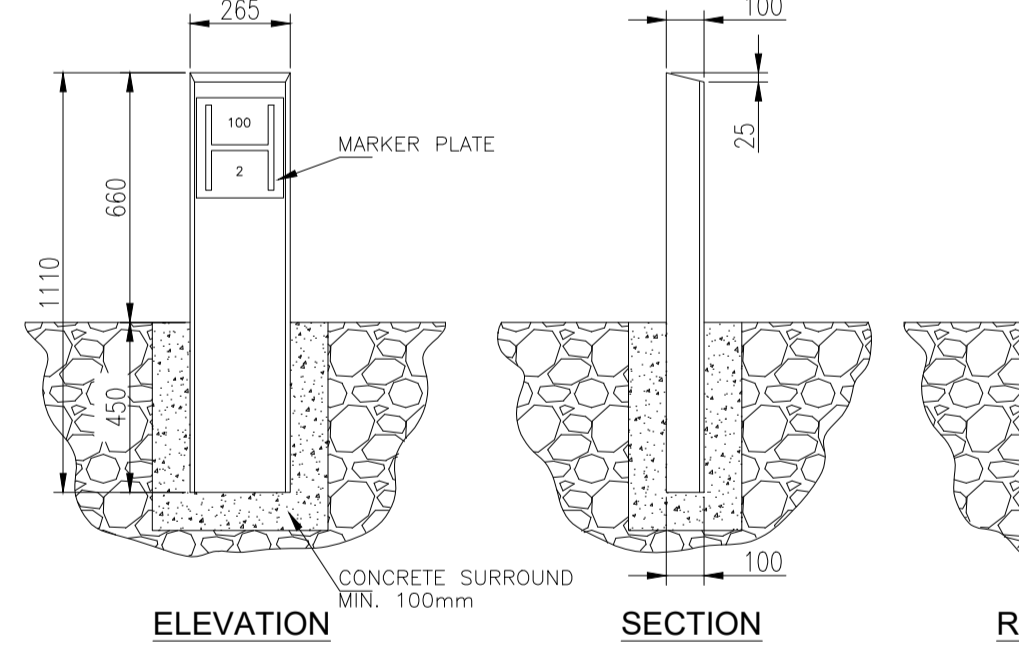
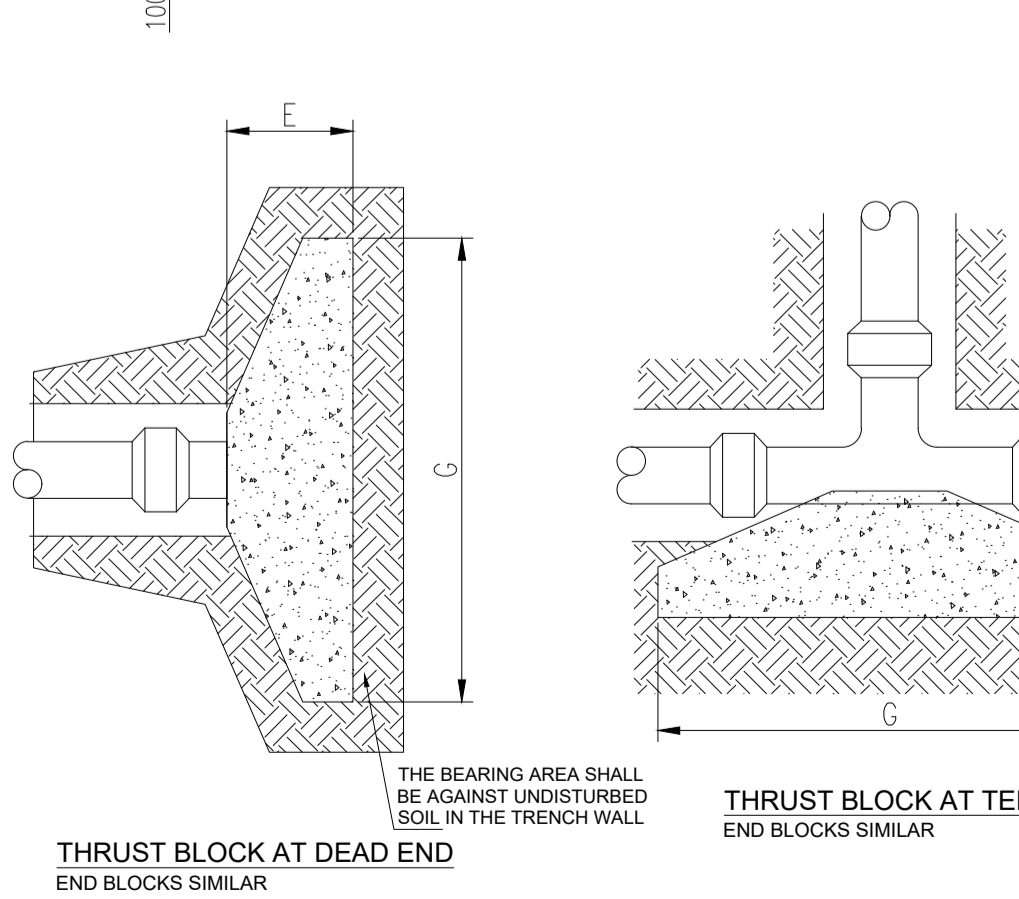


