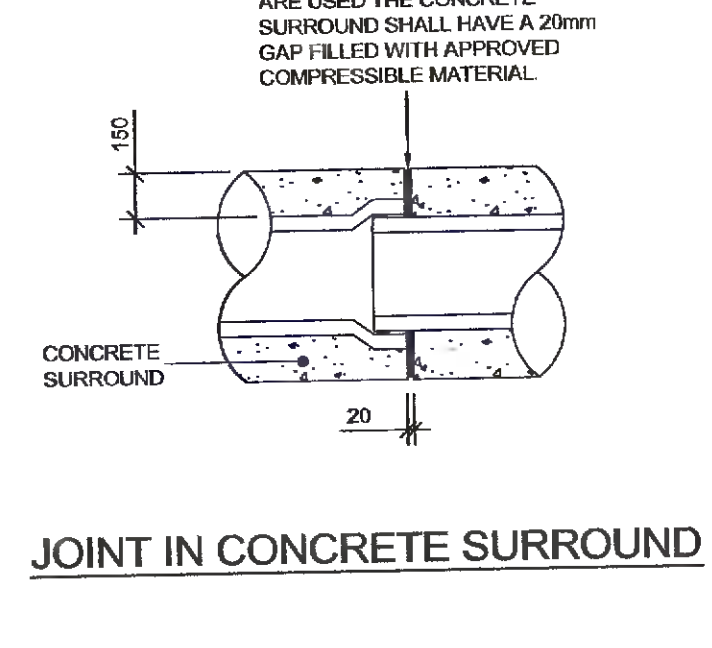
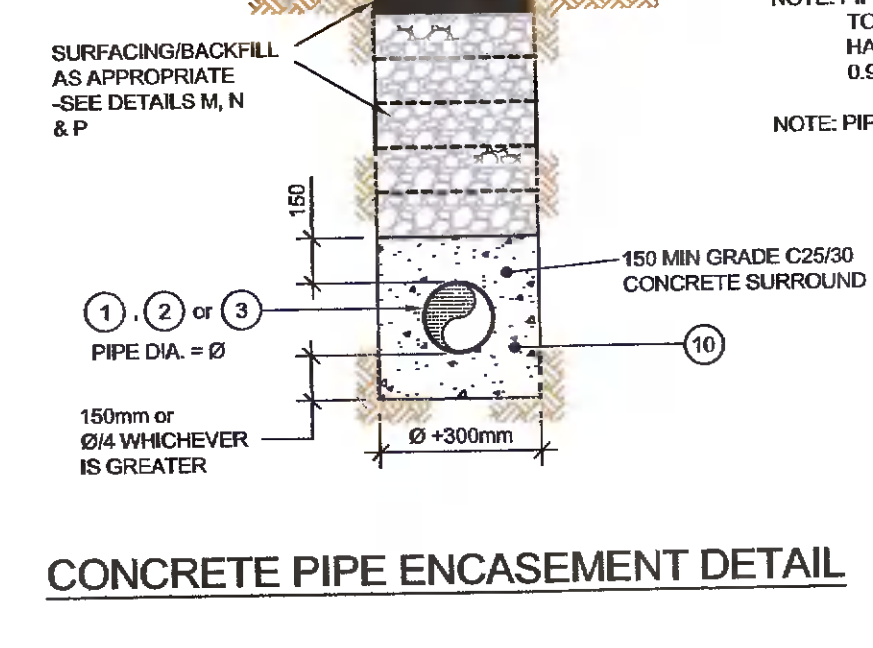
