

# Scott's Quay

Constantine, Cornwall.

## Schedule and Specification for Consolidation Work.

11/2/2013

### 1 Summary

AC was commissioned by Charles Pugh to undertake an archaeological, ecological and structural assessment of Scott's Quay in advance of proposed consolidation works to the Upper Quay. A brief setting out the requirements of the assessment was provided by Natural England (NE) and The Historic Environment Service, Cornwall Council (HES), reflecting the ecological and archaeological sensitivity of the site and its inclusion in the Goongillings Farm Higher Stewardship Scheme holding. This site is designated as part of the Cornwall Area of Outstanding Natural Beauty (AONB), an Area of Great Scientific Value (AGSV), part of the Calamansack Wood to Gweek County Wildlife Site (CWS) and lies immediately beside the Lower Fal and Helford Intertidal Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC).

Scott's Quay is at the southern tip of Goongillings Farm (SW 7379 2728) at the convergence of the Polpenwith and Polwheveral Creeks, in the upper reaches of the Helford Estuary.

The assessment was undertaken between January and August 2012, it recorded:

- The access track leading from Goongillings Farm to the Quay, built in the early 19<sup>th</sup> century by Charles Scott
- The Lower Quay also built in the early 19<sup>th</sup> century by Charles Scott to service the booming local mining and quarrying industries
- Two quarries associated with the construction of the early 19<sup>th</sup> century Quay
- The Upper Quay built by the early 20<sup>th</sup> century and significantly re-built in the 1930s
- The intertidal and terrestrial habitats that the Upper Quay forms the boundary between
- Associated flora and fauna and related legislative constraints
- The structural failing of significant parts of the Upper Quay structure due to: its lack of foundations and resultant erosion; poor repairs with vertical facing, no running bond and unsuitable backfill material; and vandalism.

A quote is required, for limited consolidation works to maximise the longevity and appreciation of the Quay without reducing the historic integrity of the structure or incurring additional planning considerations and costs. Details of the specific archaeological, ecological and structural management recommendations and timings and are provided in the assessment report.

## 2 Introduction

HLS will only fund an appropriate level of repair to the structure, not a 'gold-plated' approach. Please note that Natural England cannot accept 'contingency' amounts. All reasonably foreseeable work should be quoted for. The final amount payable will be based on work actually required and completed.

*Those wishing to tender are invited to visit the site on the morning of Friday 22<sup>nd</sup> Feb, before completing their specification. Please contact Matt Mossop of Archaeological Consultancy Ltd on 01326 341061 or at [mmossop@archaeologicalconsultancy.com](mailto:mmossop@archaeologicalconsultancy.com) to arrange a time ASAP.*

**All costings must be clearly itemised in the submitted tender including all materials necessary for the consolidation works.** Each item should include identification of who will carry out the work and timings allocated to it. The consultants are expected to add, itemise, justify and quote for any additional work not specifically included for within this brief but which in their opinion is required for the successful outcome of the project.

Quotations should allow for statutory responsibilities which arise, including but not limited to, any duties under the Construction (Design and Management) Regulations 2007. All quotations should be sent to Charles Pugh, ideally by e-mail to [info@goongillings.co.uk](mailto:info@goongillings.co.uk) or by post to Goongillings Cottage, Constantine TR11 5RP no later than Friday 1<sup>st</sup> March 2013.

## 3 Schedule and Specification for Consolidation Work

This document outlining the required methodology has been drawn in line with the assessment report and feedback from Natural England, The Historic Environment Service and the client.

- **Access**

All access to and from the site will be through Goongillings Farm Courtyard and along the track shown on Fig 1. If livestock is in the fields, all gates should be secured when passing through. The hedges along the access track have been trimmed to facilitate access, though one low branch remains at the edge of Scott's Wood c1.9m above the track. This branch can be avoided in dry weather by driving on the field.

