

General Drainage Installation Notes

1. Surcharges to BS 5911 must have a clear opening of 600mm and shall be constructed to BS 5911/1247 with a minimum clearance of 150mm in highway.
2. Filled ground must be filled and consolidated before any sewer works are carried out.
3. All concrete pipes to BS EN 1916 Class 120.
4. Cover slabs must carry the BS1 Kitemark, 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 600x675mm.
5. The sewers should be a minimum of 1m and manholes 0.2m from kerb faces and service margins.
6. Sewers must have 5 metres clearance from trees and hedgcs. (Also refer to Figure 2.3 on page 33 in 'Sewers for Adoption' 6th Edition for restrictions on tree planting adjacent to Sewers).
7. 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 more vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
8. All sewers to be BS1 Kitemark (certified to MS 4-35-01).
9. Sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer.
10. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2).
11. Plastic channel sections in manholes are not acceptable it is preferred that clay ware channels are used in manholes. It has been found that plastic channels are difficult to set in concrete because they float onto a satisfactory finish cannot be obtained on the bedding.
12. The clear size of manholes will more than one connection in them must be based on increment to accommodate the connections and levels.
13. Surface water and foul rising mains to be provided with marker tape above the rising mains.
14. Demarcation chambers to be a min. 450mm chamber for 100mm foul & 150mm surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
15. Maximum depth of demarcation chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.
16. Sulphate resistant cement (S20-U2) and precast concrete products must be used or a laboratory report provided that such precautions are not necessary.

For Hydro-Break Specification please refer to the latest revision of ARP Drawing 1034/01/02

Rev	By	Date	Revision	Chk
A	WJO	13/09/11	Issued to suit layout changes &	ARP
B	WJO	17/09/10	Issued for information	Chk



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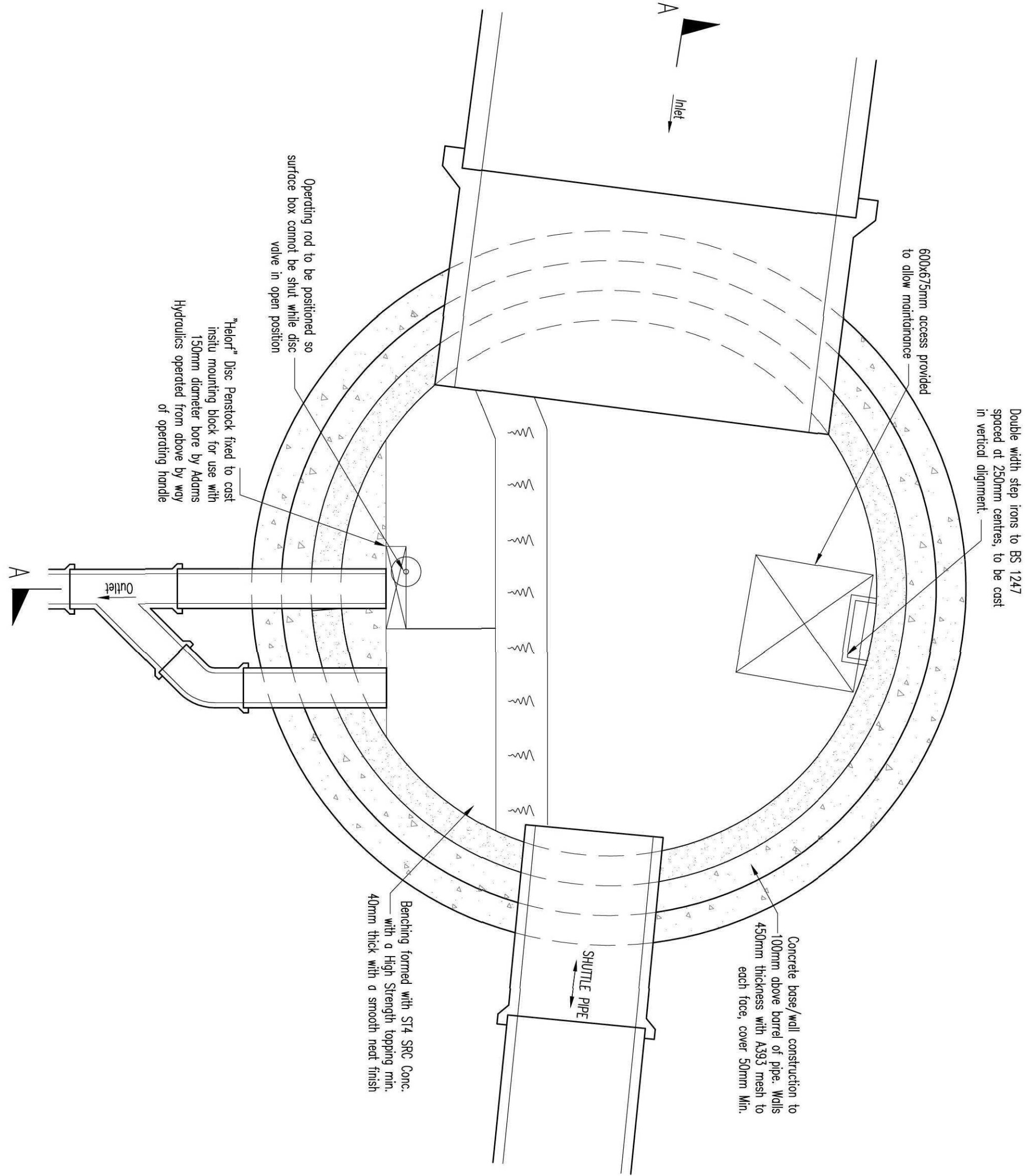
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Flow Control Manhole S16 Construction Layout