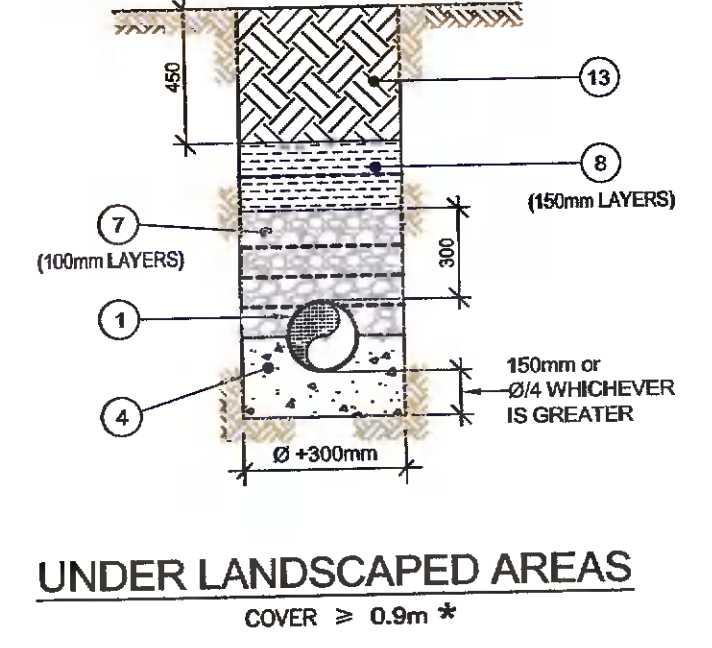
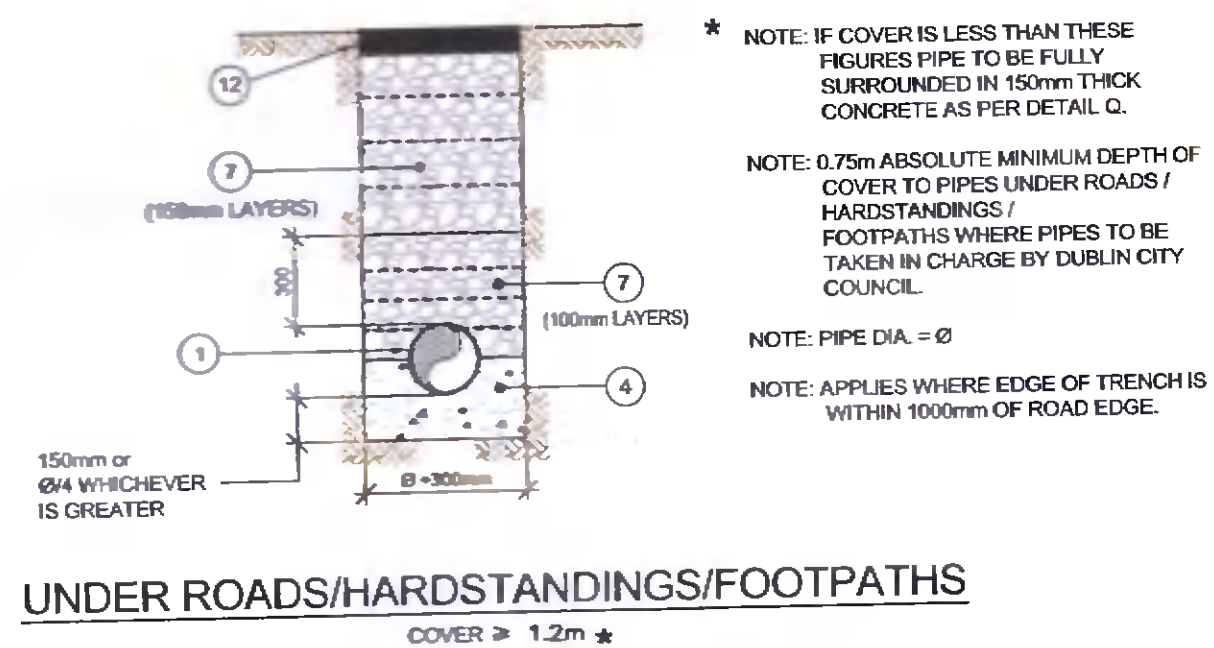


NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS.
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE. ENGINEER TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE ANY WORK PROCEEDS.
- REFER TO DRAWING JOB NUMBER/000 FOR PROJECT SPECIFICATION.

NOTES

- CONCRETE BEWER PIPES WITH SPIGOT & SOCKET JOINTS & RUBBER RING FITTINGS TO COMPLY WITH ISEN 1918 & B 6204 OR EQUIVALENT STANDARD CLASS B OR C.
 - THEMOPLASTIC STRUCTURED WALL PIPES AND FITTINGS IN ACCORDANCE WITH THE REQUIREMENTS OF ISEN 13476 (2007/2009). PIPES TO BE SERVICE CLASS B (n=1).
 - UNPLASTICIZED POLYVINYL CHLORIDE (PVC) PIPES & FITTINGS IN ACCORDANCE WITH THE REQUIREMENTS OF ISEN 1461 (2009/2012).
 - CONCRETE BED & SURROUND TO BE A MINIMUM 150mm THICK IN-SITU CONCRETE GRADE C25/30 & HAUNCHED HALF WAY UP THE BARREL OF THE PIPE.
 - GRANULAR BED & SURROUND FOR RIGID PIPES TO BE EITHER:
 - A. 150mm TO 500mm GRADED AGGREGATE OR
 - B. 100mm SINGLE SIZED AGGREGATE.
 - ALL COMPLYING WITH THE REQUIREMENTS OF ISEN 15242 & SHOULD HAVE A COMPACTION FACTOR VALUE NOT GREATER THAN 2 WHEN MEASURED IN ACCORDANCE WITH ISEN 752.
 - GRANULAR BED & SURROUND & COVER FOR FLEXIBLE PIPES TO BE:
 - (A) 150mm TO 100mm GRADED AGGREGATE (PIPE DIAMETER < 315mm)
 - (B) 100mm SINGLE SIZED AGGREGATE (PIPE DIAMETER < 315mm)
 - ALL COMPLYING WITH THE REQUIREMENTS OF ISEN 15242 & SHOULD HAVE A COMPACTION FACTOR VALUE NOT GREATER THAN 2 WHEN MEASURED IN ACCORDANCE WITH ISEN 752. GRANULAR BED & SURROUND TO BE PLACED UNIFORMLY ON EITHER SIDE OF THE PIPE IN LAYERS NOT EXCEEDING 100mm, EACH LAYER BEING COMPACTED BY HIS TAMPING UNTIL THE PIPE HAS A MINIMUM 150mm COMPACTED COVER.
 - GRANULAR BACKFILL MATERIAL SHALL BE IN COMPLIANCE WITH CLAUSE 804 (GRANULAR MATERIAL TYPE OF THE MIN SPECIFICATION FOR ROADWORKS). GRANULAR BACKFILL SHOULD BE PLACED UNIFORMLY ON EITHER SIDE OF THE PIPE IN LAYERS NOT EXCEEDING 100mm, EACH LAYER BEING COMPACTED BY HAND & TAMPING UNTIL THE PIPE HAS MINIMUM OF 300mm COMPACTED COVER. CARE SHOULD BE TAKEN THAT THE PROCESS OF COMPACTION DOES NOT DISPLACE THE PIPE FROM ITS CORRECT LINE & LEVEL. SUBSEQUENT LAYERS OF GRANULAR FILL TO BE WELL COMPACTED IN 150mm THICK LAYERS TO THE LOCAL AUTHORITY ROAD DIVISION SUPERVISOR. MECHANICAL COMPACTION EQUIPMENT SHOULD NOT BE USED UNTIL THERE IS A MINIMUM OF 450mm COMPACTED COVER OVER THE CROWN OF THE PIPE.
 - SELECTED FILL SHOULD BE FREE FROM STONES LARGER THAN 37mm, LUMPS OF CLAY COVER 75mm, TRUNK, FROZEN MATERIAL & VEGETABLE OR FOREIGN MATTER. SELECTED FILL SHOULD BE PLACED UNIFORMLY ON EITHER SIDE OF THE PIPE IN LAYERS NOT EXCEEDING 100mm, EACH LAYER BEING COMPACTED BY HIS TAMPING UNTIL THE PIPE HAS A MINIMUM OF 150mm COMPACTED COVER. CARE SHOULD BE TAKEN THAT THE PROCESS OF COMPACTION DOES NOT DISPLACE THE PIPE FROM ITS CORRECT LINE & LEVEL. SUBSEQUENT SELECTED FILL CAN BE PLACED & COMPACTED IN 150mm THICK LAYERS.
