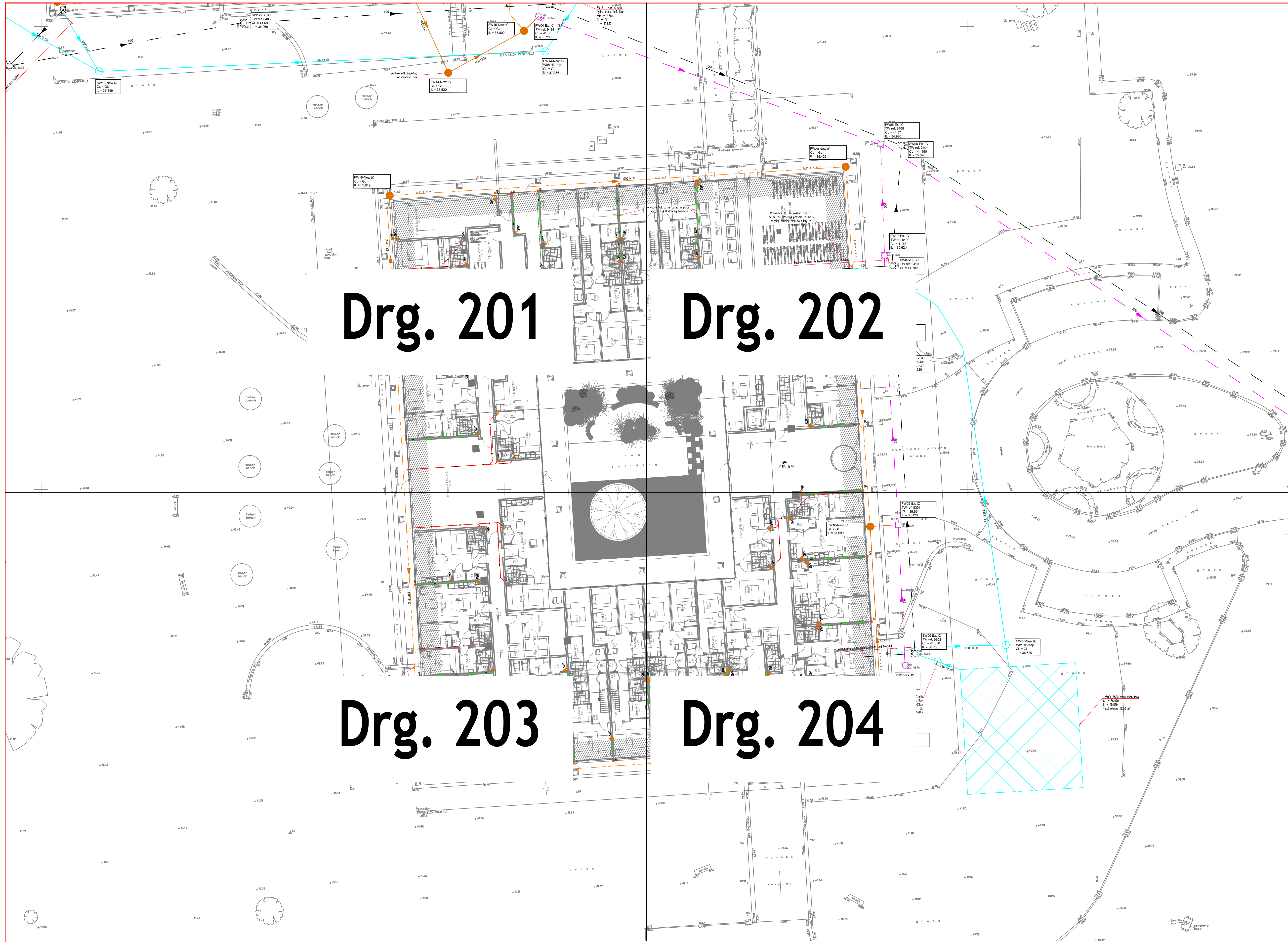




SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

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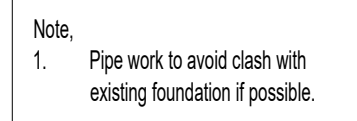
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 - UPVC pipes between 150-300mm diameter are to be structured wall pipes of stiffness class SM8.
 - Flexible joints shall be provided to all pipes within 600mm of inner face of manhole. Projecting pipes shall be surrounded with 150mm grade ST4 concrete cast monolithically with the manhole base.
 - Where pipes are encased in concrete the flexibility of the joints are to be maintained throughout the encasement. This should be provided by means of 20mm thick fibreboard, (or polystyrene), and positioned around the pipe at the centre of every joint at 6m centres max.
 - Pipes shall have granular bed and surround unless otherwise detailed. Granular material shall conform to BS.13242, and should be carefully placed and consolidated by hand in thin layers.
 - All pipework connections at manholes to be soffit to soffit.
 - The length of pipework between manholes to include for any short length pipes as necessary to achieve the configuration of rocker pipes and standard short length pipes at fixed manhole positions.
 - All pipework built into manholes to be either standard short lengths or cut lengths as appropriate.
 - Rocker pipes to be a maximum of 600mm long.
 - Maximum length of pipe within adoptable works to be 3m.
 - All saddle connections to be formed utilising proprietary junction sections.
 - All pipework beneath vehicular circulation areas and within 1m of such areas shall, where cover is less than 1200mm, receive a full concrete bed and surround, 900mm elsewhere.
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 - All down pipe connections to be 100mm nominal bore and all down pipes to have rodding access points approx. 1000mm above ground/finished floor level.
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- MANHOLE COVERS AND GRATINGS**
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 - All manhole covers in footways, pedestrian areas and comparable locations shall comply with the relevant B.S.E.N.124, B125 kitemarked and they shall be of a non-rocking design which does not rely on the use of cushion inserts.
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Rev No	Date	Revision
1	16/02/2026	FIRST ISSUE

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DRAWING ISSUE STATUS ☐ :- DESIGN DEVELOPMENT PRIOR TO TENDER ISSUE ☒ :- TENDER ISSUE ☐ :- DESIGN DEVELOPMENT PRIOR TO CONSTRUCTION ISSUE ☐ :- CONSTRUCTION ISSUE ☐ :- AS BUILT DRAWING		PROJECT : Hayes Park South London		 Civil & Structural Engineers No.5 Goldtops, Newport, NP20 4PG. Tel. 01633 255140 Email: mail@ammro.co.uk	
		TITLE : BELOW GROUND DRAINAGE LAYOUT			
DATE : 10/03/2026 DRAWN : HZ		PROJECT No. : 25.1029		DRG. No. : 200	
SCALE : 1:200 @ A1 CHECKED : MF				Rev. : -	



Architectural floor plan of a building with a central courtyard, showing room layouts, dimensions, and a proposed water supply network. The plan includes rooms like Living/Kitchen, Bed, Dressing, and Bath. A red line indicates the water supply route, with orange dots marking SVP (Service Valve Point) locations. A green line indicates the existing water supply route. A note states: "Pipe to be slotted below the existing slab. Contractor to avoid damaging the existing slab main reinforcement continuity. Method of statement to be submitted for existing for confirmation." The plan also shows a "timber bench" area and a "b u i l d i n g" label. The title "11 Euro Bins" is visible in the top right corner.