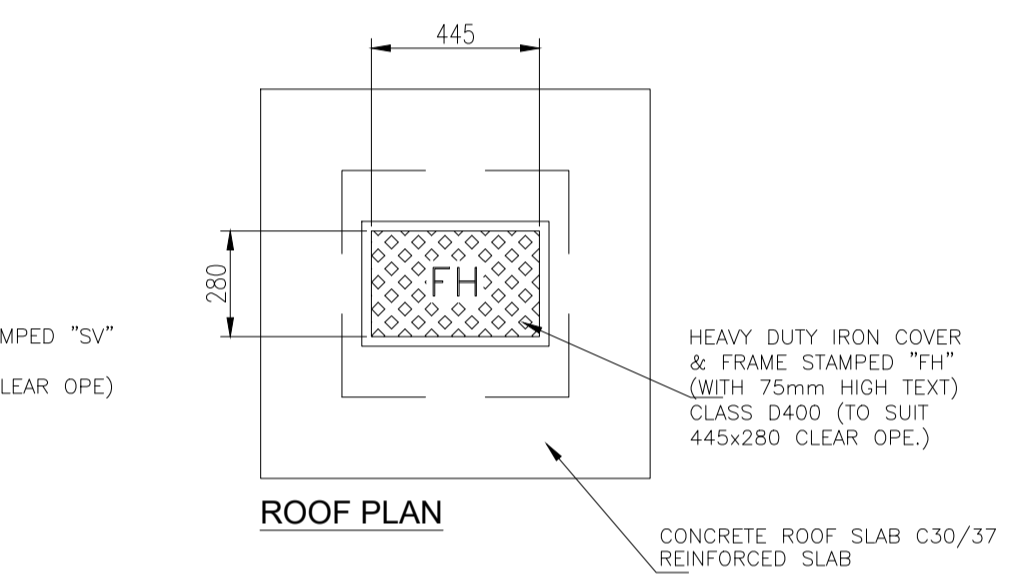
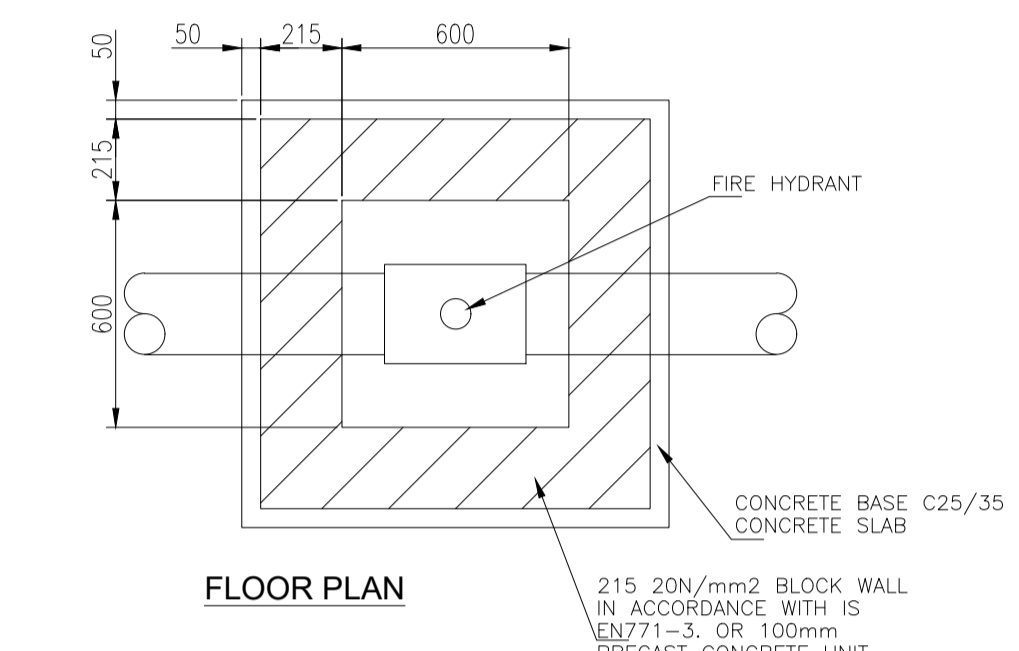