- **Storage**

Materials and machinery should not be stored beside the quarry face or on the foreshore and any stockpile should be kept below 1.5m height to avoid impinging on potential bat flight-paths. One load (6m<sup>3</sup>) of inert solid material may be stored for a few days at a time on the upper quay grass at a time, but any machinery and other materials (such as fuel, etc) should be stored in the works compound (Fig 2). Spill kits should be provided.

All potential pollutants shall be stored in accordance with Environment Agency Pollution Prevention Guidance Note 5

(<http://www.oilstoragereqs.co.uk/downloads/PPG5.pdf>)

- **Timings**

All foreshore works will need to be undertaken within 3.5 hours either side of low tide. All works should be undertaken between the hours of 8am and 8pm

Monday-Friday between April and May 2013, with all consolidation work complete by the end of May 2013.

- **Safe Working**

The Construction Design & Management Regulations 2007 may apply depending on your programme.

All contractors shall be part of an industry recognised competent persons scheme. All staff shall hold Construction Skills Certification Scheme cards of appropriate qualification.

Prior to works, a full suite of method statements, risk assessments and Construction plan of works shall be submitted and approved.

The contractor will be expected to provide appropriate welfare facilities and any necessary secure storage for the duration of the project.

- **Movement of Tumbled Rocks from the Upper Quay**

A number of large granite blocks have fallen from the upper quay onto the foreshore (highlighted in pink on Figure 2). These should all be re-built into the upper quay wall. Any machinery used to recover them should avoid the foreshore and edges of the upper quay. Care should be taken to allow any mobile animals (such as crabs) that may shelter under the stones to move away.

- **Back-fill Material**

The area 1m behind the sections of wall under repair shall be excavated to the base of the wall and replaced with free draining back fill material.

The backfill shall consist of primary aggregate, free from debris and potential contamination to prevent pollution risks. Clean secondary aggregates such as granite or slate chippings can be used with prior approval.

**1-Gradation:**

	<b>Grading</b>		
	<b>A</b>	<b>B</b>	<b>C</b>
Square Mesh Sieves	Percent passing by mass		
Pass 125 mm		100	
Pass 90 mm	100	90-100	
Pass 37.5 mm	55-100	55-95	100
Pass 19 mm			45-80
Pass 6.3 mm	25-60	25-60	25-60
Pass 2.0 mm	15-45	15-45	15-45
Pass 425 µm	5-25	5-25	5-25
Pass 150 µm	0-10	0-10	0-10
Pass 75 µm	0-5	0-5	0-5

- **Prevention of Spills**

All re-fuelling will take place in the works compound and an appropriate spills procedure put in place. See 'storage' above for further guidance.

- **Archaeological Monitoring**

Contractors will need to work closely with the archaeological team to allow archaeological monitoring of the works in line with the WSI (Assessment Report, Appendix 2).

- **Consolidation Works**

Underpin undermined western section of walling with granite blocks/slates to match approximate scale and shape of extant foundation course (Figure 3).

Clean off existing masonry where necessary. Remove granite gate-post from backfill for reuse as part of consolidated access to the eastern foreshore- see below.

Remove sections in poor condition (as highlighted in pink on Figure 3) and excavate 0.5m width trench behind down to free draining material or base of wall and store in stockpile in storage area for re-use.

Rebuild dry block wall reinstating running bond, coping and 70-80° landward batter in rebuilt sections.

Imported coping may be pre-drilled to allow pinning with iron cramps to be fixed with epoxy resin.

Lay fine mesh geotextile to prevent loss of fines through wall. Lay geotextile such that the base of the trench, the face of the wall and 0.3m of the inside face of the trench are covered prior to back fill. Note: - lap or allow sufficient additional geotextile to cover the finished surface as detailed below.

Backfill behind the repaired walling with inert free-draining aggregate (see 'Back fill material').

Reinstate surface 0.2m with stockpiled, seed and cover with (seeded) geotextile.

