

Meath County Council
 Planning Department
 Buvinda House, Dublin Road
 Navan, Co. Meath, CY291

Sent By: Email
Job Ref: L118
 A - SS, HY
Date: 14-Apr-25

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RE: Further Information Response in Relation to Planning Reference 24/61047 at The Johnstown Estate Hotel, Johnstown, Enfield, Co. Meath A83 V070.

Item Nos. – 1, 2 (a), 2 (b), 3 (a), 3 (b), 4 (a), 4 (b), 4 (c), 4 (d), 4 (e), 5.

This further information response document has been prepared by Cronin & Sutton Consulting Engineers (CS Consulting) on behalf of the applicant Lefgem Limited in relation to Planning Reference 24/61047 at The Johnstown Estate Hotel, Johnstown, Enfield, Co. Meath A83 V070.

This document addresses engineering related items of the request for further information issued on the 31st of January 2025 by Meath County Council (MCC) in respect of the above development application.

This response is supplemented by the following documents:

- **L118-CSC-ZZ-XX-RP-C-0101 Engineering Services Report (incl. Transportation)**
- **L118-CSC-ZZ-XX-DR-C-0103 Foul Drainage Details**
- **L118-CSC-ZZ-XX-DR-C-0104 Storm Water Details**
- **L118-CSC-ZZ-XX-DR-C-0105 Watermain Details**
- **L118-CSC-ZZ-XX-DR-C-0106 Existing Restaurant Upgrades – Surface Water Drainage Layout**
- **L118-CSC-ZZ-XX-DR-C-0110 Proposed Storm Water Drainage Layout**
- **L118-CSC-ZZ-XX-DR-C-0111 Proposed Foul Sewer Drainage Layout**
- **L118-CSC-ZZ-XX-DR-C-0112 Proposed Watermain Layout**
- **L118-CSC-ZZ-XX-DR-C-0113 Private Water Treatment Plant Schematic Layout**
- **PA-001 Proposed Site Plan**



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ITEM 1 OF THE REQUEST FOR FURTHER INFORMATION

The applicant is requested to submit a revised site layout plan demonstrating car parking and bicycle parking in accordance with the requirements of the Meath County Development Plan 2021-2027 (as varied). A schedule shall also be submitted listing the various elements of the overall development, the required quantum of car parking per element and the proposed quantum of car parking to be provided per element.

Where the proposed quantum of car parking is less than that required by the Meath County Development Plan 2021-2027 (as varied), the applicant shall provide a justification for the reduced car parking.

IN RESPONSE TO ITEM 1 OF THE RFI

Please find enclosed Engineering Service Report where under section 7 sub-section 7.3 'Parking' a schedule of the overall development parking provision is outlined inclusive of the proposed development extension. In addition, a justification is provided on the overall parking provision, and it is considered that the existing quantum of car parking spaces 606no. is more than sufficient to accommodate the anticipated increased parking demand of the proposed hotel and restaurant extension. For location of existing 606no. car parking spaces please refer to **Darmody Architects Drawing No. PA-001 Proposed Site Plan.**

ITEM 2 OF THE REQUEST FOR FURTHER INFORMATION

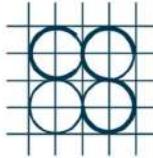
The applicant is invited to address the following items in relation Water Supply/Treatment:

ITEM 2(a) OF THE REQUEST FOR FURTHER INFORMATION

(a) The applicant is requested to confirm if the proposed development will be serviced by the public mains or the existing private water supply or both. If it is proposed to use the existing private water supply on site for the proposed development, evidence should be provided to verify that the private water supply has capacity to serve the extra demand posed by the development. If both public mains and private water supply are to be used, evidence should be provided to verify that an adequate failsafe is installed to prevent backflow of water from the private water supply into the public mains water supply.

IN RESPONSE TO ITEM 2(a) OF THE RFI

In response to this item, we submit updated **Engineering Services Report** and **CSC Drawing No's L118-CSC-ZZ-XX-DR-C-0112 Proposed Watermain Layout** and **L118-CSC-ZZ-XX-DR-C-0113 Private Water Treatment Plant Schematic Layout.**



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The submitted items illustrate that the proposed development will connect on to the existing private water supply of the subject site. It is worth noting that the existing site has a connection on to the public water supply however this supply is a backup to be used in emergency with the understanding that Meath County Council must be notified whenever the subject site switches over to public water supply.

In relation to the capacity of the private water supply we note that from 11.09.2024 till 04.03.2025 (175 days period) 12,748 m³ of water was pumped out from the existing well which equates to approximately 73 m³ per day, in order to satisfy the required demand. However, it is worth noting that the capacity of the well is not used in full as the water pumped from the well is based on the current water consumption. It is also worth noting that combined amount of ca. 72 m³ of water is available at all times in the 4 No water tanks within the private water treatment plant that acts as a buffer water supply volume. The existing well can however provide significantly more water supply quantum than currently used by the existing site and for reference of this additional capacity it is noted that from 06.12.2024 till 21.01.2025 (46 days period) based on the water demand in this period, water pumped from the well was 5,056 m³ which equates to approximately 110 m³ per day. Given the above mentioned the existing well has capacity to serve the extra demand posed by the proposed development.

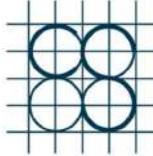
In relation to the prevention of the backflow from the private water supply to the public mains water supply we note that this has been resolved by connecting the public mains water supply on top of the water storage tank, as the water storage tank is never full there is no potential for any backflow into the public mains system. Please refer to **CSC Drawing No L118-CSC-ZZ-XX-DR-C-0113 Private Water Treatment Plant Schematic Layout** for details. It is also worth noting that the proposed development does not require a connection to the Uisce Eireann public water supply network, please refer to response to item 5 for details.

ITEM 2(b) OF THE REQUEST FOR FURTHER INFORMATION

(b) The applicant is requested to provide detailed map(s) indicating the location of the private water supply and its proximity to the proposed development. The applicant is requested to provide a detailed schematic of the water treatment system for the private regulated water supply and verify that the treatment system is suitable to satisfactorily treat the water due to the extra demand posed by the development.

IN RESPONSE TO ITEM 2(b) OF THE RFI

In response to this item, we submit **CSC Drawing No's L118-CSC-ZZ-XX-DR-C-0112 Proposed Watermain Layout** and **L118-CSC-ZZ-XX-DR-C-0113 Private Water Treatment Plant Schematic Layout**.



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In relation to the treatment system capacity to satisfactorily treat water due to the extra demand posed by the proposed development we note that the average demand of the proposed development equates to 0.84 l/sec (73 m³ per day) and the existing onsite water treatment system is supplying this on an ongoing basis. In relation to the capacity of the existing onsite water treatment system it is worth noting that the system is constrained by the softener treatment part of the system. There are 3 No softener treatment modules installed as a part of the overall system with every module having the capability to treat 10 m³ of water per hour. These modules come online progressively and if required can treat up to 30 m³ of water per hour. Other modules of the water treatment system have far greater capacity than 10 m³ per hour.

As the proposed development required an average water supply of 0.60 l/s and the existing development on site has an average consumption of 0.84 l/sec the combined water supply requirement is 1.44 l/sec which can be delivered by the existing onsite water treatment system that has a maximum treatment capacity of 30 m³ per hour which equates to 8.3 l/sec.

ITEM 3 OF THE REQUEST FOR FURTHER INFORMATION

The applicant shall submit the following with regard to concerns surrounding wastewater treatment:

ITEM 3(a) OF THE REQUEST FOR FURTHER INFORMATION

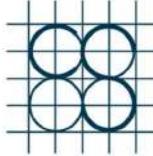
(a) The applicant is requested to confirm details of the connection to the public sewer and if the proposed development will be serviced by the public sewer. Detailed as-built drawings of the existing foul network will be required indicating invert levels, cover levels, pipe sizes and pipe gradients.

IN RESPONSE TO ITEM 3(a) OF THE RFI

In response to this item, we submit updated **Engineering Services Report** and **CSC Drawing No L118-CSC-ZZ-XX-DR-C-0111 Proposed Foul Drainage Layout**.

ITEM 3(b) OF THE REQUEST FOR FURTHER INFORMATION

(b) The applicant is requested to submit a detailed assessment of the existing foul pumping station including photographs of the pump chamber and 24hr emergency tank. The applicant should confirm and provide details on the available wet well/pump chamber capacity and available 24hr emergency storage. Detail drawings of the existing foul pumping station should be provided for assessment.



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IN RESPONSE TO ITEM 3(b) OF THE RFI

In response to this item, we submit updated **Engineering Services Report** and **CSC Drawing No L118-CSC-ZZ-XX-DR-C-0111 Proposed Foul Drainage Layout** that illustrate that the proposed development does not interact with the existing foul pumping stations.

ITEM 4 OF THE REQUEST FOR FURTHER INFORMATION

The development as proposed does not meet the requirements of Meath County Council Environment Flooding-Surface Water Section with respect to the orderly collection, treatment and disposal of surface water. Meath County Council Environment Flooding-Surface Water Section recommends that Further Information be sought from the applicant as follows;

ITEM 4(a) OF THE REQUEST FOR FURTHER INFORMATION

(a) The documents submitted by the applicant regarding surface water & foul are all submitted as draft documents. The engineering services report is not complete and has spaces left for comments. The applicant is therefore requested to re-submit all documents that are marked as draft and revise them up to planning status.

IN RESPONSE TO ITEM 4(a) OF THE RFI

In response to this item, we submit updated **Engineering Services Report** and **CSC Drawing No's L118-CSC-ZZ-XX-DR-C-0106 Existing Restaurant Upgrades – Surface Water Drainage Layout** and **L118-CSC-ZZ-XX-DR-C-0110 Proposed Storm Water Drainage Layout**.

ITEM 4(b) OF THE REQUEST FOR FURTHER INFORMATION

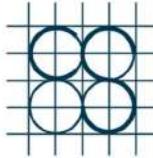
(b) The applicant has submitted a surface water design that does not comply with Meath County Council's requirements for the treatment of surface water. The submitted surface water design is not detailed sufficiently for the planning authority to carry out a thorough assessment. The applicant is therefore requested to submit a revised surface water design and system that is SuDs compliant and that is in accordance with the below mentioned guidelines.

IN RESPONSE TO ITEM 4(b) OF THE RFI

In response to this item, we submit updated **Engineering Services Report** and **CSC Drawing No L118-CSC-ZZ-XX-DR-C-0110 Proposed Storm Water Drainage Layout**.

ITEM 4(c) OF THE REQUEST FOR FURTHER INFORMATION

(c) The applicant is requested to submit a detailed and legible topographical survey of the existing surface water network including any surface water infrastructure, any existing drainage ditches in



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the vicinity of the subject site, all existing foul infrastructure including the pumping station and rising main, locations of wells or boreholes that are on the existing site.

IN RESPONSE TO ITEM 4(c) OF THE RFI

In response to this item, we submit **CSC Drawing No's L118-CSC-ZZ-XX-DR-C-0110 Proposed Storm**

Water Drainage Layout, L118-CSC-ZZ-XX-DR-C-0111 Proposed Foul Sewer Drainage Layout and

L118-CSC-ZZ-XX-DR-C-0112 Proposed Watermain Layout.

ITEM 4(d) OF THE REQUEST FOR FURTHER INFORMATION

(d) The applicant is requested to submit details of any existing surface water infrastructure that is proposed to be used as part of the subject development.

All surface water design/work shall comply fully with the Greater Dublin Strategic Drainage Study (GDSDS) Regional Drainage Policies Volume 2, for New Developments.

IN RESPONSE TO ITEM 4(d) OF THE RFI

In response to this item, we submit **CSC Drawing No L118-CSC-ZZ-XX-DR-C-0110 Proposed Storm Water Drainage Layout.**

ITEM 4(e) OF THE REQUEST FOR FURTHER INFORMATION

(e) All surface water design/work shall comply fully with the Greater Dublin Regional Code of Practice for Drainage Works Volume 6.

IN RESPONSE TO ITEM 4(e) OF THE RFI

We confirm that all surface water design/work shall comply fully with the Greater Dublin Regional Code of Practice for Drainage Works Volume 6.

ITEM 5 OF THE REQUEST FOR FURTHER INFORMATION

The applicant is required to engage further with Uisce Eireann through the submission of a Pre-Connection Enquiry (PCE) in order to determine the feasibility of connection to the public water/wastewater infrastructure. The Confirmation of Feasibility (COF) should be submitted to the Planning Authority as the response to this further information request.

IN RESPONSE TO ITEM 5 OF THE RFI

In response to this item, we submit Confirmation of Feasibility received from Uisce Eireann which notes that the wastewater connection is feasible. In relation to the water supply the proposed development will be connected to the private water supply network therefore the water supply was not part of the Pre Connection Enquiry with Uisce Eireann. Copy of the Uisce Eireann Confirmation of



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Feasibility is included in **Appendix A** of this document. For avoidance of doubt no water supply will be required from Uisce Eireann public water supply network as the entirety of water supply for the proposed development will come from the existing private water supply installation.

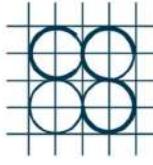
Slaven Sose

Associate

Senior Civil Engineer

BE, Dipl. Ing., MIEI

for Cronin & Sutton Consulting



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APPENDIX A
UISCE EIREANN CONFIRMATION OF FEASIBILITY

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CONFIRMATION OF FEASIBILITY

Slaven Sose

CS Consulting

19-22 Dame Street
Dublin 2
Dublin
D02E267
Ireland

5 March 2025

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Uisce Éireann
Bosca OP 448
Oifig Sheachadta na Cathrach Theas
Cathair Chorcaí
Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City
www.water.ie

**Our Ref: CDS24007934 Pre-Connection Enquiry
Extension of Johnstown Hotel, Johnstown Road, Enfield, Meath**

Dear Applicant/Agent,

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

Uisce Éireann has reviewed the pre-connection enquiry in relation to a Wastewater connection for a Business Connection of 1 unit(s) at Extension of Johnstown Hotel, Johnstown Road, Enfield, Meath, (the **Development**).

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

- **Wastewater Connection** - Feasible without infrastructure upgrade by Uisce Éireann

This letter does not constitute an offer, in whole or in part, to provide a connection to any Uisce Éireann 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 Uisce Éireann.

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/

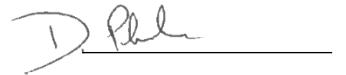
Where can you find more information?

