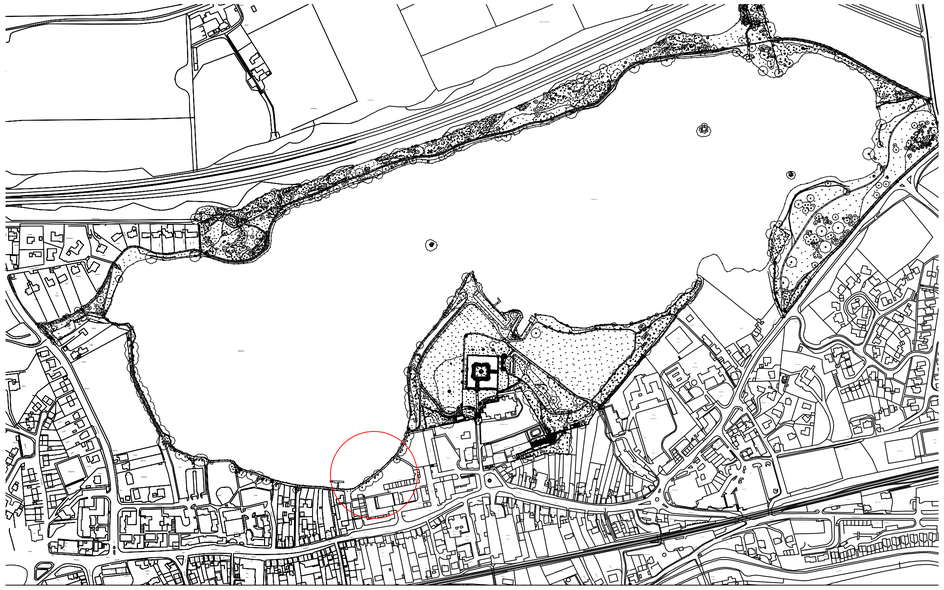
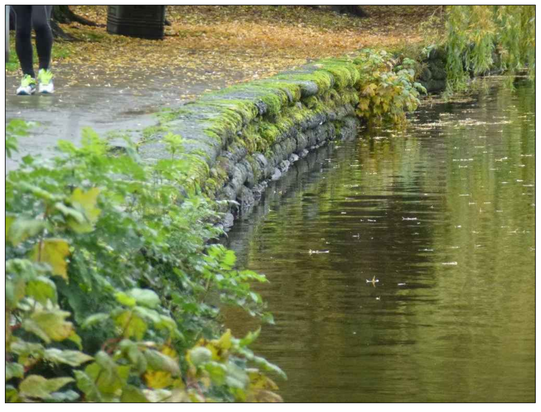
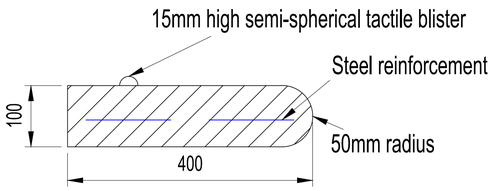


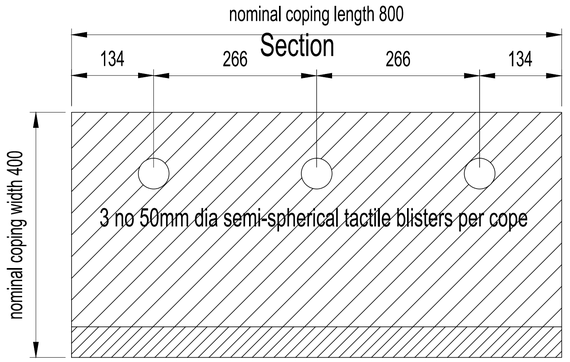
Locatin Plan (1:5000)



Picture of Existing Retaining Wall

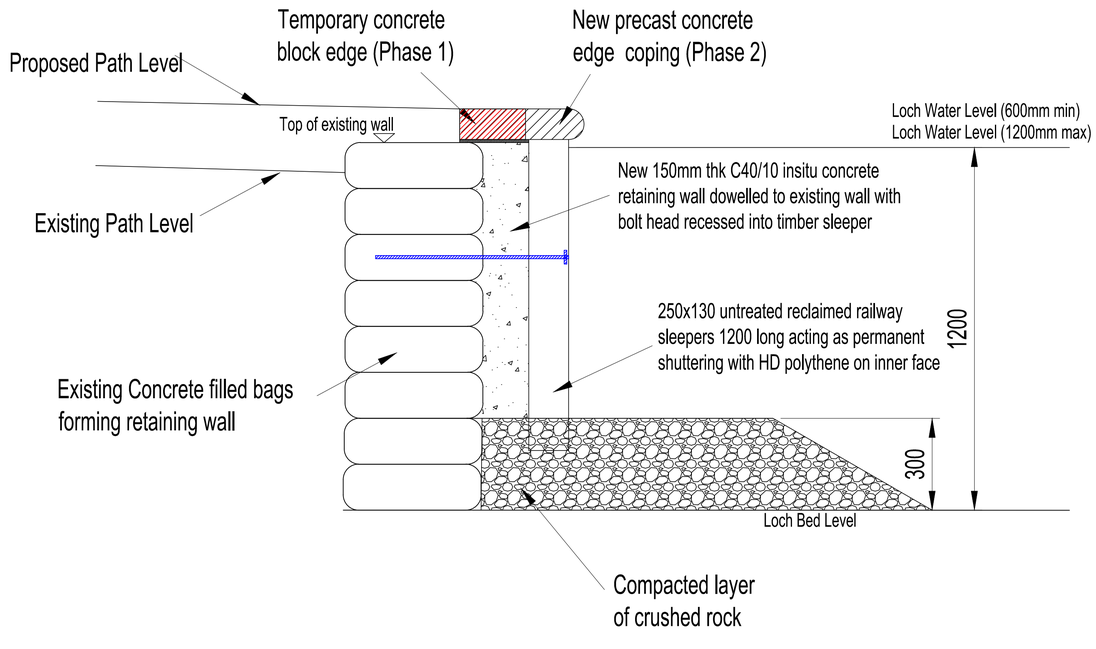
Extent of Retaining Wall Repair (1:500)