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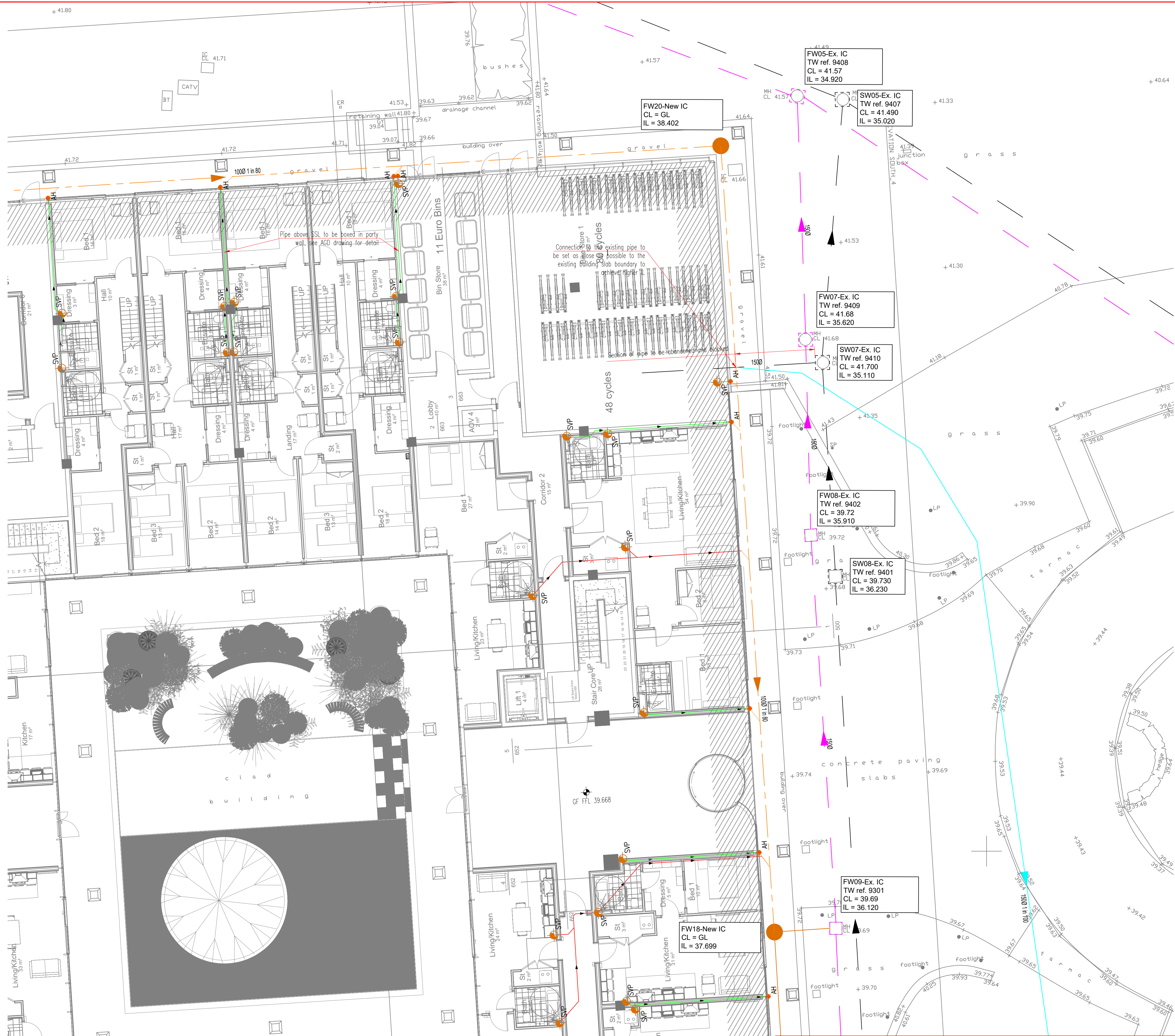
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☒ :- TENDER ISSUE

☐ :- DESIGN DEVELOPMENT PRIOR TO CONSTRUCTION ISSUE

☐ :- CONSTRUCTION ISSUE

☐ :- AS BUILT DRAWING

PROJECT : Hayes Park South London

TITLE : BELOW GROUND DRAINAGE LAYOUT 2/4

DATE : 10/03/2026 **DRAWN :** HZ **PROJECT No. :** 25.1029 **DRG. No. :** 202 **Rev. :** -

SCALE : 1:100 @ A1 **CHECKED :** MF

AMMRO CONSULTING LIMITED

Civil & Structural Engineers

No.5 Goldtops, Newport, NP20 4PG. Tel. 01633 255140 Email: mail@ammro.co.uk

Rev No	Date	Revision
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☒	:- TENDER ISSUE
☐	:- DESIGN DEVELOPMENT PRIOR TO CONSTRUCTION ISSUE
☐	:- CONSTRUCTION ISSUE
☐	:- AS BUILT DRAWING

PROJECT : Hayes Park South London	
TITLE : BELOW GROUND DRAINAGE LAYOUT 3/4	
DATE : 10/03/2026 DRAWN : HZ	PROJECT No. : 25.1029
SCALE : 1:100 @ A1 CHECKED : MF	DRG. No. : 203
	Rev. : -

	Civil & Structural Engineers	
	No.5 Goldtops, Newport, NP20 4PG.	
	Tel. 01633 255140	
	Email: mail@ammro.co.uk	

- LEGEND
- NEW Foul Water Pipe
 - EXISTING Foul Water Pipe
 - NEW Foul Water Manhole
 - EXISTING Foul Water Manhole
 - NEW Surface Water Pipe
 - EXISTING Surface Water Pipe
 - NEW Surface Water Manhole
 - EXISTING Surface Water Manhole
 - NEW Access Hatch
 - EXISTING Access Hatch
 - NEW Floor Level
 - EXISTING Floor Level

Note,
1. Pipe work to avoid clash with existing foundation if possible.