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

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

For any further information, visit www.water.ie/connections, email newconnections@water.ie or contact 1800 278 278.

Yours sincerely,



Dermot Phelan
Connections Delivery Manager

Section A - What is important to know?

What is important to know?	Why is this important?
Do you need a contract to connect?	<ul style="list-style-type: none"> 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 Uisce Éireann's network(s). Before the Development can connect to Uisce Éireann's network(s), you must submit a connection application <u>and be granted and sign</u> a connection agreement with Uisce Éireann.
When should I submit a Connection Application?	<ul style="list-style-type: none"> A connection application should only be submitted after planning permission has been granted.
Where can I find information on connection charges?	<ul style="list-style-type: none"> Uisce Éireann connection charges can be found at: https://www.water.ie/connections/information/charges/
Who will carry out the connection work?	<ul style="list-style-type: none"> All works to Uisce Éireann's network(s), including works in the public space, must be carried out by Uisce Éireann*. <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>
Fire flow Requirements	<ul style="list-style-type: none"> 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. What to do? - Contact the relevant Local Fire Authority
Plan for disposal of storm water	<ul style="list-style-type: none"> The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters. What to do? - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.
Where do I find details of Uisce Éireann's network(s)?	<ul style="list-style-type: none"> Requests for maps showing Uisce Éireann's network(s) can be submitted to: datarequests@water.ie

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

Section B – Details of Uisce Éireann’s Network(s)

The map included below outlines the current Uisce Éireann infrastructure adjacent the Development: To access Uisce Éireann Maps email datarequests@water.ie



Reproduced from the Ordnance Survey of Ireland by Permission of the Government. License No. 3-3-34

Note: The information provided on the included maps as to the position of Uisce Éireann's underground network(s) is provided as a general guide only. The information is based on the best available information provided by each Local Authority in Ireland to Uisce Éireann.

Whilst every care has been taken in respect of the information on Uisce Éireann's network(s), Uisce Éireann assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided, nor does it accept any liability whatsoever arising from or out of any errors or omissions. This information should not be solely relied upon in the event of excavations or any other works being carried out in the vicinity of Uisce Éireann's underground network(s). The onus is on the parties carrying out excavations or any other works to ensure the exact location of Uisce Éireann's underground network(s) is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

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Document Title

Engineering Services Report (incl. Transportation)

Project

Proposed Hotel and Restaurant Extension Development at
Johnstown Estate, Johnstown, Enfield, Co. Meath

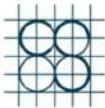
Client

Lefgem Limited



Job No. L118

14 April 2025



CS CONSULTING
Civil, Structural & Traffic Engineering

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ENGINEERING SERVICES REPORT (INCL. TRANSPORTATION)

PROPOSED HOTEL AND RESTAURANT EXTENSION DEVELOPMENT AT JOHNSTOWN ESTATE JOHNSTOWN, ENFIELD, CO. MEATH

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DOCUMENT STATUS					
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BS 1192	L118-CSC-ZZ-XX-RP-C-0101				
Version	Purpose of Document	Author	Reviewed by	Approved by	Issue Date
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P2	PLANNING	FB	SS	MMCE	14.04.2025

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ENGINEERING SERVICES REPORT (INCL. TRANSPORTATION)

**PROPOSED HOTEL AND RESTAURANT EXTENSION DEVELOPMENT AT JOHNSTOWN ESTATE,
JOHNSTOWN, ENFIELD, CO. MEATH**

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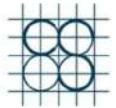
Appendix A: Surface Water Drainage Calculations

Appendix B – Uisce Eireann Confirmation of Feasibility

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by Legem Limited to prepare an Engineering Services Report for a hotel extension at Johnstown Estate, Johnstown, Enfield, Co. Meath.

This report details the following aspects of the proposed development:

- Stormwater Drainage Infrastructure
- Foul Drainage Infrastructure
- Potable Water Infrastructure
- Flooding
- Transportation

The Engineering Services Report is to be read in conjunction with the engineering drawings and documents submitted by CS Consulting and with all other relevant documentation submitted by other members of the project design team.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The proposed development site is located at the existing Johnstown Estate, Co. Meath. The site is in the administrative jurisdiction of Meath County Council.



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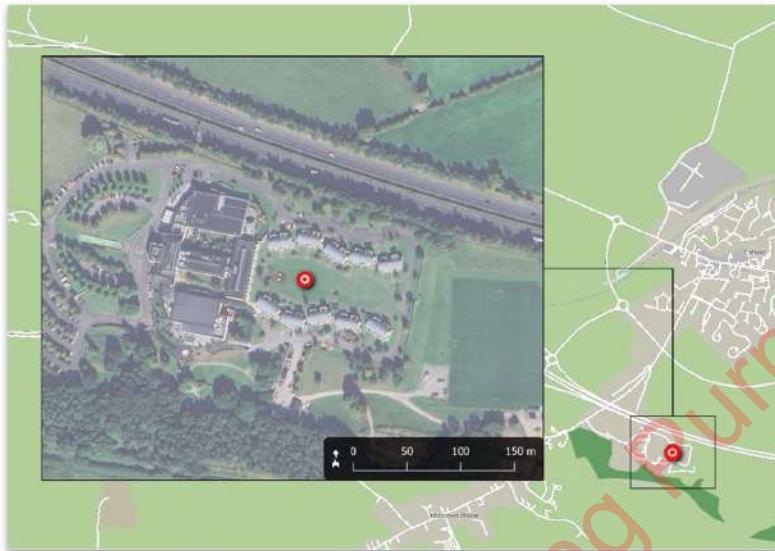


Figure 1 – Location of development site
(Image source: EPA, Osi, OSM Contributors, Google)

The location of the proposed development is shown in Figure 1. The extents and context of the development site are shown in more detail in Figure 2.

The development site is bounded to the north by M4, to the east, south and west by greenfield.

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Figure 2 – Site extents and environs
(map data and imagery: NTA, OSM Contributors, Google)

2.2 Existing Land Use

The subject site comprises a hotel with accommodation, dining and leisure facilities. Part of the hotel building entrance and central area is a protected structure.

2.3 Description of Proposed Development

The proposed development comprise of construction of 3 storey extension to the rear of the existing hotel comprising 90 no. guest bedrooms with an area of plant at roof level of the extension, creation of opening in rear façade of the existing hotel at ground floor level with the omission of one existing guest bedroom to allow for a new single storey connection to the extension, modifications to the existing floor plan of the tenor suite at ground floor level to provide for a new restaurant, provision of a proposed new single-storey extension of 210 SqM to the proposed restaurant at ground floor and basement level to the north-west corner of the existing hotel to provide additional floorspace for a new restaurant and a new entrance to the existing leisure centre, modifications to internal partition walls to extend the existing kitchen, provide bathrooms and to separate the restaurant from spa and gym, removal of

existing external escape staircase from basement and provision of a new entrance and reception area to gym, provision of new replacement external staircase from ground floor to basement and alterations to existing openings and partition walls, provision of storage room in basement, provision of 4 no. accessible parking spaces to serve restaurant and provision of 2 no. external signs above new restaurant and gym entrances. The development also includes all other associated engineering works, landscaping, lighting, and ancillary works necessary to facilitate the development.

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3.0 SURFACE WATER DRAINAGE

3.1 Existing Surface Water Drainage Infrastructure

The existing Johnstown Estate development is currently served by surface water drainage infrastructure as illustrated on CS Consulting Drawing No **L118-CSC-ZZ-XX-DR-C-0110**. The existing infrastructure ranges between 100mm and 900mm in diameter. At present the existing surface water drainage system is unattenuated and overall Johnstown Estate surface water drainage system discharges into River Blackwater to the south of the subject site at three separate locations.

3.2 Proposed Surface Water Drainage Arrangements

Firstly, it is worth noting that it is proposed to undertake works that relate to existing surface water drainage system in two segregated areas. The first area relates to the extension works of the existing restaurant which is located at the northwestern corner of the existing hotel. The second area relates to the proposed extension of the existing hotel bedroom block that is to be undertaken to the east of the existing hotel.

3.2.1 Proposed Restaurant Extension

In relation to the existing restaurant extension works it is worth noting that the existing restaurant roof is at present drained via 2 no rainwater downpipes on the façade of the restaurant which discharge into existing gullies directly below. These gullies are connected to an existing surface-water drainage manhole located within the existing restaurant courtyard. This manhole is within the footprint of the proposed restaurant extension. Also to note is that the existing restaurant courtyard falls towards existing landscaping and road/carpark to the northwest of the restaurant and any surface water runoff from the restaurant courtyard that is not channeled towards the landscaping areas is picked up by existing road gullies located within road/carpark. The existing restaurant surface water drainage layout is illustrated on CS Consulting Drawing No **L118-CSC-ZZ-XX-DR-C-0106**.

Proposed restaurant extension is proposed on a portion of the exiting restaurant courtyard. As the existing restaurant courtyard has an impermeable pavement finish the proposed extension of the restaurant will not alter the surface water runoff from this area



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therefore no change to the loading of the existing surface water drainage system is envisaged.

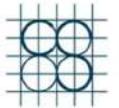
As a part of the proposed extension the existing rainwater downpipes located on the façade of the existing restaurant and the existing surface water drainage manhole located within the footprint of the proposed extension will be decommissioned. New rainwater downpipes located on the façade of the proposed extension will be provided and these rainwater downpipes will be connected to the existing surface water drainage system similar to the existing arrangement. Proposed restaurant surface water drainage layout is illustrated on CS Consulting Drawing No **L118-CSC-ZZ-XX-DR-C-0106**.

3.2.2 Proposed Bedroom Block Extension

The hotel extension is proposed on lands located between the existing self-catering lodges to the east of the main hotel building. At present, this area is predominantly landscaped area with some areas of hard standing including paths and a playground. The subject area is traversed by a limited number of existing surface water drainage lines that will be partially diverted in order to accommodate the proposed footprint of future hotel bedroom extension.

As the existing landscaped area will be turned into proposed bedroom block extension the surface water management for it is designed to comply with the Greater Dublin Strategic Drainage Study (GDSDS). The GDSDS require that four main criteria to be provided by the developer.

- Criterion 1: River Water Quality Protection – satisfied by providing treatment of run-off within SUDS features e.g., detention basin.
- Criterion 2: River Regime Protection - satisfied by attenuating run-off from the site.
- Criterion 3: Level of Service (flooding) for the site – satisfied by the site being outside the 1000 year coastal and fluvial flood levels. Pluvial flood risk addressed by development designed to accommodate a 100 year extreme storm as noted in GDSDS. Planned flood routing for storms greater than 100-year level considered in design and development run-off contained on site.
- Criterion 4: River Flood Protection – attenuation and/or long-term storage provided within the Suds features.



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While the sustainable drainage elements can improve the overall surface water quality, a second requirement under storm water management in the GDSDS is to ensure that the subject lands only discharges storm water at the greenfield (undeveloped) run-off rate. In restricting the storm water flow to pre-development levels, suitably sized storage is required to retain on site the excess storm water generated during extreme storm events.

To generate the greenfield runoff rate (Q_{bar}), rainfall data was obtained from Met Éireann. This included the Sliding Duration table for the area, as well as the Standard Average Annual Rainfall (SAAR) value. Given this Q_{bar} for the site has been calculated to be 2.32 l/sec/ha, See **Appendix A** for site Q_{bar} calculations.

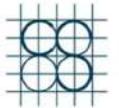
However, given that the area footprint of the proposed bedroom block extension is limited to 0.2ha the related Q_{bar} figure was of order 0.5 l/s which in turn equated to an orifice on the flow control device less than 40mm. This size of orifice would be prone to blockage therefore an adequately sized flow control was sized and the associated discharge rate of 2 l/sec has been adopted.

Restricting storm water outflow to 2.0 l/sec/ requires that attenuation be provided for the predicted 1-in-100-year critical storm event (as increased by 20% for the predicted effects of climate change). The storm water attenuation volume to be retained on site has been estimated as 98m³.

This attenuation volume has been provided in a form of detention basin within the area of open space immediately east of the proposed extension. Proposed detention basin will have a side slope of 1:3 in order to facilitate the maintenance of the open space.

Detention basin attenuation volume is designed to discharge through the flow control device located in the manhole immediately downstream of the detention basin before discharging in the existing surface water drainage system of the subject site.

In addition to detention basin provision the proposed surface water drainage layout of the proposed hotel bedroom extension includes downstream defender in order to provide an additional treatment and interception of the surface water drainage runoff. It is worth noting that the surface water drainage runoff from the proposed hotel extension generally covers the runoff from the roof areas of the proposed extension as the proposed extension does not include roads or car parking spaces as a part of the



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proposed works therefore the proposed downstream defender will cater for treatment and interception requirements adequately.

It is also worth noting that class 1 bypass petrol interceptor required under granted planning permission Reg. Ref. 23613 will be installed on site before the end of April 2025.

Refer to CS Consulting Drawing no. **L118-CSC-ZZ-XX-DR-C-0110** and **L118-CSC-ZZ-XX-DR-C-0104** for proposed surface water drainage layout and surface water drainage details.

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4.0 FOUL DRAINAGE

4.1 Existing Foul Drainage Infrastructure

The existing Johnstown Estate is currently served by dedicated foul drainage infrastructure. This private foul drainage networks at present connects to 450mm diameter Uisce Eireann public foul sewer in close proximity of developments entrance on to Johnstown Road. From there the foul effluent outfalls to Enfield Wastewater Treatment Plant to the west of the proposed development. Refer to CS Consulting Drawing no. L118-CSC-ZZ-XX-DR-C-0111 for details.

4.2 Foul Effluent Generated by the Proposed Development

Firstly, it is not envisaged, given the scale of works, that the extension of the restaurant will increase the foul drainage discharge from the subject site.

In relation to the proposed bedroom block extension, it is noted that the extension will comprise 90no. hotel rooms. Based on Irish Water guidelines, the foul effluent generated shall be:

- 250 l/day/per guest
- 250 l/day/per guest x 188 guests = 47,450 l/day = 47.45 m³/day;
- 0.604 l/sec Average flow (1 DWF);
- 2.718 l/sec Peak Flow (4.5 x DWF).

4.3 Foul Drainage Discharge

Regarding the restaurant extension the subject area is traversed by a limited number of existing foul drainage lines that will be partially diverted in order to accommodate the proposed footprint of future hotel bedroom extension.

