## REPORT BY EDWARD MATENGA AUGUST 2004

## APPENDIX I

## BLUE STONE QUARRY WALL CONDITION SURVEY REPORT

## Introduction

This condition survey report dwells mainly on the present condition of the standing portions of the walling, i.e. the inner façade, since the seaside façade is completely collapsed. Features of interest from the point of view of conservation are wall length, height and structural deteriorations. The main causes of deterioration are stated and discussed in the main report for the purpose to decide on appropriate intervention options. A collapse refers to the falling over of face blocks. This is the reason why we are using the term façade for the noncollapsed portions. The only place where there is a total collapse of both the face blocks and the core is the breached section. In all the other areas the core stones are still intact.

Since the primary purpose of constructing the wall was to create a barrier, there was no attempt at building an aesthetically pleasing structure. The resultant finish is what is referred to as P-style in dry stone structures classification of workmanship.


Q-style (Quality)


R-style (Rough)
Wall styles

## How to use the report

This document is meant to serve as a site monitoring and conservation tool. It is in three components, the map, photographs and descriptions. All the three complement each other in an effort to achieve an exhaustive documentation record of the structure, in case change takes place. In routine inspections, inspectors can use this document to monitor deterioration. The most useful of the above tools is photography. Photographs provide an effective means of comparing the present with past captured on a photograph. The map is also useful in comparisons of spatial extent of problem. Descriptive documentation confirms features, such as bulges. Metric data is also given in descriptions.

Any changes so confirmed by the three documentation tools are then recorded and also added to the existing record as a way of updating it. It should be noted at this point that new developments are an addition and never discard or destroy the past record since documentation is a process that also constitutes part of the history of the structure. All this information is then passed on to the site heritage manager who will decide on the best remedial action to take.

## The Documentation



Map of the quarry and wall.

## Wall 1

The northern end of the structure, it has wall 2 butting on to it on its southern end. It is a low wall with a maximum height of 0.8 m and appears stable as it retains some compacted soils. The collapse along it separates façade 1a from 1 b and is a result of a very deliberate effort in moving the top blocks.


Intersection of walls 1 and 2


Façade 1a

## Façade 1a

It is 7.5 m long with a maximum height of 0.45 m . It is separated from façade 1 b by a 0.5 m long collapse of the top blocks.


Collapse between facade1a and 1b


Façade 1b

## Facade 1b

It stretches for 20.5 m attaining a maximum height of 0.8 m at the intersection wilt wall 2. It has a bottom void ( $0.4 \mathrm{~m} \times 0.4 \mathrm{~m}$ ) halfway along its length.

## Wall 2

This is the main dyke extending along the western and southern edges of the quarry site. It ends against wall 1 at the northern end, which is also its lowest part. Because of its length, it has been subdivided into sections that are separated by collapses for management purposes.


Façade 2a

## Façade 2a

It curves into façade 1 b at the northern end. There is a bottom bulge towards the collapse that separates it from façade 2 b . It is 20 m long and 1.85 m high.


Collapse between façade 2 a and 2 b .


Façade 2b

## Façade 2b

It is separated from façade 2 a by a 2.5 m long collapse. It is at this collapsed portion that the wall starts to have a lower wall ( 1.45 m high) upon which the upper part sits like a terrace and tapering off. It is 12 m long and 2.15 m high.


Collapse between facade 2 b and 2c.
Extends for a length of 7 m , the lower part of the façade collapsed forcing the uppers part to sink. Result of a bottom bulge that burst.


Fig. 22. Façade 2c

## Façade 2c

It is 13.5 m long and 2 m high. This is the portion that ends with the section of total collapse. Visitors should not climb over the wall, as it is unstable.


The section that was breached by the waves, between façade 2 c and 2 d
The breach is 15 m long and its ruble has been swept and spread towards the quarry pit.


Façade 2d

## Facade 2d

It has a backward lean. Stone are sliding down at the end breach. It is 4 m long and 1.8 m high.


Collapse between façades 2 d and 2 e .


Façade 2e

## Façade 2e

It is 0.6 m long and 1.4 m high. Its top courses are leaning backwards, assuming a much more stable position.


Collapse between façade 2 e and 2 f
The 8 m long collapse that separates facades 2 e and 2 f has some hanging blocks.


Façade 2f

## Façade 2f

It is 5.5 m long rising to a maximum height of 2 m . It leans backwards from the bottom up to halfway through its height. From here it tapers inwards.


A 2 m long collapse of the top blocks separates façade 2 f from 2 g .


Façade 2g

## Façade 2g

It has a mid bulge near the collapse that separates it from façade 2 f . Another bottom to mid bulge 5 m from this end has resulted in a void ( 0.5 m long $\times 0.6 \mathrm{~m}$ high). This may cause further collapse of the blocks that are directly above it. The façade stretches for 9 m and attains a maximum height of 2.1m.


A 6 m long collapse separates façade 2 g from 2 h .
This is an extensive collapse of the façade going down to the bottom blocks.


Façade 2h
It is 8.5 m long and 2.15 m high. Most of its top façade blocks are collapsed for three-quarters of its length.


FA 4 m long collapse separates façade 2 h from 2 i .


Façade 2i
It is 3 m long and 2 m high.


A 2.5 m long collapse separates façade 2 j from 2 i .


Façade 2j
It leans backwards at the point with a bottom void ( 0.2 m long $\times 0.1 \mathrm{~m}$ high) towards the right end. It is 2.5 m long and 2.1 m high.


A 5.5 m long collapse separates façade 2 j from 2 k .


Façade 2k
This is the last standing facade of the wall 2 at the southern end. The top face blocks have collapsed. It is 7 m long and the standing façade rises to 1.5 m .

Walls 3 and 4


Wall 3


Wall 4

They end against either side of the same boulder forming a soil-retaining platform from which quarried stones were loaded into lorries.

## Wall 5

It stretched along the eastern edge of the quarry site. Now only two standing portions remain. The wall remnants exhibit some elements of straight coursing a sign of improved workmanship!


Facade 5a

It ends against a rock over which it used to pass at the northern end. The southern end is totally collapsed. The same rock forms the eastern edge of the main quarry pit. It is 1.5 m long and 0.3 m high.


Façade 5b
It stretches for about 8 m into the shrubs that grow to its northern end. It also ends against the same rock as façade 5 a to its south. It is 1.5 m high.

Wall 6
It forms a lower terrace below wall 2. It is constructed on top of the western edge of the quarry pits. Like wall 2, it also is characterized by a series of collapsed portions overlooking the pit and they threaten to progressively collapse.


Façade 6a, it is 13 m long and 0.55 m high.


A 2.5 m long collapse separates façade 6 a from 6 b .
A path over it into the pit was causing erosion.


Façade 6 b. It is 13 m long and 0.7 m high.


A 1.5 m long collapse separates façade 6 b from 6 c .


Façade 6 c , It is 2 m long and 0.5 m high. It overlooks the main pit. Blocks between it and façade 6 d are continuously sliding.


A 3m long collapse separates façade 6 c and 6 d


Façade 6d
It is 5 m long and 0.5 m high.


A 2.5 m long collapse separates façade 6 d from 6 e.


It is 7 m long and 0.75 m high. The rubble from the total collapse is concealing its southern end that now has a few blocks reaming.

