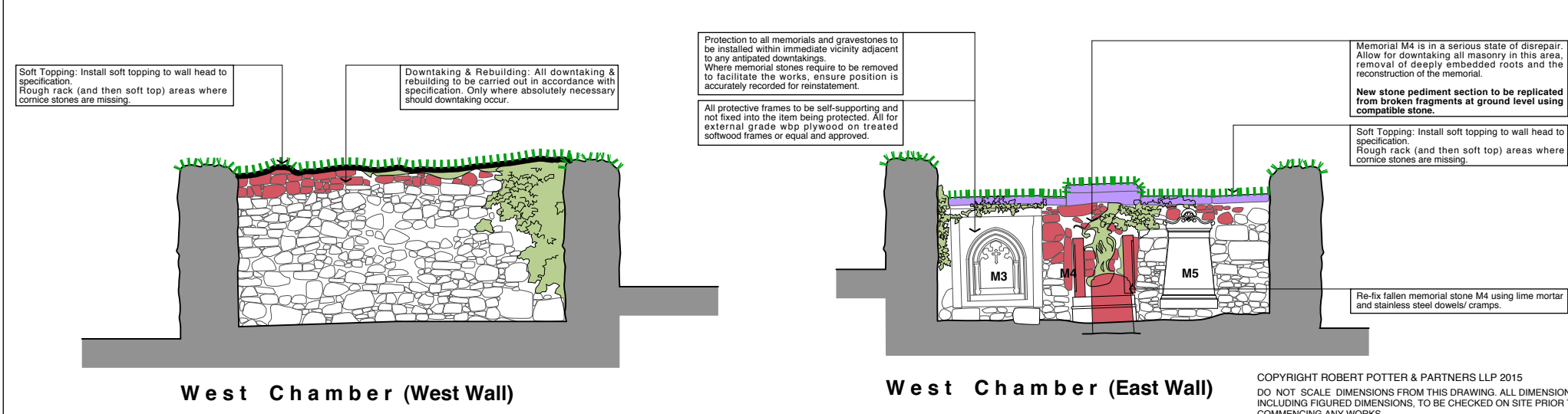
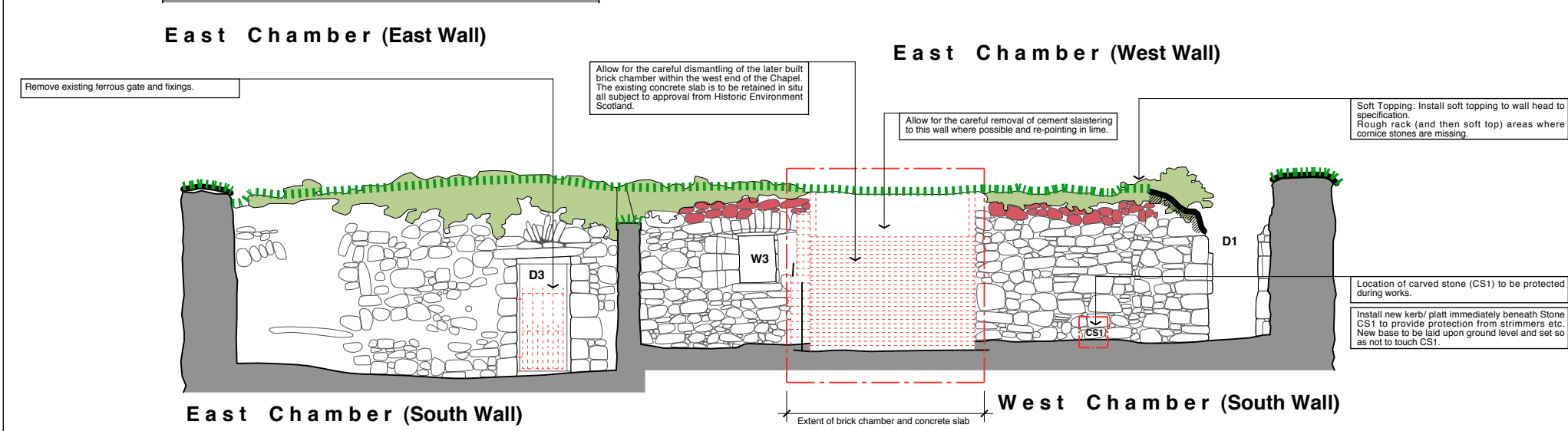