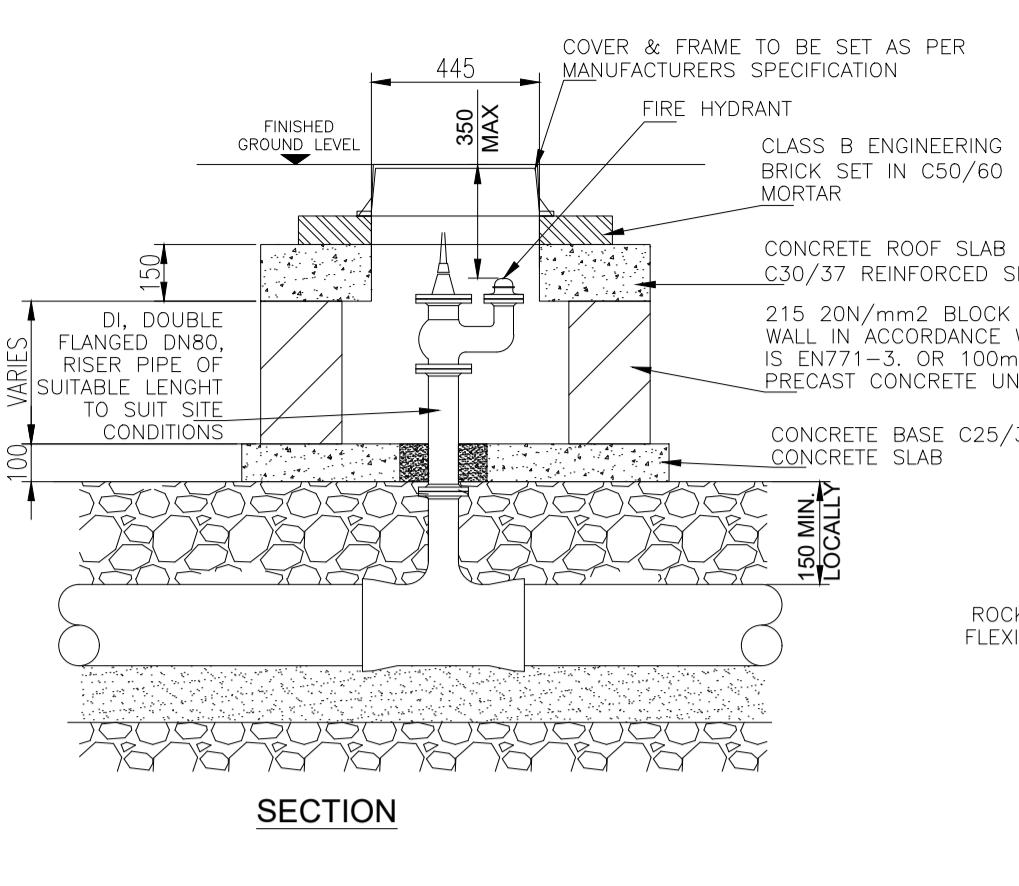
**SLUISE VALVE CHAMBER**  
BLOCKWORK OR PRECAST CONSTRUCTION.