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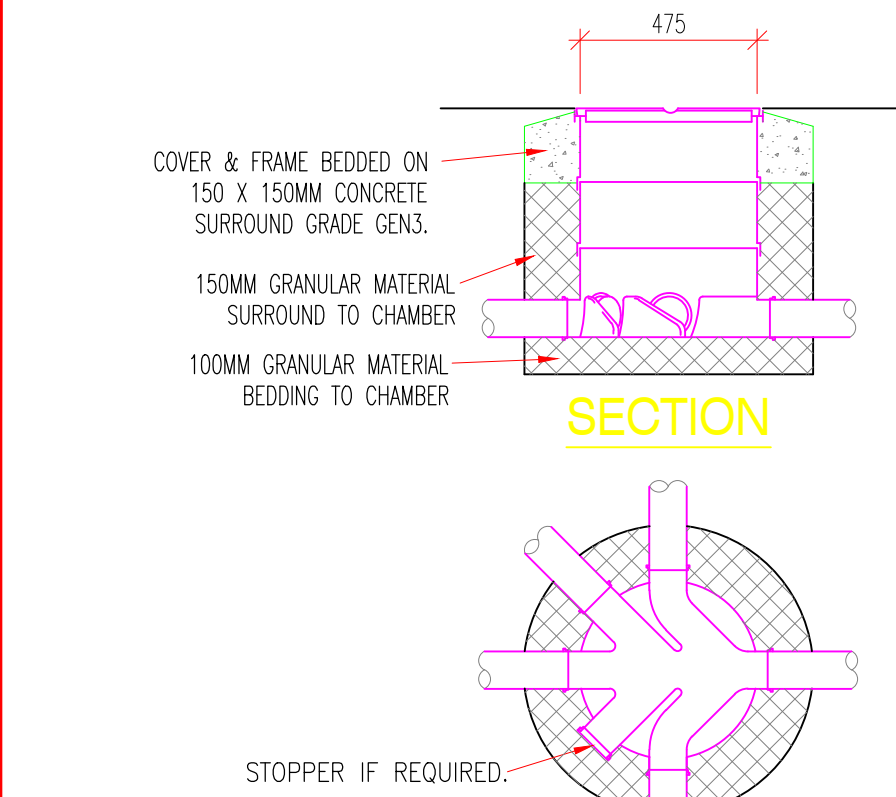
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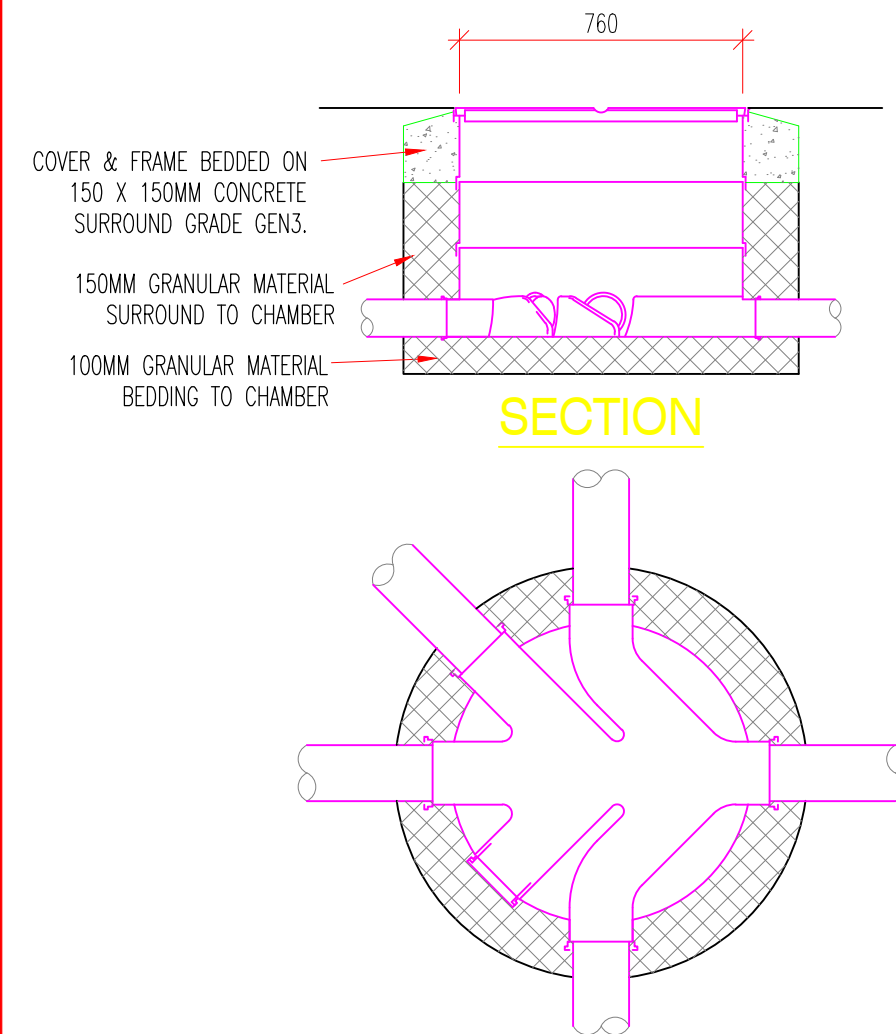
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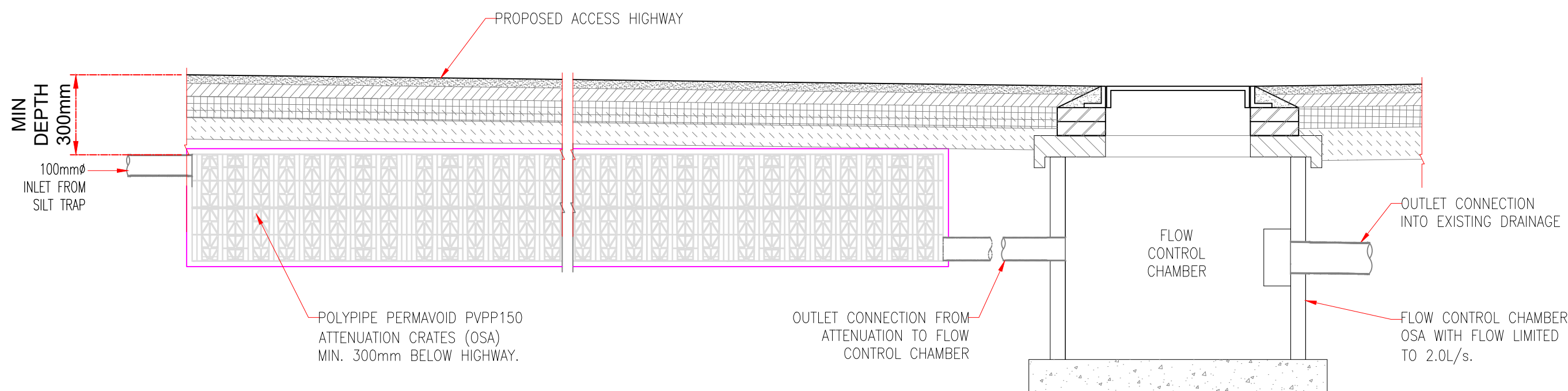
DRAWING ISSUE STATUS		PROJECT : Hayes Park South London			 Civil & Structural Engineers No.5 Goldtops, Newport, NP20 4PG. Tel. 01633 255140 Email: mail@ammro.co.uk
☐ :- DESIGN DEVELOPMENT PRIOR TO TENDER ISSUE	☒ :- TENDER ISSUE	TITLE : BELOW GROUND DRAINAGE LAYOUT 4/4			
☐ :- DESIGN DEVELOPMENT PRIOR TO CONSTRUCTION ISSUE	☐ :- CONSTRUCTION ISSUE	DATE : 10/03/2026	DRAWN : HZ	PROJECT No. : 25.1029	
☐ :- AS BUILT DRAWING		SCALE : 1:100 @ A1	CHECKED : MF	DRG. No. : 204	
		Rev. : -			