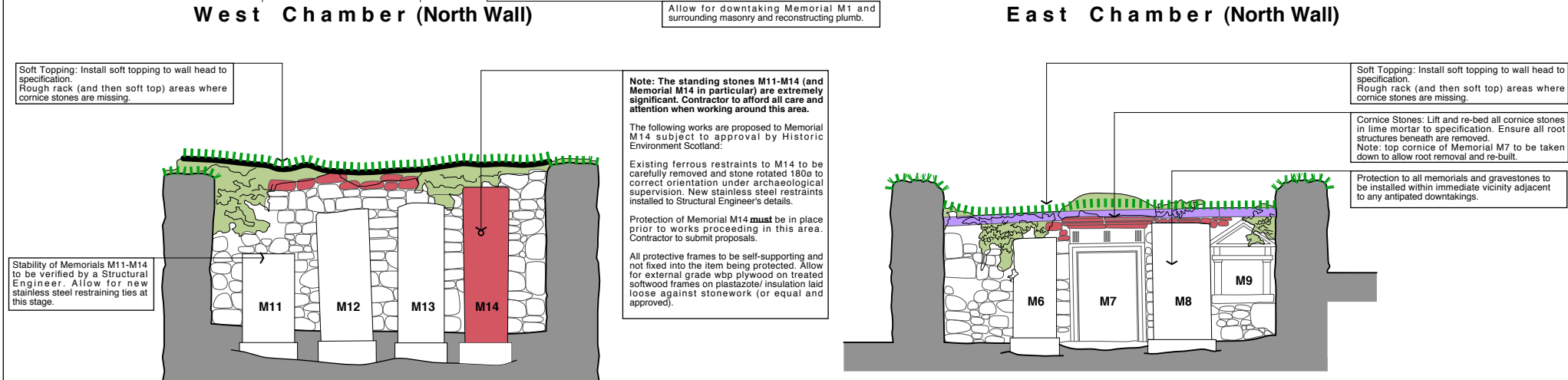
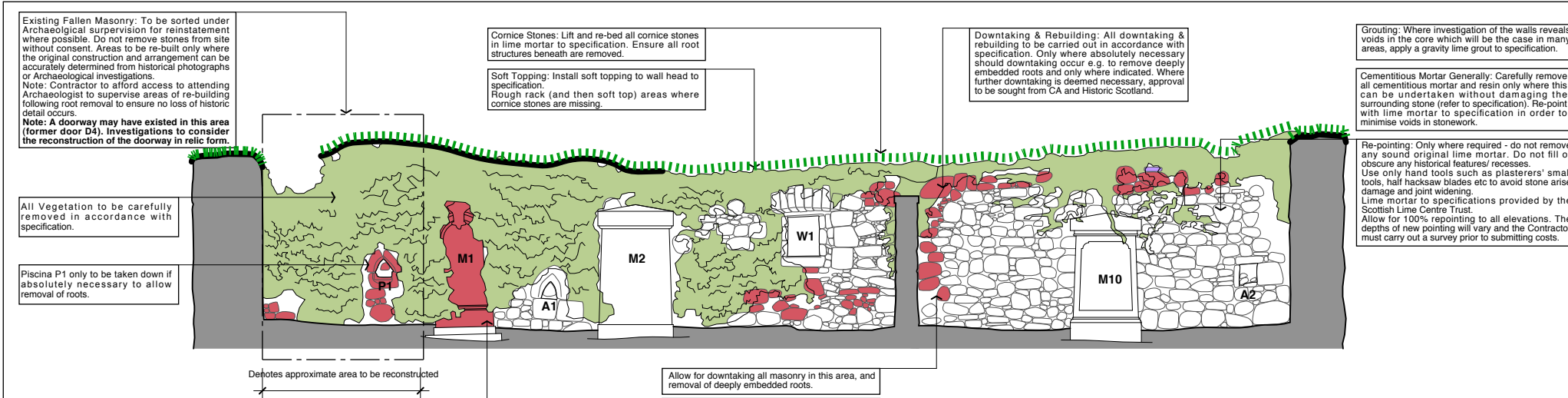