 - GENERAL BACKFILL MATERIAL SUITABLE FOR BACKFILL ABOVE SELECTED FILL MATERIAL SHOULD BE FREE FROM Boulders, Lumps of Concrete, Timber & VIBRABLE OR FOREIGN CONTAMINATED MATTER. GENERAL BACKFILL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 300mm, EACH LAYER BEING WELL COMPACTED. MECHANICAL COMPACTION EQUIPMENT SHOULD NOT BE USED UNTIL THERE IS A MINIMUM OF 450mm COMPACTED COVER OVER THE CROWN OF THE PIPE.
 - PIPES WITH INADEQUATE COVER TO BE FULLY SURROUNDED IN 150mm THICK GRADE C25/30 CONCRETE.
 - LEAN MIX BACKFILL TO TRENCHES IN EXISTING ROAD, WHERE REQUIRED BY THE LOCAL AUTHORITY TO BE GRADE C20/25 CONCRETE WITH 25mm AGGREGATE.
 - SURFACING TO BE IN ACCORDANCE WITH THE ROAD SPECIFICATION & IF APPROPRIATE, LOCAL AUTHORITY REQUIREMENTS.
 - GOOD QUALITY TOPSOIL, 450mm MINIMUM THICK, TO BE PLACED OVER BACKFILL IN ACCORDANCE WITH PARKS DEPARTMENT LANDSCAPE ARCHITECTS REQUIREMENTS.
 - A/J (ARMSTRONGS JUNCTIONS)
 - a. TO BE USED FOR PIPE DEPTHS UP TO 600mm.
 - b. INTERNAL AIR IF REQUIRED TO HAVE DOUBLE SEALED COVERING.
 - c. EXTERNAL AIR TYPICALLY TO BE PROPRIETARY PVC WITH 25mm COVER.
 - d. EXTERNAL AIR IN AREAS SUBJECT TO TRAFFIC TO BE SURROUNDED 150 WITH CONCRETE & TO HAVE A SEALED COVER & FRAME SUPPORTED OFF THE CONCRETE SURROUND.
- GENERAL NOTES
- IN SOFT GROUND CONDITIONS (GCR < 5) THE MATERIAL SHOULD BE EXCAVATED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND SPECIFICATION FOR ROADWORKS SHALL REPLACE THE EXCAVATED MATERIAL WRAPPED IN GEO-TEXTILE WRAPPING. ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING FILING 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.
 - PIPES SHALL NOT BE SUPPORTED ON STONES, ROCKS OR ANY HARD OBJECTS 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 GRADE 8/16 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROAD AUTHORITY SPECIFICATION FOR ROADWORKS. THE GRANULAR MATERIAL SHALL BE Laid ABOVE THIS VOID BACKFILL MATERIAL.
 - NON DEGRADABLE MARKER TAPE SHOULD BE INSTALLED AT TOP OF PIPE BEDDING LAYER. IN THE CASE OF NON METAL PIPES MATERIAL, THE MARKER TAPE SHOULD INCORPORATE A TRACE WIRE WHICH IS LINKED TO FITTINGS AND TERMINATED AT THE WASTE WATER PLUMBING STATION AND THE DISCHARGE MANHOLE.
 - TRENCH WIDTHS FOR PIPE SIZES < 400mm MAY BE < 500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.
 - THE HAUNCHES AND SURROUNDS TO BE FORMED USING FORMWORK TO PROVIDE A ROUGH CAST FINISH.
 - EXPANSION JOINTS IN THE CONCRETE SHALL BE PROVIDED AT ALL PIPE JOINTS TO ALLOW FOR PIPE FLEXIBILITY. COMPRESSIBLE FILLER BOARD TO BE IN ACCORDANCE WITH B.S. EN 822-1 AND B.S. EN 822-4 AND TO BE 18mm THICK.
 - POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH B.S. 6079 BEFORE BEING CAST INTO CONCRETE.
 - BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PE OR PVC PIPES.
 - FOR FOLL DRAINS TO BE TAKEN IN CHARGE BY IRISH WATER, PIPE BEDDING SHALL BE STRICTLY IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATER WHICH MAY DIFFER FROM THE DETAILS SHOWN. REFER TO IRISH WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE AND ASSOCIATED IRISH WATER STANDARD DETAILS, ALONG WITH ANY PARTICULAR REQUIREMENTS.

