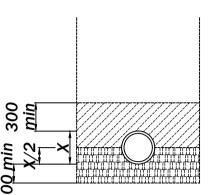
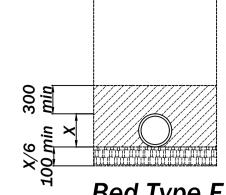


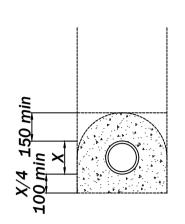
<sup>™</sup> Bed Type N Bedding Factor 1.1



Bed Type B
Bedding Factor 1.9



Hamiltonian Bed Type F
Bedding Factor 1.5



Bed Type Z

Each unit is supplied with pedestrian duty manhole

Vent pipe connections are supplied, but vent runs and

covers and frames to suit.

stack are by others.

1. Movements joints shall shall be formed

material, vegetable matter.

and 0.15 for Bed Type F

Joints in Bed Type Z

Concrete bed nad surround

in Bed Type Z at each socket or sleeve joint

lumps of clay over 100mm, timber, frozen

Selected Fill: free from stones larger than 40mm

Granular Material: should conform to BS EN 1619

Annex B Table B15 and should b signle size material

14mm for 150mm pipes, 20mm for pipes upto 600mm

Compaction fraction maximum 0.3 for Bed Type N or B

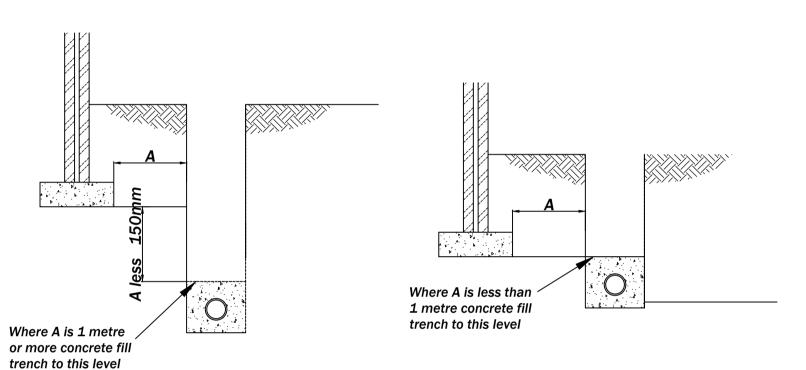
from 5mm up to a max of 10mm for 100mm pipes

and 40mm for pipes greater than 600mm diameter.

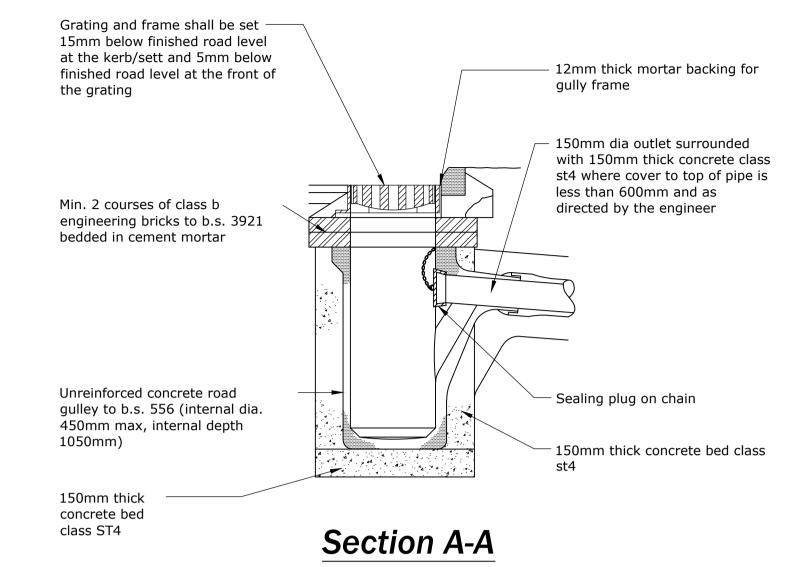
Movement Joint of

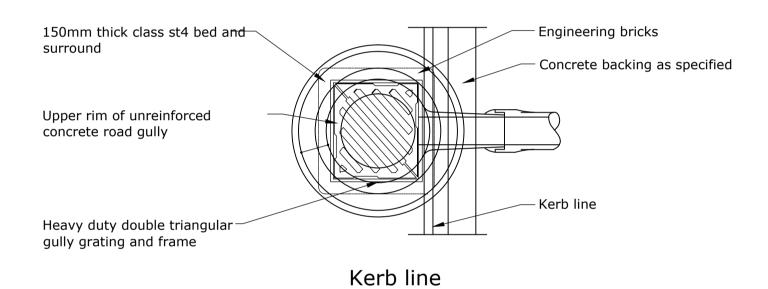
Thick Compressible

Bedding Types for Rigid Pipes.

