style-type: none"> <li>• The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters.</li> <li>• <b>What to do?</b> - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.</li> </ul>
<b>Where do I find details of Irish Water's network(s)?</b>	<ul style="list-style-type: none"> <li>• Requests for maps showing Irish Water's network(s) can be submitted to: <a href="mailto:datarequests@water.ie">datarequests@water.ie</a></li> </ul>

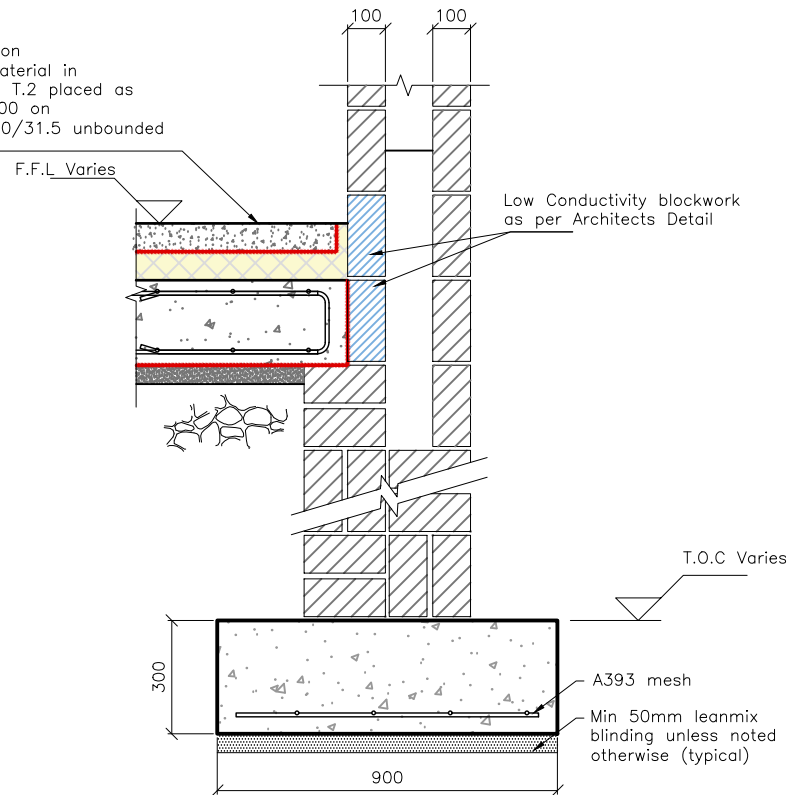
<p><b>What are the design requirements for the connection(s)?</b></p>	<ul style="list-style-type: none"> <li>The design and construction of the Water &amp; Wastewater pipes and related infrastructure to be installed in this Development shall comply with <b><i>the Irish Water Connections and Developer Services Standard Details and Codes of Practice</i></b>, available at <a href="http://www.water.ie/connections">www.water.ie/connections</a></li> </ul>
<p><b>Trade Effluent Licensing</b></p>	<ul style="list-style-type: none"> <li>Any person discharging trade effluent** to a sewer, must have a Trade Effluent Licence issued pursuant to section 16 of the Local Government (Water Pollution) Act, 1977 (as amended).</li> <li>More information and an application form for a Trade Effluent License can be found at the following link: <a href="https://www.water.ie/business/trade-effluent/about/">https://www.water.ie/business/trade-effluent/about/</a></li> </ul> <p>**trade effluent is defined in the Local Government (Water Pollution) Act, 1977 (as amended)</p>