In relation to the bedroom block extension, it is proposed that the foul effluent generated within this area be collected in separate foul drainage line and discharged into the existing Johnstown Estate foul drainage network at the location immediately northwest of the existing hotel.

Refer to CS Consulting Drawing no. L118-CSC-ZZ-XX-DR-C-0111 and L118-CSC-ZZ-XX-DR-C-0103 for proposed foul drainage layout and foul drainage details.

A Pre-Connection Enquiry for the scheme was submitted to Uisce Eireann and we have received Confirmation of Feasibility noting that the wastewater connection is feasible. Copy of Confirmation of Feasibility is attached in **Appendix B** of this report.

5.0 POTABLE WATER SUPPLY

5.1 Existing Water Supply Infrastructure

The subject site is at present fed by an onsite well that connects to the private water supply network through the onsite water treatment facility. It is worth noting that the existing site has a connection onto the public water supply via 100mm diameter main which connects to Uisce Eireann water supply network in Johnstown Road to the west of the subject site however this supply is a backup to be used in emergency with the understanding that Meath County Council must be notified whenever the subject site switches over to public water supply.

5.2 Potable Water Demand

Firstly, it is not envisaged, given the scale of works, that the extension of the restaurant will affect current water supply requirements of the subject site.

In relation to the proposed bedroom block extension it is noted that the extension will comprise 90no. hotel rooms. Based on Irish Water guidelines, the water demand shall be:

- 250 l/day/per guest
- 250 l/day/per guest x 188 guests = 47,450 l/day = 47.45 m³/day;
- 0.604 l/sec Average demand;
- 3.295 l/sec Peak water demand (5 x Average demand).

It is worth noting that based on the existing well supply and water treatment plant records the existing well and onsite water treatment system have ample capacity to supply the proposed development with the required water supply needs.

5.3 Potable Water Connection

Regarding the restaurant extension no alterations to the existing potable water arrangement in this area is envisaged.

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In relation to the bedroom block extension, it is proposed that the potable water in this area be provided via a connection to the existing Johnstown Estate hotel private water supply network at the interface of the existing hotel and proposed bedroom block extension.

Refer to CS Consulting Drawing no. **L118-CSC-ZZ-XX-DR-C-0112** and **L118-CSC-ZZ-XX-DR-C-0105** for proposed watermain layout and watermain details.

6.0 FLOOD RISK

There is an existing inherent risk of any flood event occurring during any given year. Typically, this likelihood of occurrence was traditionally expressed as a 1-in-100 chance of a 100-year storm event happening in any given year.

A less ambiguous expression of probability is the Annual Exceedance Probability (AEP), which may be defined as the probability of a flood event being exceeded in any given year. Therefore a 1-in-100-year event has a 1% AEP; similarly, a 100% AEP can be expressed as a 1-in-1-year event.

The Planning System and Flood Risk Management, Guidelines for Planning Authorities set out the best practice standards for flood risk assessment in Ireland. These are summarised in Table 1 below.

Table 1 - Summary of Level of Service – Flooding Source.

Flooding Source	Drainage	River	Tidal/Coastal
Residential	1% AEP	1% AEP	0.1% AEP
Commercial	1% AEP	1% AEP	0.5% AEP
Water-compatible docks, marinas)	-	>1% AEP	>0.5% AEP

Under these guidelines, a proposed development site has first to be assessed to determine the flood zone category it falls under.

It is a requirement of both Meath County Council's and the Department of the Environment, community & Local Government flooding guidelines, The Planning System and Flood Risk Management, Guidelines for Planning Authorities, that the predicted effects of climate

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change are incorporated into any proposed design. Table 2 below indicates the predicted climate change variations.

Table 2 - The predicted climate change variations

Design Category	Predicted Impact of Climate Change
Drainage	20% Increase in rainfall
Fluvial (River flows)	20% Increase in flood flow

The flooding guidelines categorize the risks associated with flooding into three areas, Zone A, B & C. This categorization is indicated below.

- Zone A – High Probability of Flooding. Where the average probability of flooding from rivers and sea is highest (greater than 1% annually or 1 in 100 for river flooding or 0.5% annually or 1 in 200 for coastal flooding).
- Zone B – Moderate Probability of Flooding. Where the average probability of flooding from rivers and sea is moderate (risk between 0.1% annually or 1 in 1000 years and 1% annually or 1 in 100 years for river flooding, and between 0.1% or 1 in 1000 years and 0.5% annually or 1 in 200 for coastal flooding).
- Zone C – Low Probability of Flooding. Where the probability of flooding from rivers and sea is moderate (risk is less than 0.1% annually or 1 in 1000 years for both rivers and coastal flooding).

In accordance with the Planning Systems and Flood Risk Management Guidelines for Planning Authorities, commercial units are classified as 'less vulnerable developments', dwellings are classed as 'highly vulnerable developments'.

The subject development site is situated approximately 190m to the north of the River Blackwater. Please refer to Figure 3.

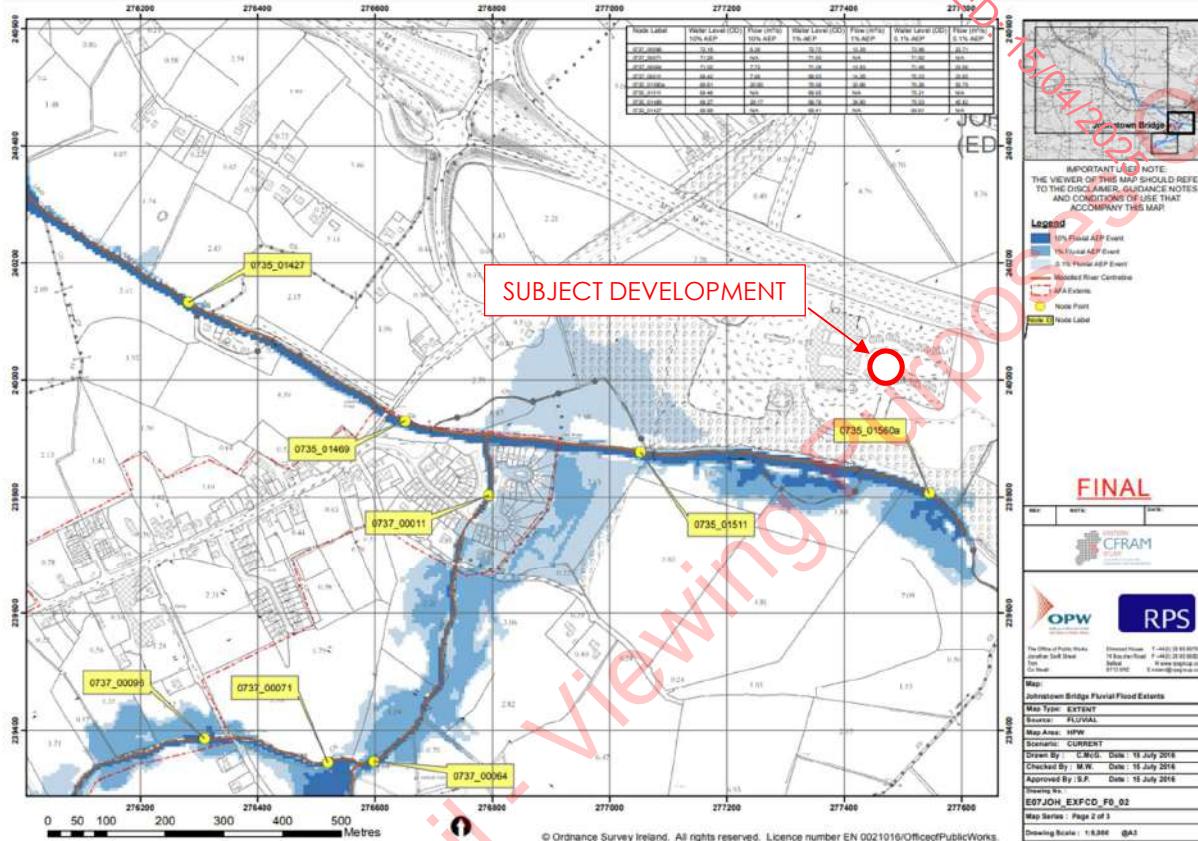


Figure 3 - OPW CFRAM Fluvial Flood Extents

Reviewing the OPW flood maps and the Meath County Development Plan 2021-2027 Strategic Flood Risk Assessment, the subject lands are located in Flood Zone C, as such a justification test for development is not required.

The sites local geology & hydrogeological conditions do not indicate that flooding from groundwater is an issue at the site.

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7.0 TRAFFIC AND TRANSPORTATION

7.1 Access and Layout

It is proposed to utilize the existing access arrangement and internal road layout of the hotel for all access and deliveries operations. The existing hotel is accessed via Johnstown Road to the west of the existing hotel. Deliveries shall be brought to and from the existing delivery yard located to the south-east of the main hotel building. There are no changes to the existing internal road layout as part of this application.

7.2 Trip Generation

The subject development comprises of a hotel extension of 90no. bedrooms as well as the removal of 1no. existing hotel bedroom and the provision of a new hotel restaurant. Trip generation factors from the TRICS database have been used to predict the trip generation to and from the proposed development for both the AM and PM peak periods.

7.2.1 Hotel Trip Generation

The TRICS sub-category '06 – Hotel, Food and Drink / A - Hotels' has been employed, being the most appropriate for the development. This is described in the TRICS land use category definitions as follows:

"Hotels, guest houses and B&B's. Trip rates are calculated by Gross Floor Area, Bedrooms, or Employees."

Table 2 – TRICS Subject Development Hotel Trip Generation Rates

Hotel	Arrivals (per hour per bedroom)	Departures (per hour per bedroom)
AM Peak (08:00 – 09:00)	0.104	0.243
PM Peak (17:00-18:00)	0.263	0.181

Hotel trip numbers in this instance have been calculated as a function of the TRICS trip rates given in Table 2 and the total number of additional bedrooms 89no. (90 bedrooms minus the 1 existing bedroom being removed) the following trip generation figures are calculated, provided in Table 3.

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Table 3 – TRICS Subject Development Hotel Trip Generation

Hotel	Arrivals (per hour)	Departures (per hour)	Total (trips per hour)
AM Peak (08:00 – 09:00)	9	22	31
PM Peak (17:00-18:00)	23	16	39

The hotel extension is expected to result in an additional 31no. trips within the AM peak hour, and 39 trips within the PM peak hour.

7.2.2 Restaurant Trip Generation

The TRICS sub-category '06 – Hotel, Food and Drink / B - Restaurants' has been employed, being the most appropriate for the development. This is described in the TRICS land use category definitions as follows:

"Single restaurants. If a pub/restaurant then include as 06/C. If road-side food such as Little Chef then include as 06/E. If the site includes a drive-through facility then include as 06/D. Trip rates are calculated by Gross Floor Area, Seats, Employees, or Parking Spaces."

Table 4 – TRICS Subject Development Restaurant Trip Generation Rates

Restaurant	Arrivals (per hour per 100sqm)	Departures (per hour per 100sqm)
AM Peak (-)	-	-
PM Peak (18:00-19:00)	1.904	1.142

Restaurant Trip Generation trip numbers in this instance have been calculated as a function of the TRICS trip rates given in Table 4 and the total area of the proposed restaurant (348.5m²).

The following trip generation figures are calculated, provided in Table 5.

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Table 5 – TRICS Subject Development Restaurant Trip Generation

Hotel	Arrivals (per hour)	Departures (per hour)	Total (trips per hour)
AM Peak (08:00 – 09:00)	-	-	-
PM Peak (18:00-19:00)	7	4	11

It is noted that there is no available trip generation rates for the AM peak period for sites similar to the proposed development. The trip generation shows a single peak in the PM period.

The above is considered a worst-case scenario in relation to the trip generation for the restaurant extension. In order to ensure a robust assessment, no discount of trip generation is made for the removal of the function room area.

7.2.3 Total Trip Generation

Although TRICS information shows that the hotel extension and restaurant extension shall generate peak vehicular traffic at different times throughout the day, the AM peak period and PM peak period flows have been combined to calculate an overall trip generation for the subject development. Please refer to table 6 below.

Table 6 – TRICS Subject Development Overall Trip Generation

Hotel	Arrivals (per hour)	Departures (per hour)	Total (trips per hour)
AM Peak	9	22	31
PM Peak	30	20	50

It is not anticipated that the increased trip generation due to the subject development extension shall negatively impact on the road network surrounding the proposed development.

7.3 **Parking**

The subject development consists of the provision of 90no. hotel bedrooms and the removal of 1no. existing bedroom in order to facilitate a connection to the main hotel building and a

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restaurant extension of 127sq.m. (Existing function room change of use to restaurant 221.5sq.m + restaurant extension area 127sq.m totalling 348.5sq.m of new restaurant).

7.3.1 Car parking Requirements

The existing hotel grounds consists of **606no.** delineated car parking spaces, (excluding 12no bus parking spaces and a hardstanding area catering for approx. 30 car spaces for sports pitches). It is not proposed to provide additional car parking spaces to serve the proposed development extension.

The car parking provision of the proposed development has been assessed with respect to the *Meath County Development Plan 2021-2027*, which defines the standard maxima for car parking provision in new developments. The maximum and proposed car parking provision is provided in Table 7.

Table 7 – Car Parking Provision – Meath County Development Plan 2021-2027

Land Use	Car Parking Maximum	Quantum	Maximum Provision
Hotel Accommodation	1 per bedroom	90 bedrooms	90 spaces
Restaurant (extension)	1 per 5sq.m	127sq.m	25 spaces

The existing hotel and associated amenities include the following elements:

- o Rooms (128No.)
- o Self Catering lodges (40No.)
- o Spa (1095m²)
- o Leisure Centre (1474m²)
- o Restaurant (372m²)
- o Bars/function rooms (2339m²)

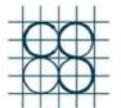
- o Sports Pitches (2no.)

In order to justify the existing parking provision is adequate to cater for the proposed hotel and restaurant extension an on the beat parking survey was carried out over 2 full weekends (21st of February 2025 and the 28th February 2025 from Friday to Sunday). This survey was carried out during the peak hour periods of operation of the hotel at 9.00am, 1.00pm and 6.00pm each day. The maximum observed parking occupancy was 271 car spaces over both weekends. As part of the on the beat parking survey the numbers of guests (residents of the hotel) and visitors (non-residents of the hotel) were obtained for each day of the survey. Refer to Appendix B.

