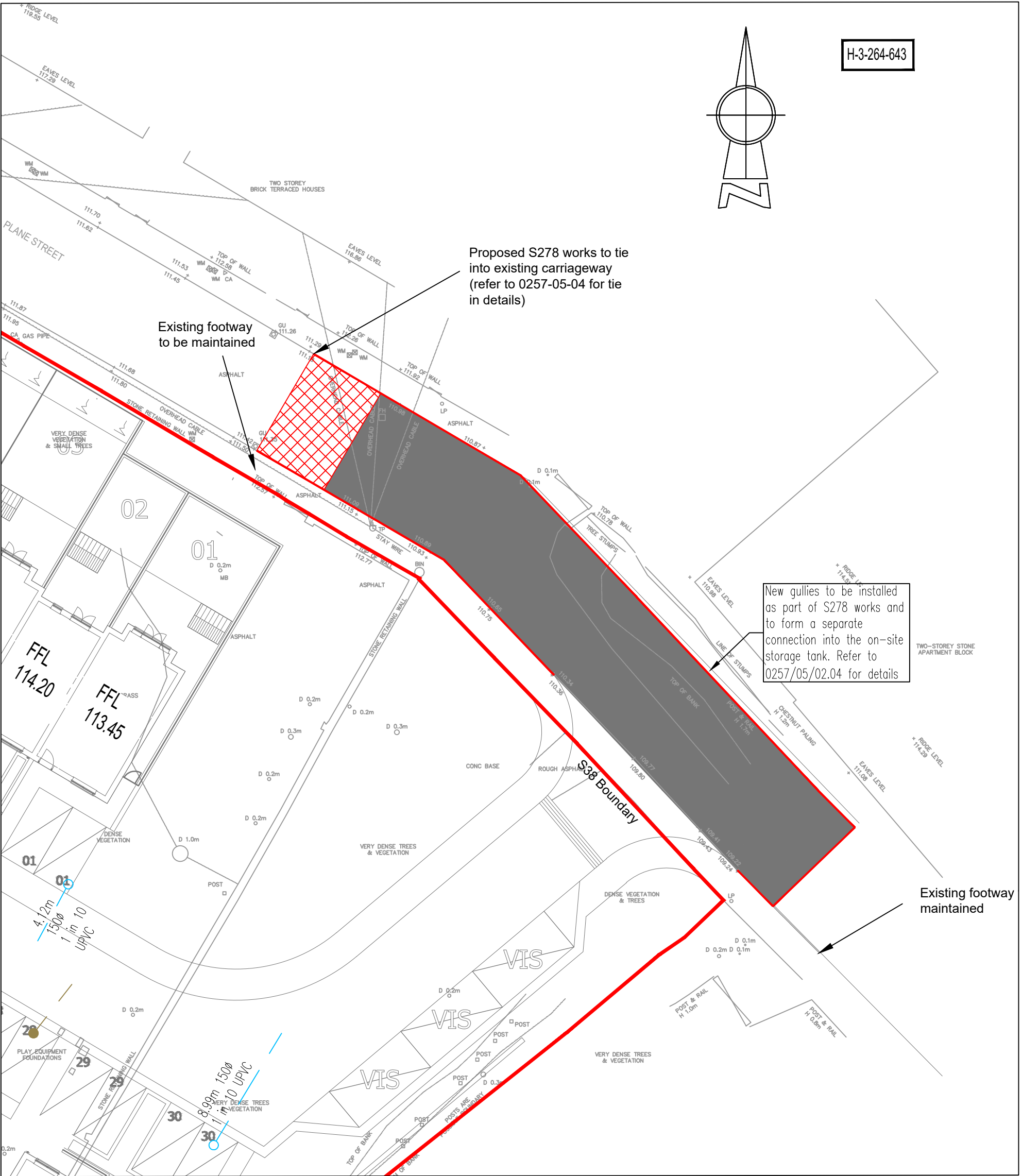
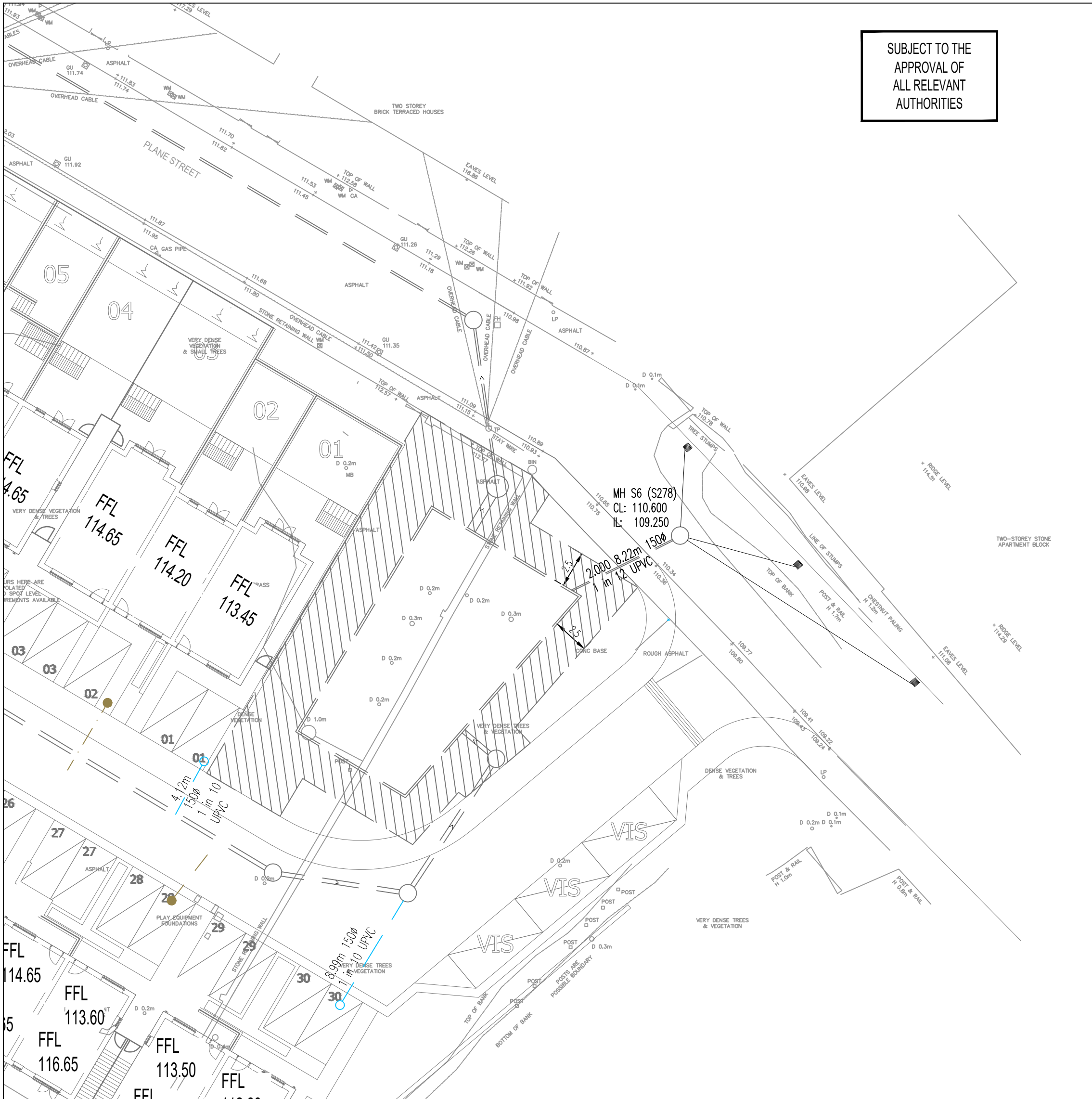