# APPENDIX 6

## FOUNDATION SKETCHES

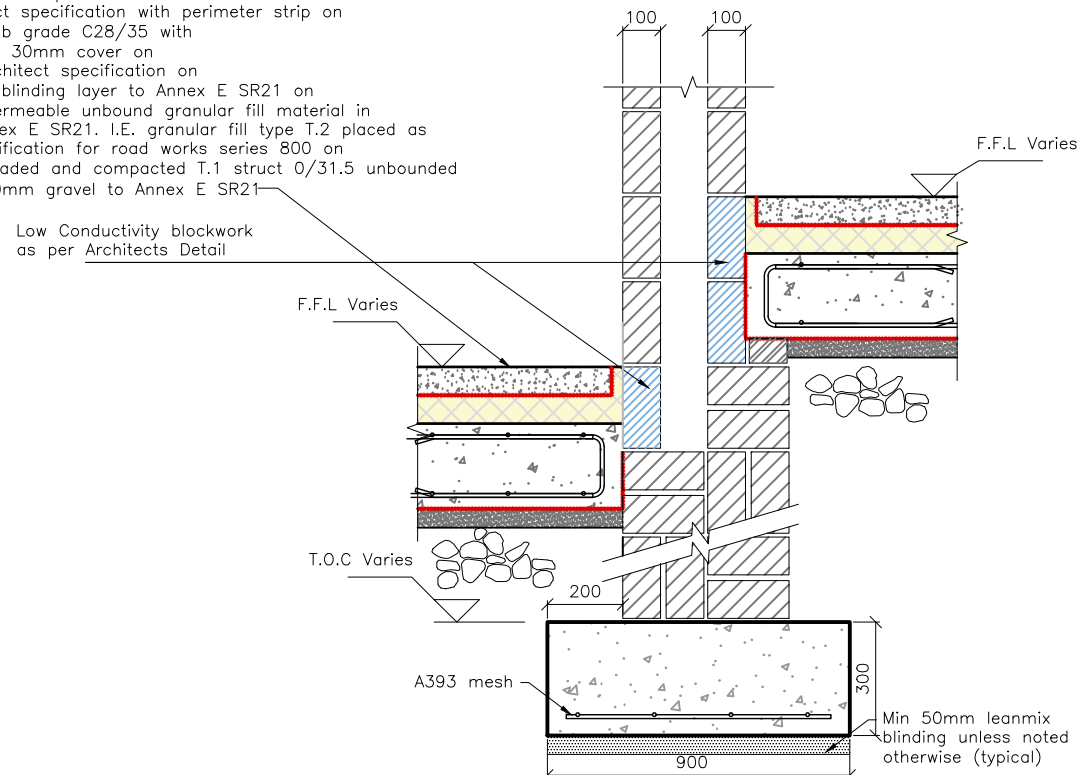


75mm screed concrete grade C28/35 with A142 mesh with 25mm top cover on 500 gauge polyethylene slip membrane on Insulation to Architect specification with Perimeter strip on 225mm concrete slab grade C28/35 with A393 mesh top and bottom with 30mm cover and H8 U-bars at end supports @ 200 c/c on Radon barrier to architect specification on 50mm T3 0/40mm blinding layer to Annex E SR21 on 200mm minimum permeable unbound granular fill material in compliance with Annex E SR21. I.E. granular fill type T.2 placed as type B to NRA specification for road works series 800 on minimum 300mm graded and compacted T.0 struct 0/31.5 unbounded granular fill or 0/40mm gravel to Annex E SR21



○ Typical External Wall Foundation With Suspended Ground Floor Slab Scale 1:20

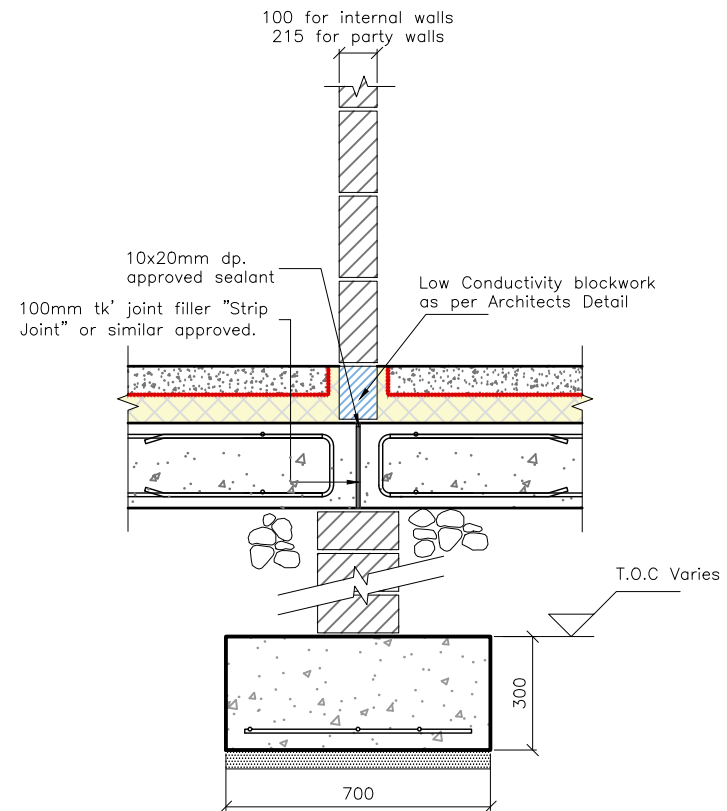
75mm screed concrete grade C28/35 with A142 mesh with 25mm top cover on 500 gauge polyethylene slip membrane on Insulation to Architect specification with perimeter strip on 225mm concrete slab grade C28/35 with A252 mesh top with 30mm cover on Radon barrier to architect specification on 50mm T3 0/40mm blinding layer to Annex E SR21 on 200mm minimum permeable unbound granular fill material in compliance with Annex E SR21. I.E. granular fill type T.2 placed as type B to NRA specification for road works series 800 on minimum 300mm graded and compacted T.1 struct 0/31.5 unbounded granular fill or 0/40mm gravel to Annex E SR21