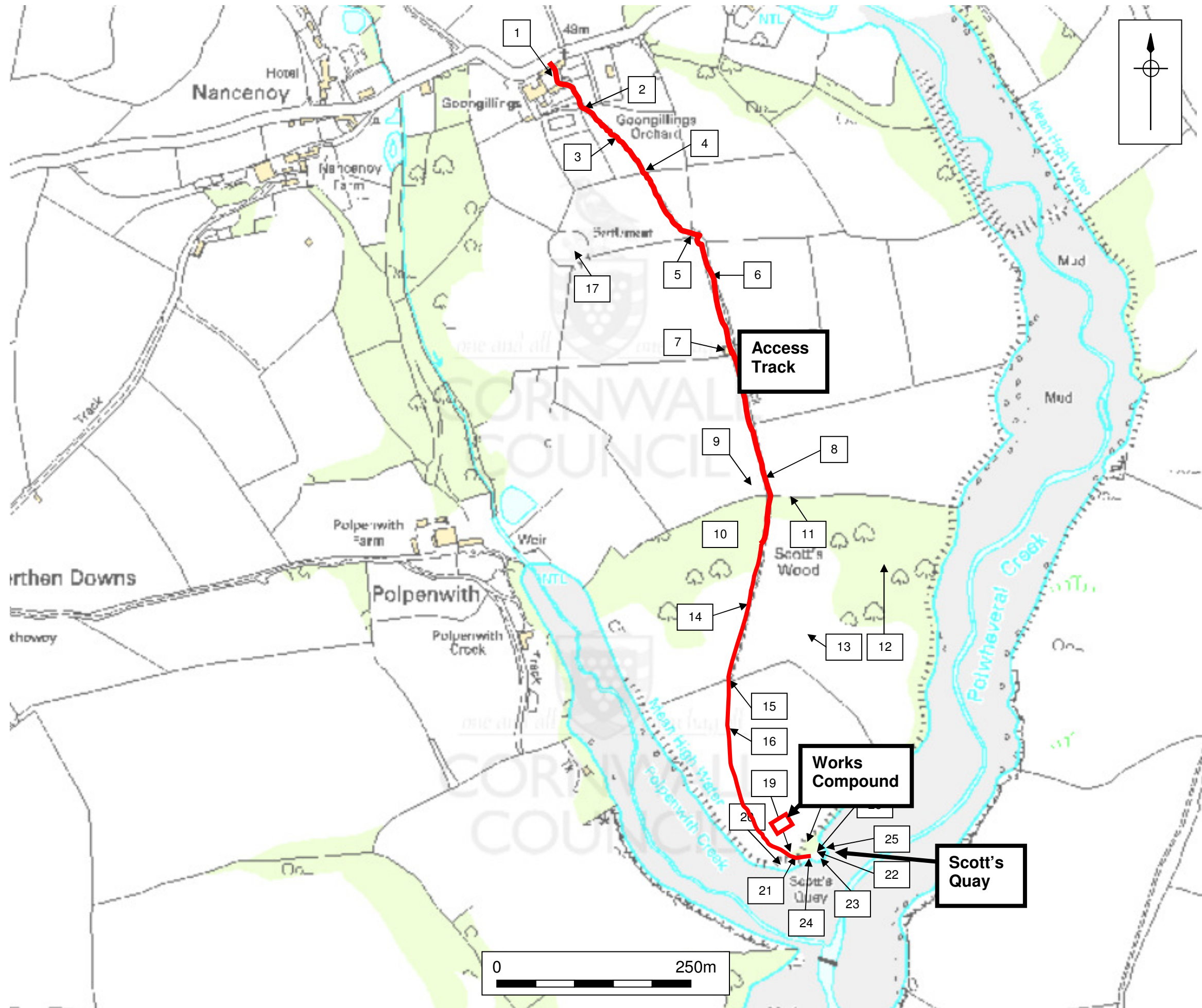


Figure 1

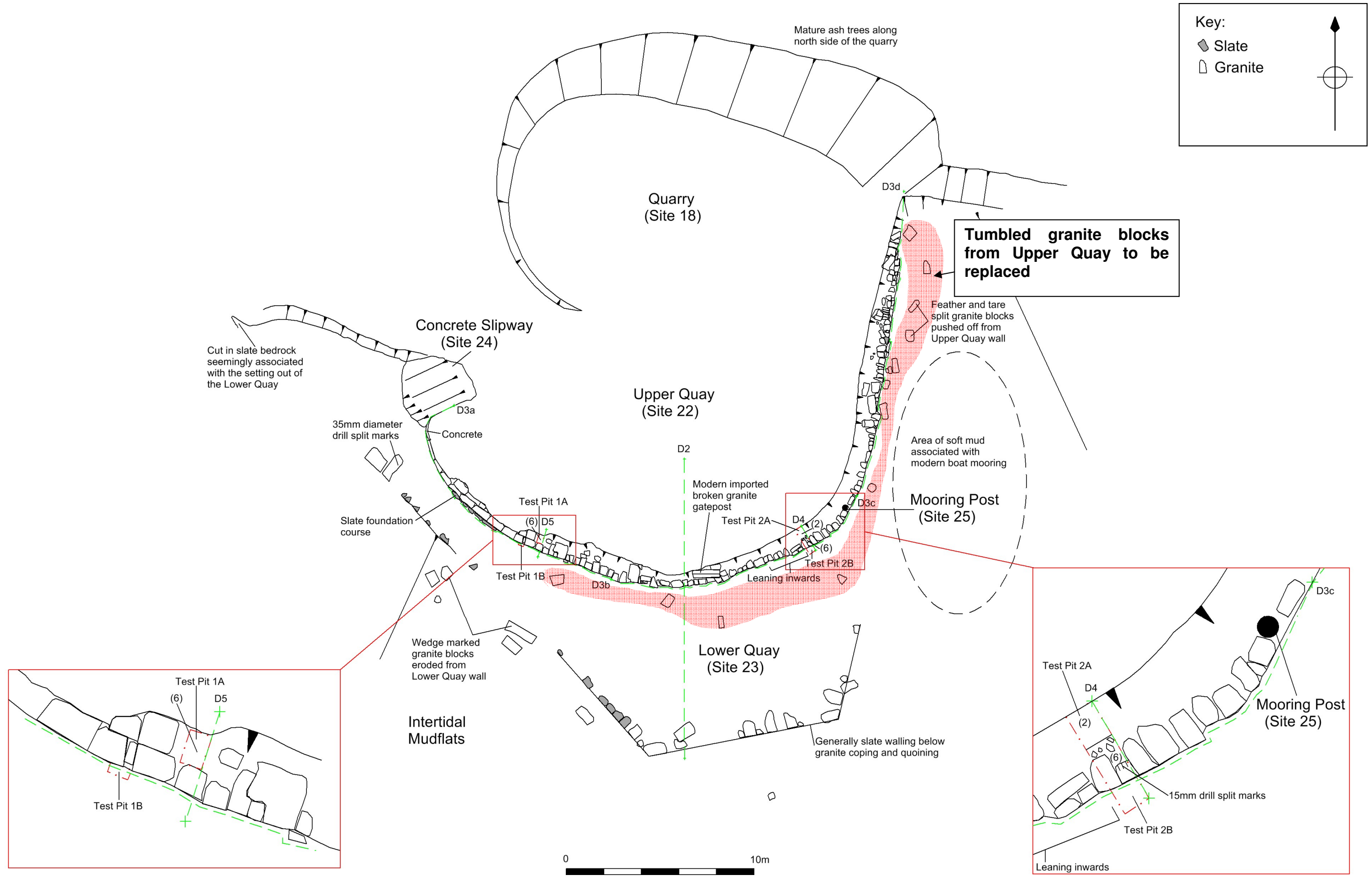


Figure 2