- Yorkshire Water notes:
- All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
 - Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways
 - Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out
 - Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of the land drainage run-off 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 run-off
 - Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water 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 Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued Autumn 2004 for Kitemarked cover slab opening sizes
 - Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
 - The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 - Sewers must have 5 metres clearance from trees and hedges.
 - Sewers to be laid in Class "S" Bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provide above granular bed and surround.
 - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
 - The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
 - Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 – 1.5m.
 - Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-35-01 and BS/EN13476) Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the bedding.
 - The minimum crushing strength for clay pipes should be as follows : 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be - (Class 120 to EN 1916/BS5911-1 2002). Plastic pipes should conform to WIS 4-35-01 and BS EN13476. Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

N O T E S

ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

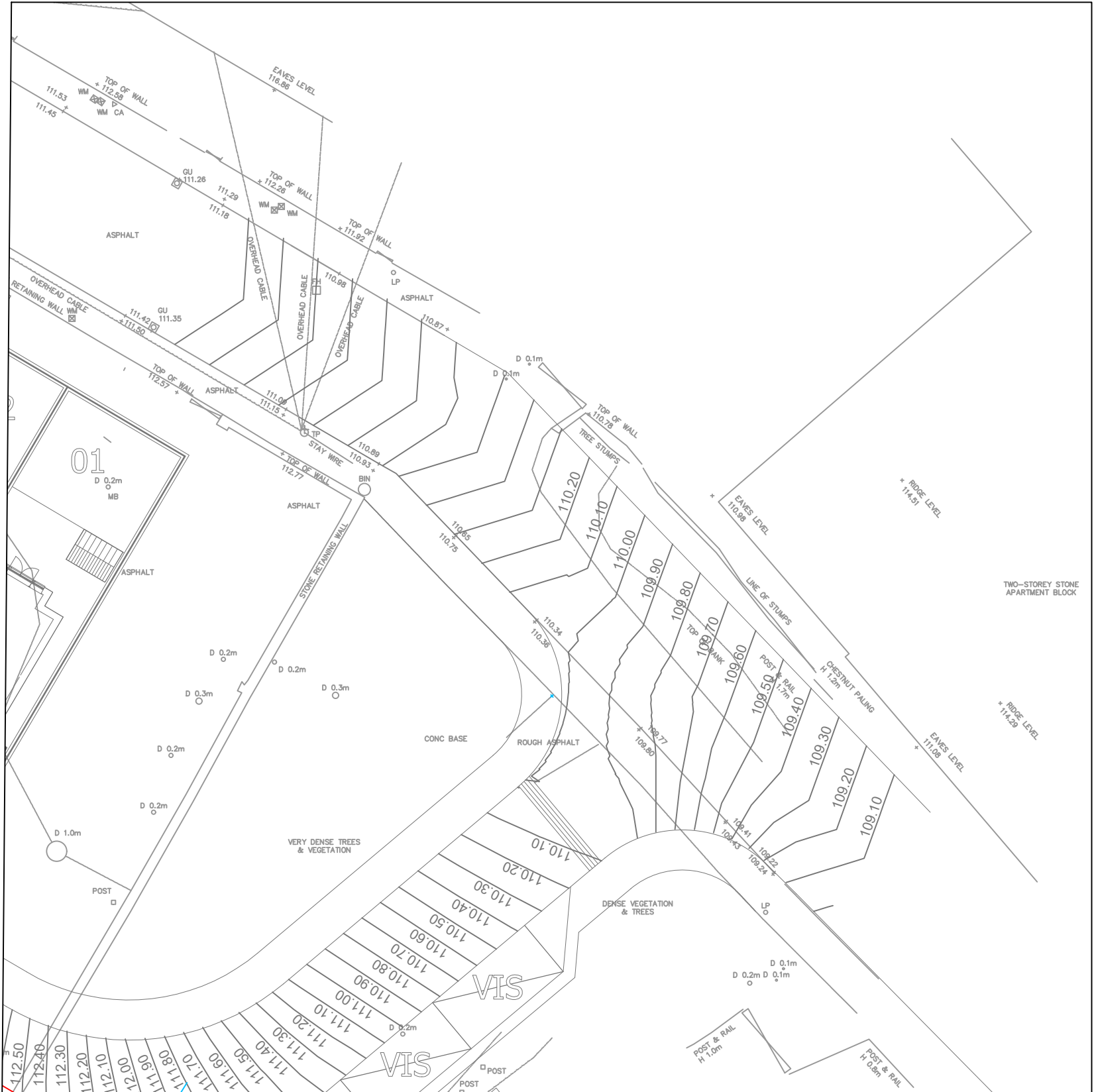
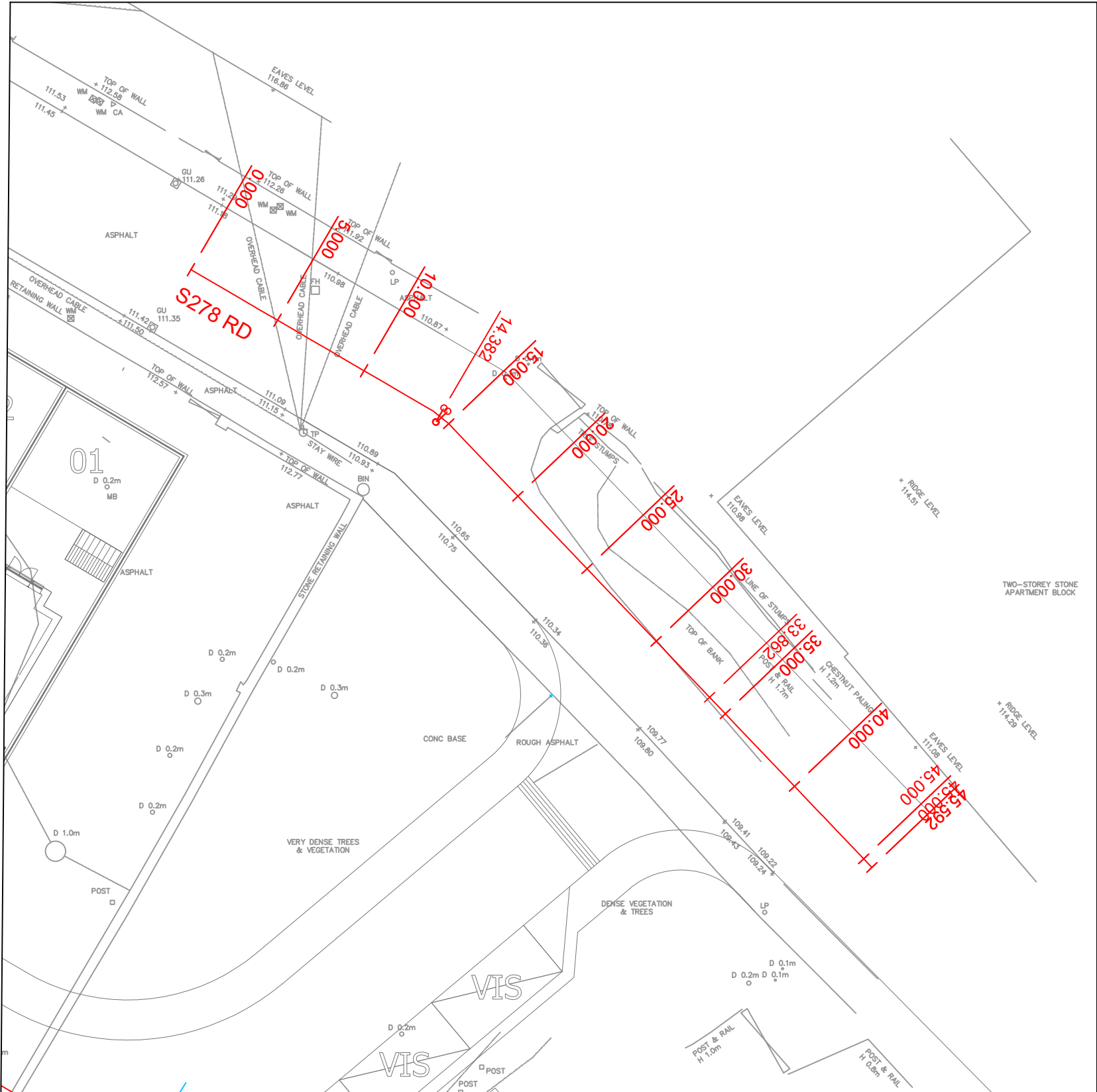
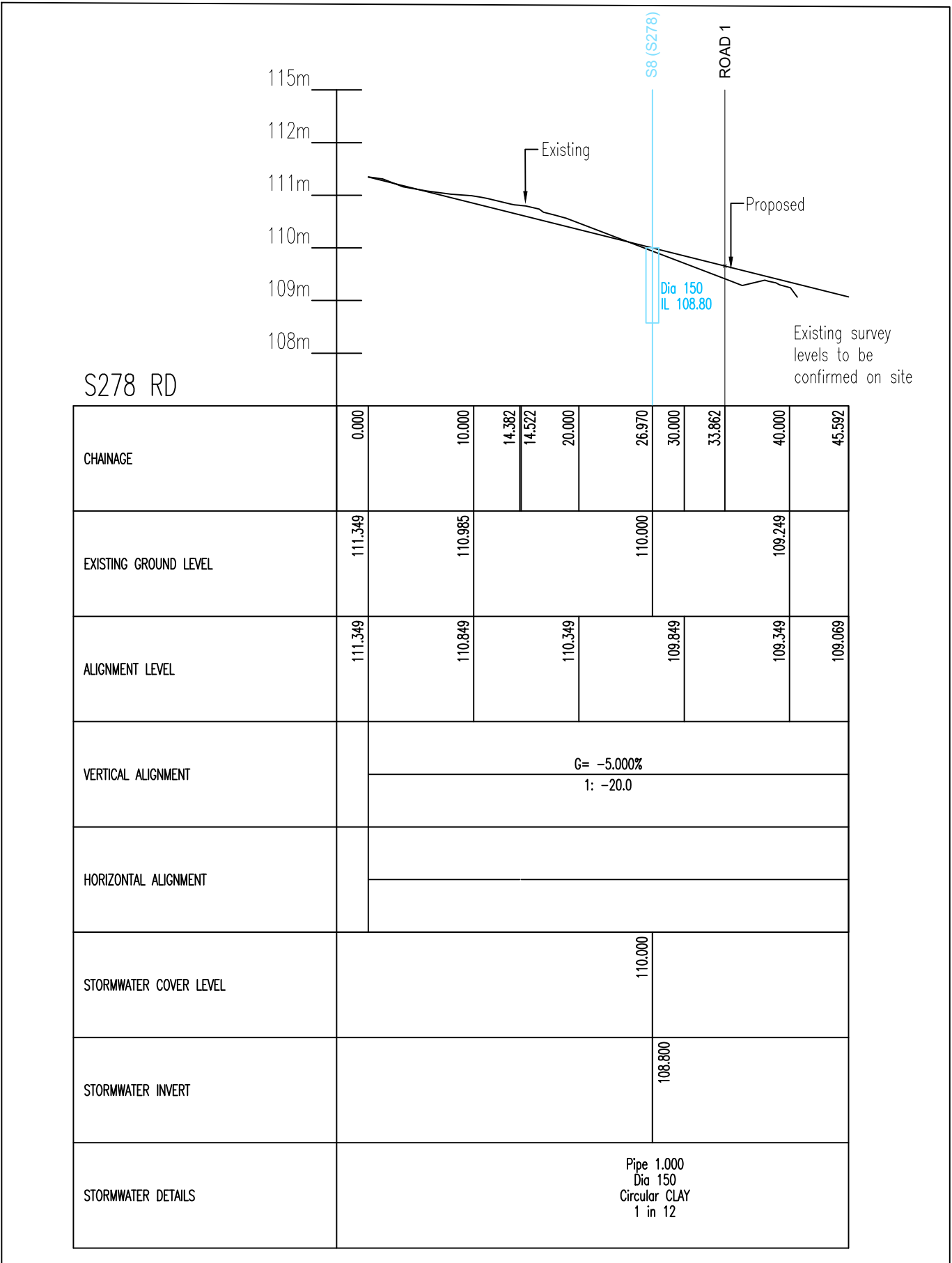
K E Y