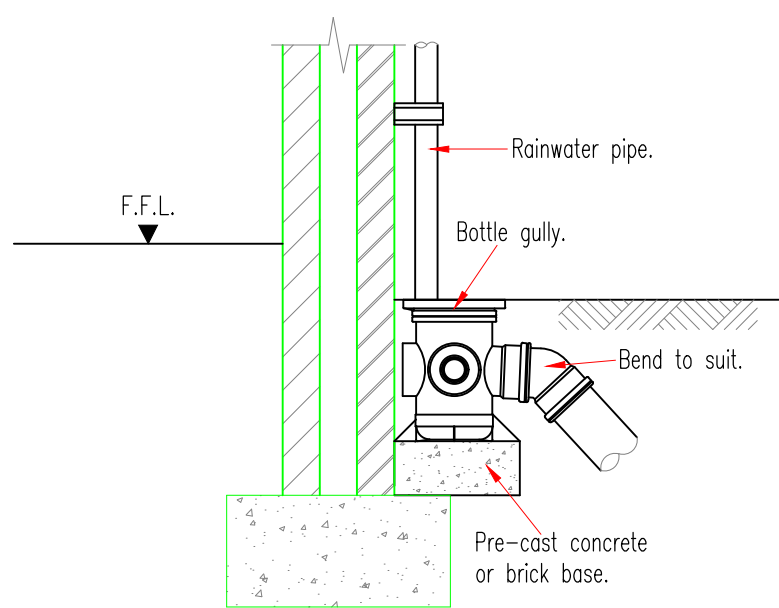
SECTION
PLAN
POLYPROPYLENE CHAMBER
(MAX. INVERT DEPTH 0.95m)
SCALE 1:20



