

**WATERMAIN LEGEND:**

	DENOTES PROPOSED 150mm Ø HDPE CLASS 'D' WATERMAIN
	DENOTES PROPOSED SLUICE VALVE
	DENOTES PROPOSED SCOUR VALVE
	DENOTES PROPOSED AIR VALVE
	DENOTES 25mm Ø HDPE PIPE TO IRISH WATER APPROVED BOUNDARY BOX
	DENOTES PROPOSED FIRE HYDRANT
	DENOTES EXISTING WATERMAIN
	DENOTES WATERMETER

- GENERAL WATERMAIN NOTES:**
1. ALL WATERMANS SHALL BE 150mm Ø HDPE TYPE WATERMAIN U.N.O.
  2. ALL WATERMANS SHOULD BE LOOPED TO AVOID DEAD ENDS.
  3. ONLY USE ALL FLANGED T's & ALL FLANGED VALVES.
  4. USE ANTI-CLOCKWISE (LEFT-HAND CLOSING) SLUICE VALVES.
  5. DO NOT USE DUCTILE IRON TAILS - USE FLANGE ADAPTORS WHERE APPLICABLE.
  6. ONLY USE SCREW TYPE HYDRANTS.
  7. THE DEPTH OF THE SLUICE VALVE SPINDLE CAP BELOW FINISHED GROUND LEVEL SHOULD NOT EXCEED 300mm.
  8. THE DEPTH OF THE HYDRANT OUTLET BELOW FINISHED GROUND LEVEL, SHOULD NOT EXCEED 200mm.
  9. AN APPROVED MARKER TAPE CONTAINING A TRACER WIRE, SHOULD BE AFFIXED TO THE TOP SURFACE OF ALL WATERMANS.
  10. NO PIPE, CABLE, CONDUIT OR OTHER SERVICE SHOULD BE LAID LONGITUDINALLY OVER THE LINE OF A WATERMAIN.
  11. ENSURE MARKER PLATES ARE IN PLACE.
  12. ALL WATERMANS SHOULD BE TESTED AT 1.5 TIMES THE WORKING PRESSURE FOR ONE HOUR IN THE PRESENCE OF A MEMBER OF STAFF FROM IRISH WATER OR THEIR AGENTS. DETAILS OF TESTING PROCEDURE TO BE DISCUSSED ON SITE WITH CONTRACTOR.
  13. ALL HYDRANTS TO BE PUT IN, IN ACCORDANCE WITH TECHNICAL GUIDANCE DOCUMENT B OF THE BUILDING REGULATIONS 2000/2007 S.S 5.1.6 T.G.D.B & B.5.1 T.G.B.D & THE D.O.E. "RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS".
  14. HYDRANTS TO BE LOCATED IN ACCORDANCE WITH THE FIRE OFFICER'S RECOMMENDATIONS.
  15. PROVIDE THRUST BLOCKS AT ALL CHANGES IN DIRECTION.
  16. ALL CONNECTIONS POINTS TO BUILDING TO BE SERVICED WITH PE-X-100 HDPE PIPE WITH AN SDR RATING OF 11.
  17. ALL WATERMANS, METERS, HYDRANTS & VALVES TO BE INSTALLED, TESTED & CLEANED IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
  18. BUTT FUSION WELDING AND ELECTRO FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE, USING FULLY AUTOMATIC APPROVED JOINTING MACHINE/RIGS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE IDENTITY OF THE HDPE PIPELINE MANUFACTURER SHALL BE MADE KNOWN TO IRISH WATER PRIOR TO COMMENCEMENT OF THE INSTALLATION.
  19. ALL TESTING (PRESSURE CHLORINATION & BACTERIAL) TESTS TO BE IN ACCORDANCE WITH LOCAL AUTHORITIES SPECIFICATION. THE ENGINEER IS TO INSPECT THE PRESSURE TEST AFTER THE WATER CONTROL METRES ARE INSTALLED. ALL HYDRANTS & VALVES ARE TO BE INCLUDED IN THE TEST.
  20. CERTIFICATION AND TESTING (INCLUDING INDEPENDENT THIRD PARTY CERTIFICATION) SHALL BE PROVIDED TO CONFIRM QUALITY ASSURANCE COMPLIANCE. EACH JOINT SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE.
  21. A PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH JOINT, SHALL BE PROVIDED AND RETAINED FOR QUALITY ASSURANCE PURPOSES.
  22. CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
  23. WHEN EXISTING AC WATERMANS ARE PRESENT A SPECIFIC METHOD STATEMENT SHALL BE SUBMITTED TO IRISH WATER PRIOR TO WORKS TAKING PLACE AND SUBJECT TO WRITTEN APPROVAL, DETAILING THE PROTECTION TO BE PUT IN PLACE TO EXISTING MAINS, METHOD OF REMOVAL OF EXISTING AC, METHOD OF DISPOSAL OF EXISTING AC AND METHOD OF CONNECTION TO EXISTING AC.

**DRAWING LEGEND:**

- PROPOSED BUILDING OUTLINE
- PROPOSED SITE BOUNDARY
- EXISTING ESB MAINS
- EXISTING WAYLEAVE

**WATERMAIN NOTES:**  
 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, SEPTEMBER 2017 VERSION 1. 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.

- FIRE HYDRANT NOTES:**
1. FIRE HYDRANTS TO BE POSITIONED A MINIMUM OF 6m FROM THE PROPOSED BUILDING FOUNDATIONS.
  2. LOCATIONS OF FIRE HYDRANTS AS PER FIRE CERTIFICATE DRAWINGS.
  3. FIRE HYDRANTS TO BE IN ACCORDANCE WITH THE FIRE OFFICER RECOMMENDATIONS.
  4. ALL FIRE HYDRANTS TO BE LOCATED IN ACCORDANCE WITH TECHNICAL GUIDANCE DOCUMENT B OF BUILDING REGULATIONS, 1997 & TECHNICAL GUIDANCE DOCUMENT B OF BUILDING REGULATIONS, 2006 STATUTORY INSTRUMENT 497 OF 1997.
  5. FINAL VERIFICATION SHOULD BE SOUGHT FROM THE FIRE AUTHORITY FOR AGREED LAYOUT OF ALL HYDRANTS & THE NUMBER OF WATER SUPPLY CONNECTIONS TO THE FIRE WATER RING MAIN.

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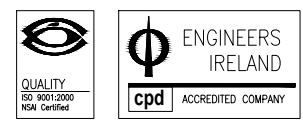
Referenced drawings

Dwg No.	Dwg Title

Issue register

Rev.	Date	Description	Des.	Chkd.	Appvd.
P1	14.03.17	PRELIMINARY ISSUE	MD	KK	NP
P2	22.05.17	PERLUMINARY ISSUE	SK	NP	NP
P3	11.07.17	PERLUMINARY ISSUE	SK	KK	NP
PL1	20.04.18	PLANNING ISSUE	EH	NP	NP

- 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.



**PROPOSED WATERMAIN & LEVELS LAYOUT**

Date: 09.02.17 Scale: A1 - 1/500, A3 - 1/1000

Drawn By: M.DI DATO Checked By: K.KINCHILLA Approved By: N.PATTERSON

Client: WATERFORD CITY AND COUNTY COUNCIL

Job Description: SOCIAL HOUSING PPP BUNDLE 2 SLIEVEKEALE, WATERFORD CITY

Project No: 17KK007/SB2 Drawing Ref: SLI-C-004 Rev: PL1

PLANNING

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