The most notable observation from the figures obtained are that there is a substantial multi-purpose use of the facilities within the existing development namely the residents of the hotel utilising the Restaurant/Bar and Leisure/Spa facilities.

The figures obtained highlight a 45% share in the use of the Leisure/Spa by those already residents of the hotel and a 65% share in the use of the Bar/Food restaurant area by those already residents of the hotel.

Based on the above the below parking schedule for the overall development is proposed including the proposed hotel and restaurant extension.



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Table 9 – Car Parking Provision – Meath County Development Plan 2021-2027

Land Use	Car Parking Maximum	Quantum	Maximum Provision	Proposed site Provision
Hotel Accommodation	1 per bedroom	218 bedrooms	218 spaces	218 spaces (including 90 spaces for the hotel extension)
Self-Catering Accommodation	1 per unit	40 units	40 spaces	40 spaces
Spa/Leisure Centre	5 per 100m ²	2569 sq.m	128 spaces	70 (55% visitor use, 45% residents of the hotel therefore use the hotel accommodation car parking)
Bars/Function Rooms	1 per 4m ²	1823 sq.m	456 spaces	160 (35% visitor use, 65% already resident of the hotel therefore use the hotel accommodation car parking)
Beauty/Hair Salon	5 spaces per 100m ²	101 sq.m	5 spaces	5 spaces
Restaurant	1 per 5sq.m	499sq.m	100 spaces	35 spaces (including 9 spaces for the hotel extension) (35% visitor use, 65% residents of the hotel therefore use the hotel accommodation car parking)
Total			947 Spaces	528 Spaces

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It is considered that the existing quantum of car parking spaces 606no. is more than sufficient to accommodate the anticipated increased parking demand of the proposed hotel and restaurant extension. The existing surplus parking provision of 78 spaces will be used for overspill parking on event days such as conferences or weddings with the use of the hard standing area of the coach parking also available if not fully in use.

In addition, following consultation with the hotel operator it was confirmed that during high season or major event demand (weddings) the parking provision available is more than adequate to facilitate the needs of the hotel. The proposed extension will not have a negative effect on the existing quantum of parking available and it is not recommended to further increase the parking provision above the existing 606no. car parking spaces readily available for the site.

It should be noted that many of the above uses are primarily used by guests of the hotel, such as spa, gym, hotel bar, function rooms etc. The existing development includes 12no. coach parking spaces which can reduce the reliance on the private car parking spaces if necessary or can act for overspill parking in the event of additional space being required.

7.3.2 Electric Vehicle Charging Spaces

The existing car parking area includes a total of 8no. car parking spaces equipped with electric vehicle charging points which shall be available to guests of the proposed hotel extension.

It is not proposed to provide additional EV car parking as part of the subject development.

7.3.3 Disabled-accessible Spaces

The existing car parking area includes a total of 10no. car parking spaces suitable for use by disabled accessible vehicles (2 of which are EV spaces) which shall be available to guests of the proposed hotel extension. It is not proposed to provide additional car parking as part of the subject development hotel extension.

It is noted that the restaurant may require additional disabled parking provision and therefore it is proposed to provide 4no. disabled parking spaces to cater the needs of the restaurant proposed. These spaces shall absorb 6no. existing standard parking

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spaces with 2no. standard parking spaces re-allocated within the grounds of the hotel thereby not reducing the current quantum of parking available for the hotel.

7.3.4 Bicycle Parking Requirements

The bicycle parking provision of the proposed development has been assessed in accordance with the Meath County Development Plan 2021-2027 which defines standard norms for the provision of bicycle parking in new developments.

Table 8 – Bicycle Parking Provision – Meath County Development Plan 2021-2027

Land Use	Bicycle Parking Standard	Quantum	Standard Provision	Proposed Provision
Hotel Accommodation (inclusive of leisure facilities and restaurant)	1 space per 10 staff members	332 staff members (incl. part time)	33 spaces	33 spaces

It is proposed to provide 33no. bicycle parking spaces to serve the subject development.

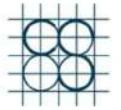
If the bicycle demand, use were to increase for staff members additional bike facilities can be provided as required to cater for the encouraged demand.

8.0 CONCLUSION

It is proposed to construct a hotel extension comprising 90no. bedrooms, removal of one existing bedroom and a restaurant extension.

- The development surface water drainage shall comply with the requirements of the Meath County Development Plan 2021-2027.
- The development foul water drainage and potable water supply shall be provided in accordance with the requirements of the Irish Water Code of Practice for Wastewater Infrastructure and the Code of Practice for Water Infrastructure respectively.
- The subject development is situated within Flood Zone C and the risk of flooding is low.
- Access and services to the development shall be via the existing established access and deliveries arrangement.

- The development is unlikely to result in significant impacts on the surrounding road network.
- It is not proposed to provide additional car parking to serve the proposed extension given the quantum of existing car parking which exists within the overall hotel lands.



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Appendix A:
Surface Water Calculations

Project: Johnstown Estate
Project No.: L118
Calculation: Attenuation 100-year
Calcs By: AC
Checked By: SS
Date: 14/11/24

Site Location:	Meath	
Design Storm Return Period:	100 years	
Climate Change Factor:	20 %	
Soil Type:	2	
Total Site Area:	0.223 ha	
Hardstand Area:	0.080 ha@ 80% Impervious
Roof Area:	0.143 ha@ 100% Impervious
Effective Impermeable Area:	0.207 ha	

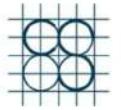
Allowable Outflow	Calculate
IH124: QBAR = 0.00108 x AREA ^{0.89} x SAAR ^{1.17} x SOIL ^{2.17}	
AREA:	0.0022 km ²
SAAR:	859 mm
SOIL:	0.3
QBAR/ha	2.32 l/s/ha

Allowable Outflow	2.0 l/s	Smallest Allowable Discharge Rate
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Storage required =		98 m ³	
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Duration (min)	Rainfall 100-Year (mm)	Rainfall 100-Year with CCF (mm)	Intensity (mm/hr)	Discharge (Q = 2.71iA) (l/s)	Proposed Runoff (m ³)	Contiguous Land Runoff (m ³)	Total Runoff (m ³)	Allowable Outflow (m ³)	Storage Required (m ³)
5	13.5	16.2	194.4	109	33	0	33	1	32
10	18.9	22.7	136.1	76	46	0	46	1	45
15	22.2	26.6	106.6	60	54	0	54	2	52
30	27.4	32.9	65.8	37	66	0	66	4	63
60	33.8	40.6	40.6	23	82	0	82	7	75
120	41.7	50.0	25.0	14	101	0	101	14	87
180	47.1	56.5	18.8	11	114	0	114	22	93
240	51.4	61.7	15.4	9	125	0	125	29	96
360	58.2	69.8	11.6	7	141	0	141	43	98
540	65.8	79.0	8.8	5	159	0	159	65	95
720	71.8	86.2	7.2	4	174	0	174	86	88
1080	81.2	97.4	5.4	3	197	0	197	130	67
1440	88.6	106.3	4.4	2	215	0	215	173	42
2880	100.4	120.5	2.5	1	243	0	243	346	-102
4320	110.8	133.0	1.8	1	269	0	269	518	-250
5760	120.3	144.4	1.5	1	292	0	292	691	-400
8640	137.1	164.5	1.1	1	332	0	332	1037	-705
11520	152.1	182.5	1.0	1	369	0	369	1382	-1014
14400	166.0	199.2	0.8	0	402	0	402	1728	-1326
17280	179.0	214.8	0.7	0	434	0	434	2074	-1640
23040	203.2	243.8	0.6	0	492	0	492	2765	-2272
28800	225.6	270.7	0.6	0	547	0	547	3456	-2909
36000	252.0	302.4	0.5	0	611	0	611	4320	-3709

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County
Ireland



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Appendix B:
Uisce Eireann Confirmation of Feasibility

CONFIRMATION OF FEASIBILITY

Slaven Sose

CS Consulting

19-22 Dame Street
Dublin 2
Dublin
D02E267
Ireland

5 March 2025

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Uisce Éireann
Bosca OP 448
Oifig Sheachadta na Cathrach Theas
Cathair Chorcaí
Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City
www.water.ie

**Our Ref: CDS24007934 Pre-Connection Enquiry
Extension of Johnstown Hotel, Johnstown Road, Enfield, Meath**

Dear Applicant/Agent,

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

Uisce Éireann has reviewed the pre-connection enquiry in relation to a Wastewater connection for a Business Connection of 1 unit(s) at Extension of Johnstown Hotel, Johnstown Road, Enfield, Meath, (the **Development**).

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

- **Wastewater Connection** - Feasible without infrastructure upgrade by Uisce Éireann

This letter does not constitute an offer, in whole or in part, to provide a connection to any Uisce Éireann 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 Uisce Éireann.

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/

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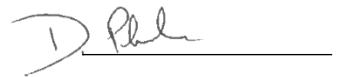
Where can you find more information?

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

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

For any further information, visit www.water.ie/connections, email newconnections@water.ie or contact 1800 278 278.

Yours sincerely,



Dermot Phelan
Connections Delivery Manager

Section A - What is important to know?

What is important to know?	Why is this important?
Do you need a contract to connect?	<ul style="list-style-type: none"> 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 Uisce Éireann's network(s). Before the Development can connect to Uisce Éireann's network(s), you must submit a connection application <u>and be granted and sign</u> a connection agreement with Uisce Éireann.
When should I submit a Connection Application?	<ul style="list-style-type: none"> A connection application should only be submitted after planning permission has been granted.
Where can I find information on connection charges?	<ul style="list-style-type: none"> Uisce Éireann connection charges can be found at: https://www.water.ie/connections/information/charges/
Who will carry out the connection work?	<ul style="list-style-type: none"> All works to Uisce Éireann's network(s), including works in the public space, must be carried out by Uisce Éireann*. <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>
Fire flow Requirements	<ul style="list-style-type: none"> 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. What to do? - Contact the relevant Local Fire Authority
Plan for disposal of storm water	<ul style="list-style-type: none"> The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters. What to do? - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.
Where do I find details of Uisce Éireann's network(s)?	<ul style="list-style-type: none"> Requests for maps showing Uisce Éireann's network(s) can be submitted to: datarequests@water.ie

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

Section B – Details of Uisce Éireann’s Network(s)

The map included below outlines the current Uisce Éireann infrastructure adjacent the Development: To access Uisce Éireann Maps email datarequests@water.ie



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Note: The information provided on the included maps as to the position of Uisce Éireann's underground network(s) is provided as a general guide only. The information is based on the best available information provided by each Local Authority in Ireland to Uisce Éireann.

Whilst every care has been taken in respect of the information on Uisce Éireann's network(s), Uisce Éireann assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided, nor does it accept any liability whatsoever arising from or out of any errors or omissions. This information should not be solely relied upon in the event of excavations or any other works being carried out in the vicinity of Uisce Éireann's underground network(s). The onus is on the parties carrying out excavations or any other works to ensure the exact location of Uisce Éireann's underground network(s) is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

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Appendix C:
Surveyed Resident / Non-Resident figures

Car Parking Occupancy Survey

Date	21/02/2025	Friday
Time	Car Park Occupancy Numbers	
9:00 am		200
1:00 pm		207
6:00 pm		255

Date	28/02/2025	Friday
Time	Car Park Occupancy Numbers	
9:00 am		174
1:00 pm		148
6:00 pm		184

Date	22/02/2025	Saturday
Time	Car Park Occupancy Numbers	
9:00 am		213
1:00 pm		241
6:00 pm		271

Date	01/03/2025	Saturday
Time	Car Park Occupancy Numbers	
9:00 am		255
1:00 pm		226
6:00 pm		258

Date	23/02/2025	Sunday
Time	Car Park Occupancy Numbers	
9:00 am		238
1:00 pm		277
6:00 pm		234

Date	02/03/2025	Sunday
Time	Car Park Occupancy Numbers	
9:00 am		213
1:00 pm		150
6:00 pm		208

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Meath County Council - Viewing Point
02/03/2025

Fire & Salt Restaurant Occupancy Survey

		Number of People Using Restaurant	
Date	Day	Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
21/02/2025	Friday	136	57
22/02/2025	Saturday	189	60
23/02/2025	Sunday	53	109

		Number of People Using Restaurant	
Date	Day	Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
28/02/2025	Friday	102	2
01/03/2025	Saturday	197	9
02/03/2025	Sunday	152	69