Plan

Precast Concrete Edge Coping Details (1:5)



Typical Cross Section of Proposed Retaining Wall (1:10)

RETAINING WALL BASE SPECIFICATION:

- A layer of crushed rock is to be placed on the existing loch bed, onto which a footing of bagged concrete is to be established, as below
- Crushed rock to be 75mm single ize, spread and levelled in one well compacted layer
- Footing to be geotextile bags, approximately 600x300x100, filled with concrete (Grade C40/10) and placed before fully set

RETAINING WALL SPECIFICATION:

- Concrete for the new retaining wall to be in line with requirements of BS8110, to be a designated mix supplied in accordance with BS5328 Parts 2, 3 and 4, gerade C40/10 with a minimum cement content of 340 kg/m³
- Maximum water cement ration to be 0.5. Concrete to be suitable for placing below water with a permanent shutter comprising of 250x130 railway sleepers with HD polythene inner face. Finish to be fair faced with blow holes filled with mortar of similar spec as concrete
- No release agents to be used
- Retaining wall tied to existing revetment with stainless steel ties drilled and anchored with M8 x 80 HVU capsule @1000mm centres

COPING SPECIFICATION

- Description: High quality precast concrete edge coping units. Supplier Blanc de Bierges or equivalent approved manufacturer
- Colour: Light Buff to match existing repair works
- Texture: Hand brushed
- Joints: Max 10mm wide pointed with matching mortar
- Concrete: Min 50 N/mm2 compressive strength
  Grade C50 to BS 8110
  Max free water/cement ratio 0.45
  Min cement content 400 kg/m3
  Water absorption max 4% to BS 1881
  Resistance to de-icing agents: very light peeling classification to ISO/DIS 4846.2
  Samples: A sample of concrete to be approved prior to ordering

- Each cope to have one restraint tie fitted at each end, as below:
  Ties to be Ancon YPB. Anchors to be Ancon M6 single expansion bolt.
  Description: 100mm long grade 304 L-shaped stainless steel tie fixed to top of concrete retaining wall with expanding anchor bolt. 60mm x 6mm dia length stainless steel loose dowel fitted through tie into mortar filled holes centred in ends of copings.

Notes:

Important

The contractor will be held to have examined the site and checked all dimensions and levels before commencing construction work.

No assumption should be made without reference to the architect.

No dimensions should be scaled from this drawing.

No materials to be deposited in loch.

Cement leakage into loch to be prevented by use of continious jointed HD polythene to inner face of timber sleepers.

GENERAL

- Drawings and areas are indicative only, contractor is responsible for a full measured site survey. All dimension provided should be checked on site and should not be exceeded. DO NOT SCALE DRAWING.
- Contractor is responsible for suitably propping existing structure before removal of any wall.
- All construction to be carried out in accordance with all the relevant current Health and safety guidelines and regulations.
- All materials and fixings to be installed fully in accordance with manufacturers recommendations.

PHASES

PHASE 1 :-
Construction of new concrete wall with permanent timber shuttering. Temporary edge cope of concrete blocks.

PHASE 2 :-
Removal of temporary edge cope and installation of permanent precast copes as per specification with hot bitumen infill at junction between path and new cope.

Residual Risks

1. Working in water of max depth 1.2m
2. Underwater concreeting
3. Risk of pollution to Loch

Revisions:
20160108 Rev A - Revised shuttering detail
20160212 Rev B - Revised length and notes on phases added

Construction

MONUMENT: Linlithgow Loch

PROJECT: Loch Retaining Wall
Loch Wall Strengthening

HISTORIC SCOTLAND
ALBA AOSMHOR

PROJECT DRAWING NUMBER: EDS.4.1.57/09B

SCALE	As Shown	ENGINEER	Kashif Ashraf
DATE	18/01/2016	DRAWN BY	KA
ARCHIVE NUMBER			