ROBBEN ISLAND MUSEUM: OLD POWER STATION

REPORT No.4: REINSTATEMENT, RETENTION, REMOVAL, REPLACEMENT AND MODIFICATION OF HISTORIC FABRIC

Contents

1. INTRODUCTION

The conversion of the OPS will, arguably, for the first time see major intervention in the historic fabric of any building as yet attempted on Robben Island. Robben Island Museum has a policy that a structure and its fabric must reflect its state as at the takeover by RIM of the Island in 1997. Major deviations from this policy in the conversion of the OPS is important if the structure and parts of its fabric are to be saved. The policy can also not be sustained with regard to the OPS as this would mean that the fabric will be in a permanent state of dereliction. [refer to fig. 39. 1996 Mayibuye photograph] Determination of significance of fabric will, therefore, over ride any policy decision to freeze heritage in space and time.

RIM also uses the Australia ICOMOS [Burra] Charter as a guideline in its conservation principles. Adaptive re-use of heritage is firmly supported.

At a meeting of consultants on 23 February 2012 it was agreed that a technical work group be set up to specifically look at monitoring and directing the development of documentation on the reinstatement, retention, removal, replacement and modification of historic fabric. The work group consisted of the Heritage Consultant, Conservation Architect for RIM, Collections Manager RIM and the Conservation architect from GPA.

The work group met on 15 March 2012 to work through Report No. 4 and make sound decisions on the direction to take. This reiterative process is fully supported by the Burra Charter. Two further meetings were held, with a final record of decisions recorded on 18 April 2012.

2. SPECIFIC CONSERVATION POLICY AND PRINCIPLES

With the conversion certain elements will need to be reinstated, certain elements will need to be retained, certain elements will need to be replaced, certain elements will need to be modified or moved while some will be removed completely to accommodate the new use.

Retention, re-introduction, removal, replacement or modification of fabric is a contested area and should not be done by one or two people alone. It will require input from a range of experts and should be carefully considered and motivated.

The aim is to achieve a reasonable balance between the needs to conserve with that of adaptive re-use.

Decisions to re-introduce, retain, remove, replace or modify must be justifiable.

The process must be re-iterative. Recommendations in this document may need to change with implementation and construction.

Good methods of interpretation of re-introduction, retention, removal or modification should be implemented.

Records by means of both photographs and documents must be made during construction of the re-introduction, retention, modification or removal of fabric.

Any fabric removed or modified must be handed over to RIM. RIM must in terms of the National Heritage Resources Act, 25 of 1999, and in conjunction with SAHRA decide on the significance of items removed and whether to incorporate these into the collection, place into storage or scrap. Any fabric to be scrapped must be thoroughly recorded and photographed prior to removal from the island.

The principle of 'do as much as is necessary and as little as possible' must be used as far as possible. In situ materials should be made good and left as is.

The industrial 'feel' or 'sense of place' [genus loci] of the buildings and their environment must be respected and interpreted appropriately

3. REINSTATEMENT OF HISTORIC FABRIC

3.1. ELEMENTS IDENTIFIED

3.1.1. Roof

The original design proposal provided for the reinstatement of the roof ventilator shown in the ca 1963 tracing from an earlier architectural drawing. The reasoning for the reintroduction was that it would allow for the ducting of the new air conditioning plant, wiring, pipes and other services required for the storing of artefacts.

The reintroduction contradicts RIM's 1996 policy, has no value from an engineering perspective and will not provide any volume saving.

The two current roof ventilators are asbestos fibre cement. One is situated on the SE pitch of the roof approximately on grid line 'B', the second is situated on the NW pitch approximately between grid lines 'D' and 'E'. Both will need to be removed, sealed and placed back in situ. They may only be replaced if matching fibre cement ventilators are available and must be taken into the collection.

Corrugated asbestos roof sheets to be replaced with matching profile fibre cement to reduce asbestos register on Island.

