

**DRAWING LEGEND:**

- F1.0 → PROPOSED FOUL DRAINAGE & ACCESS CHAMBER
- IC → DENOTES PROPOSED INSPECTION CHAMBER AS PER IRISH WATER DETAILS
- EXISTING FOUL DRAINAGE MAINTAINED

**GENERAL NOTES:**

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ALL LEVELS ARE IN METRES ABOVE DATUM UNLESS OTHERWISE NOTED.
3. ALL PIPE DIAMETERS ARE NORMAL.
4. THE CONTRACTOR MUST CONTACT THE RELEVANT AUTHORITIES PRIOR TO CONSTRUCTION WORK, & SATISFY HIMSELF IN RESPECT TO THE LOCATION OF ALL EXISTING SERVICES.
5. ALL SEWER & DRAIN PIPES ARE uPVC STIFFNESS CLASS SN8 (8kN/m<sup>2</sup>) UNLESS OTHERWISE STATED.
6. ALL BEDDING TO SEWERS IS CLASS 'B' UNLESS OTHERWISE NOTED.
7. ALL MANHOLES CAN BE EITHER PRECAST CONCRETE RING MANHOLES OR BLOCKWORK UNLESS OTHERWISE STATED.
8. 600mm MAX. LENGTH ROCKER PIPES ARE TO BE PROVIDED ON SEWER WHERE:
  - (A) A PIPE ENTERS A MANHOLE OR PUMPING STATION.
  - (B) A PIPE LEAVES A MANHOLE.
  - (C) A PIPE ENTERS CONCRETE ENCASUREMENT.
  - (D) A PIPE LEAVES CONCRETE ENCASUREMENT.
  - (E) ANY OTHER LOCATION AS DIRECTED BY THE ENGINEER.
9. ALL SEWER ROCKER PIPES ARE TO BE FORMED BY CUTTING & 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.
10. WHERE SEWER PIPES OR RISING MAINS CONNECT TO EXISTING MANHOLES, THE CONTRACTOR IS REQUIRED TO:
  - (A) CONTACT THE RELEVANT AUTHORITIES PRIOR TO COMMENCING WORK.
  - (B) MAKE GOOD THE EXISTING CHAMBER WALL AT THE PROPOSED POINT OF PENETRATION & ADJUST THE EXISTING BENCHING TO THE SATISFACTION OF THE ENGINEER.
11. WHERE SEWER PIPES, RISING MAINS OR ROAD GULLY DRAINS CROSS EXISTING ROADS, THE CONTRACTOR IS REQUIRED TO:
  - (A) CONTACT THE RELEVANT AUTHORITIES PRIOR TO COMMENCING WORK.
  - (B) MAKE GOOD THE EXISTING ROAD TO ITS ORIGINAL SPECIFICATION AS APPROVED BY THE ENGINEER.
12. MINIMUM FALLS INDICATED ON DRAINAGE PIPES, LEVELS TO BE REVISED IF MANHOLE LOCATIONS ARE MODIFIED BY CONTRACTOR.
13. CONCRETE PROTECTION TO BE PROVIDED AROUND ALL PIPES WHERE COVER TO SOFFIT IS LESS THAN 1.2m.
14. ALL BRANCH AND PERIMETER DRAINAGE ARE TO BE DETAILED BY ARCHITECT.

**TESTING OF SEWERS**

- (A) FOUL AND SURFACE WATER SEWERS TO BE TESTED EITHER A WATER OR AIR TEST. IF THE AIR TEST IS CARRIED OUT AND THE RESULTS SHOW A FAILURE THEN A WATER TEST SHALL BE SUBSEQUENTLY CARRIED OUT TO DETERMINE ACCEPTANCE OR REJECTION.
- (B) WATER TESTS CARRIED OUT SHALL BE TESTED IN UNDER A HEAD OF WATER IN ACCORDANCE WITH BS 8301 1995, AND CARRIED OUT FOR A MINIMUM OF 30 MINUTES.
- (C) THE CONTRACTOR IS TO ENGAGE AN ENGINEER WITH PROFESSIONAL INDEMNITY INSURANCE TO SUPERVISE ALL AIR/WATER TESTS ON MAINS BEFORE BACKFILLING.
- (D) ON COMPLETION OF ALL SEWERS DRAINS AND GULLIES, ALL SEWERS SHALL BE FLUSHED OUT AND LEFT FREE FROM DEFECT AND OBSTRUCTION AND SUBSEQUENTLY A CCTV SURVEY SHALL BE CARRIED OUT BY AN INDEPENDENT CONTRACTOR OF THE AS BUILT DRAINAGE. THE CCTV SURVEY SHALL INCLUDE A REPORT AND DVD AND SHALL BE SUBMITTED TO THE ENGINEER AND ARCHITECT PRIOR TO PRACTICAL COMPLETION.
- (E) ON COMPLETION OF ALL SEWERS, DRAINS AND GULLIES AN AS-BUILT SURVEY MUST BE SUBMITTED INCLUDING LOCATION OF MANHOLES RELATIVE TO THE BUILDING OUTLINE, COVER, INVERT LEVELS AND PIPE DIAMETERS, TO THE ENGINEER AND ARCHITECT FOR THEIR REVIEW PRIOR TO PRACTICAL COMPLETION.

