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# Old Bethlehem – Wine Cellar

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PHOTOGRAPHIC  
RECORD OF  
RESTORATION WORK  
for SAHRA

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## 1.0 INTRODUCTION

This document gives a brief overview of the construction process to restore the WINE CELLAR outbuilding at OLD BETHLEHEM FARM.

## 2.0 LOCATION

- 2.1 Old Bethlehem Farm 153 is located in the Groot Drakenstein Area in the Stellenbosch municipal district. It falls within the **Grade 1 Dwars River Valley Conservation Area**. The property is located between the townships of Kylemore and Lanquedoc, and is accessible from Kylemore.

## 3.0 APPROVALS

- 3.1 Approval was obtained from Heritage Western Cape to carry out emergency repairs to the Wine Cellar Building in July 2012. See ROD's and Minutes uploaded to SAHRIS.

## 4.0 GRADING

- 4.1 It was recommended by Belcom HWC that the complex merits a Grade II Status. See BELCOM minutes 17 Nov 2011



View of Wine Cellar with its protective coat, before restoration



Front View of Wine Cellar at the beginning of the Restoration – Brick Buttresses begun



Front View - After Restoration – Dec 2012





East View of front section of T- shape



West View of Front Section towards Partial Loft to be removed



Interior East View – Showing New Arched Interior Buttressing Wall



Interior West View – Loft Removed , New Ceiling in place – before Lime washing





View into Tail Section showing Original Loft Ceiling to be retained



Tail Wing restored – Ceiling Strengthened from above – left unrestored



**BUILDING OF BUTTRESSES AND STRENGTHENING OF CORNERS:**

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Excavations full of water due to high winter water table



Baled out – showing clay bed and old Stone Foundation





Corners braced, Buttresses built, Cracks opened up and strengthened with Stainless steel mesh screwed in and bent around the corner



Close up of Mesh Reinforcing, fixed with Wall Plugs and stainless steel washers





Stone Corner before Stainless steel mesh strengthening and collapsed werf wall before rebuilding, reusing as much original material as possible



Completed Corner and Wall – Lime Plaster and Lime Washed



**INTERNAL FLOOR CONSTRUCTION:**

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Chopping up existing crumbling concrete floor



Laying Subsoil Drains



Pumping Coloured Concrete Readymix to cast Floor Slab



Finished floor

### CEILING CONSTRUCTION – FRONT SECTION:

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Ceiling Beams fixed to horizontal wall plate with hoop iron.

Wall Plate is screw fixed to Beam against wall, to form an L- Shaped Ring Beam, anchored into the wall with a system of stainless steel threaded rods, plates. The ring beam together with the cross beams and the ceiling boarding serve to 'tie the building together'



Ceiling Beams: 'Oregon Pine' reused from Salt River Railway sheds. Same proportions as original loft beams

Ceiling Boards: Recycled Floor Boarding – 'Oregon Pine' similar size to original loft boarding

Finish: cleaned and fumigated, left natural



**GENERAL REPAIRS AND USE OF LIME:**

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Slaking Lime for use in Mortar, Plaster and Limewash



Lime Mortar 1:3 mix and “Underburn” Bricks from a local brickyard





Doorway bricked up, (lintol kept as reminder), cement plaster about to be removed



All patched with pure lime plaster





Werf Wall rebuilt with Lime Mortar – originally built with clay/earth mortar



Lime Mortar and Underburn bricks used for all repairs. Existing fabric consisted of various earth, Clay and Lime mortars, which were difficult to match and as the building was so fragile, a slightly stronger material was needed to stabilise the crumbling areas.

Buttresses were built with a lime rich cement mortar for structural strength.



**PAVING AND EXTERNAL WORKS:**



Level reduced around building, stone retaining wall and pebble channel, using stone found on site, set in cement.



Stone "Skirt" around base of building with pebble stormwater channel.





Existing Stoep paved with stone from site. Existing brick edge on low stone plinth retained



Courtyard: Existing cement floor replaced with Coloured Concrete slab, cast against wide pebble channels