- Site Boundary
- Existing Combined sewer
- Proposed S278 Storm water manhole
- Proposed S278 Storm water sewer
- 100mm check Half Batten (Type 2 road)
- Proposed Gully

C O U L O U R K E Y

- Flexible surfaced carriageways
- Existing carriageway to be resurfaced

- Refer to typical section Drawing No 1375/02/04 for typical highway details.
- Dropped kerbs and tactile pavings are required at the junctions to facilitate the movement of wheelchairs etc. The dropped kerbs to be laid with a 10mm upstand.
- Adoptable sewers are not to be constructed under or within 1.0 metres of any footpath/ kerb line / service strip.
- Off-site drainage already built must have invert levels checked prior to connection of the site drainage.
- Gully positions shown are subject to adjustment on site to ensure full drainage and the absence of ponding.
- No walls are to be constructed 1m of the highway drains located in gardens or verge.
- No water should be allowed to discharge from any private drives onto the adoptable highway.
- All highway works are to be the subject of a Section 38 Agreement of the highways Act 1980.
- All public sewers to comply with the requirements of the Water Authorities publication "Sewers for Adoption 6th Edition" together with any additional specific requirements of the drainage authority.
- All public sewers are to be the subject of a Section 104 Agreement of the Water Industry Act 1991.
- Any coated base material in carriageway left exposed for more than seven days to be sealed using bituminous sealing grt.
- Highway boundary to be indicated by back edgings laid flush or change of material on Private drives.
- All vertical faces of joints involving flexible materials shall be treated with "Oxy-bit" or other approved joint sealant. This includes ironwork, and precast products. Overbanding will not be accepted with Kirkless Council.
- Do not scale from this drawing.



C	RJ	07.04.22	Amended to new site layout	MI	MI
B	MB	04.11.21	Amended to suit section 104 comments	MI	MI
A	RJ	28.09.21	Drawing number revised	MI	MI
/	RJ	12.04.21	Issued for approval	MI	MI
Rev	By	Date	Revision	Chk	Apvd.

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ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 3773833, whose registered office is at 5/6 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE	SECTION 278 LAYOUT				
PROJECT	PLANE STREET HUDDERSFIELD				
CLIENT	UNITY HOUSING ASSOCIATION				
DRAWING STATUS	FOR APPROVAL				
Scale	1:250 @ A1	Date	APR 21	Drawn	RJ
				Chk.	MI
Drg. No.	257/05/02.04				Rev C