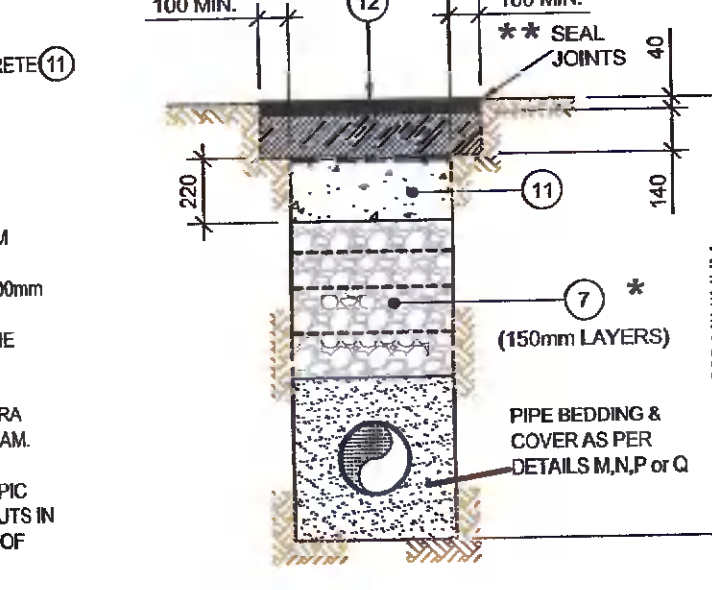
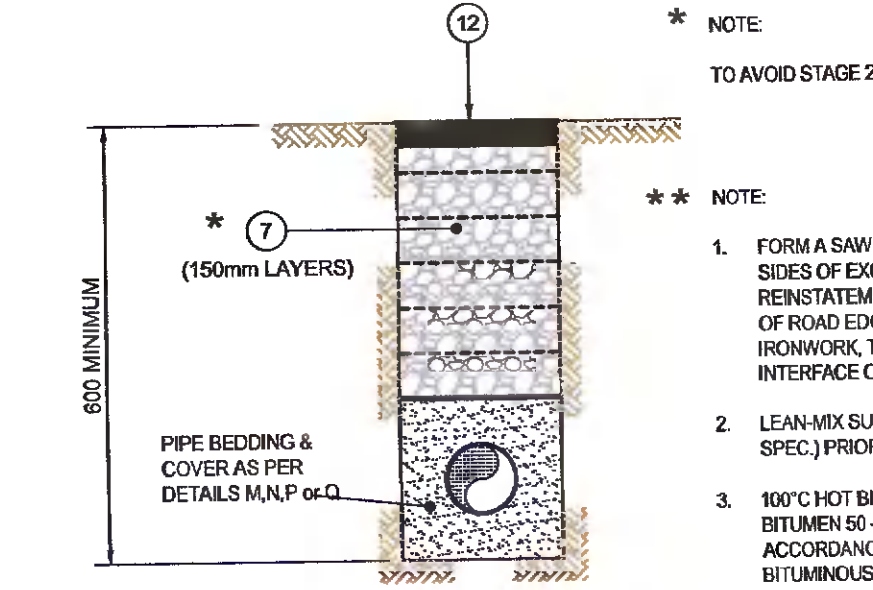