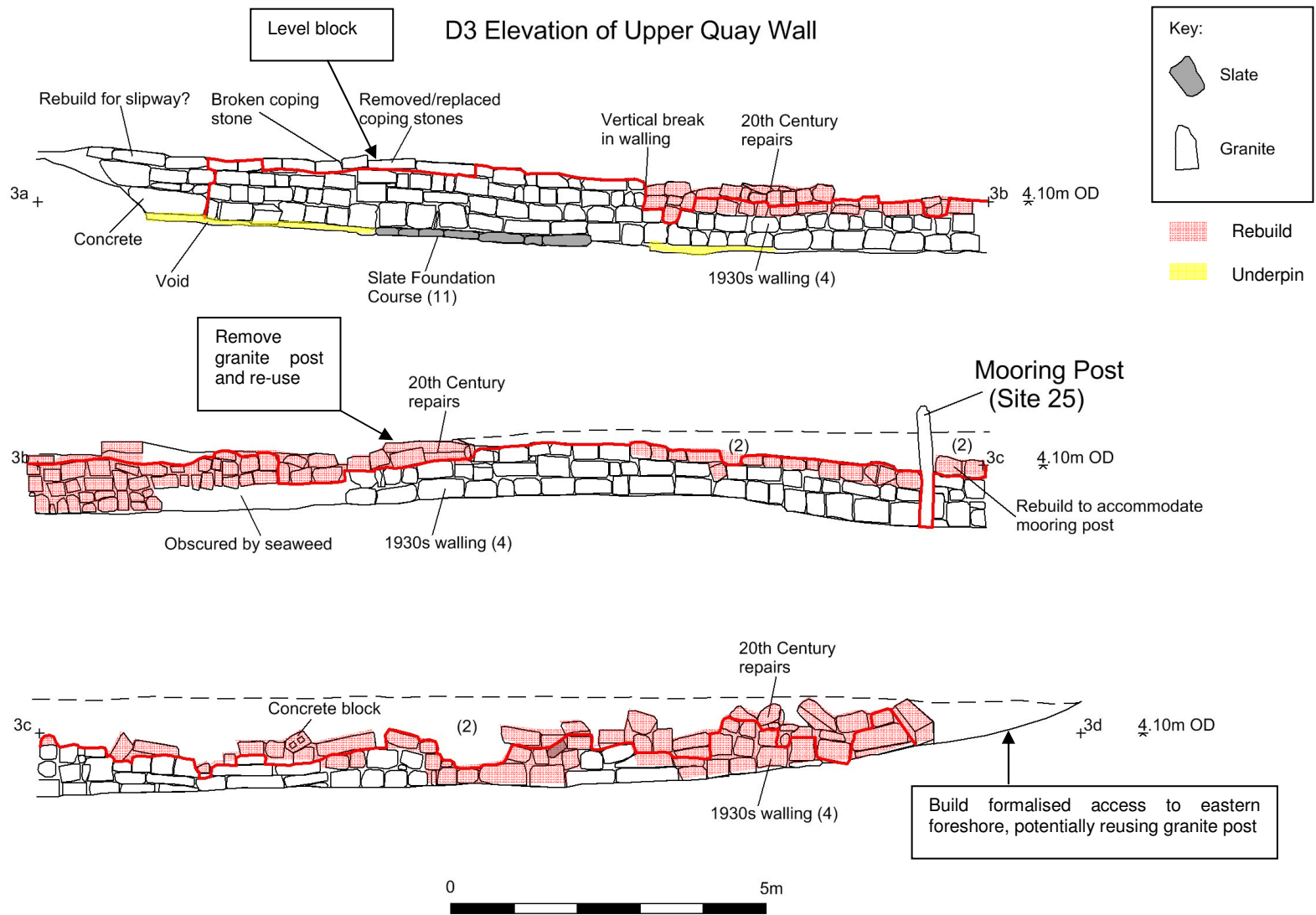


Figure 3 Elevation drawing of Upper Quay Wall showing rebuild requirements