The Coach House Brasserie Occupancy Survey

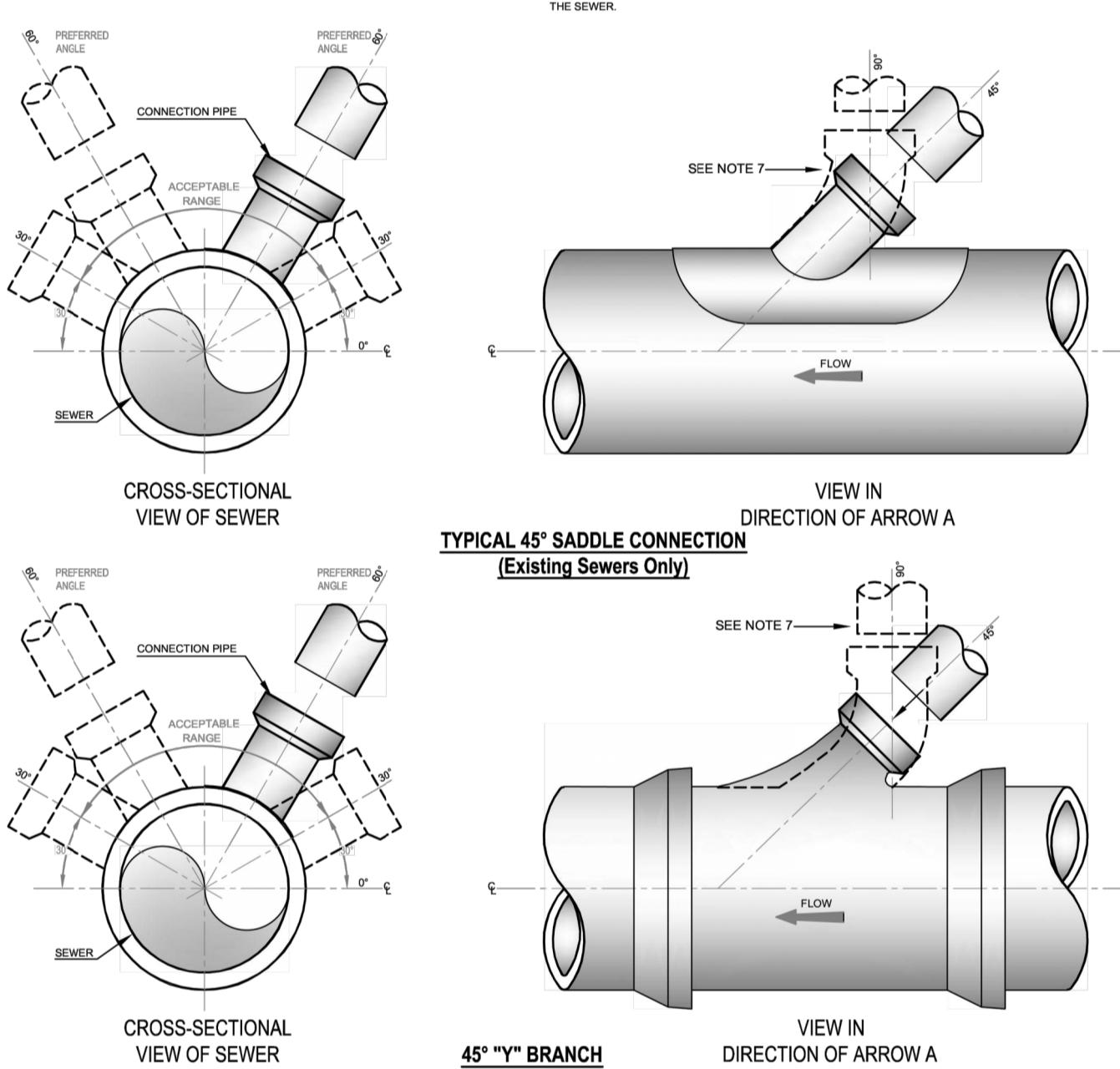
		Number of People Using Restaurant	
Date	Day	Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
21/02/2025	Friday	293	46
22/02/2025	Saturday	319	66
23/02/2025	Sunday	168	204

		Number of People Using Restaurant	
Date	Day	Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
28th February	Friday	106	158
1st March	Saturday	110	93
2nd March	Sunday	46	116

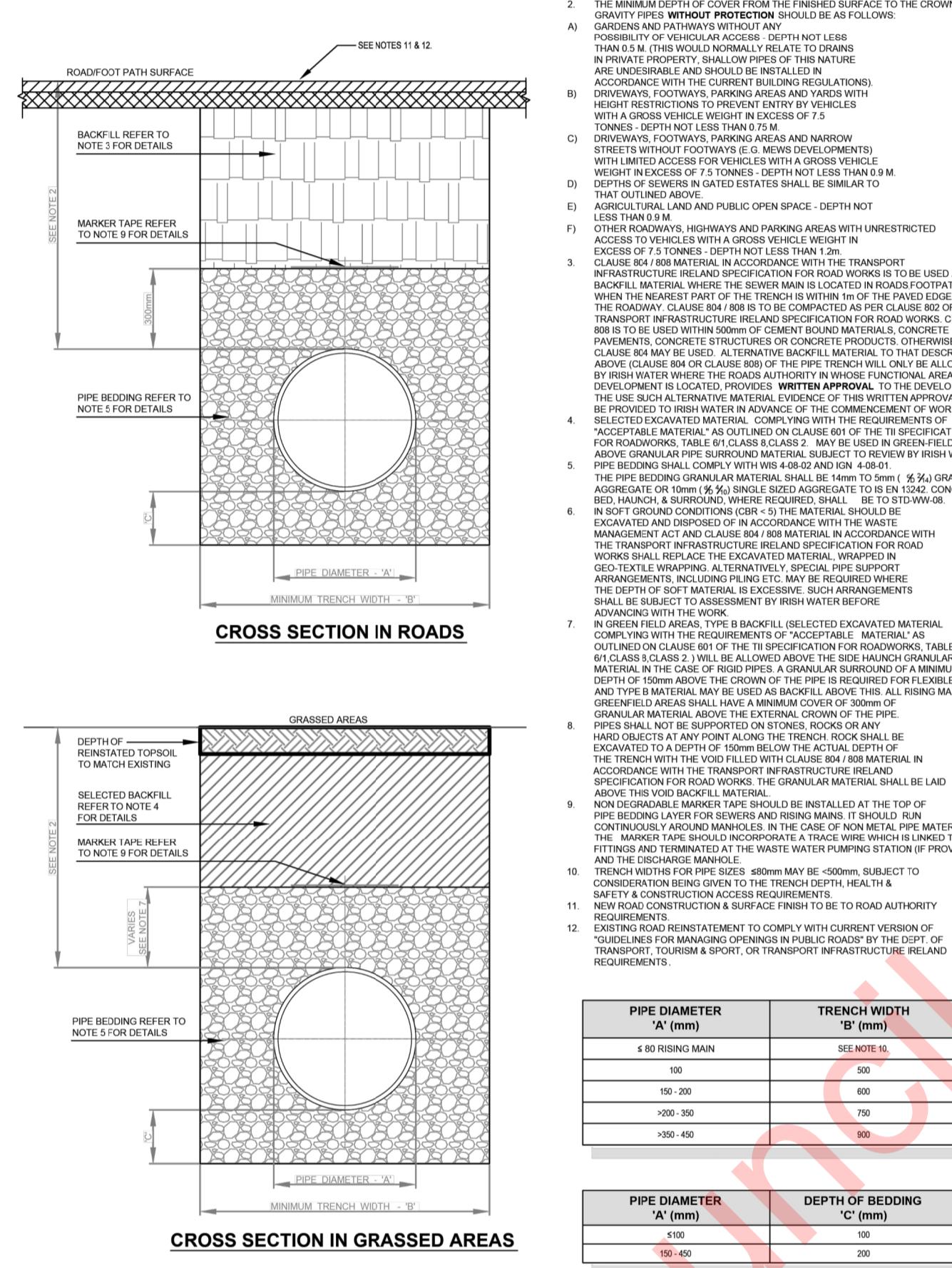
Leisure Club + Spa Occupancy Survey

Date	Day	Number of People Using Leisure Club and Spa	
		Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
21/02/2025	Friday	337	386
22/02/2025	Saturday	287	275
23/02/2025	Sunday	285	324

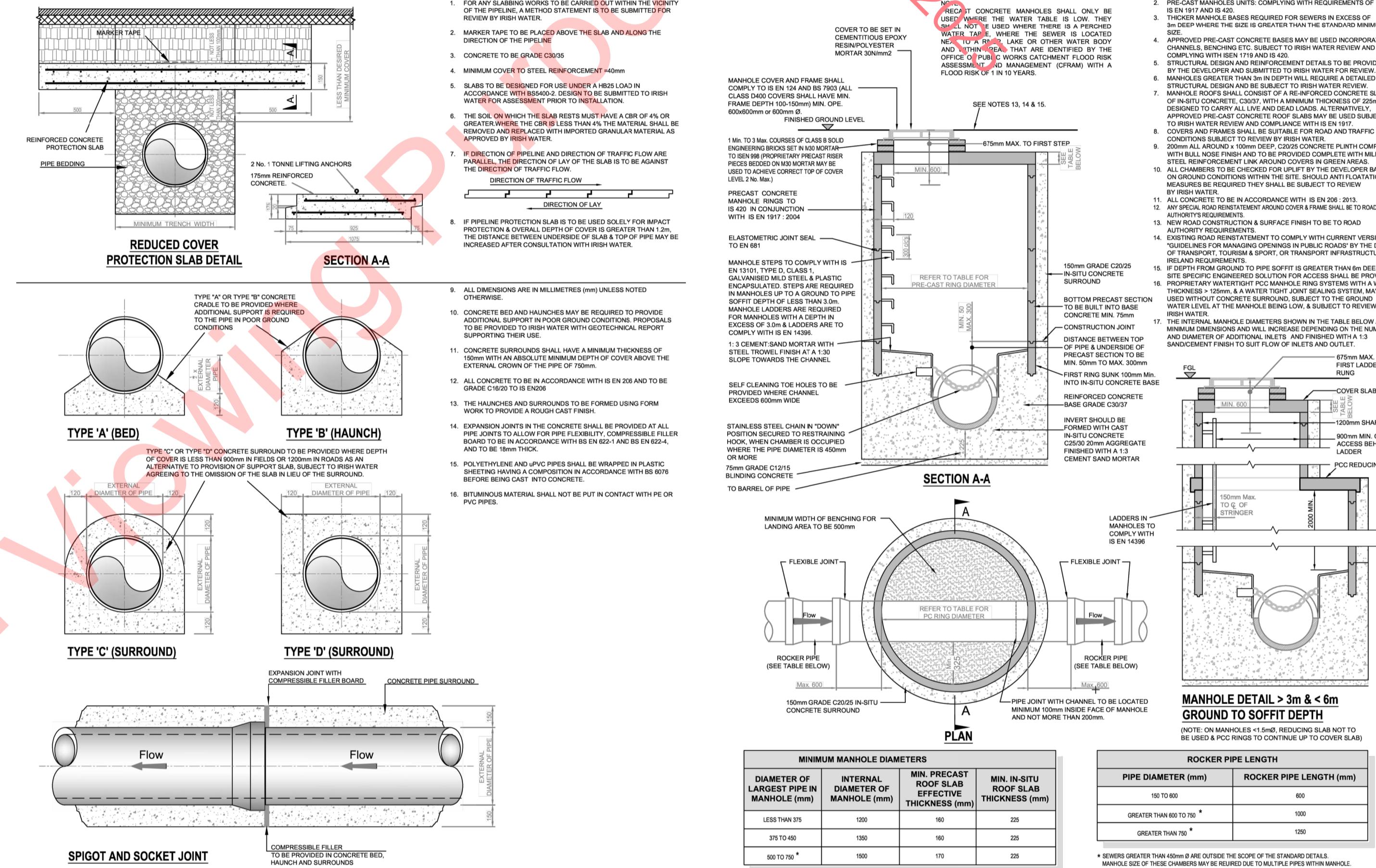
Date	Day	Number of People Using Leisure Club and Spa	
		Residents (Individuals staying at the hotel)	Non-Residents (Individuals not staying at the hotel)
28/02/2025	Friday	180	396
01/03/2025	Saturday	304	265
02/03/2025	Sunday	200	279



STD-WW-04. TYPICAL SEWER/SERVICE PIPE CONNECTIONS



STD-WW-07. TRENCH BACKFILL AND BEDDING.



STD-WW-08. CONCRETE PROTECTION SLAB, BED,
HAUNCH, AND SURROUND, TO WASTEWATER PIPES.

N

NOTES

1. For setting out refer to Architect's drawings.
2. This drawing to be read in conjunction with all other Architectural and Engineering drawings and all other relevant drawings and Specifications.
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Architect	Darmody Architecture				
Project	Johnstown Estate				
	FOUL WATER DETAILS				
No.	L118-CSC-ZZ-XX-DR-C-0103				
	Drn by	Chkd by	Aprvd by	Scale	Revision
2024	AB	CF	MME	AS SHOWN	