3.00 WALL HEAD CONSOLIDATION:-

Note: the sequence of consolidation operations should be planned so that wallheads and other potential sources of water penetration are dealt with before pointing. Lime mortars cannot withstand the action of water running through the masonry structure.

3.01 Comices

Remove all vegetation using methods previously described.

Sort areas of fallen masonry under archaeological supervision and carry out detailed, non-intrusive survey of ground level in order to determine whether any missing comice stones can be reinstated. Note: stones only to be reinstated where their original position can be accurately determined.

Allow for lifting and re-bedding all comice stones.

Comice bedding and pointing mortar to be to the following Scottish Lime Centre Specification:

Note: All mortar mixes are subject to approval by Historic Environment Scotland & the Scottish Lime Centre Trust. Sample panels of each mix must be provided for approval.

1 part St. Astier NHL 5 lime: 2.5 parts sharp concrete sand (Newbigging Quarry).

Sand has been matched by the Scottish Lime Centre (refer to SLC report).

3.02 Soft Topping

Remove existing turf and sedum setting aside for re-use. Supplement with local turf (taken from outside monument area) if required. Fill voids and cap wall head using lime mortar to specification provided by the Scottish Lime Centre. Install bentonite clay/ sand layer (minimum depth of 100mm) to create concave profile, and two layers of turf (the bottom layer turned upside down) secured with timber pegs or stainless steel pins fixed into masonry joints together with a pitch biodegradable mesh (50mm mesh size) to secure turf whilst this establishes. Plant sedum plug plants set into upper layer of turf. Ensure that turf is doubled up and returned at edges to prevent die back. The top layer of turf and sedum plugs should be installed within the growing season.

Ensure that the turf is suitably watered at all times until fully established. Note: Aftercare will be required beyond contract works into defect liability period.

3.03 Rough Racking

Check wall heads for voiding and grout where necessary using lime mortar to specification provided by the Scottish Lime Centre. Wall head to be shaped to assist the shedding of rainwater with the core built up with local fallen stonework taken from the immediate vicinity. IMPORTANT: Use only undressed random rubble to build up wall heads where required. Rough rack all sloping and horizontal wall head surfaces using lime mortar to specification. Alternatively, use imported compatible sandstone to specification provided by the British Geological Survey.

Rough racking mortar to be to the following Scottish Lime Centre Specification:

Note: All mortar mixes are subject to approval by Historic Environment Scotland & the Scottish Lime Centre Trust. Sample panels of each mix must be provided for approval.

1 part St. Astier NHL 5 lime: 2 parts sharp concrete sand with Magnesium Stearate (ligophob) (supplied in pre-weighed sachets to dose per bag of lime). Sand to be from Newbigging quarry.

Sand has been matched by the Scottish Lime Centre (refer to SLC report).

4.00 EXISTING FERROUS FIXINGS & FIXTURES:-

Remove all existing ferrous fixings and ferrous gate.

5.00 STRUCTURAL WORKS:-

Carry out structural works in accordance with Structural Engineer's recommendations.

6.00 SCAFFOLDING:-

Due to the relative instability of the structure throughout, under no circumstance should the scaffolding come into contact with the existing masonry or be fixed into existing masonry/ mortar. The scaffolding must be self-supporting, buttressed as required. Ground excavation will not be permitted therefore scaffolding may have to rest on timber sole boards laid on sand bags or other approved methods.

Care must be taken to ensure no damage occurs to the surrounding memorials and gravestones.

Contractor to submit full scaffold design and specification for approval prior to proceeding.

Note: Localised propping scaffold will be required during the works to stabilise areas of masonry during vegetation removal. Refer to Engineer's details. It is anticipated that acrow props with timber boards laid against masonry and props anchored on or against temporary gabion baskets will be utilised.

NOTE: Areas marked for downtaking are notional only and are an estimate only at the time of survey. Further downtaking may be required as the root structures continue to destabilise masonry over time. A further review will be required with the Stonemason prior to works commencing and approval sought thereafter from HES.

KEY:-

- Extent of anticipated downtaking and reconstruction to match original arrangement.
- Areas where extensive re-pointing is required to a substantial depth (varies). (Remaining areas to be re-pointed only where required).
- Comice/ cope stones to be lifted and rebedded to specification.
- Vegetation to be removed.
- Potential new stone indents to specification.
- Areas of excessive voiding to be built up to specification.
- Soft Topping
- Rough Racking

7.00 PROTECTION OF MEMORIALS AND GRAVESTONES:-

Install protection to all memorials and gravestones within the immediate vicinity where these are adjacent to any anticipated down taking. Where memorial stones require to be removed to facilitate the works, ensure the position is accurately recorded for reinstatement.

The protective frames are to be self-supporting and not fixed into the item to be protected. Allow for external grade wbp plywood on treated sw frames or equal and approved at this stage.

It is likely that the scaffolding will extend around the surrounding gravestones. Ensure that all gravestones within the vicinity of the scaffolding are suitably protected.