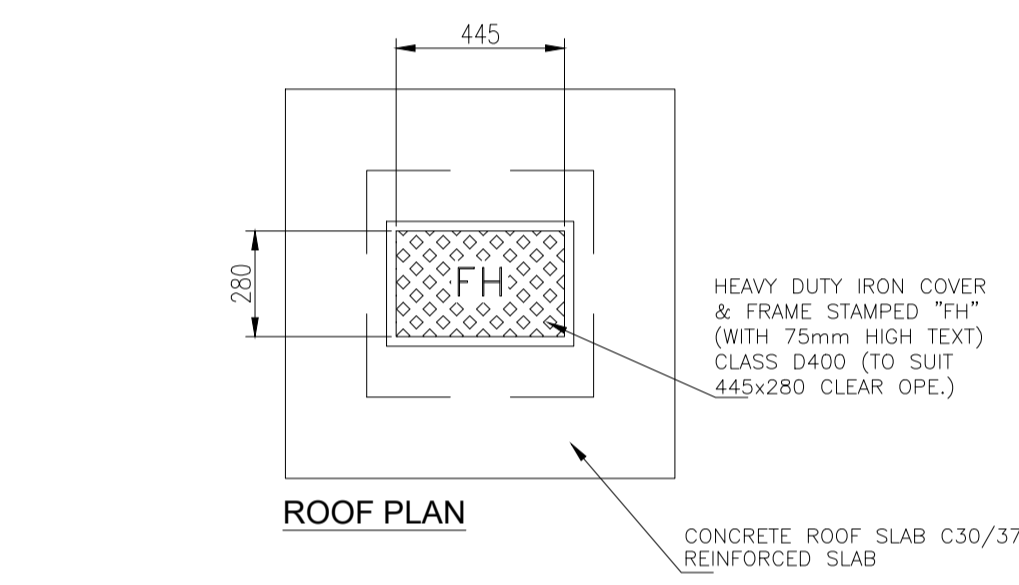
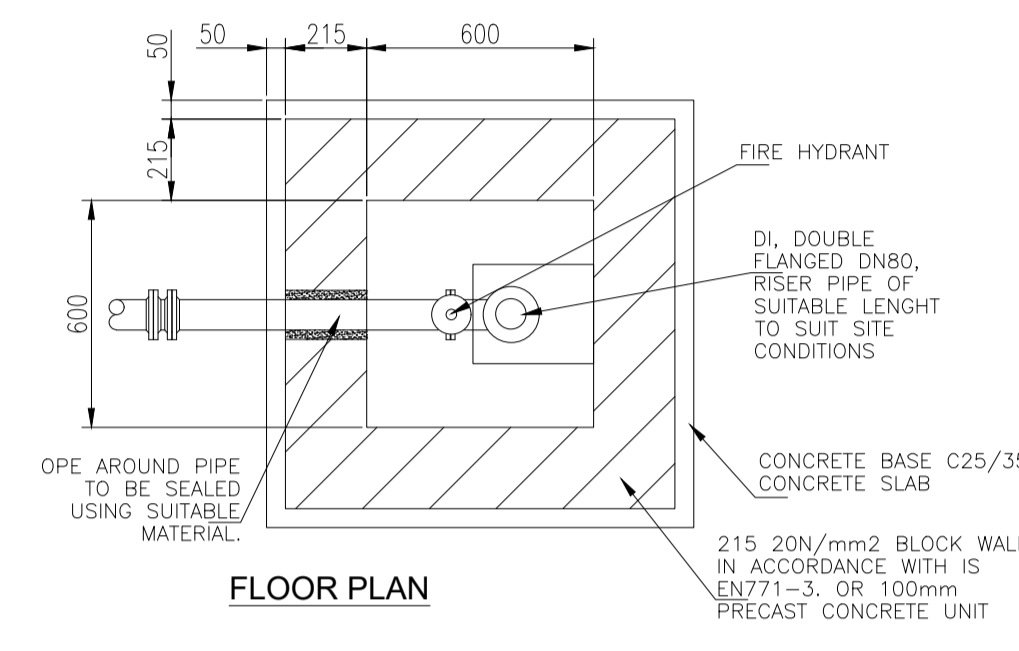
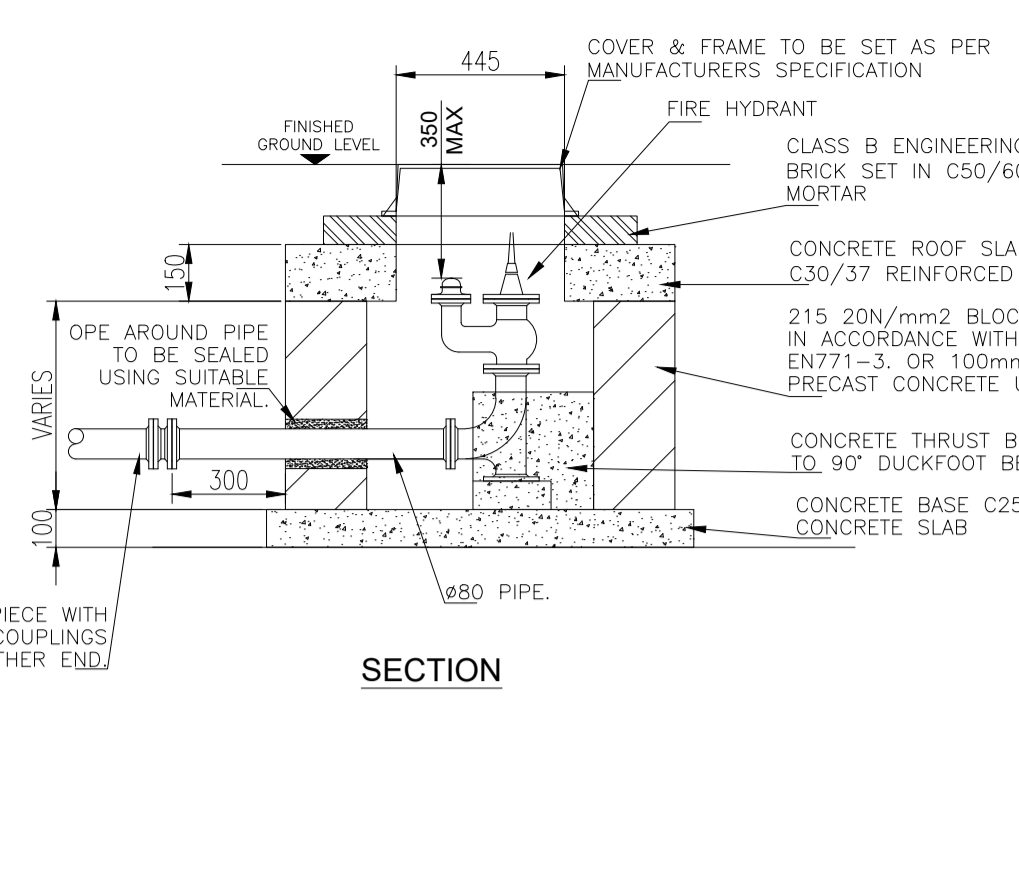
**MARKER POST DETAILS**