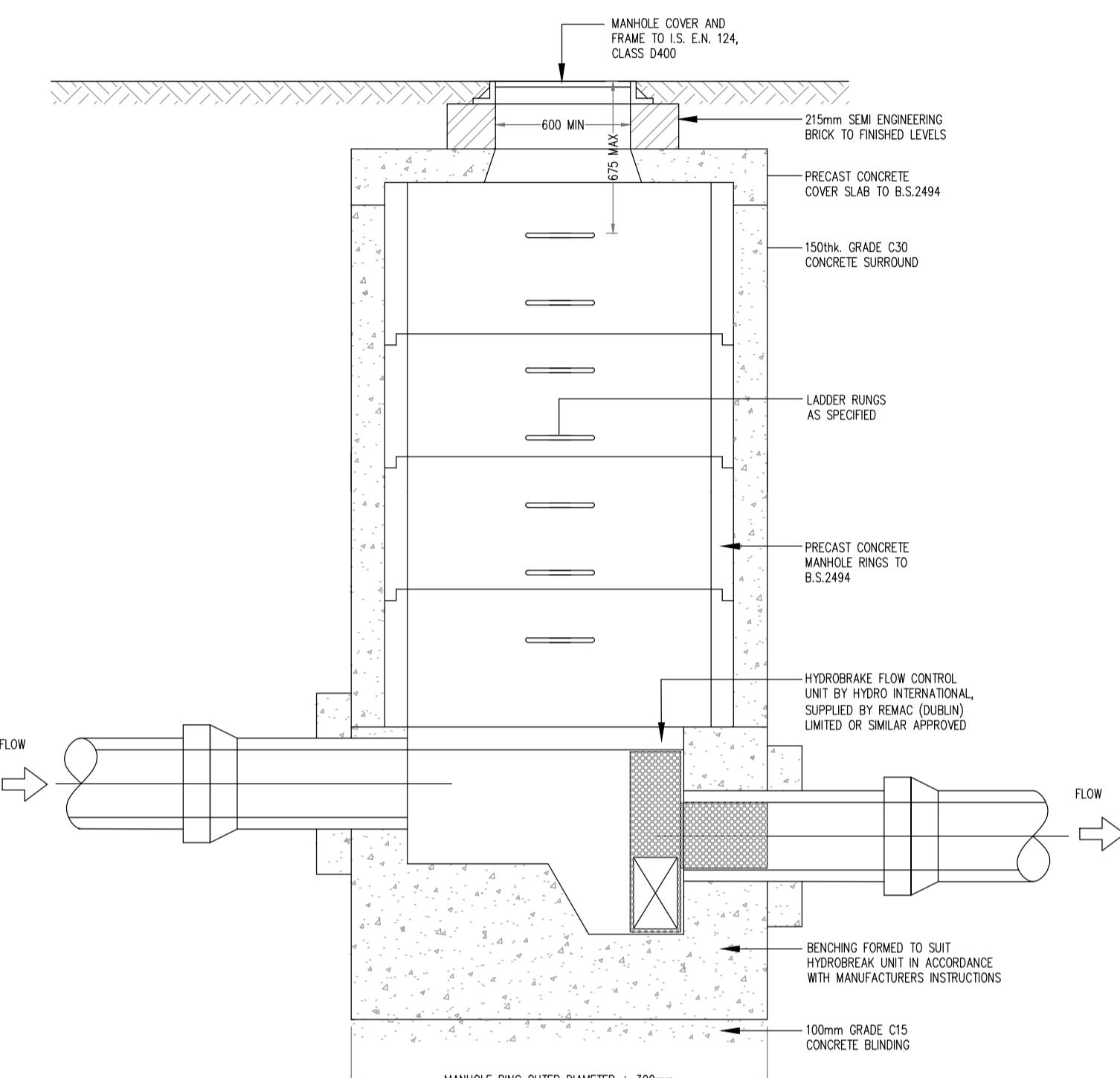
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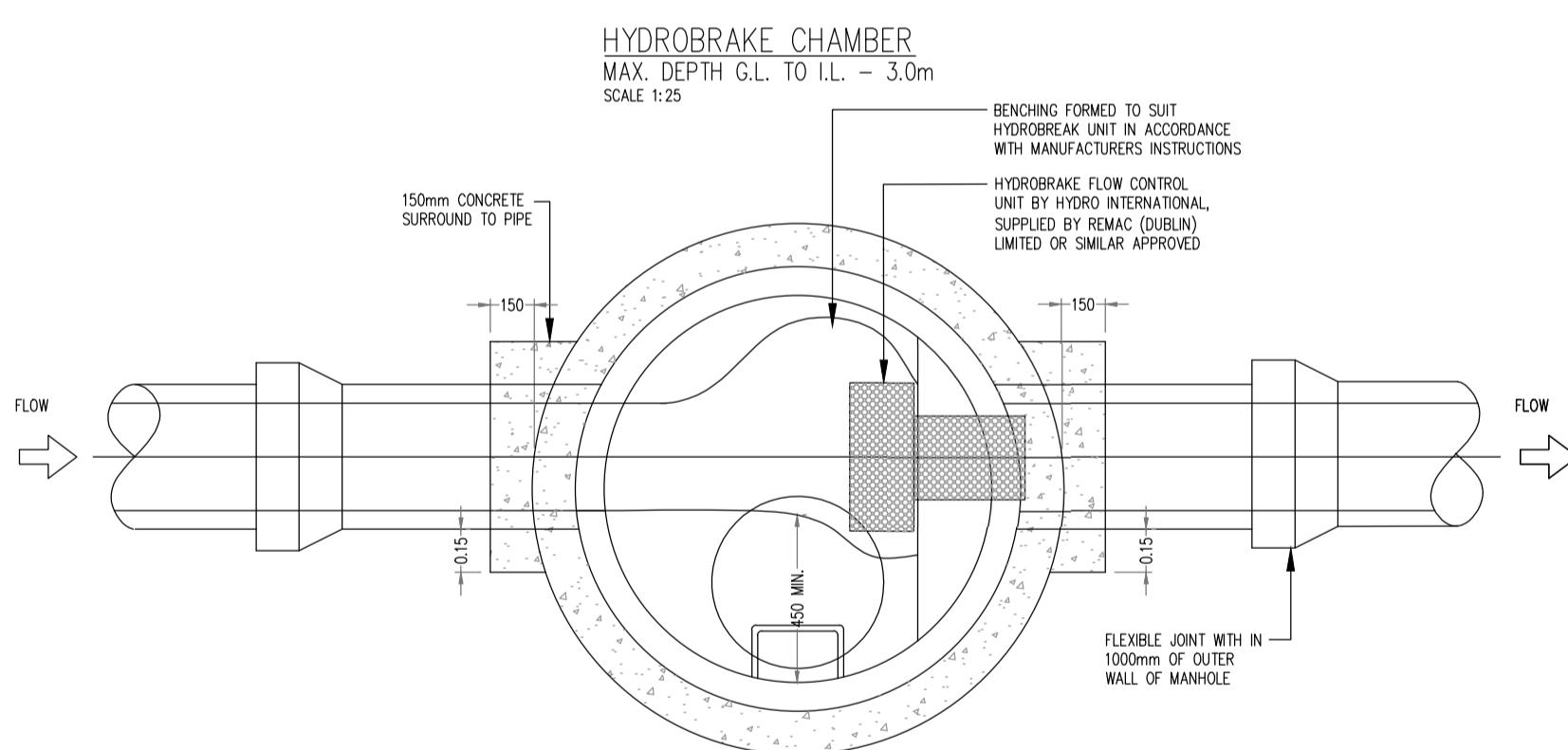
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Environment	I.S. EN ISO 14001:2004
Energy	I.S. EN ISO 50001:2011
Health & Safety	OHSAS 18001:2007

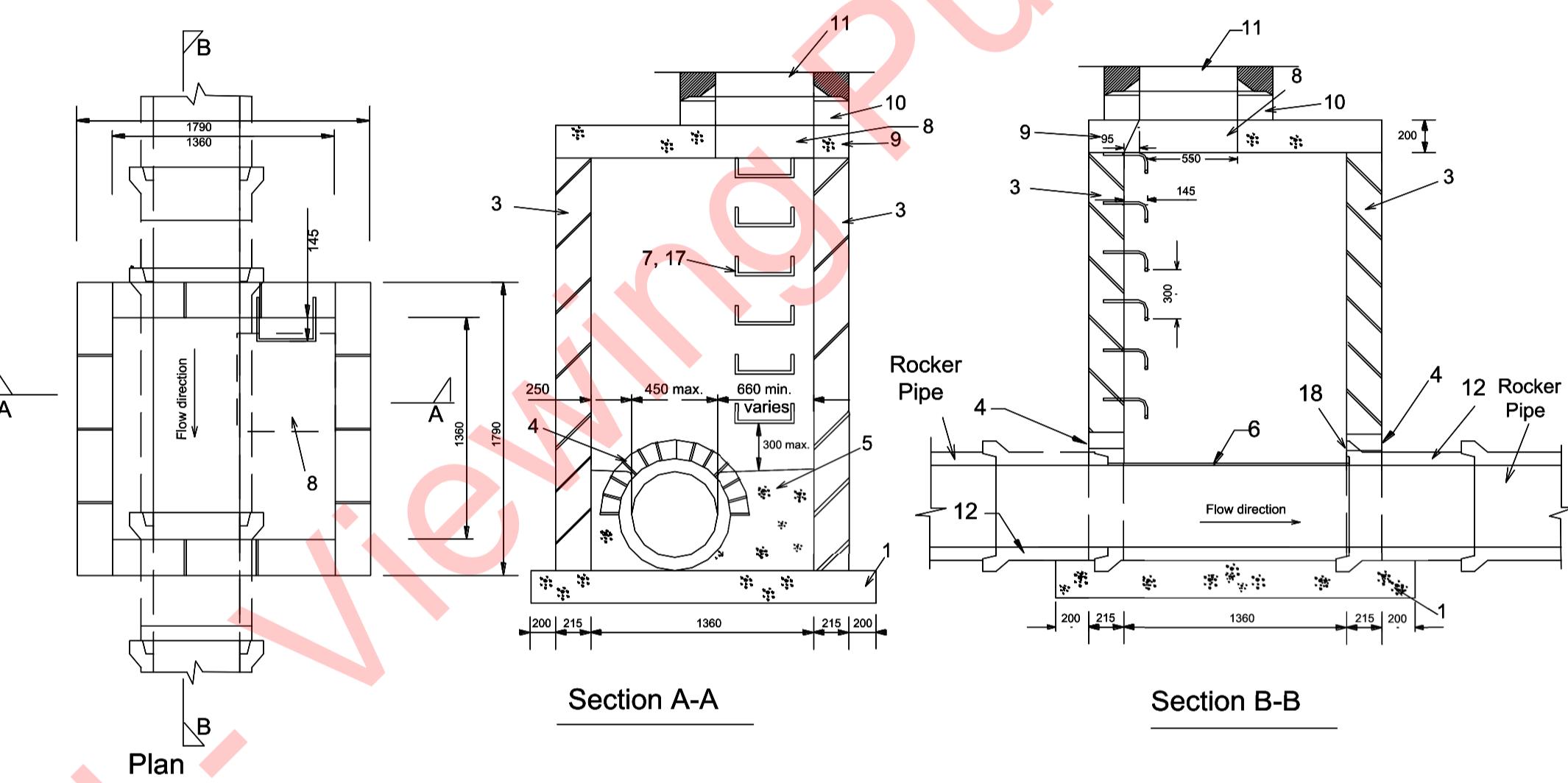


NOTES

1. DO NOT SCALE FROM THIS DRAWING USE STATED DIMENSIONS ONLY. IF IN DOUBT CONSULT THE ENGINEER.
 2. LEVELS REFER TO O.S. DATUM MALIN HEAD.
 3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ALL OF THE CONTRACT DOCUMENTS IN PARTICULAR THE ARCHITECT'S, LANDSCAPE ARCHITECT'S AND SERVICE ENGINEER'S SITE LAYOUT DRAWINGS.
 4. ALL CIVIL WORKS SHALL BE COMPLETED IN ACCORDANCE WITH SPECIFICATIONS.
 5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING ALL EXISTING SERVICES WITHIN THE SITE BOUNDARY. THE ENGINEER HAS SHOWN KNOW SERVICES ON THE DRAWINGS BUT GIVES NO GUARANTEE THAT THESE ARE THE ONLY SERVICES WITHIN THE SITE BOUNDARY. THE CONTRACTOR SHALL CONTACT THE RELEVANT STATUTORY AND PRIVATE UTILITY COMPANIES AND CONFIRM THE LOCATION OF THEIR PLANT FOR HIMSELF.
 6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF THE NAME AND LOCATION OF ALL TIPS USED FOR THE DISPOSAL OF MATERIAL OFF SITE.
 7. THE CONTRACTOR SHALL ENSURE THAT ADEQUATE PROVISIONS ARE IN PLACE TO PREVENT THE SPREAD OF DIRT, MUD AND SITE MATERIAL ON THE PUBLIC ROAD. THE CONTRACTOR SHALL ENSURE THAT THE PUBLIC ROADS AROUND THE SITE ARE CLEANED ON A REGULAR BASIS, OR AS DIRECTED BY THE ENGINEER, WITH A MECHANICAL SUCTION SWEEPER.
 8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THAT NOISE AND DUST ARE MINIMISED.
 9. BLINDING CONCRETE SHALL BE GRADE 15N20. BLINDING SHALL BE A MINIMUM OF 100MM THICK. ALL STRUCTURAL CONCRETE SHALL BE GRADE 30N20 UNLESS SPECIFIED OTHERWISE ELSEWHERE.
 10. ALL EXPOSED CONCRETE FINISHES SHOULD BE FAIR FACED FINISHES UNLESS SPECIFIED OTHERWISE ELSEWHERE.
 11. HANDRAILS SHALL BE GRADE 316 STAINLESS STEEL. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO MANUFACTURE.



PLAN ON HYDROBRAKE CHAMBER
MAX. DEPTH G.L. TO I.L. - 3.0m
SCALE 1:25



TYPE B MANHOLE.

**Manhole Details For Pipe Diam's. 225, 300, 375, 450.
Depth to Invert 1m to 3m.**

Drawing Notes:

1. 225mm thick Cl. 20N/20mm Mass Concrete Foundations.
 2. Preformed half circle channel pipes. The pipeline may, where practicable, be laid through the manhole and the crown cut out to half diameter, provided flexible joints are situated on each side no further than 600mm from the inner face of manhole wall.
 3. Manhole construction.

For Surface Water Manholes high-density blocks to Cl.S10 of IS.20 Part 1:1987 or Cl. 30N/20mm insitu concrete.
Block work shall be bedded and jointed using mortar to IS406. Beds and vertical joints shall be completely filled with mortar as the blocks are laid.
Joints shall be flush pointed as the work proceeds.
All Foul Manholes must be faced in solid Engineering Brick (min. class A or B), or insitu concrete for 1 metre above Benching Level.
Brick to be bonded to block work using English Garden Wall Bond.
 4. Relieving arch formed by 215x103x65 solid engineering brick Class A or B as per drawing.

Relieving arches used in brick or block work manholes extend over full thickness of wall.
A Double Arch is to be formed for pipe diameters greater than 600mm.
 5. Benching and pipe channel pipe surround Cl. 20/20 concrete.
 6. Benching finished in 2:1 sand-cement mortar with a smooth trowel finish, at 1 in 30 slope towards channel.
 7. Standard rungs at 300c/c vertically and galvanized to the latest version of B.S. 729 or equivalent. Note: Steps Irons are not acceptable.
 8. 600mm square ope in roof slab.
 9. Precast R.C. Roof Slab shall be 200mm thick in Class 30N/20mm, with 40mm cover to steel.
 10. 1 to 2 courses of solid engineering bricks Cl.B to I.S.91:1983 set in 1:3 (cement and mortar).
 11. Class D400 or E600 manhole cover and frame to IS/EN 124. 150mm deep frame for roads and 100mm deep for footpaths and green areas. Non-rock design, closed keyways, manufactured from spheroidal graphite cast iron (ductile cast iron), 600 x 600 (600diam.) clear opening, cover and frame coated in bitumen or other approved material, cover to have a minimum mass of 140kg/m², frame bearing area shall be 80,000mm² min, frames shall be designed to prevent covers falling into manhole. Frames shall be bedded on approved mortar to manufacturers instructions.
 12. Short length pipe and pipe joint external to manhole shall not exceed 600mm from the inner face of manhole wall.
 13. Toe holes of 230mm minimum depth and galvanized steel safety railings to be provided in benching of sewers greater than 525mm diameter and depth to invert >3m for access to invert.
 14. A safety chain is to be provided on pipes that exceed 450mm in diameter. Mild safety chain shall be 10mm nominal size grade M(H) non-calibrated chain, type 1, complying with B.S.4942 Part 2 or equivalent.
 15. When depth of manholes to invert is greater than 3.0m ladders shall be used instead of rungs to B.S.4211 or equivalent except that stringers should be not less than 65 x 12mm in section and rungs 25mm in diameter.
Fixed ladders should meet the dimensional requirements of B.S.4211 or equivalent.
 16. Ladder stringers should be adequately supported from the manhole wall at intervals of not more than 2.0m stringers should be bolted to cleats to facilitate renewal.
 17. All ladders, rungs, handrails, safety chains etc shall be hot dip galvanized to B.S.729 or equivalent.
 18. Pipe should be cut flush with the inside surface of the manhole wall so that the channel extends the full length of the manhole (except for pre-cast manholes).
 19. Position of 910 square ope in intermediate roof slab.