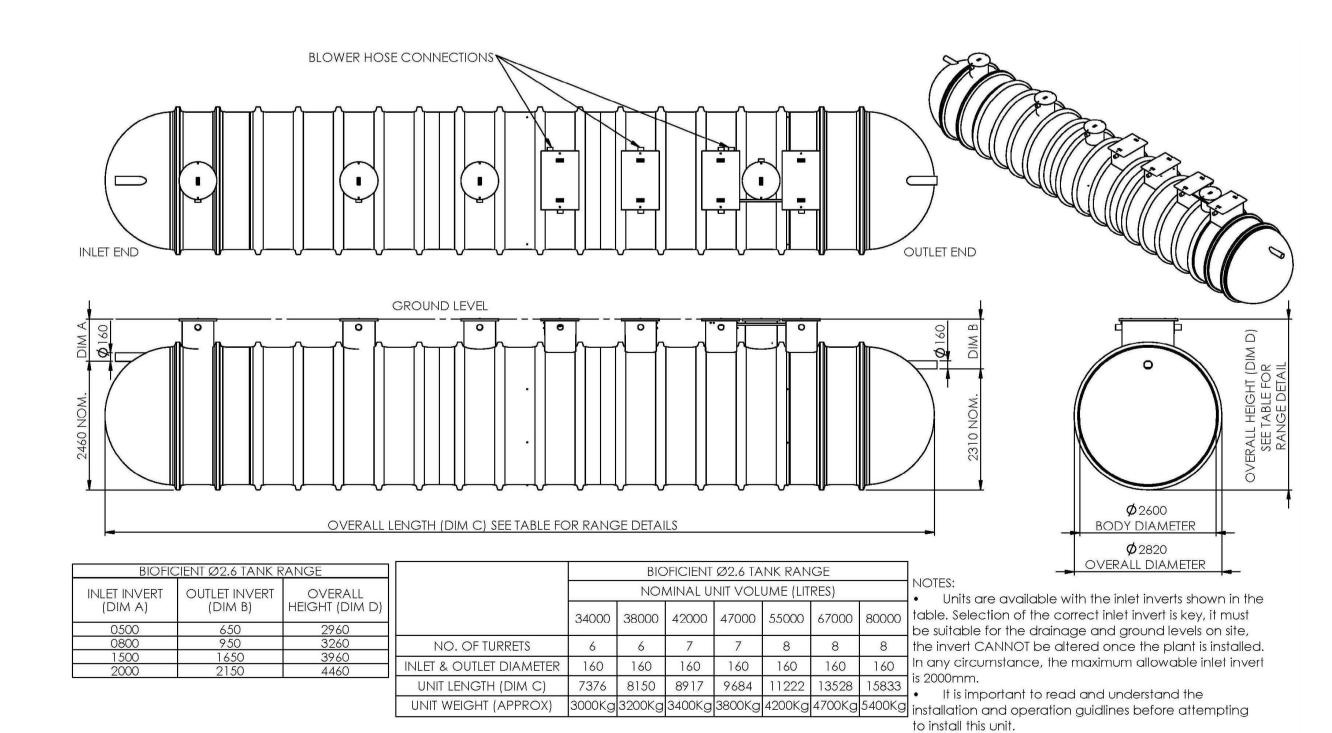


<u>Pipe runs</u> near building

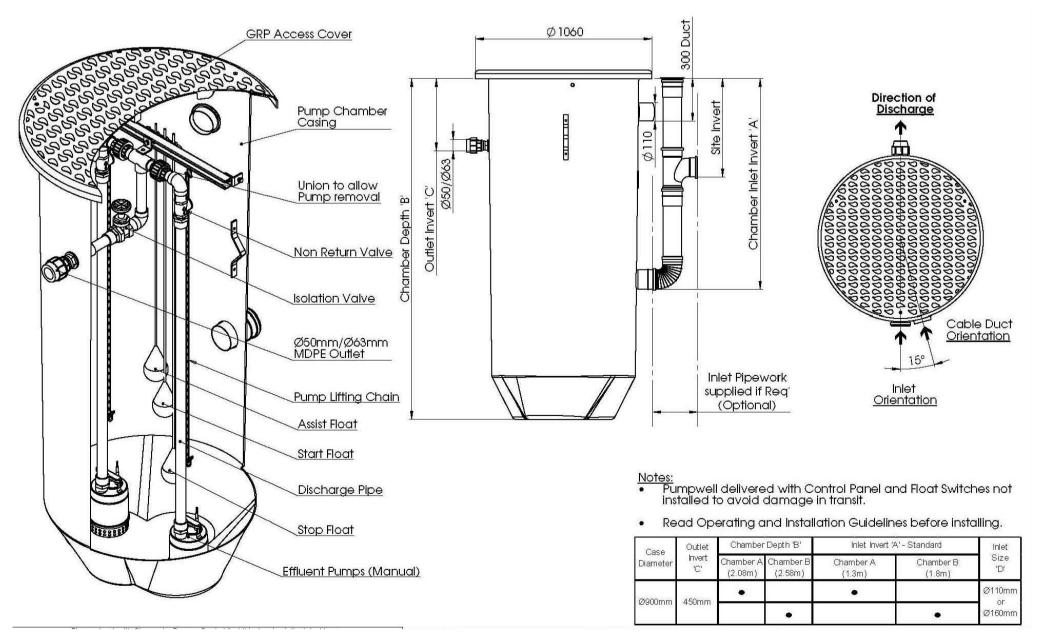




## **Gully Detail**



Kingspan Bioficient
Treatment Plant



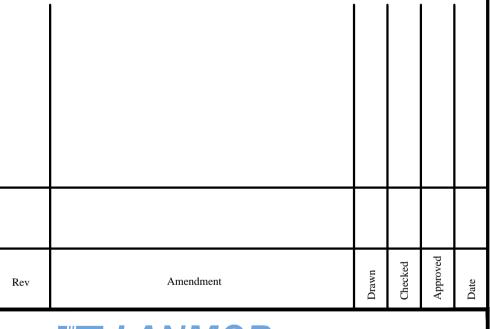
Kingspan Twin Effluent
Pump Chamber

## NOTES

- 1. All dimensions are given in millimeters.
- 2. This drawing shall be read in conjunction with the drainage schedules and standard details.
- 3. All existing sewer routes are to be proved on site by the contractor and any discrepancies notified to engineer.
- 4. All sewers shall be constructed in accordance with Part H of the
- Building Regulations and Sewers for Adoption 7th Edition.5. It is the contractors responsibility to ensure compliance with
- 6. Reference should be made to the structural engineers details for all aspects of foundation design and construction.

current building regulations and codes of practice.

- 7. The contractor should check all dimensions on site. Any
- discrepancies shall be reported to the engineer immediately.
- 8. Bed type B,F and N shall be used for rigid pipes. Bed type Z shall be used for all gully connections and pipes under proposed carriageways with less than 700mm cover. The concrete bed and surround is to extend to the side of the trench or be of minimum width and voids filled with well compacted selected
- 9. All precast concrete manhole units are to conform to B.S. 5911. Precast concrete cover slabs are to be heavy duty.
- 10. Downstream exit pipes of 600mm dia. and over should be fitted with heavy duty safety chains across their mouths.