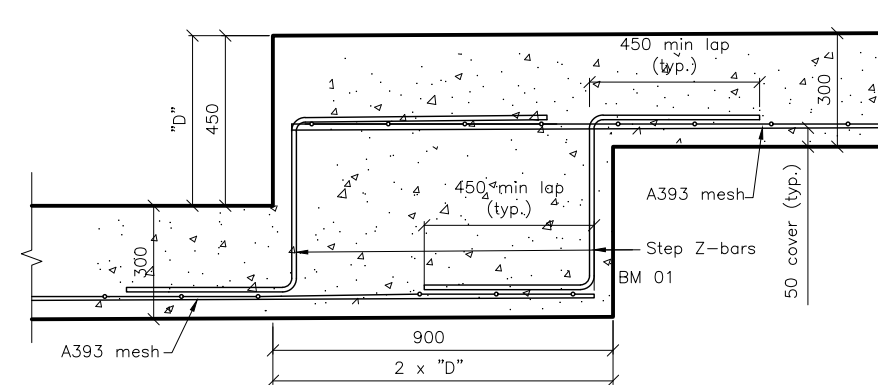
○ Typical Stepped Party Wall Foundation Scale 1:20

GENERAL NOTES:

This drawing is not to be scaled:  
 Figured dimensions only to be used.  
 All dimensions to be site checked.  
 Drawings issued for information only.  
 Refer to Site Assessment Report for recommended levels.



○ Typical Internal/Party Wall Foundation with Suspended Ground Floor Slab Scale 1:20



○ Stepped Foundation Detail Scale 1:20

A	ISSUED FOR INFORMATION	FH	SH	04.01.24
REV	DETAILS	BY	ICHD	DATE

**DJF**  
 DJF ENGINEERING SERVICES LTD.  
 Consulting Engineers • Project Managers  
 Tramore House, Reevesswood, Douglas Road, Cork, T12 RBXW  
 Tel: (021) 2380454 Email: info@djf.ie Web: www.djf.ie.com