All manholes shall be watertight to the satisfaction of the Engineer. Formwork to Reinforced Concrete and Mass Concrete shall comply with Class 2, Section 6.2.7, B.S.8110: Part 1: 1997.
Finish to the top of slabs shall comply with Type A, Section 6.2.7, B.S.8110: Part 1:1997.
Plan dimensions of manholes are based on block work having a co-ordinating size of 450 x 225 x 100.
Manholes are designed to B.S.8005 and wall thickness to LS.325 block work design code taking granular fill pressure and H.B. surcharge.
Reinforcement to slabs to Engineers details.
 20. For manholes >3m depth to invert use 30N/20mm insitu concrete.
Reinforcing mesh ref. A393 @ 6.16kg/m to be fixed at mid point of wall.
Additional reinforcement to be supplied over pipe crown.

General Notes:

- i) All brick to be Solid Engineering Brick Class A or B.
 - ii) For pipe diameter >750mm use manhole with internal diameter size = pipe size + 1metre + 300mm.
 - iii) Distance from the top rung of the ladder to ground level must be a maximum of 500mm.

NOTES

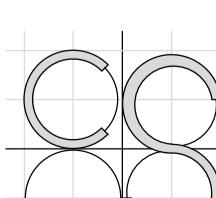
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Architect	Darmody Architecture				
Project	Johnstown Estate				
Site	STORM WATER DETAILS				
Reg. No.	L118-CSC-ZZ-XX-DR-C-0104				
Date	Dm by	Chkd by	Aprvd by	Scale	Revision
10/2024	AB	CF	MME	AS SHOWN	

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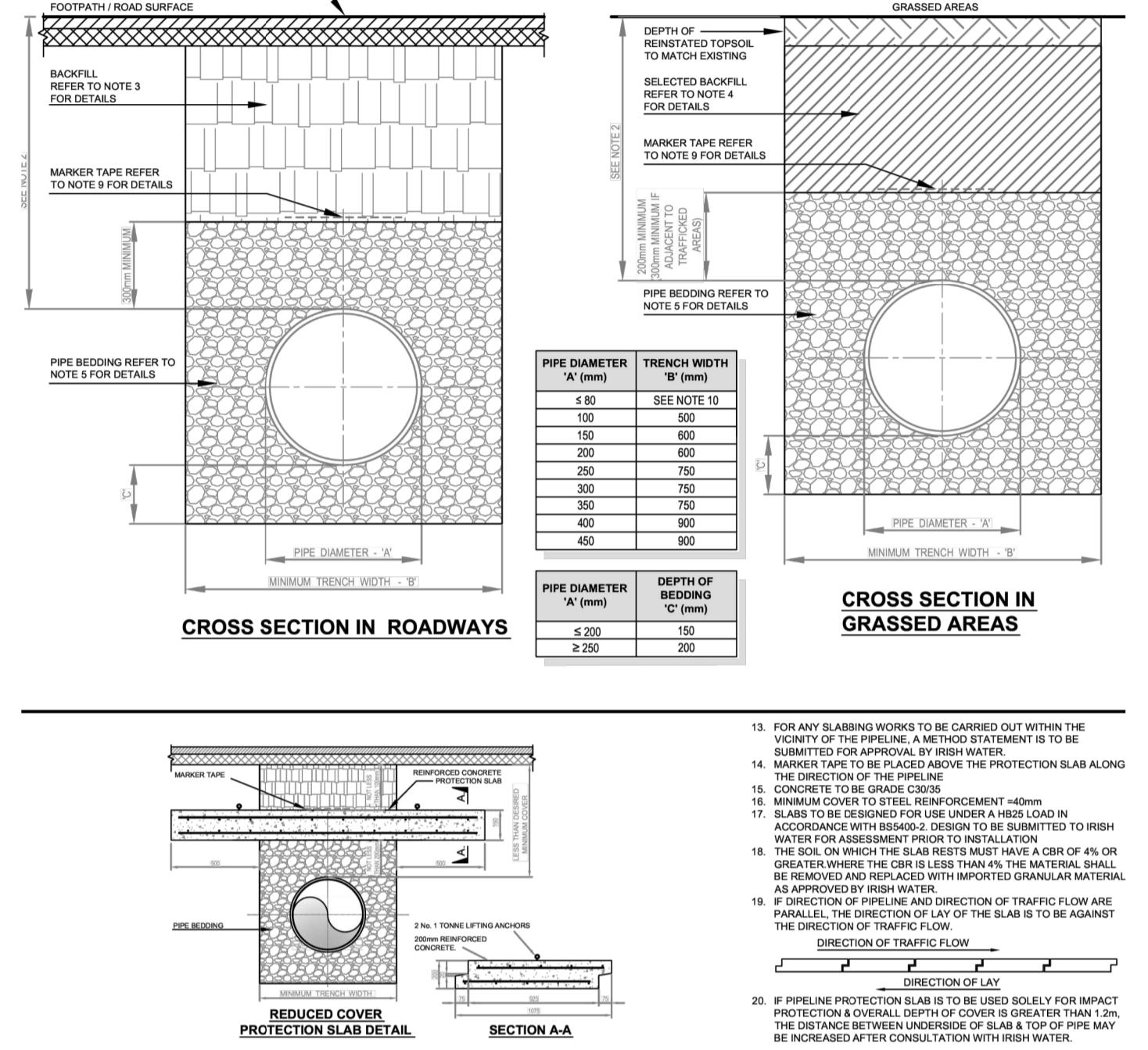
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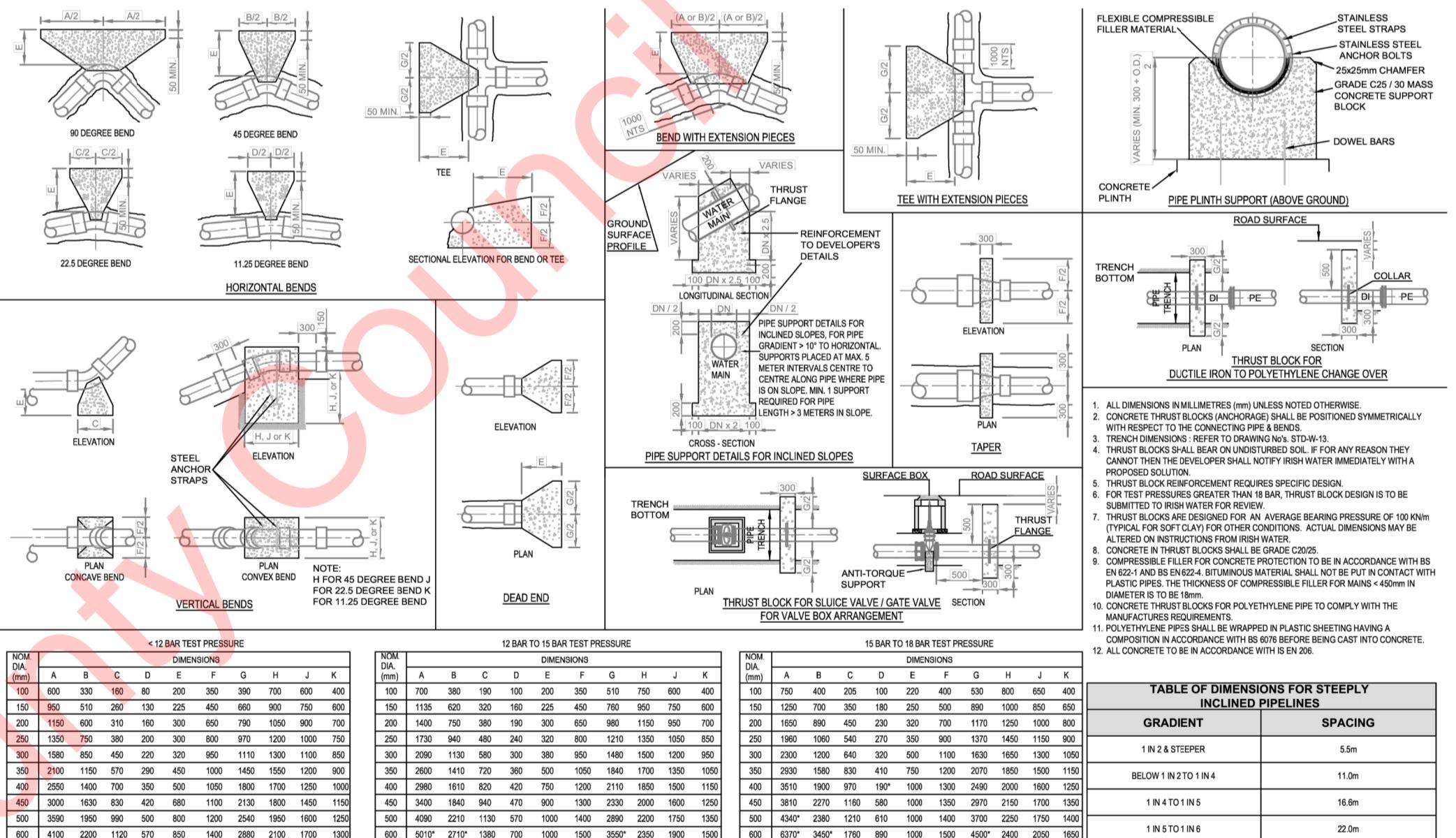
	Quality	I.S. EN ISO 9001:2008
NSAI Certified	Environment	I.S. EN ISO 14001:2004
	Energy	I.S. EN ISO 50001:2011
	Health & Safety	OHSAS 18001:2007

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 900mm WHERE THE PIPE IS TO BE LOCATED IN HOUSING ESTATE ROADS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE DESIRABLE COVER FOR A WATERMAIN SHOULD BE 1200mm, WHERE PRACTICABLE & SHOULD NOT EXCEED 3.0m.
3. CLAUSE 804 / 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER 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 NATIONAL ROADS AUTHORITY 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 IRISH WATER WHERE THE ROADS AUTHORITY IN WHOMS FUNCTIONAL AREA THE DEVELOPMENT IS LOCATED, PROVIDES WRITTEN APPROVAL TO THE DEVELOPER TO USE SUCH ALTERNATIVE MATERIAL.
4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO REVIEW BY IRISH WATER.
5. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm (% $\frac{3}{4}$) GRADED AGGREGATE OR 10mm (% $\frac{1}{2}$) SINGLE SIZED AGGREGATE TO IS EN 13242.
6. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 804 / 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY 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 IRISH WATER BEFORE ADVANCING WITH THE WORK.
7. PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT 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 NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
8. SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
9. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163. PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
10. TRENCH WIDTHS FOR PIPE SIZES \leq 80mm MAY BE \leq 500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.
11. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
12. 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.



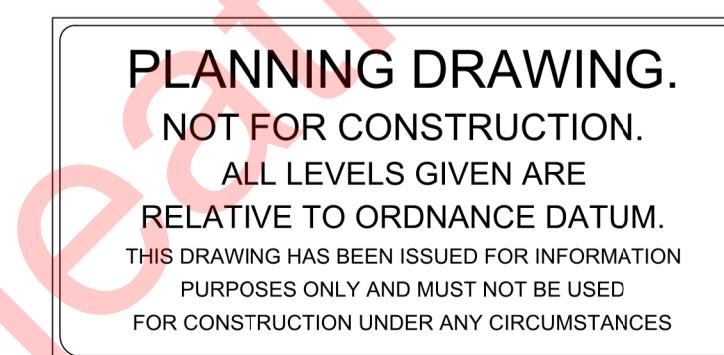
STD-W-13 TRENCH BACKFILL/BEDDING AND
REDUCED COVER PROTECTION SLAB DETAIL.

NTS



STD-W-28 WATER MAIN THRUST AND SUPPORT BLOCKS.

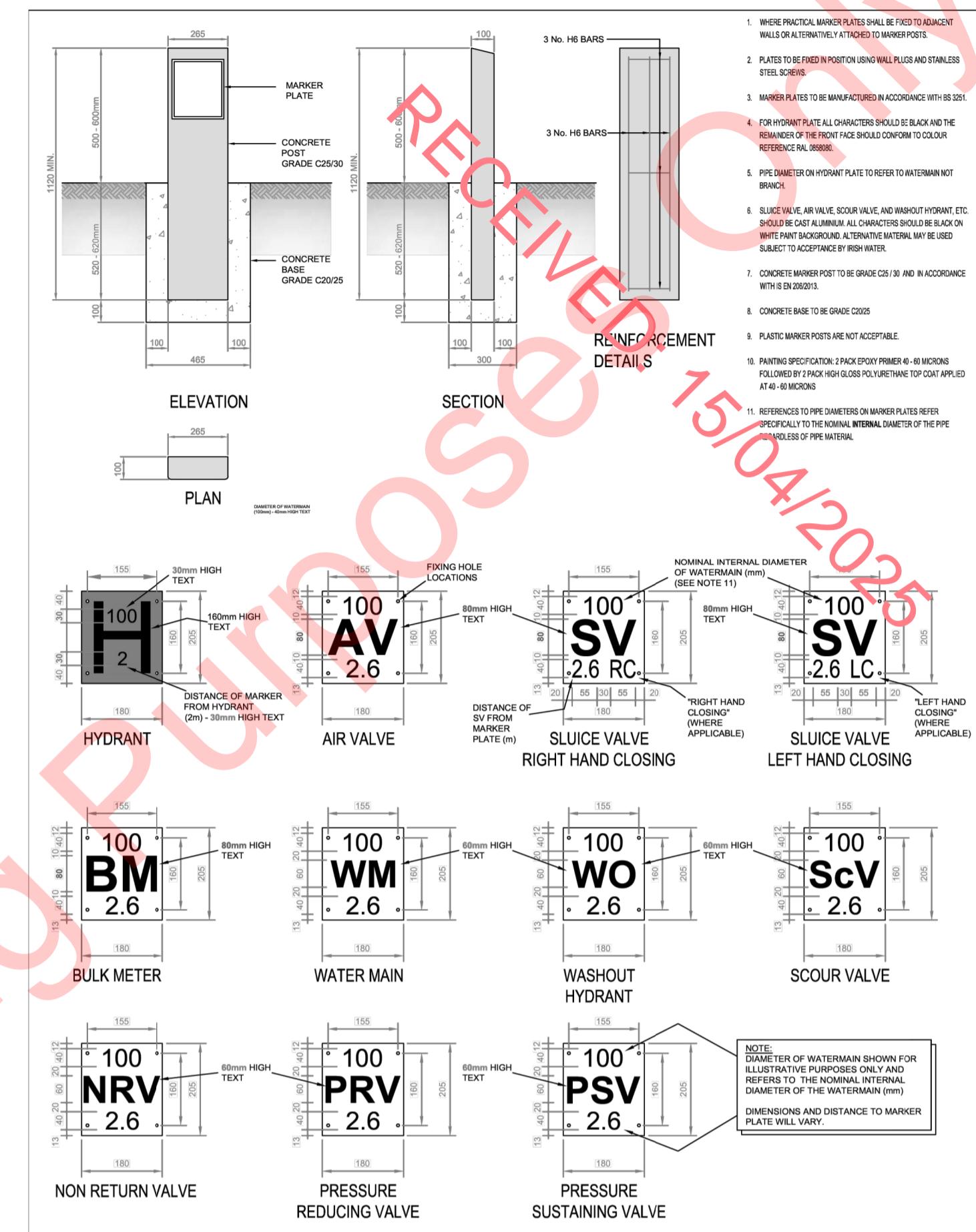
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NTS