**THRUST BLOCK AT DEAD END**  
END BLOCKS SIMILAR



**FIRE HYDRANT CHAMBER-ON LINE**  
BLOCKWORK OR PRECAST CONSTRUCTION.

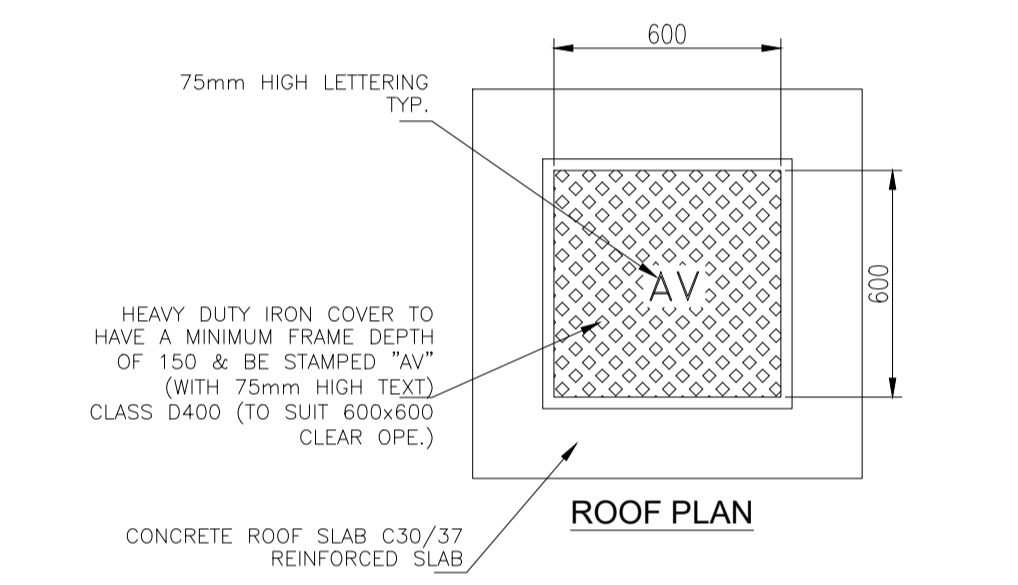
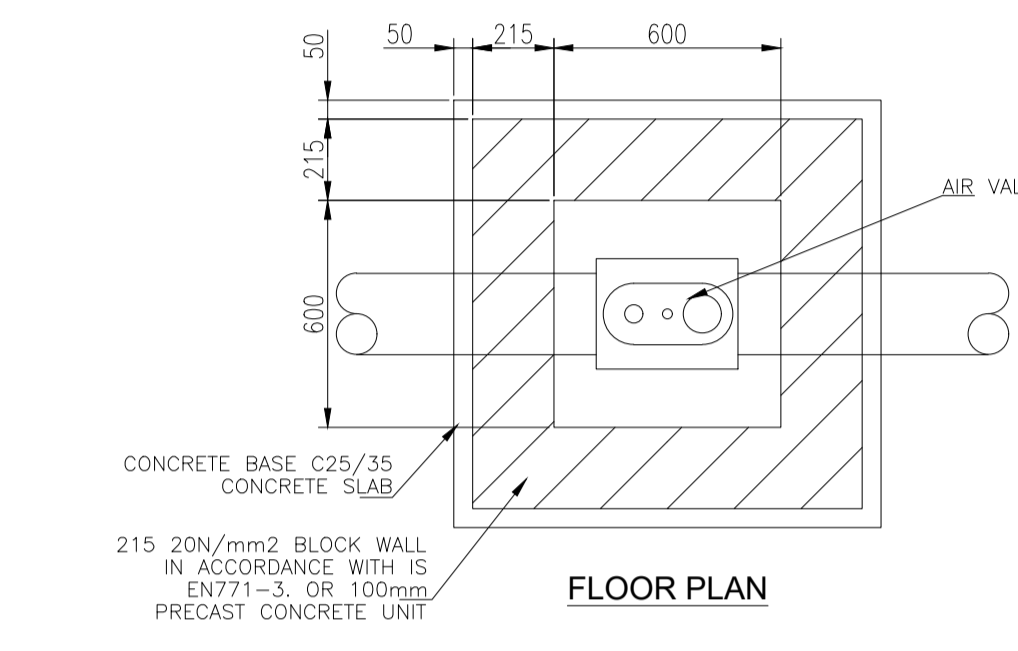
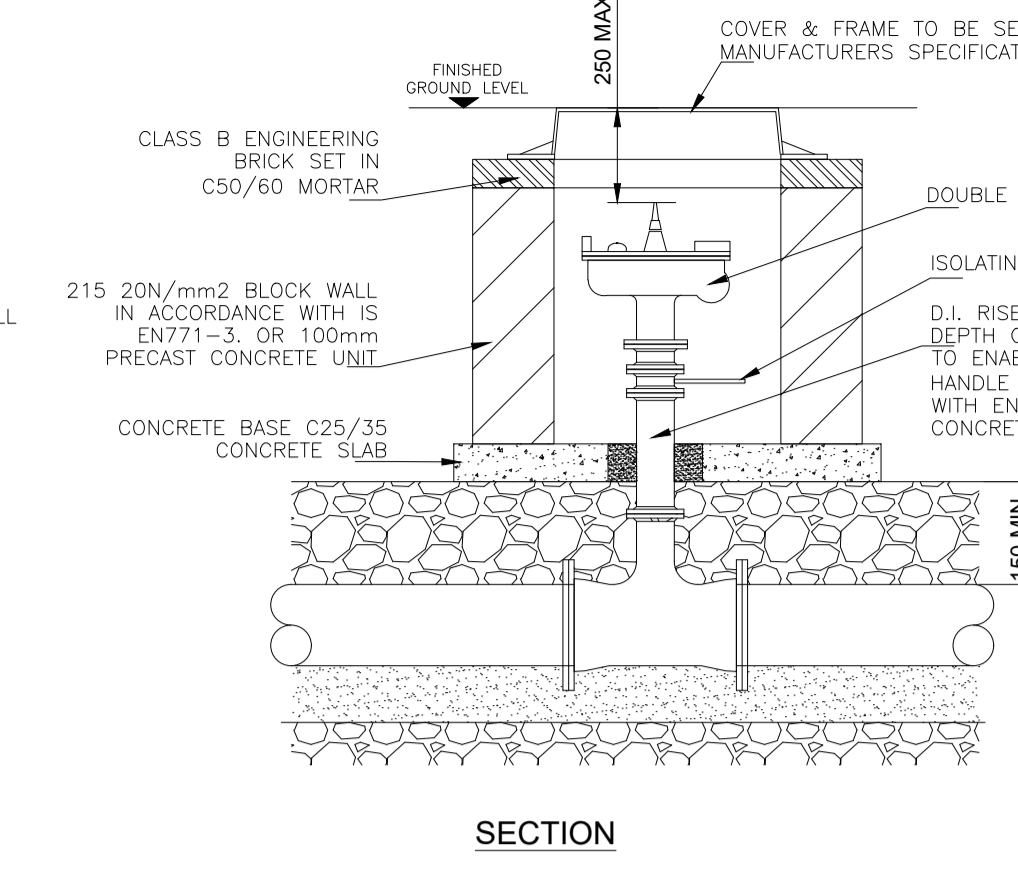


