

A01. These notes are intended to augment drawings and specifications. Where conflict of requirements exists the order of precedence shall be as shown in the specification. Otherwise the strictest provision shall govern.

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AVZ. This drawing to be read in conjunction with all other relevant engineers and architects drawings.

A03. Drawings not to be scaled. All dimensions to be checked on site by the contractor. Any discrepancies to be notified to the Engineer and further instructions obtained before work is commenced.

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Manhole construction - refer to CFA technical bulletin Sept 2001 outlining changes to relevant BSA product standards BSS911-2001/1994. All precast concrete products are to be kiln marketed. Manhole covers to have a clear opening of 600 x 600mm and shall be class D400 to BS EN124 with 150mm deep frames. Filled ground must be filled and consolidated under the supervision of ST before any sewer works are carried out. All adoptable sewers to be SSI kilnmarked (certified to M54-35-01)

Plastic channels are not acceptable

All custom built ironwork to be hot dipped galvanised prior to final fitting.

specific operational need to lay longer lengths.

United Utilities are not obliged to accept filter drain / land drainage runoff into the public sewer network or adoptable drainage network (directly or indirectly). An alternative method of disposal of land drainage runoff will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff.

Cover slabs must carry the BSI Kitemark or will be rejected by United Utilities Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the United Utilities specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issue Autumn 2004 for Kitemarked cover slab opening sizes.

Sulphate resistant cement (C20-D/C2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

Sewers to be laid in class S bedding (150mm granular bed and surround. Where depth of cover is less than 1.2m in highways and verges (or less than 900mm in non vehicle access areas) then a concrete slab should be provided above the granular bed and surround.

The chamber size of manholes with more than one connection in them may need to be increased one increment to accommodate the connection and bends. See individual manhole detail.

Contractors should be aware of significantly large diameter pipes and manhole chamber rings proposed in this design and precautions should be taken in movement and placing of such items. Also to be considered is the depth of excavation of the drainage works especially the large diameter components up to 8m deep excavations.


The adoptable sewers shall be a min 1.0m and manholes 0.5m from the curb and service margins.

for Adoption restrictions on tree planting / types.

specification 4-08-02 (table A2)

ALL MANHOLES AND DRAINAGE COMPONENTS TO COMPLY WITH CODE FOR ADOPTION STANDARD DETAILS. ANY DEVIATION BETWEEN THESE AND CURRENT DESIGN TO BE CLARIFIED PRIOR TO CONSTRUCTION.

MANHOLE CONSTRUCTION. IN LIEU OF THE STANDARD DETAILS UNITED UTILITY WILL ACCEPT FP MACCANN EASI-BASE PRECAST MANHOLE BASES AND FP MACCANN WIDE WALLED MANHOLE RINGS. THESE DRAWING BY UTILIZING THE ABOVE PROJECTS MUST BE APPROVED FOR INDIVIDUAL MANHOLES BY UNITED UTILITIES PRIOR TO CONSTRUCTION.

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<h3>Mill Hill, Cleator Moor</h3>		
<h3>Plots 15-64 & 80-82</h3>		
<h3>S30 Manhole detail</h3>		
<h3>DRAWN BY tab</h3>		
<h3>SCALE H1:500 V1:100</h3>		
<h3>DATE Apr17</h3>		
<h3>RECD B</h3>		
<h3>DRAWING No. 1083-12-10</h3>		