

LONGITUDINAL SECTION B-B THROUGH PROPOSED CULVERT

Proposed 1200mm Deep x 3300mm Wide Box Culvert by specialist

Base of culvert retaining walls to be formed on well compacted DTP granular fill type-1 on well consolidated virgin ground, weald clay formation @2.20m below E.G.L.. Allowable ground bearing pressure to be minimum 120kN/m2. It may be required to carry out plate bearing tests to confirm bearing capacity of ground at foundation level. Reference made to SI by LEAP Environmental GD Ref. LP2586 dated 30/06/2021.

CONCRETE REQUIREMENTS								
ELEMENT	SURFACE	CONCRETE GRADE (MIN)	Cnom mm	Cmin mm	FINISH			
RC UPSTAND	ALL SIDES	C40 / 50	65	50	F3			
WING WALL STEM	EXPOSED FACE	C40 / 50	65	50	F3			
	BURIED FACE		65	50	F3			
WING WALL BASE	ALL SIDES	C40 / 50	50	40	F2			
CULVERT	INSIDE	C40 / 50	65	50	F3			
	OUTSIDE		50	40	F2			

CONCRETE REQUIREMENTS

Concrete finish to comply with SHW CL. 17.8

NOTES:-

- 1. Sikaswell A2010 hydrophillic sealant to be installed at the interface between head wall and box culvert units.
- 2. All works are to be undertaken in accordance with the manual of contract documents for Highway Works Volume 1 - Specification for Highway Works.
- Parapet on the footpath side over culvert to be 1.25m high. Parapet working width is W1 (0.6m) and impact severity level is A. Parapets to be left unpainted.
- 4. For carriageway layers, refer to drg No. A9332-1630, 1691 & 1692.
- 5. Longitudinal fall on culvert 1:200.
- Waterproofing to be installed in accordance with manufacturers specification. For fillet to accomodate waterproofing, refer to Ciria C543 Detail 3.1.4-2.
- 7. Parapets to be installed in accordance with Varley and Gullivers specification. See dwg No. VGSN 500-02B, VGSN 500-03B and VGAS-2B.
- 8. Reno Mattress to be Maccaferri 60mm mesh size, 3mm wire zinc and pvc coated.
- 25mm x 25mm Chamfer to all external corners of concrete to be provided, refer to Ciria C543 Detail 3.1.2-1.
- 10. Reinforcement tying wire to be stainless steel.





NOTES

DO NOT SCALE THIS DRAWING.

WORK TO FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN

- MILLIMETRES (mm) UNLESS NOTED OTHERWISE. 1. This drawing is to be read in conjunction with all relevant Architect's,
- Engineer's and Specialist's drawings and their respective Specifications. 2. All work to comply with the relevant British Standards, Codes of Practice
- 3. Any discrepancies between all working drawings, specifications and schedules of all disciplines to be immediately notified to CTP for clarification/correction prior to construction of relevant structure.

STRUCTURAL CONCRETE:

4. All bar bending to comply with BS 8666.

and the Building Regulations.

5. All rebar (Type B) to comply with BS 4449.

6. Nominal cover to reinforcement to be as follows

- = 40+10 Parapets Top/roadside cover = 60+10
- = 40+10 Cover Fixing tolerances for reinforcement as stated in BS EN 13670:2009
- 7. Reinforcement laps to be in accordance with Eurocode 2.
- 8. All concrete & steel fixing to be in accordance with SHW Series 1700.

Execution of Concrete Structures (If BS standards used note to read 'Fixing tolerances for reinforcement as stated in BS 8110=1:1997

- 9. Concrete Grades (BS 8500): Mass concrete blinding to be GEN1. Reinforced concrete to be RC40/50.
- 10. All buried concrete surfaces to be coated with 2 coats of cutback bitumen to SHW 2004 and 2006
- 11. Ready mixed concrete to be obtained from a plant that holds a current certificate of production conformity to NACCB.
- 12. Surface of concrete at construction joints to be sprayed and brushed whilst green to expose aggregate finish. Surface to be clean and damp when fresh concrete is cast against it.
- 13. Do not place concrete when it risks freezing or overheating.
- 14. Discharge concrete so as not to cause segregation of ingredients. Fully compact concrete to remove all air.
- 15. All concrete finishes to U1 / F1 to SHW Clause 1708 unless noted

FOR COMMENT

P02 Ci	ulvert Resized	18.09.23	SF	SM
P01 Fc	or Comment	24.08.23	SV	SM
Revision	Amendments	Date	Rev'd	Chk'c
Created by:	Date created: Aug 2023			scipline





Swatlands Farm

CDM 2015 RESIDUAL RISKS

- Existing live stream
 Contaminated soil.
- Ground water. 4. Unstable ground
- 5. Temporary loading during construction.

The above residual risks are for non-standard hazards. It is assumed that a competent contractor familiar with the construction of this type of work will be appointed who will be aware of the standard hazards.

Culvert No.1 Section Sheet 1 of 2