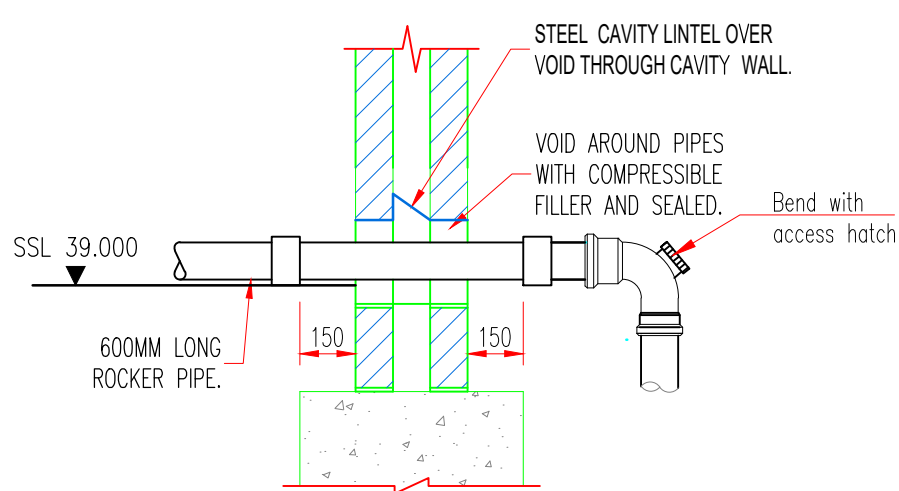
SECTION
PLAN
POLYPROPYLENE CHAMBER
(MAX. INVERT DEPTH 1.2m)
SCALE 1:20



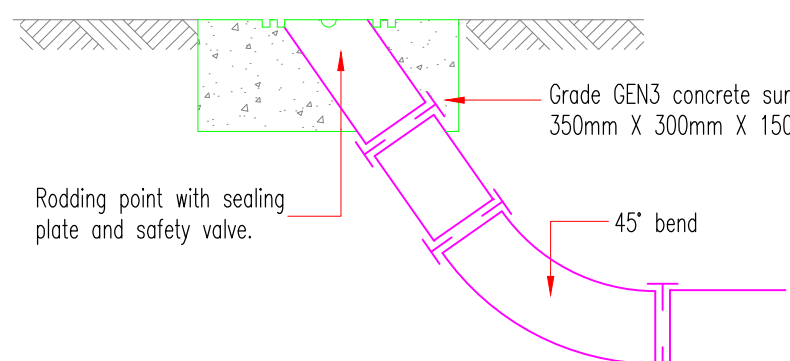
TYPICAL ATTENUATION DETAIL WITH
FLOW CONTROL CHAMBER
SCALE 1:20