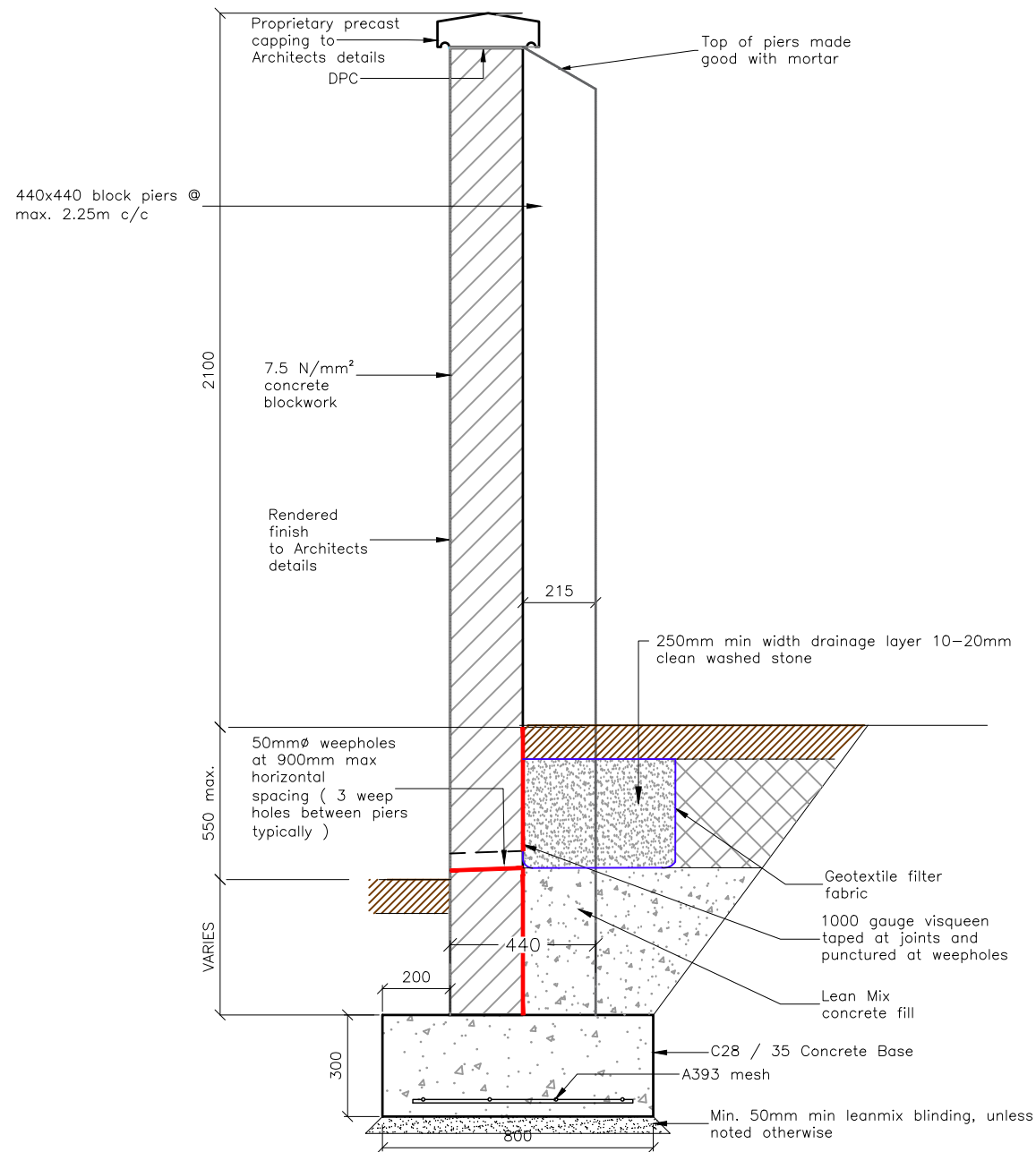
Client  
  
**Cork County Council**  
 Comhairle Contae Chorcaí

Status **INFORMATION**

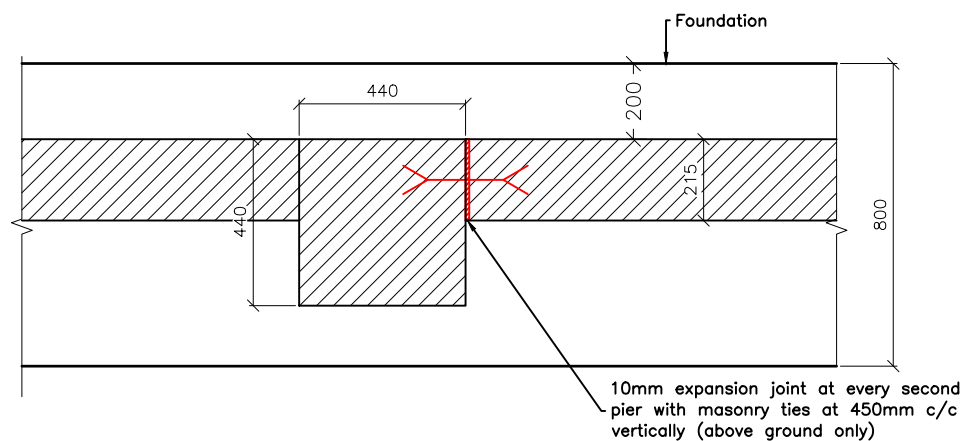
Project Title  