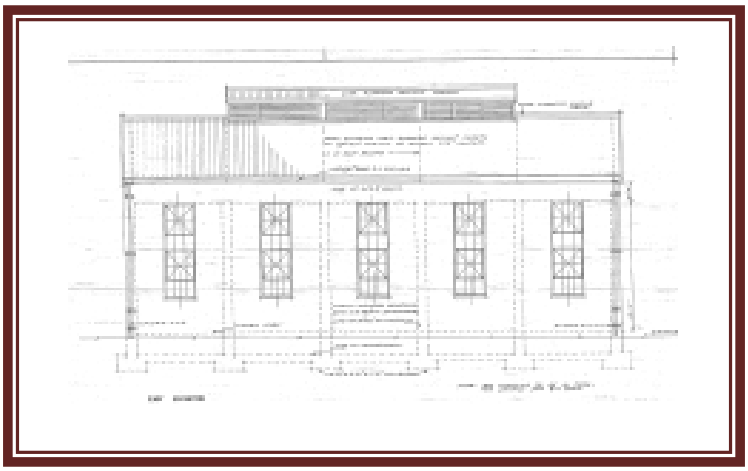
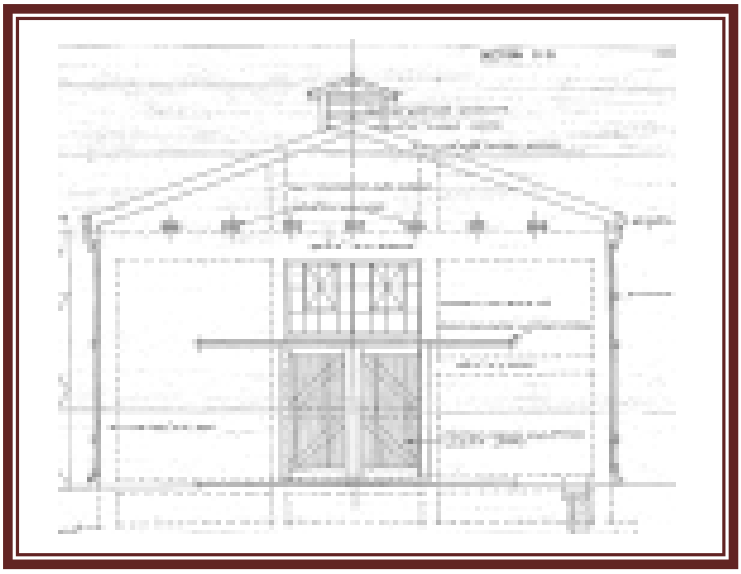


Fig.1. Ca 1963 tracing showing roof ventilator

Fig.2 & 3. Current roof ventilators ca 1970's or 1980's

3.1.2. Doors

The door on the north façade shown in the 1963 architects drawing is to be reopened beneath the central window and the door replicated. This will mean the return of the symmetry of the original design and will allow for better access down a central axis throughout the proposed storage area. The present door ca 1980's would be bricked up. The outline to be scored in the plaster as an interpretation of this part of the history of the place. The door to the ca 1967 to 1970 transformer room to be retained and either repaired or replicated.



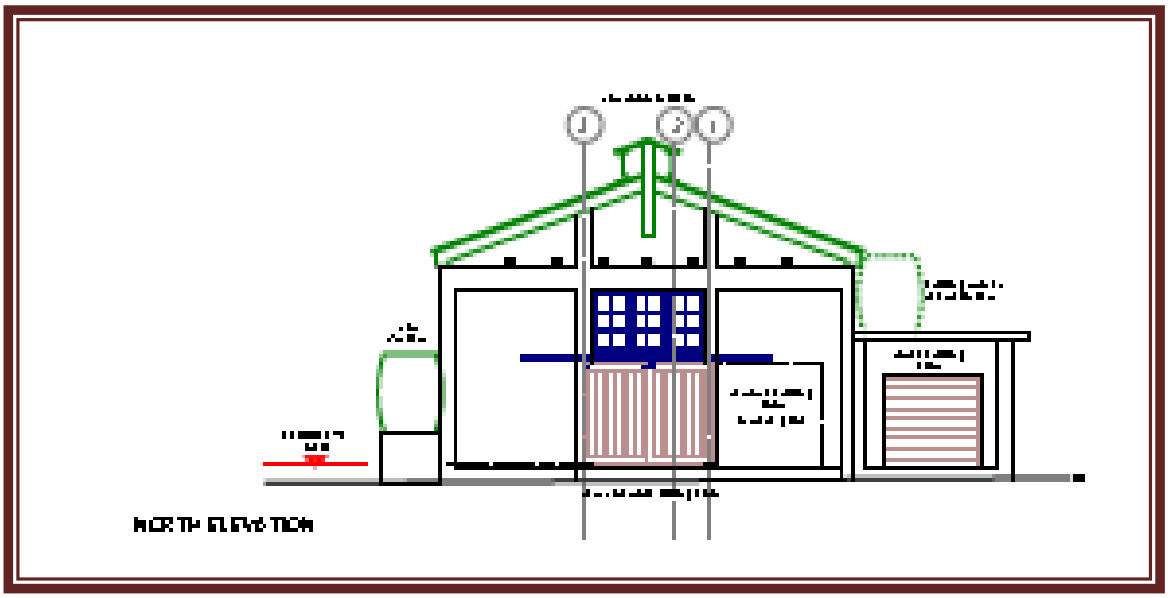


Fig.4 to 6. North elevation

3.1.3. Windows

Generally to be retained, repaired or replicated .