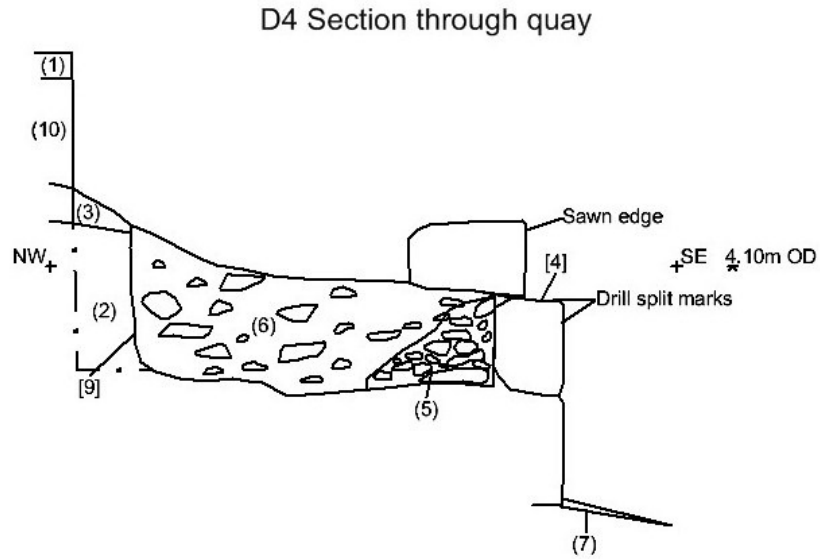


Figure 4 Section drawing through the Upper Quay wall in test-pit 2 as existing