- 11. Where large differential settlement is probable, several short lengths of pipe with flexible joints should be laid on either side of the chamber.
- 12. Where drains pass through foundations, a flexible joint should be provided within 150mm of the face of the structure.
- 13. Fast setting resin mortars may be used in lieu of cement mortar for bedding manhole frames where agreed with the Engineer to enable early cover loading.
- 14. The concrete base slab shall be 225mm minimum thickness for chambers up to 4500mm deep. Manholes over 4500mm deep require a slab 450mm thick.
- 15. All manholes over 2000mm deep are to be fitted with a "DANGER TEST FOR OXYGEN" sign
- 16. Appropriate measures (to be agreed with the district council's building control section) are to be taken to discourage rodent entry into the properties.
- 17. The contractor is to keep a record of any variations made on site, including the relocation of sewers or drains, so that an as built drawing can be prepared upon completion of the project.
- 18. Location of RWP's and SVP's to be confirmed by the architect, Sub Stacks shall not be used unless connected to a ventilated section of the sewer in accordance with Building Regulations.



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Civil Engineers & Transport Planning



Bicester Golf And Spa

Standard Details

Sheet 1 of 2

DRAWN	CHI		CKED		APPROVED KBL		
Diarwin	TS		KTP				
DATE	Jan-17	DAT	DATE Jan-17		DATE	Jan-17	
SCALE	NTS		PRJ No. 160842			SIZE	REV
DWG No. 160842/SD/02						A1	-