EXTERNAL RWP. TO GULLY



SERVICE PIPE THROUGH
CAVITY WALL
SCALE 1:20



RODDING ACCESS POINT
DETAIL

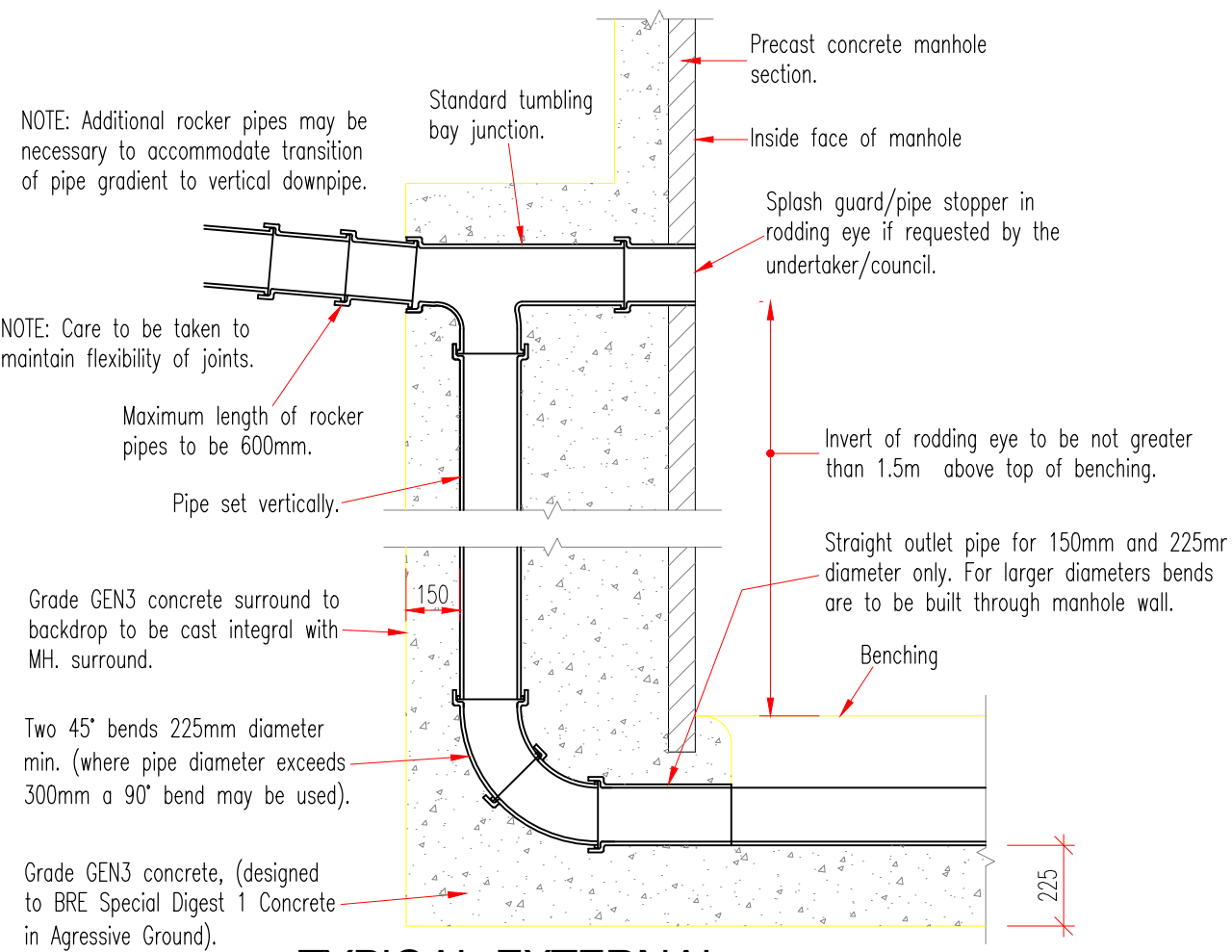
PIPES BUILT INTO MANHOLE SHOULD HAVE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE EXTERNAL FACE OF THE STRUCTURE AND THE LENGTH OF THE NEXT ROCKER PIPE SHOULD BE AS SHOWN.

PIPE DIA (mm)	EFFECTIVE LENGTH (m)
150mm - 600mm	0.60
601mm - 750mm	1.00
> 750mm	1.25

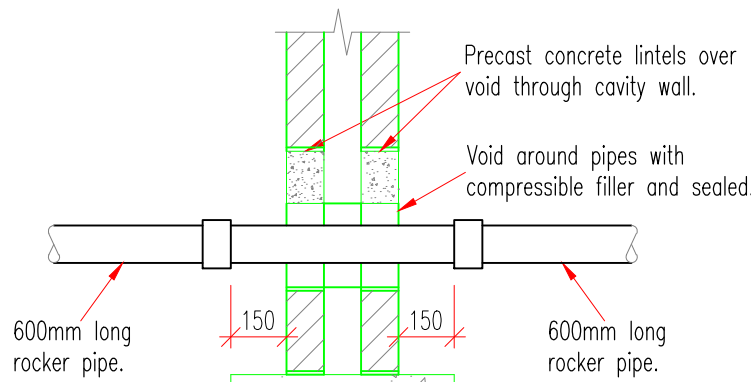
ALL PIPES ENTERING THE BOTTOM OF THE MANHOLE TO HAVE SOFFITS LEVEL.

