## ELLENS GLEN ROAD CULVERT HEALTH AND SAFETY FILE

#### 1.0 <u>Description of Structure</u>

The structure is a 7.2m long precast reinforced concrete box culvert with internal dimensions of 1.375m x 1.000m. The wall slab thicknesses are 0.125m.

The culvert connects into a 1.2m brick culvert which opens into a 2.4m x 2.4m brick manhole chamber. The outlet from the chamber is through a 900mm  $\varnothing$  concrete pipe.

To the upstream end of the culvert there is a concrete apron with a galvanised trash grille.

The top of the culvert is protected with 'Excelastic' waterproof membrane and the vertical surfaces are painted with two coats of bituminous paint.

The carriageway is typically 5.6m wide with a 0.7m wide footpath to the east side, all surfaced in hot rolled asphalt.

### 2.0 Maintenance

The masonry culvert was replaced in December 1997 after extensive flooding had damaged the existing masonry slab and walls. The details of this work can be found on Drawing No. HY623/569/9/1/AB.

The precast reinforced concrete box culvert was designed and supplied by Milton Pipes Ltd. The details can be found in Appendix A.

The waterproofing used is "Excelastic 0.8mm" sheet membrane as supplied by Geosynthetic Technology Ltd. The waterproofing is protected with a layer of fabric sheeting "Geosom PR700". The details can be found in Appendix B.

#### 3.0 Existing Services

The following utilities are present over the bridge:

East of Scotland Water	9" steel water main	
Street Lighting	1" cable	
Mercury Communications	100mm∅ Upvc duct	
2No. 100mm∅ EWP ducts	Unknown what services are carried in these ducts	
Scottish Power Scottish Telecom Transco	No plant present	

The approximate location of the services are shown on Drawing No. HY623/569/9/1/AB.

# 4.0 Record Drawings

Drawing No.	Title	Description
HY623/569/9/1/AB	Culvert Replacement As-Built	Details of new box culvert and trash grille.