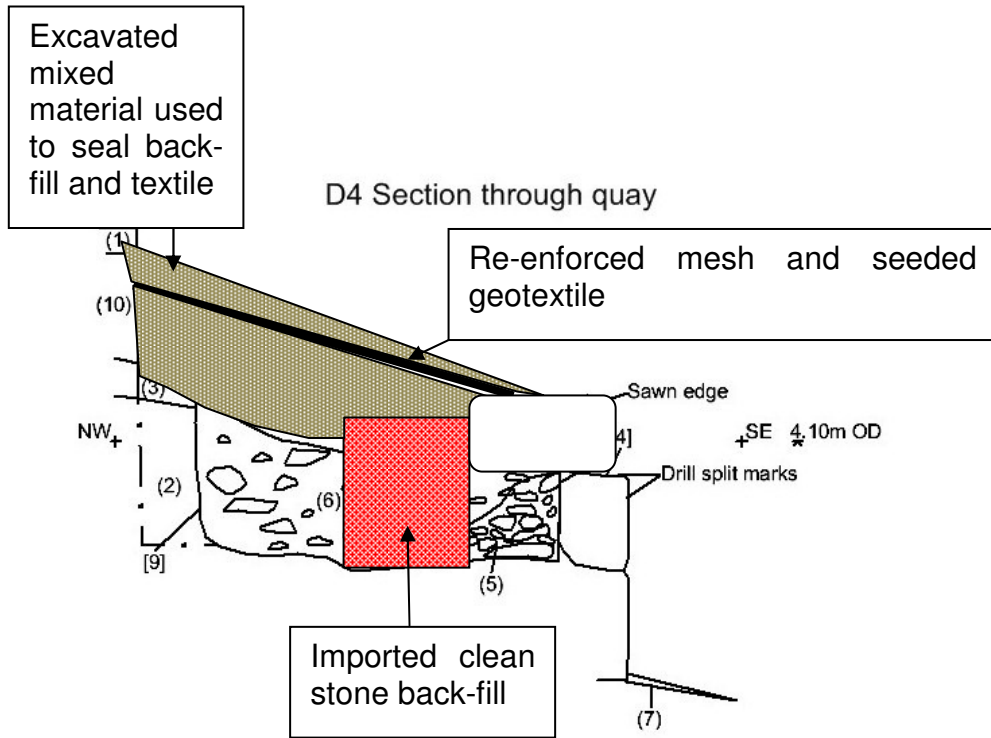


Figure 5 Section drawing through the Upper Quay wall as proposed