FOUL SEWER PIPES TO BE THERMOPLASTIC STRUCTURED WALL PIPE STIFFNESS CLASS 8kN/m<sup>2</sup> IN ACCORDANCE WITH "IRISH WATER CODE OF PRACTICE FOR PIPE MATERIAL SECTION 3.13"

ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH 'RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS', DEPARTMENT OF THE ENVIRONMENT.

CONCRETE PROTECTION WILL BE PROVIDED OVER PIPES WHERE THE DEPTH OF COVER TO PIPES UNDER ROADS IS LESS THAN 1200MM & 900MM UNDER GRASSED/PAVED AREAS.

NOTE: ALL PERIMETER DRAINAGE TO ARCHITECTS DETAILS



Pipe Section	U/S CL (m)	U/S IL (m)	D/S IL (m)	Pipe Dia. (mm)
F1.0 to F1.1	95.600	94.250	93.475	150
F1.1 to F1.2	95.200	93.475	92.990	150
F1.2 to F1.3	95.050	92.990	92.640	150
F1.3 to F1.4	94.750	92.640	92.545	150
F1.4 to F1.5	94.700	92.545	92.415	150
F1.5 to F1.6	94.550	92.340	92.185	225
F1.6 to F1.7	94.400	92.185	91.830	225
F1.7 to F1.8	94.000	91.830	91.725	225
F1.8 to F1.9	94.000	91.725	91.680	225
F1.9 to EX	94.000	91.680	91.515	225
F2.0 to F2.1	94.800	93.450	93.160	150
F2.1 to F1.5	94.800	93.160	92.340	150
F3.0 to F1.8	94.000	92.650	92.066	150
F4.0 to F4.1	94.800	93.745	93.650	150
F4.1 to F1.4	94.800	93.650	93.450	150

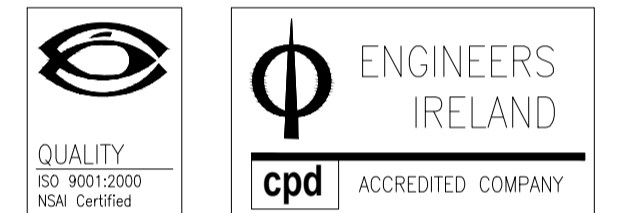
FOUL DRAINAGE DESIGN TABLE

**IRISH WATER QA:**  
 THE CONTRACTOR IS TO INCLUDE FOR THE EMPLOYMENT OF A CHARTERED ENGINEER WITH PI INSURANCE TO €6.5M TO WITNESS THE INSTALLATION OF ALL AIR TESTS AND OTHER IRISH WATER QA AS REQUIRED UNDER THE IRISH WATER QUALITY ASSURANCE (QA) FIELD INSPECTION REQUIREMENTS MANUAL, AS PER CURRENT VERSION ON IRISH WATERS WEBSITE. IT IS A REQUIREMENT OF THE MAIN CONTRACTOR TO AGREE THE REQUIRED QA WITH THE IW FIELD INSPECTORS, RETAIN ALL THE QA DOCUMENTS ON SITE AND REPAIR ANY DEFECTS. THE MAIN CONTRACTORS CHARTERED ENGINEERS AND THE MAIN CONTRACTOR ARE RESPONSIBLE FOR AGREEING ON SITE CONFORMANCE WITH IW PRIOR TO HAND OVER OF THE WORKS TO IW. THE PRICE FOR ALL THE ABOVE IS TO BE INCLUDED IN THE MAIN CONTRACTORS TENDER SUM.

**NOTES:**

**GENERAL NOTES:**

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SERVICE ENGINEERS DRAWINGS & SPECIFICATIONS.
2. ALL LEVELS ARE STRUCTURAL UNLESS NOTED OTHERWISE.
3. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BUILDING REGULATIONS.
4. DO NOT SCALE - WORK TO FIGURE DIMENSIONS ONLY.



Referenced drawings	
Dwg No.	Dwg Title

Issue register					
Rev.	Date	Description	Dwn.	Chkd.	Apprv.
F1.1	03.12.21	PART 8	TD	NP	NP

Client: **KILDARE CO. CO.**

Job Description: **AMBASSADOR SITE HOUSING KILL, Co. KILDARE**

Status: **PART 8**

Drawing Title: **PROPOSED FOUL DRAINAGE LAYOUT**

Project No: <b>21KK009</b>	Drawing Ref: <b>C-010</b>	Rev: <b>PL1</b>
Date: <b>10.09.18</b>	Scale: <b>A1-1:500 @ A3-1:1000</b>	
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