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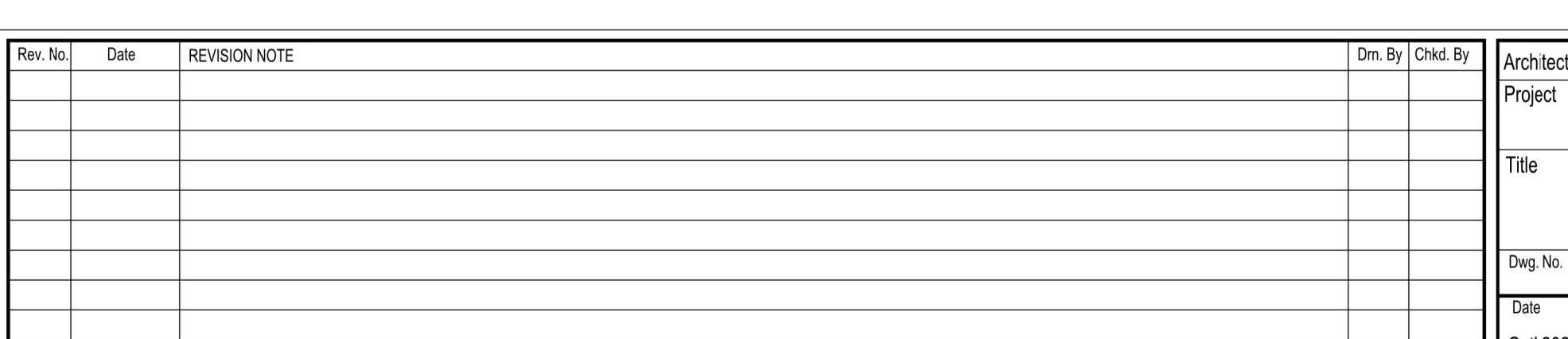
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12 BAR TO 15 BAR TEST PRESSURE											15 BAR TO 18 BAR TEST PRESSURE											18 BAR TO 21 BAR TEST PRESSURE											12 ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.										
NOM. DIA. (mm)	DIMENSIONS										NOM. DIA. (mm)	DIMENSIONS										NOM. DIA. (mm)	DIMENSIONS										NOM. DIA. (mm)	DIMENSIONS									
	A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K
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400	2550	1400	700	350	500	1050	1800	1700	1250	1000	400	2980	1610	820	420	750	1200	2110	1850	1500	1150	400	3510	1900	970	190°	1000	1300	2490	2000	1600	1250	400	3510	1900	970	190°	1000	1300	2490	2000	1600	1250
450	3000	1630	830	420	680	1100	2130	1800	1450	1150	450	3400	1840	940	470	900	1300	2330	2000	1600	1250	450	3810	2270	1160	580	1000	1350	2970	2150	1700	1350	450	3810	2270	1160	580	1000	1350	2970	2150	1700	1350
500	3590	1950	990	500	800	1200	2540	1950	1600	1250	500	4090	2210	1130	570	1000	1400	2890	2200	1750	1350	500	4340°	2380	1210	610	1000	1400	3700	2250	1750	1400	500	4340°	2380	1210	610	1000	1400	3700	2250	1750	1400
600	4100	2200	1120	570	850	1400	2880	2100	1700	1300	600	5010°	2710°	1380	700	1000	1500	3550°	2350	1900	1500	600	6370°	3450°	1760	890	1000	1500	4500°	2400	2050	1650	600	6370°	3450°	1760	890	1000	1500	4500°	2400	2050	1650



STD-W-27 MARKER POST / PLATES

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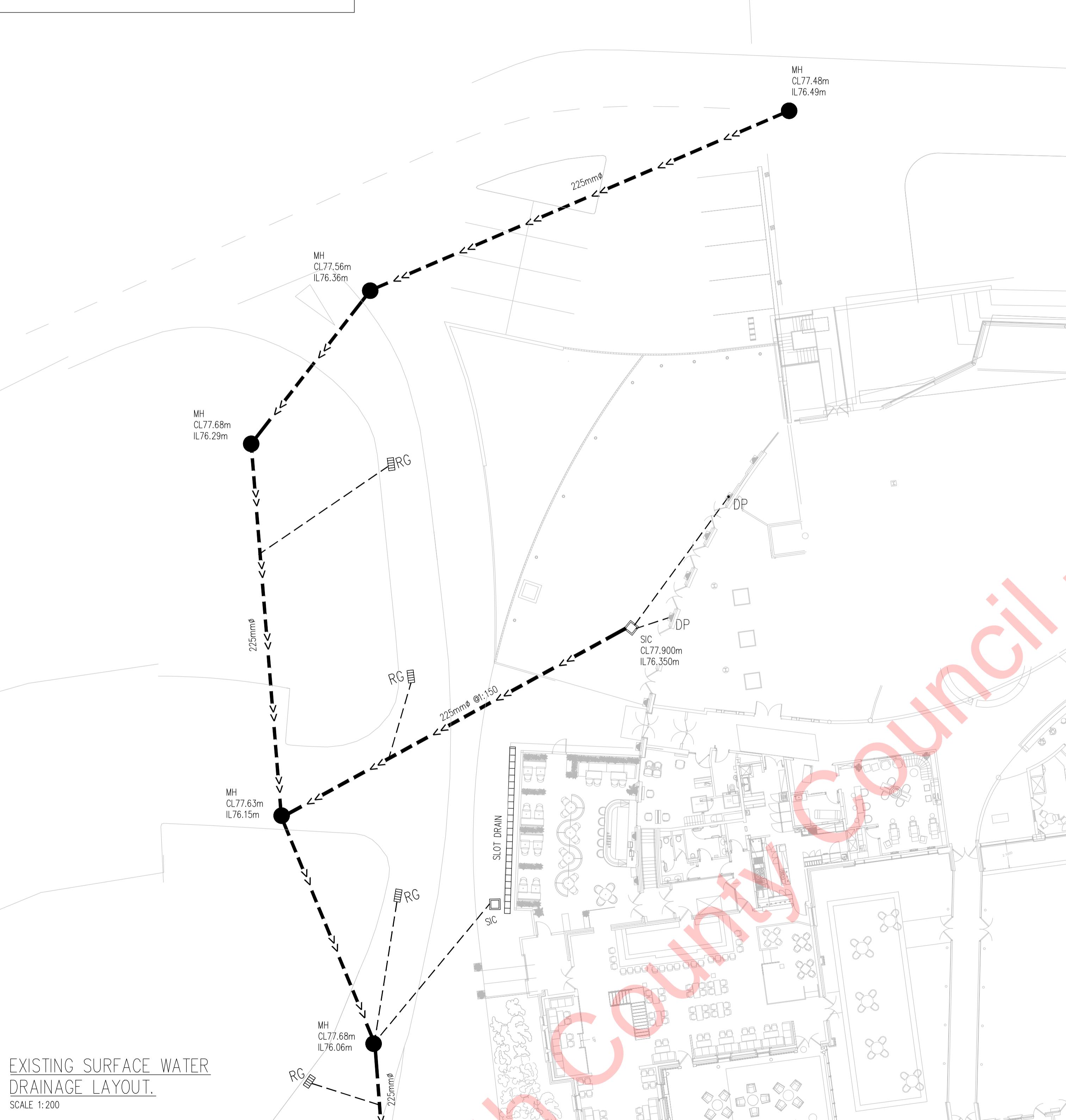


	Darmody Architecture		
	Johnstown Estate		
	WATERMAIN DETAILS		
	L118-CSC-ZZ-XX-DR-C-0105		
Drn by	Chkd by	Aprvd by	Scale
AP	CE	MME	AS SHOWN
Revision			



EXISTING DRAINAGE LEGEND:

EXISTING STORM WATER DRAINAGE & MANHOLE	
EXISTING GULLY	
EXISTING RAIN WATER PIPE	
EXISTING INSPECTION CHAMBER	
SITE BOUNDARY	


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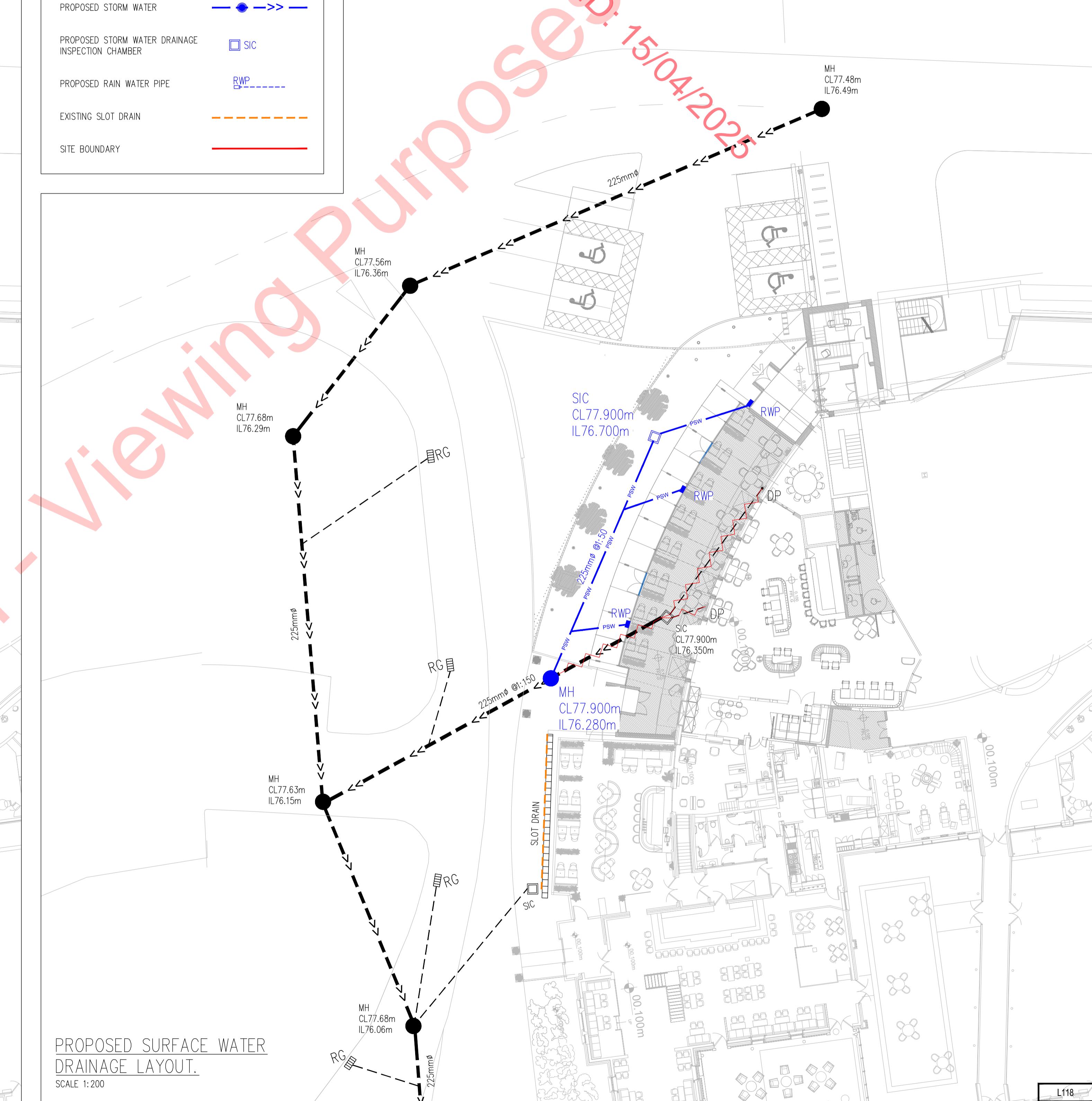
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
DRAINAGE LEGEND:

EXISTING STORM WATER	
EXISTING STORM WATER TO BE DECOMMISSIONED	
EXISTING ROAD GULLY	
EXISTING RAIN WATER PIPE	
EXISTING INSPECTION CHAMBER	
PROPOSED STORM WATER	
PROPOSED STORM WATER DRAINAGE INSPECTION CHAMBER	
PROPOSED RAIN WATER PIPE	
EXISTING SLOT DRAIN	
SITE BOUNDARY	


Rev. No.
Date
REVISION NOTE
P1
18.03.2025
UPDATED & RE-ISSUED FOR PLANNING
P2
20.03.2025
REISSUED IN RESPONSE TO A REQUEST FOR FURTHER INFORMATION
Drw. By
Chkd. By
JS
SS
JS
SS
Architect
Project
Title
Dwg. No.
Date
Dm by
Chkd by
Apprv by
Scale
Revision
P2
L118
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Environment
Energy
I.S. EN ISO 14001:2004
NSAI Certified
Health & Safety
OHSAS 18001:2007
P2

STORM WATER DRAINAGE LEGEND:

- EXISTING STORM WATER DRAINAGE & MANHOLE
- EXISTING PRIVATE STORM WATER DRAINED TO BE DIVERTED
- EXISTING GULLY
- EXISTING HEADWALL
- PROPOSED STORM WATER DRAINAGE & MANHOLE
- SITE BOUNDARY



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REV.

P1

20/03/2025

ISSUED IN RESPONSE TO A REQUEST FOR FURTHER INFORMATION

P2

14/04/2025

UPDATED AND REISSUED IN RESPONSE TO A REQUEST FOR FURTHER INFORMATION

DATE

JS

SS

Dm by

Chd by

Aptd by

Scale

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