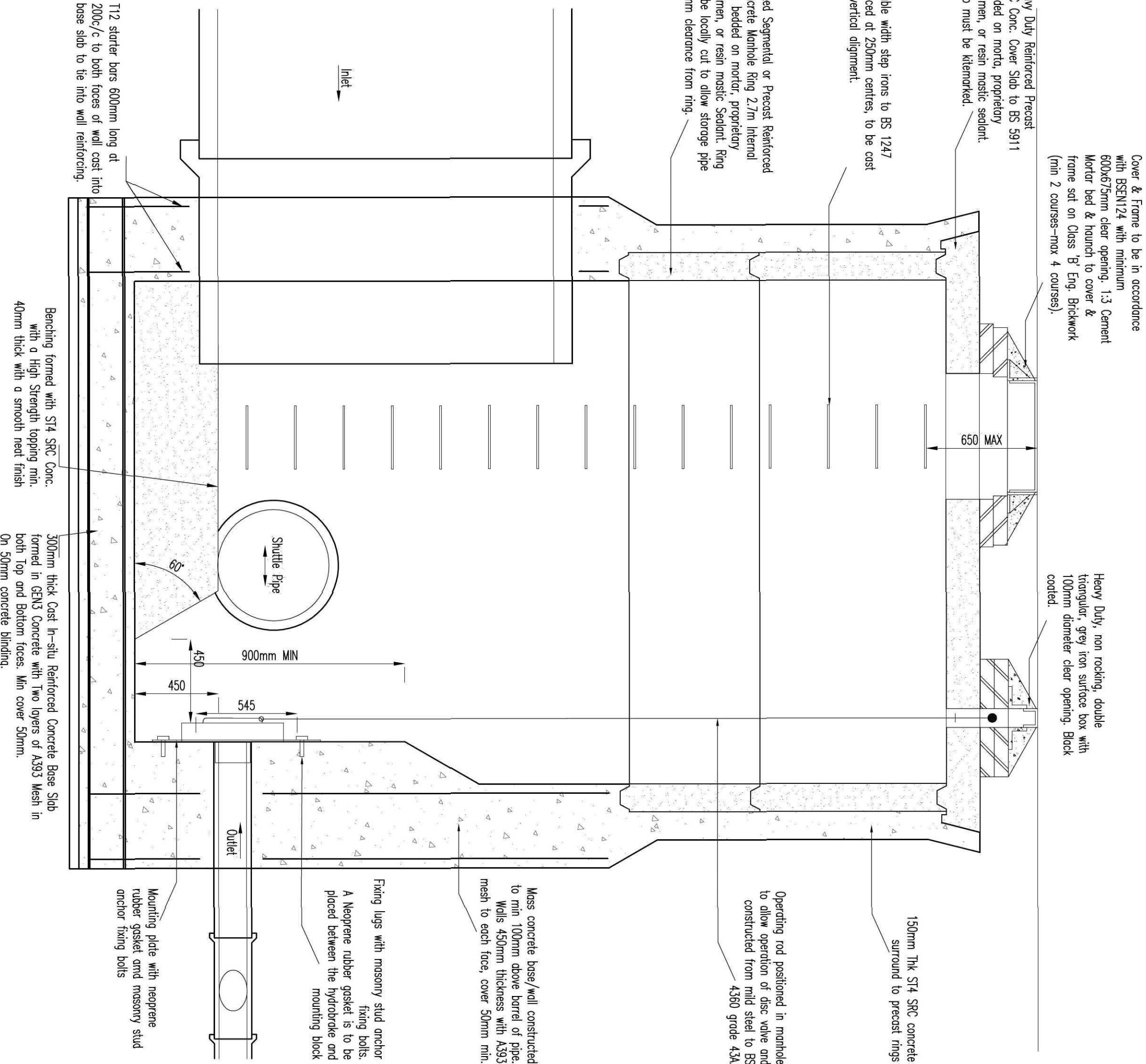
Clay Lake Spalding

Ashley King Developments