**Site Investigations**

Drawing Title  
**Typical Foundation & Suspended Floor Slab Details**

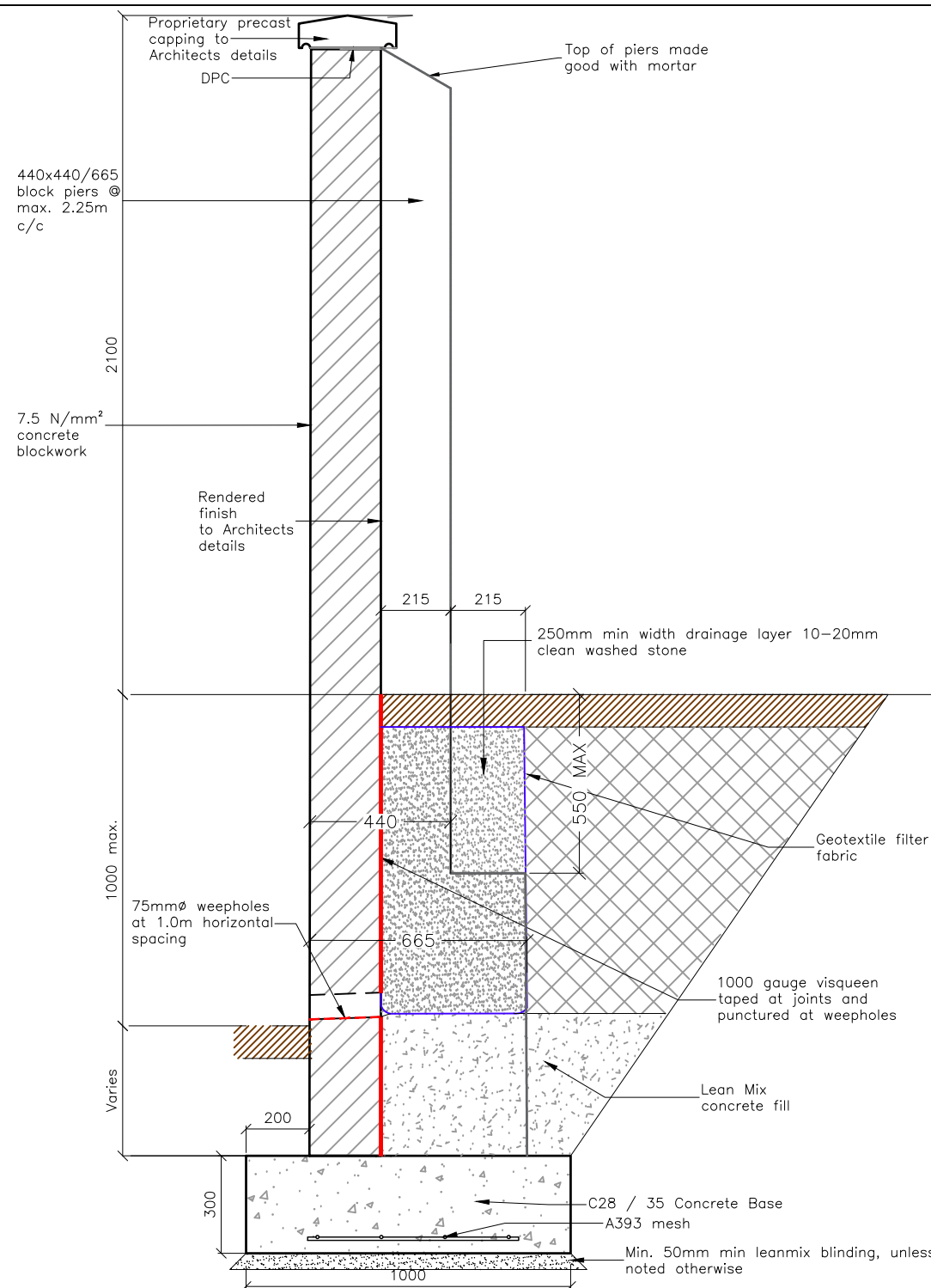
Scales	Drawing No.	Rev
1:20	-A3 5011-001	A