TABLE B	
INTERNAL DIAMETER (mm)	LARGEST OUTGOING PIPE DIMENSION (mm)
1200	LESS THAN 375
1350	375-450
1500	500-700
1800	750-900

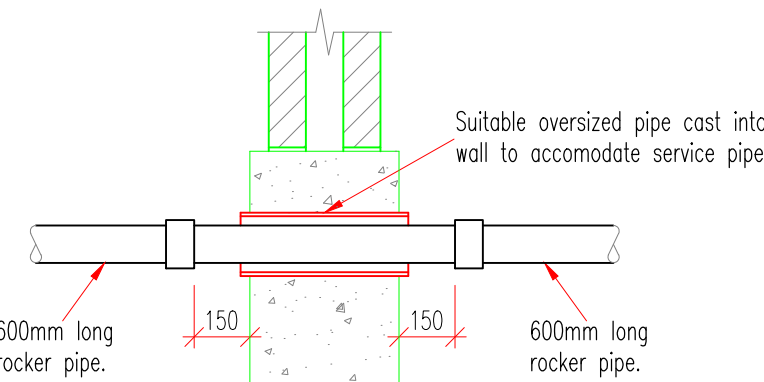
MANHOLE DIMENSIONS FOR ADAPTABLE SEWERS
FOR PIPE DIAMETER OF LESS THAN 375MM AND DEPTH TO SOFFIT IS 1.35M-1.5M A 1050MM DIAMETER MANHOLE CAN BE ADOPTED. THE USE OF RECTANGULAR PC CONCRETE MANHOLES UNITS WITH 150MM GRADE GEN3 CONCRETE SURROUND IS PERMITTED.



TYPICAL EXTERNAL
BACKDROP



SERVICE PIPE THROUGH
CAVITY WALL



SERVICE PIPE THROUGH
CONCRETE WALL

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 - UPVC pipes between 150-300mm diameter are to be structured wall pipes of stiffness class SM8.
 - Flexible joints shall be provided to all pipes within 600mm of inner face of manhole. Projecting pipes shall be surrounded with 150mm grade ST4 concrete cast monolithically with the manhole base.
 - Where pipes are encased in concrete the flexibility of the joints are to be maintained throughout the encasement. This should be provided by means of 20mm thick fibreboard, (or polystyrene), and positioned around the pipe at the centre of every joint at 6m centres max.
 - Pipes shall have granular bed and surround unless otherwise detailed. Granular material shall conform to BS 13242, and should be carefully placed and consolidated by hand in thin layers.
 - All pipework connections at manholes to be soffit to soffit.
 - The length of pipework between manholes to include for any short length pipes as necessary to achieve the configuration of rocker pipes and standard short length pipes at fixed manhole positions.
 - All pipework built into manholes to be either standard short lengths or cut lengths as appropriate.
 - Rocker pipes to be a maximum of 600mm long.
 - Maximum length of pipe within adoptable works to be 3m.
 - All saddle connections to be formed utilising proprietary junction sections.
 - All pipework beneath vehicular circulation areas and within 1m of such areas shall, where cover is less than 1200mm, receive a full concrete bed and surround, 900mm elsewhere.
 - All pipework beneath building footprint to receive full concrete bed and surround.
 - All down pipe connections to be 100mm nominal bore and all down pipes to have rodding access points approx. 1000mm above ground/finished floor level.
 - All road gully connections to be 150mm nominal bore.

- MANHOLE COVERS AND GRATINGS
- Covers shall be set at, or not more than 5mm below the surrounding level in paved areas. Inverts shall be within 5mm of given level, and may not cause the as-laid gradient of the pipes to vary from that given on the drawing by more than 10%.
 - All manhole covers in carriageway area shall comply with the relevant B.S EN 124, D400 kitemarked and they shall be of a non-rocking design which does not rely on the use of cushion inserts.
 - All manhole covers in footways, pedestrian areas and comparable locations shall comply with the relevant B.S EN 124, B125 kitemarked and they shall be of a non-rocking design which does not rely on the use of cushion inserts.
 - All manhole covers shall be the non-ventilating type and shall have closed keyways.

Rev No	Date	Revision
-	16/02/2026	FIRST ISSUE

This drawing is copyright.
All dimensions to be checked prior to construction or manufacture. Any discrepancy to be reported to the Engineers immediately.
Do not scale this drawing, work to figured dimensions only.

DRAWING ISSUE STATUS		PROJECT : Hayes Park South London			 AMMRO CONSULTING LIMITED Civil & Structural Engineers No.5 Goldtops, Newport, NP20 4PG. Tel. 01633 255140 Email: mail@ammro.co.uk		
☐ :- DESIGN DEVELOPMENT PRIOR TO TENDER ISSUE	☒ :- TENDER ISSUE	TITLE : BELOW GROUND DRAINAGE DETAILS					
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