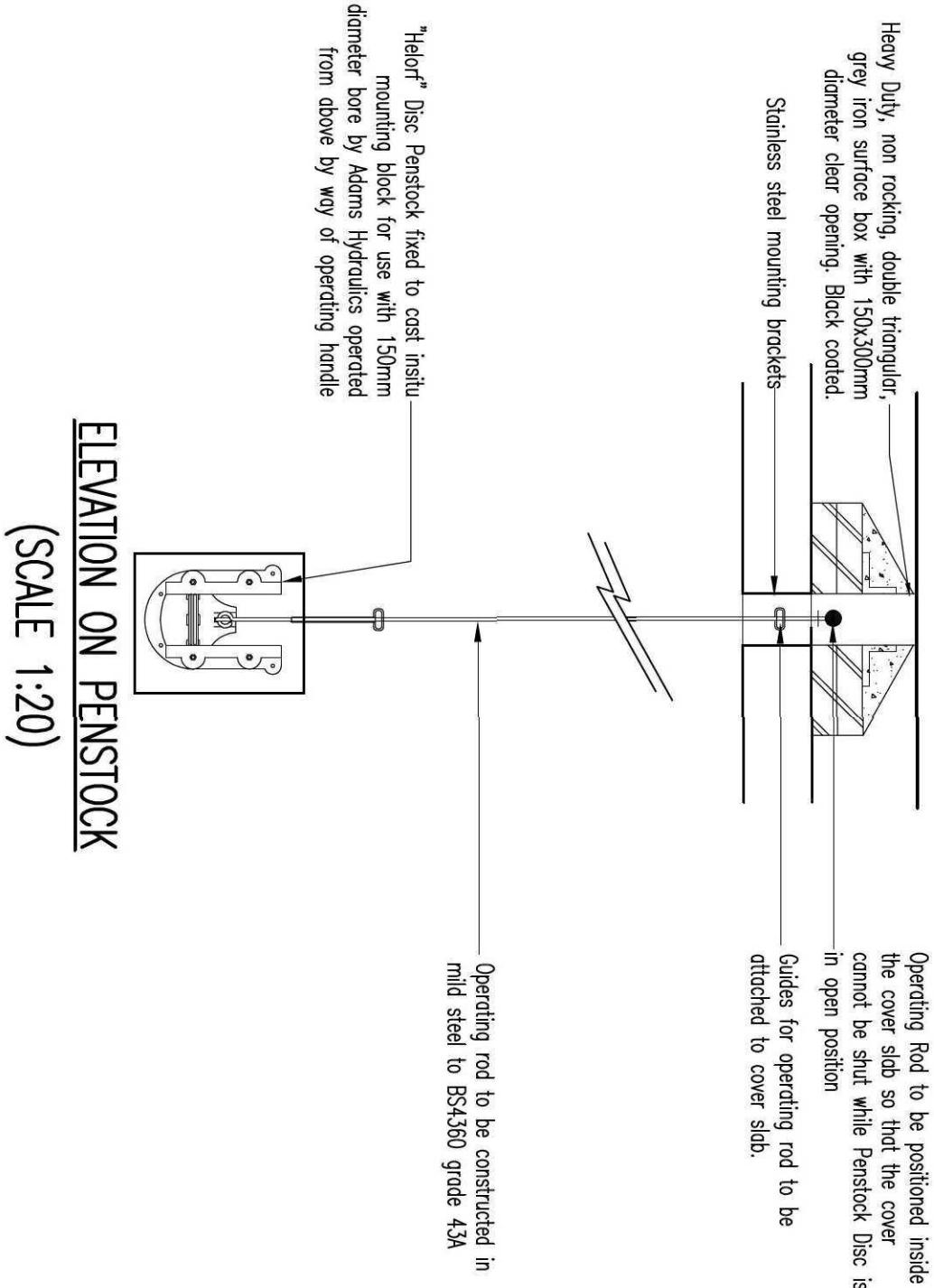
Scale	Date	Drawn
1:20 @ A1	JUN'10	MTD
Rev	No	Rev
	1034/01/08	A