Arrange for the inspection of memorial stones in the immediate vicinity of the Structural Engineer for signs of failure or collapse. Where required, and subject to the approval of Historic Environment Scotland, install stainless steel or phosphor bronze fixings to ensure stability.

Note: The standing stones M11-M14 (and Memorial M14 in particular) are extremely significant. Contractor to afford all care and attention when working around this area.

The following works are proposed to M14 subject to approval by Historic Environment Scotland:

Existing ferrous restraints to M14 to be carefully removed and stone rotated 180o to correct orientation under archaeological supervision. New stainless steel restraints installed to Structural Engineer's details.

Protection of Memorial M14 **must** be in place prior to works proceeding in this area. Contractor to submit proposals.

8.00 MASONRY CLEANING:-

Note: Minor herbaceous plants, lichens etc can often be left in place if they are causing no immediate damage to masonry or joints however some damage can occur through moisture retention and the secretion of acids. All masonry cleaning is therefore provisional and subject to further detailed inspection once all leafy vegetation has been removed and approval from Historic Environment Scotland has been obtained.

Allow for two applications of a suitable biocide containing glyphosate such as Roundup ProBio 360 (or equal and approved) to remove areas of biological growths such as moss, lichen and algae.

Use only a surface biocide bearing a current Health and Safety Executive number and approved specifically for the purpose.

- To be applied in accordance with all COSHH regulations.
- Avoid application during or shortly before rain.
- Avoid over-application as run-off can harm adjacent vegetation.
- Avoid biocide containing Ammonium Sulphamate as this will affect lime mortar producing a nitrogenous fertiliser.
- Care must be taken not to spray any surrounding vegetation (including soft topping) that is to be retained.
- All masonry cleaning to be carried out in strict accordance with manufacturers instructions.

9.00 SAMPLE PANELS:-

Contractor to provide 1m2 sample panels of all mortar mixes (including re-pointing and re-bedding) for approval prior to proceeding with remaining sections. In addition, a 1m linear sample of rough racking and soft topping is to be provided for approval prior to proceeding.

Allow for two further comparison pointing samples as follows:

Alternative 1: Otterbein lime with mix as before.

Alternative 2: Otterbein lime with shell inclusions and mix as before.

Sample panels to be carried out on surrounding cemetery walls and not the Scheduled Monument subject to approval from North Ayrshire Council.

Contractor to provide sample panels immediately upon commencement of phase one (vegetation removal) in order that these can be inspected by the CA and Historic Environment Scotland.

10.00 INTERPRETATION PANELS:-

Supply and install interpretation panels where required by Client.

Allow for 2no. free standing interpretive boards with geotextile material at base.

11.00 ADDITIONAL NOTES:-

Allow for downtime in the event of archaeological finds.

Allow for the downtime resulting from the attendance of an Archaeologist during downtaking and re-building of masonry.

Allow provisional sum for protection of additional memorials/ gravestones.

Allow provisional sum for structural stabilisation of memorials built into or adjacent to Chapel using phosphor bronze or stainless steel ties.

The use of power tools is prohibited.

REVISIONS & ADDITIONS		DATE	BY
A	Lime specifications updated, gates removed, memorial protection notes & brick chamber updated.	12-05-16	PWM
B	Mortar mixes and sample panel notes updated.	04-07-16	PWM

PROJECT

**Saving St Bride's Chapel Arran Group
Proposed Consolidation, Repairs &
Restoration Work to St Bride's Chapel,
Margnaheglis, Lamlash, Isle of Arran.**

DRAWING TITLE

Elevations as Proposed (Sheet 2)

ROBERT POTTER & PARTNERS
CHARTERED ARCHITECTS & PROJECT MANAGERS

7 MILLER ROAD, AYR
51 NEWALL TERRACE, DUMFRIES
87 HANOVER STREET, STRANRAER
169 ELSERSLIE STREET, GLASGOW

KAT 2AX
DG1 1LN
DG9 7RS
G3 7JR

01292 - 261228
01387 - 255509
01776 - 703453
0141- 332 9111

SCALE	1:50 @ A1 1:100 @ A3	7690/06
DATE	October 2015	
DRAWN BY	SMcC/ PWM	
CHECKED BY		

REVISION		B

COPYRIGHT ROBERT POTTER & PARTNERS LLP 2015
DO NOT SCALE DIMENSIONS FROM THIS DRAWING. ALL DIMENSIONS, INCLUDING FIGURED DIMENSIONS, TO BE CHECKED ON SITE PRIOR TO COMMENCING ANY WORKS