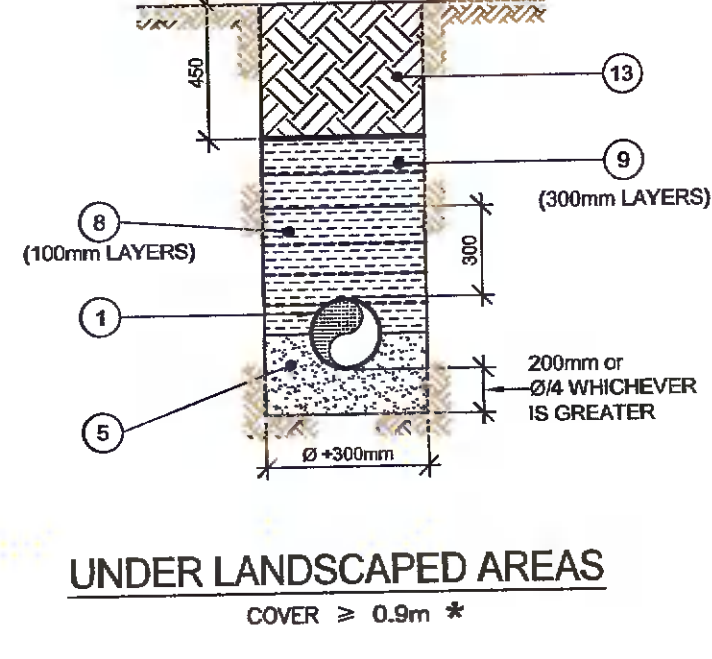
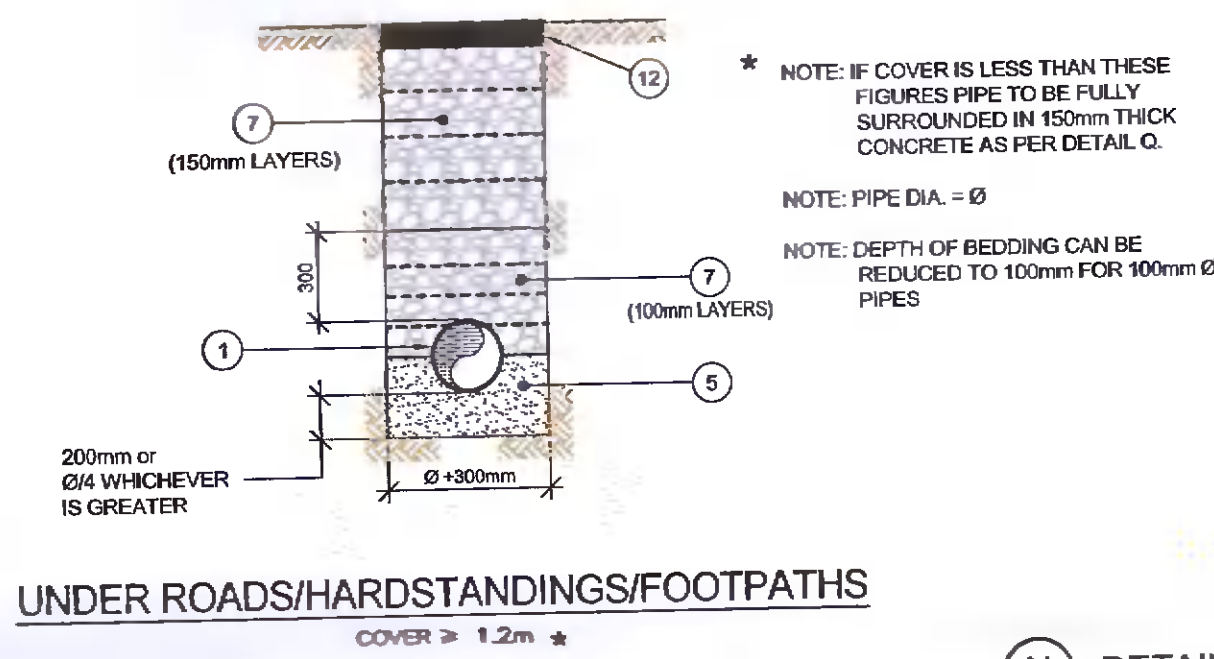