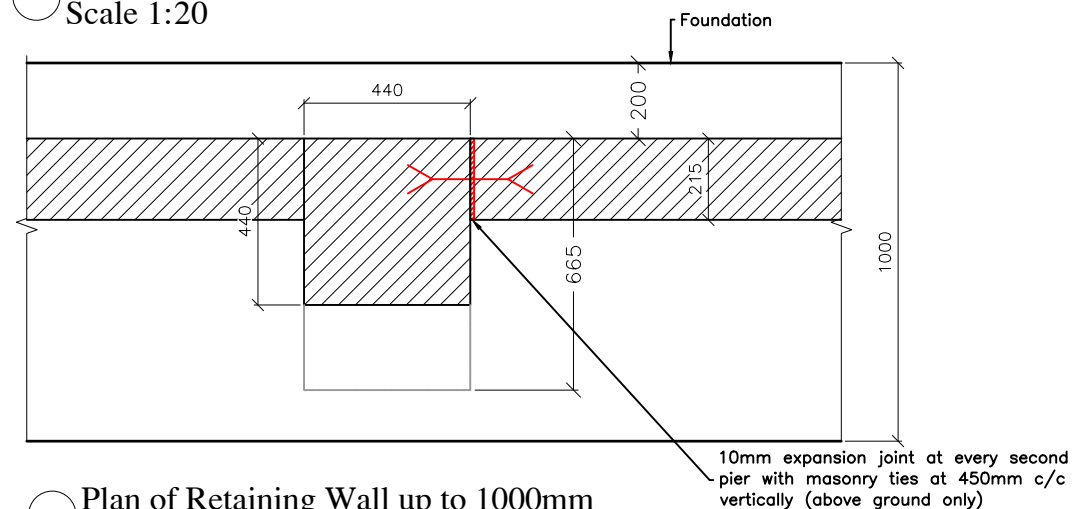
Retaining Wall up to 550mm  
Scale 1:20



Plan of Retaining Wall up to 550mm  
Scale 1:20



Retaining Wall up to 1000mm  
Scale 1:20



Plan of Retaining Wall up to 1000mm  
Scale 1:20

**GENERAL NOTES:**  
This drawing is not to be scaled:  
Figured dimensions only to be used.  
All dimensions to be site checked.  
Drawings issued for information only.  
Refer to Site Assessment Report for recommended levels.

A	ISSUED FOR INFORMATION	FH	SH	04.01.24
REV	DETAILS	BY	CHD	DATE

Client

Status **INFORMATION**

Project Title  
**Site Investigations**

Drawing Title  
**Typical Site Retaining Wall Details**

Scales	Drawing No.	Rev
1:20	-A3 5011-003	A



## CORK COUNTY COUNCIL

### PLANNING & DEVELOPMENT & FORESHORE (AMENDMENT) ACT 2022 PLANNING & DEVELOPMENT ACT 2000 (as amended)

Notice is hereby given, pursuant to the provisions of the Planning and Development and Foreshore (Amendment) Act 2022 and in accordance with the requirements of the Planning and Development (Section 179A) Regulations 2023 that Cork County Council propose to undertake the following development:

#### SCHEDULE

LOCATION	NATURE & EXTENT OF DEVELOPMENT	OFFICES AT WHICH PLANS AND PARTICULARS MAY BE INSPECTED
Lands at 33 Market Place, Kanturk  In the townland of: Kanturk, Co. Cork	<ul style="list-style-type: none"><li>• The construction of 1no. one-bed bungalow</li><li>• New parking area</li><li>• Hard landscaping, including footpaths</li><li>• Soft landscaping including green areas and planting</li><li>• Connection to public utilities.</li><li>• All associated site works.</li></ul>	Housing Directorate, Floor 4, County Hall, Cork
		Cork County Council, Kanturk Mallow Municipal District Offices, Annabella, Mallow, Co. Cork

#### The plans and particulars may be inspected as follows:

1. By visiting the stated offices above.
2. Online at the following address:  
<https://www.corkcoco.ie/en/resident/planning-and-development/public-consultations>
3. On receipt of a written request the Council will post or email a copy of the plans and particulars to a member of the public who wishes to receive a copy.
4. The request should be headed: 'Housing Scheme at 33 Market Place, Kanturk', and addressed to the Housing Directorate, Cork County Council, Floor 4 Co. Hall, Cork or emailing [part8housing@corkcoco.ie](mailto:part8housing@corkcoco.ie), stating whether you wish to have the plans etc. sent in hard copy form or by email.

As per Article 81A of the Planning and Development (Section 179A) Regulations 2023 an Environmental Impact Assessment (EIA) screening determination has been made and concludes that there is no real likelihood of significant effects on the environment arising from the proposed development once standard industry environmental management systems are in place. A determination has been made that an **EIA is not required**. A determination has been made that the proposed development **is not required to undergo an appropriate assessment (AA)** under the Habitats Directive.

As per Article 81A a person may question the validity of any decision of the planning authority by way of an application for judicial review, under Order 84 of the Rules of the Superior Courts (S.I. No. 15 of 1986), in accordance with sections 50 and 50A of the Act.

Plans and particulars of the proposed development will be available for inspection and/or purchase at the locations outlined above (see Point No. 1 above) on each day during which the said offices are open for the transaction of business (excluding Bank Holidays) for a period beginning on 16<sup>th</sup> February 2024 and ending on 17<sup>th</sup> April 2024.

**Director of Services, Housing Directorate,  
Cork County Council**

*It should be noted that the Freedom of Information Act applies to all records held by Cork County Council*

# SITE NOTICE

## CORK COUNTY COUNCIL

### PLANNING & DEVELOPMENT & FORESHORE (AMENDMENT) ACT 2022 PLANNING & DEVELOPMENT ACT 2000 (as amended)

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