

**LEGEND**

--- XXX@ 1/XXX --- SMH EXISTING SURFACE WATER SEWER WITH PIPE SIZE, GRADE AND INVERT LEVEL

--- XXX@ 1/XXX --- FMH EXISTING FOUL WATER SEWER WITH PIPE SIZE, GRADE AND INVERT LEVEL

--- XXX@ 1/XXX --- SMH PROPOSED SURFACE WATER SEWER WITH PIPE SIZE, GRADE AND INVERT LEVEL

--- XXX@ 1/XXX --- FMH PROPOSED FOUL WATER SEWER WITH PIPE SIZE, GRADE AND INVERT LEVEL

--- XXX@ 1/XXX --- SIC SURFACE WATER INSPECTION CHAMBER

--- XXX@ 1/XXX --- FIC FOUL WATER INSPECTION CHAMBER

--- XXX@ 1/XXX --- SIC PROPOSED PERFORATED PIPE SURROUNDED IN FILTER STONE

--- XXX@ 1/XXX --- PROPOSED SLUNG SURFACE WATER SEWER WITH RODDING EYE

--- XXX@ 1/XXX --- PROPOSED SLUNG FOUL WATER SEWER WITH RODDING EYE

--- G --- PROPOSED GULLY AND CONNECTION TO SURFACE WATER DRAINAGE

--- K --- KLARGESTER MODEL NSBE010 PETROL INTERCEPTOR OR EQUIVALENT

--- DRY DETENTION BASIN

--- PROPOSED INTENSIVE GREEN ROOFING (SUBSTRATE DEPTH MIN. 200mm)

--- PROPOSED EXTENSIVE GREEN ROOFING (SUBSTRATE DEPTH <200mm)

--- PERMEABLE PAVING



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**NOTES:**

DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEBSITE AT [WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/](http://WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/) WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.

ALL PROPOSED PUBLIC STORM WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE LOCAL AUTHORITY'S REQUIREMENTS FOR TAKING IN CHARGE AND IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.

ALL PROPOSED PUBLIC FOUL WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATER REQUIREMENTS.

ALL PRIVATE DRAINAGE WORKS SHALL BE IN ACCORDANCE WITH THE BUILDING REGULATIONS PART H.

ALL COVER LEVELS ARE INDICATIVE ONLY AND SHOULD BE SET TO SUIT THE FINISHED ROAD OR PAVED LEVEL LEVELS IN REAR GARDENS HAVE BEEN ASSUMED AS STRAIGHT GRADE TO ADJACENT BOUNDARY FROM FFL - 150mm. EXTERNAL LEVELS TO BE CONFIRMED BY ARCHITECT

**GRAVITY SEWER PIPE MATERIAL TYPES**

WASTEWATER PIPE MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 3.13 OF THE IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE.

THE TYPES AND FITTINGS OUTLINED HEREIN SHALL BE USED IN THE CONSTRUCTION OF THE GRAVITY SEWERS. PIPE MATERIAL SHOULD NOT CHANGE BETWEEN MANHOLES. THE LIST BELOW DOES NOT APPLY TO PIPES INSTALLED BY PIPE JACKING OR MICRO TUNNELLING.

CONCRETE: CONCRETE SEWER PIPES WITH SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS SHALL COMPLY WITH IS EN 1916 (2002), BS 5911, PART 1 (2002-2010) AND IS 6 (2004) OR EQUIVALENT STANDARD, STRENGTH CLASS 120 WITH MINIMUM CRUSHING LOADS IN ACCORDANCE WITH TABLE 8 OF BS 5911-1 (2002/2010).

ALL PIPES AND FITTINGS SHALL HAVE GASKET TYPE JOINTS OF SPIGOT AND SOCKET OR REBATED FORM (PIPE DIAMETERS 225MM AND ABOVE).

THERMOPLASTIC STRUCTURED WALL PIPES: THERMOPLASTIC STRUCTURED WALL PIPES SHALL COMPLY WITH THE PROVISIONS OF IS EN 13476 (2007/2009). PIPES TO BE OF STIFFNESS CLASS 8kN/M2 AND TO BE CAPABLE OF DEMONSTRATING A JETTING RESISTANCE OF 2,600 PSI (180 BAR) WITHOUT DAMAGE WHEN TESTED IN ACCORDANCE WITH SECTION 3.3 OF WIS 4-35-01 (2008). (SEWER DIAMETERS 150MM UP TO 450MM, SERVICE CONNECTIONS OF 100MM DIAMETER).

UNPLASTICISED PVC: UNPLASTICISED PVC PIPES AND FITTINGS SHALL COMPLY WITH THE PROVISIONS IS EN 1401 2009/2012. PIPES TO BE APPLICATION AREA CODE "UP", STIFFNESS CLASS 8kN/M2. PROVISION FOR JETTING SHALL BE BASED ON THE WRC SEWER JETTING CODE OF PRACTICE, JUNE 1997. PIPES TO BE CAPABLE OF RESISTING A MAXIMUM JETTING PUMP PRESSURE OF 2,600PSI (180 BAR) WITHOUT DAMAGE. (SEWER DIAMETERS 150MM UP TO 450MM, SERVICE CONNECTIONS OF 100MM DIAMETER).

OTHER: THE USE OF ALTERNATIVE PIPE TYPES AND MATERIALS WILL REQUIRE THE PRIOR WRITTEN AGREEMENT OF IRISH WATER.

WHERE 1.2m COVER TO FOUL WATER PIPE SOFFIT IS NOT ACHIEVABLE IN ROADWAYS, CONCRETE SURROUND SHALL BE PROVIDED IN ACCORDANCE WITH STD-WW-08 OF WASTEWATER INFRASTRUCTURE STANDARD DETAILS.

**SERVICE LAYOUT DISTANCES:**

HORIZONTAL AND VERTICAL SERVICE LAYOUT DISTANCES SHALL BE AS PER IRISH WATER STANDARD DETAIL STD-WW-05.

THE EXTERNAL FACE OF MANHOLES SHALL BE AT LEAST 0.5m FROM KERB LINE.

**RESTRICTIONS ON PLANTING:**

PLANTING ADJACENT TO WASTEWATER INFRASTRUCTURE SHALL BE IN COMPLIANCE WITH IRISH WATER STANDARD DETAILS STD-WW-06 AND STD-WW-06A.

Rev	Date	Description	Dm	Appr
P01	13/12/23	PLANNING SUBMISSION	IG	IW

Amendments

Project


**PROPOSED RESIDENTIAL DEVELOPMENT GRANGE ROAD, DUBLIN 13**

Title

**PROPOSED DRAINAGE LAYOUT**

Client

GRANGE BUILDERS PROVIDERS



BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie

Status

**PLANNING**

Designed By	SDN	Approved	IW	Waterman Ref	22-109		
Drawn By	PJD	Date	DEC. 2023	Scales @ A1	AS SHOWN		
Project	Originator	Volume	Level	Type	Role	Number	Revision
GRR-WMC-ZZZ -00-DR-C-200							-

Drawing Location: N:\P\proj\22-109 Grange Rd\Drawings\Waterman Moylan\Civil\Planning\Outcad\Drawings\GRR-WMC-ZZZ-00-DR-C-200 Proposed Drainage Layout.dwg  
Date: Dec 12, 2023 3:10 pm