M DETAIL SCALE 1:25

Q DETAIL SCALE 1:25

RIGID PIPES WITH CONCRETE BED & SURROUND

CONCRETE ENCASEMENT



N DETAIL SCALE 1:25

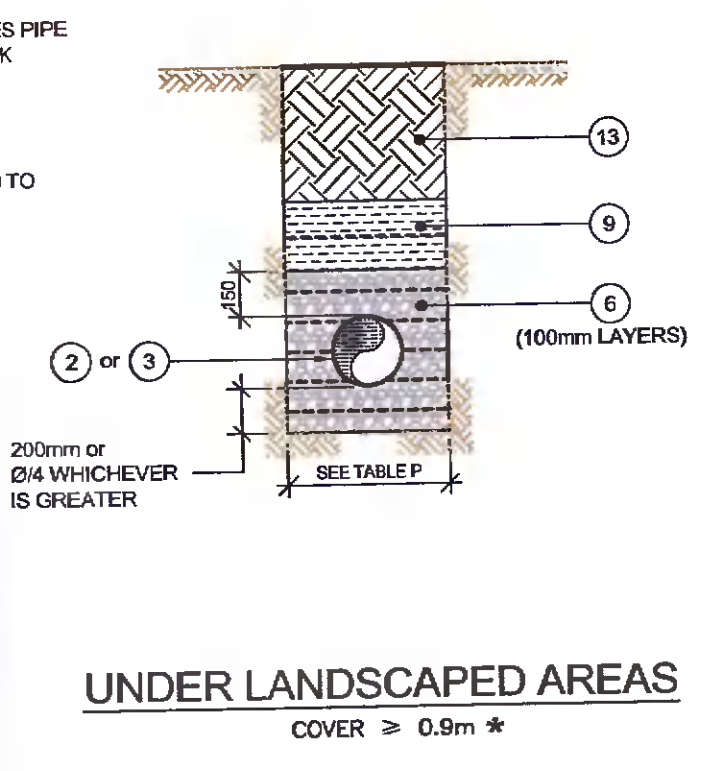
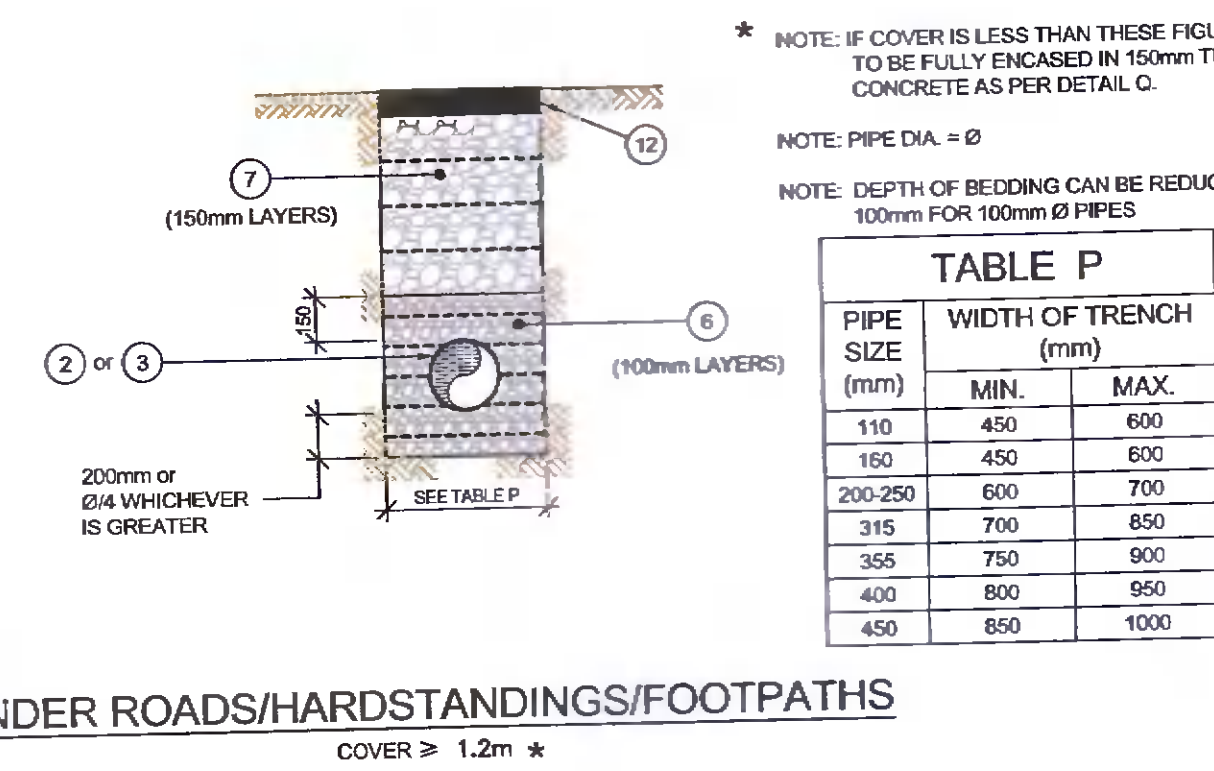
R DETAIL SCALE 1:25

RIGID PIPES WITH GRANULAR BED & SURROUND

NOTE: GRANULAR BED NOT ALLOWED IN DUBLIN CITY COUNCIL AREAS

REINSTATEMENT OF PIPE TRENCH IN EXISTING ROAD

(SUBJECT TO APPROVAL OF LOCAL AUTHORITY)



PIPE SIZE (mm)	WIDTH OF TRENCH (mm)	
	MIN.	MAX.
110	450	600
150	450	600
200-250	600	700
315	700	850
355	750	900
400	800	950
450	850	1000

P DETAIL SCALE 1:25

FLEXIBLE PIPES WITH GRANULAR BED & SURROUND

NOTE: UPVC PIPES NOT ALLOWED IN DUBLIN CITY COUNCIL AREAS

Rev	Date	Amendments	by	chkd
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PROJECT
PROPOSED PAINT STORE AT
GALCO, BALLYMOUNT

CLIENT
GALCO

DRAWING TITLE
PIPE BEDDING DETAILS

drawn by: DB date: 01.04.22 scale: N.T.S. @ A1 chk: IC

GALC - DOW - 00 - XX - DR - CE

Project	Originator	Volume	Level	Type	Role
21183	5012				P-01

DOW Project No. dtg. no. rev.

S4 - FOR STAGE APPROVAL

Suitability Status: Code - Description
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