The window between gridline ‘B’ and ‘C’ on the east façade reflects two historical periods and is to remain as is. The lower bricked up part corresponding to the larger window is to be demarcated by differential plaster finish and outline scored in plaster.

Fig. 7. Halved window of ca 1970’s conversion in section B-C

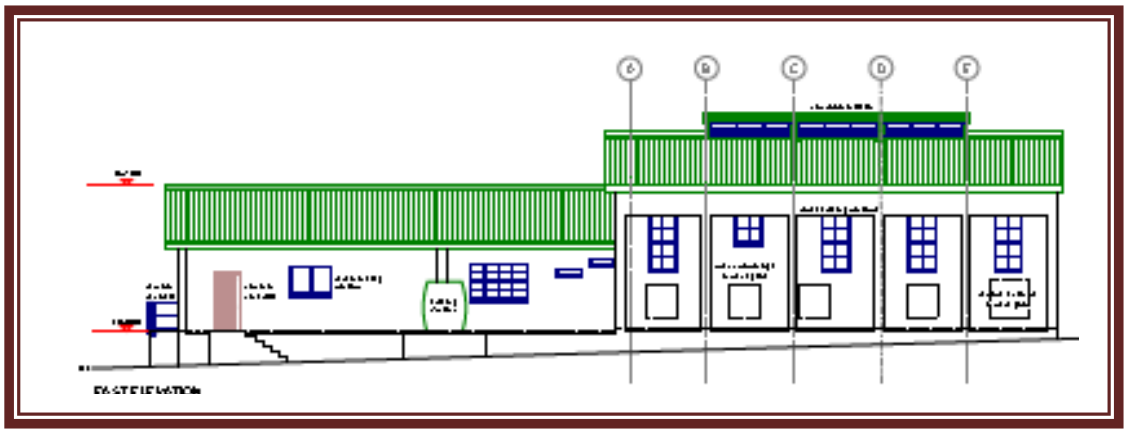


Fig.8. Design proposal East Elevation

3.1.4. Mezzanine level

The number and type of artefacts requires that the available space in the double volume of the main building be optimally utilised. The design proposal provides for the introduction of a mezzanine level.

The 1963 tracing clearly indicates a gallery on the western interior of the building. The introduction of the mezzanine level prevents any attempt to restore or represent the original gallery

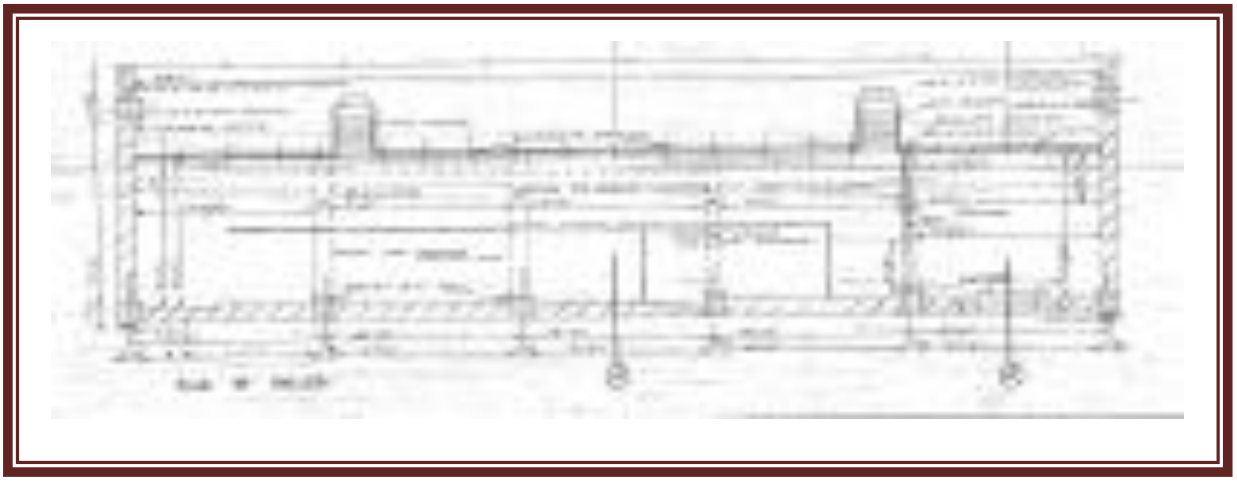


Fig. 9. Plan of gallery from 1963 tracing

3.1.5. Floor

With the ca 1967-1970 and later alterations the pipe channels leading out to the cooling pond were filled in with concrete. Three channels can be seen running west to east to the eastern wall. A third trench runs at right angles into the southern most of the three trenches from north south. The new design proposes the use of the trenches to facilitate humidity and temperature control services, subject to final design. Whether the trenches are used or not, they are to be distinguished by differential material or colours in the final floor finish. Refer to report number 7.