**FIRE HYDRANT CHAMBER-OFF LINE**  
BLOCKWORK OR PRECAST CONSTRUCTION.

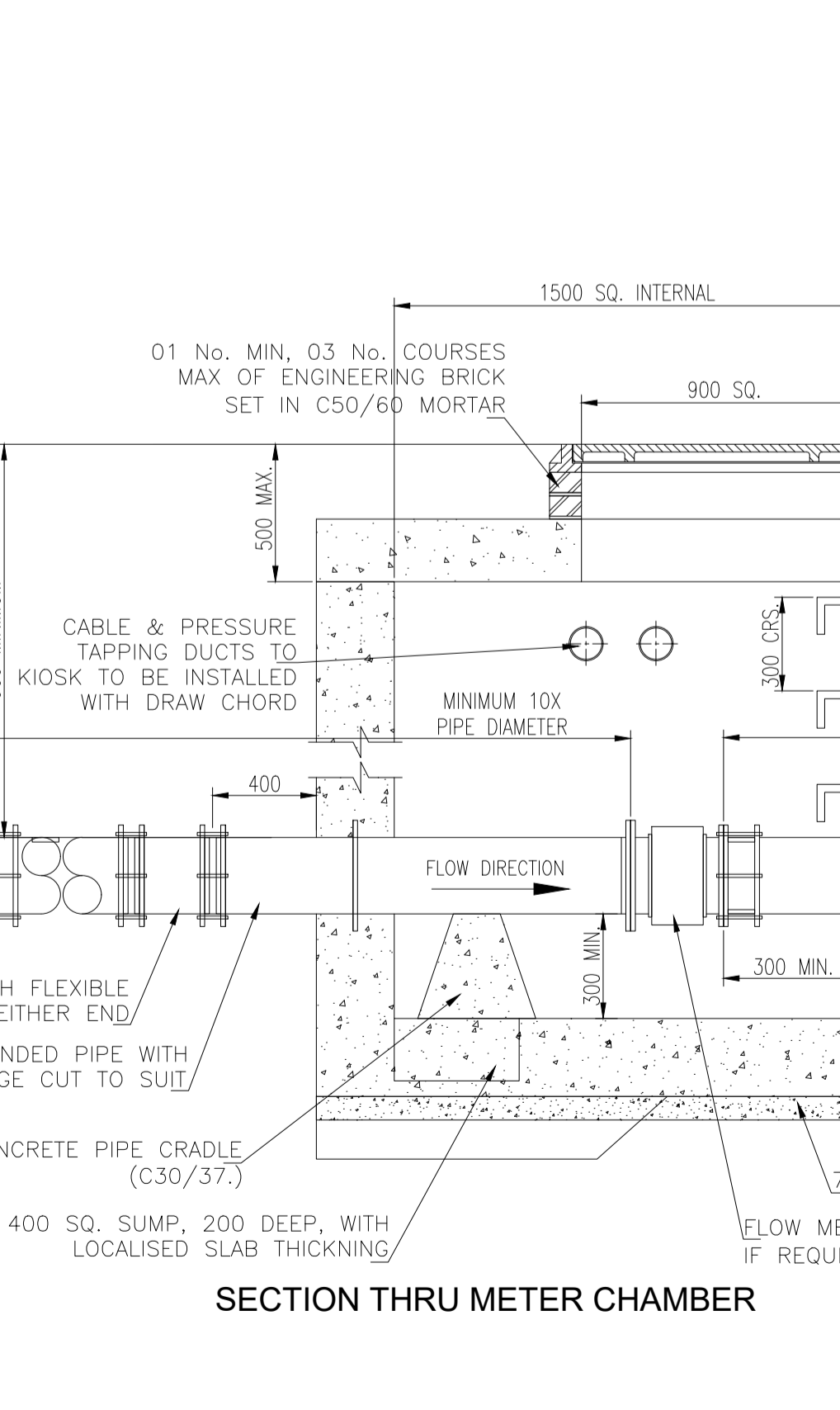
**MARKER POST NOTES:**

- WHERE PRACTICAL MARKER PLATES SHALL BE FIXED TO ADJACENT WALLS OR ALTERNATIVELY ATTACHED TO MARKER POSTS.
- PLATES TO BE FIXED IN POSITION USING WALL PLUGS AND STAINLESS STEEL SCREWS.
- MARKER PLATES TO BE MANUFACTURED IN ACCORDANCE WITH BS 3251.
- FOR HYDRANT PLATE ALL CHARACTERS SHOULD BE BLACK AND THE REMAINDER OF THE FRONT FACE SHOULD CONFORM TO COLOUR REFERENCE No. 309 (CANARY YELLOW) OF BS381C.
- PIPE DIAMETER ON HYDRANT PLATE TO REFER TO WATERMAIN NOT BRANCH.
- SLUISE VALVE, AIR VALVE, SCOUR VALVE, WASHOUT HYDRANT AND METER PLATES SHOULD BE CAST IRON. ALL CHARACTERS SHOULD BE BLACK ON WHITE PAINT BACKGROUND.
- CONCRETE SURROUND TO MARKER POST TO BE GRADE C25/30 AND IN ACCORDANCE WITH IS EN 206/2013.
- PLASTIC MARKER POSTS ARE NOT ACCEPTABLE.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

**THRUST BLOCK NOTE:**  
SYMMETRICALLY POSITIONED CONCRETE THRUST BLOCKS OF GRADE C20/25 CONCRETE SHALL BE CONSTRUCTED AT ALL DEAD ENDS, TEES, TAPERS, PIPE CHANGE OVER & HORIZONTAL / VERTICAL BENDS OF GREATER THAN 11.25°. THRUST BLOCK SIZES (BASED ON ASSUMED BEARING CAPACITY OF 100Kn/m<sup>2</sup>) VARY WITH PIPE DIAMETER, PIPE TEST PRESSURE & WITH ANGLE/TYPER OF PIPE JUNCTION. FOR DETAILS & SIZE OF THRUST BLOCK FOUNDATIONS REFER TO DETAILS & TABLES ON DWG. No. STD-W-28 ON IRISH WATER DOC. REF. IW-CDS-5020-01