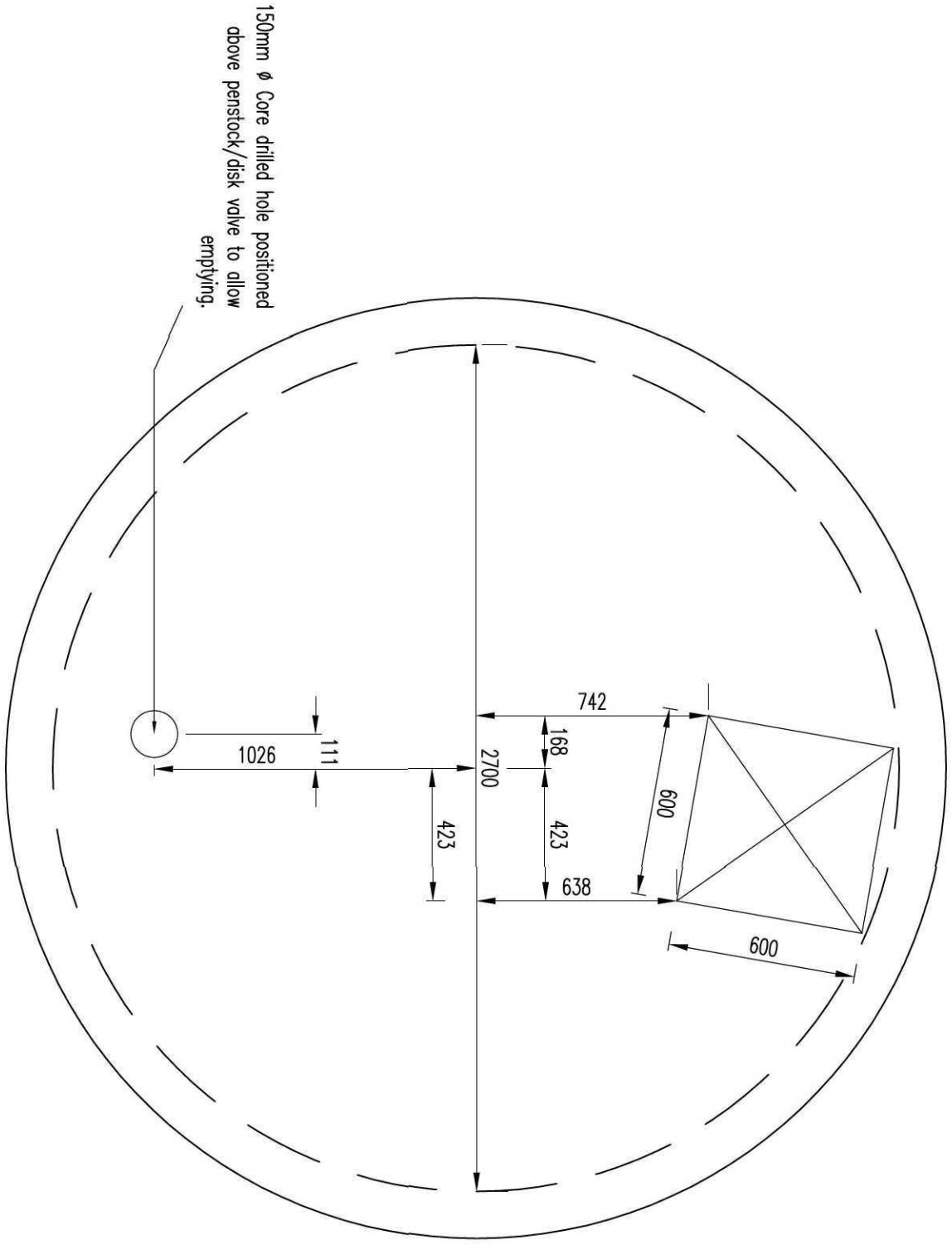
PLAN OF MANHOLE S16 (SCALE 1:20)



SECTION A-A THROUGH MANHOLE S16 (SCALE 1:20)



ELEVATION ON PENSTOCK (SCALE 1:20)



COVER SLAB ARRANGEMENT (SCALE 1:20)