**ON-LINE AIR VALVE CHAMBER**  
BLOCKWORK OR PRECAST CONSTRUCTION.



**SECTION THRU METER CHAMBER**

- ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
- PIPEWORK TO BE DOWNSIZED TO ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRAIGHT PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. IF THE METER IS NOT CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS, A BY-PASS FLOW METER SHALL BE PROVIDED WITH APPROPRIATE VALVES, FITTINGS AND PIPEWORK.
- ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI-FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER.
- WATERMANS SUITABLE FOR WORK SHALL BE EITHER DUCTILE IRON (DI) OR POLYETHYLENE (PE), WITH PE80 OR PE100 RATING (MDPE, HDPE, OR HPPPE).
- ALL NEW WATERMAIN PIPE NETWORKS SHALL UNDERGO TESTING & COMMISSIONING, IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATER DOC. IW-CDS-5020-03, INCLUDING CLENSING & PRESSURE TESTING PRIOR TO CONNECTING TO THE IRISH WATER NETWORK.

- NOTES:**
- ALL WATER SUPPLY DESIGN & CONSTRUCTION TO COMPLY WITH IRISH WATER CONNECTIONS & DEVELOPMENT SERVICES CODE OF PRACTICE FOR WATER INFRASTRUCTURE (DOC. REF. IW-CDS-5020-03)
  - ALL WATER SUPPLY CONSTRUCTION DETAILS TO COMPLY WITH IRISH WATER CONNECTION & DEVELOPMENT SERVICES, WATER INFRASTRUCTURE DEVELOPMENT DETAILS (DOC. REF. IW-CDS-5020-01)
  - ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
  - SLUISE VALVE & HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND ARE SUBJECT TO THE APPROVAL OF IRISH WATER.
  - SLUISE VALVES SHALL BE RESILIENT SEATED AND SHALL COMPLY WITH BS 5163-1, BS 5163-2, IS EN 1074-1, IS EN 1074-2, OR EQUIVALENT E.U. SPECIFICATIONS.
  - ALL SLUISE VALVES SHALL BE ANTI-CLOCKWISE CLOSING.
  - ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
  - VALVE OR HYDRANT CHAMBERS TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM IRISH WATER.
  - CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL.
  - ALL HYDRANTS, SURFACE BOX FRAMES & COVERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF IS EN 14339, IS EN 1074-6 & BS 750. FIRE HYDRANTS SHALL BE TYPE 2, THE HYDRANT INLET SHALL BE 80mm DIAMETER WITH PN16.
  - DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545, PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 12201:2011.
  - PROVIDE 200mm ALL AROUND x100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND PLINTH IN GREEN AREAS.
  - AIR VALVES SHALL COMPLY WITH THE REQUIREMENTS OF IS EN 1074-4. AIR VALVES SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE A GATE VALVE CONFORMING TO IS EN 1074-2 & SHALL BE OF A BOLTLESS BONNET DESIGN.
  - THE AIR VALVES SHALL HAVE BODIES AND COVERS OF CAST IRON TO BS EN 1563 WITH FLANGES DRILLED TO PN 16 IN ACCORDANCE WITH BS EN 1092. EACH VALVE SHALL HAVE A LARGE AND A SMALL AIR ESCAPE ORIFICE WITH AN ISOLATING VALVE.
  - AIR VALVE CHAMBERS SHALL BE COVERED WITH APPROVED VENTILATED HEAVY DUTY METAL COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
  - SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION.
  - AIRVALVE CHAMBERS TO BE OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM IRISH WATER.
  - THE LOCATION OF AIR VALVES SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH IRISH WATER TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED.
  - THRUST BLOCKS, TO BE PROVIDED AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.

Rev	Sts	Description	Date
P01	S2	Issued for Planning	23.06.20
P02	S2	Issued for Planning	15.07.22
P03	S2	Issued for Planning	27.09.23
P04	S2	Issued for Planning	14.06.24

**MMOS** The Chapel, Blackrock House, Blackrock Road, Cork, T12 KRK7  
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PROJECT  
Proposed Development at Courtstown, Little Island, Co. Cork

CLIENT  
Ruden Homes Ltd.

TITLE  
Typical Watermain Details

DRAWN BY  
A.R.

CHECKED BY  
P.M.

APPROVED BY  
P.M.

SCALE  
NTS

PROJECT NUMBER  
20093

DOCUMENT REFERENCE	STATUS
20093-MMS-ZZ-DR-C-10016	S2
PROJECT-ORIGINATOR-ZONE-LEVEL-TYPE-DIPLINE-NUMBER	P04