3.1.6. Cooling pond and channels

The new design provides for the use of the cooling pond shown on the 1963 tracing and mentioned in archival sources outside the eastern elevation. The cooling pond with additional superstructure will house the new plant for temperature and humidity control.

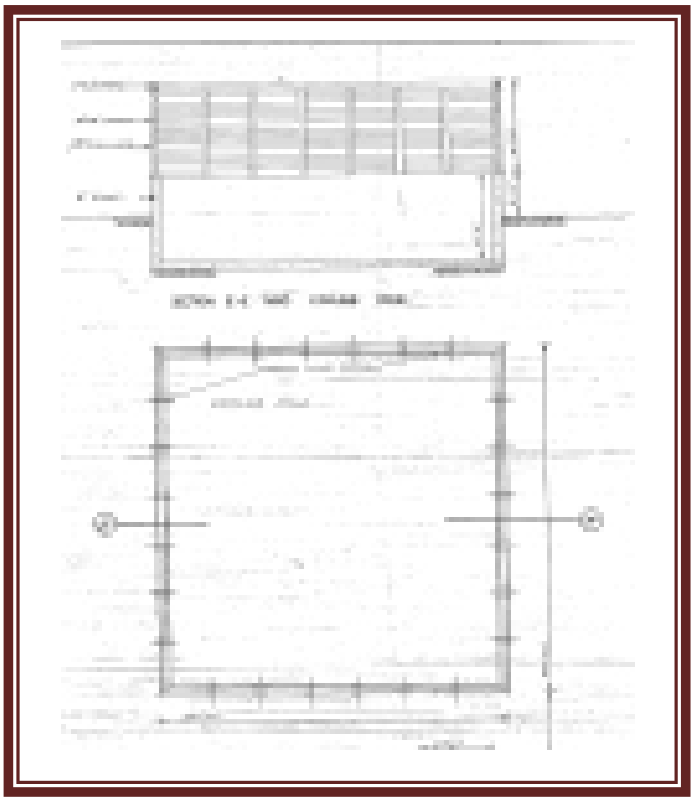


Fig.14. Ca 1963 tracing of cooling pond

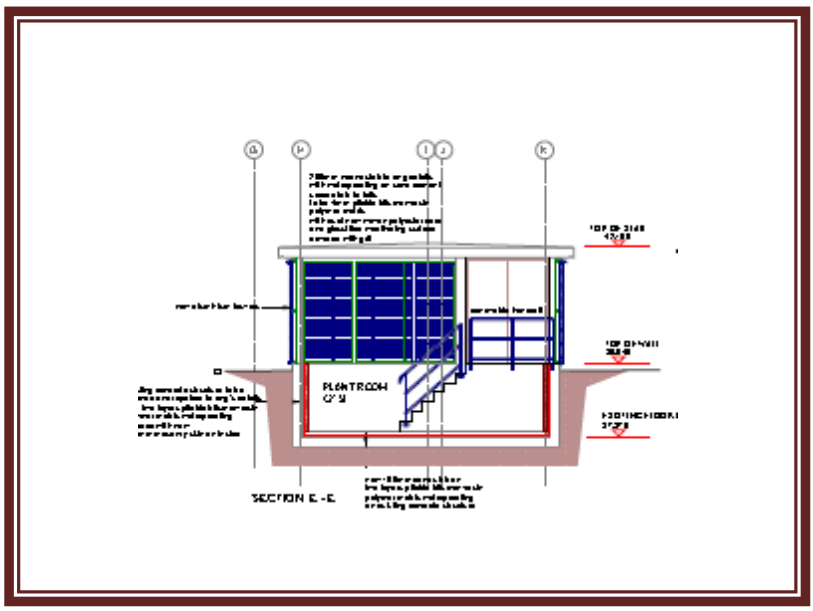


Fig. 15 & 16. Design proposal [refer drawing 04/01]

4. RETENTION OF HISTORIC FABRIC

Decisions to retain, replicate or remove fabric/ componenets should to the fullest extent possible be taken in advance and be incorporated into the contract.

Unforeseen elements exposed during works will be addressed by the proposed heritage-competent oversight of the works and related contract clauses and instructions.

4.1. Roof

The siren mounting on the southern and northern gable of the double volume building to be retained with necessary repair and decoration.

Fig.17. North gable wooden mounting. South gable siren mounting is discernable.

4.2. Guttering and down pipes

Two types of guttering provide historical layering to the building.

a. Some ogee steel guttering remains : circa 7m on east, 9m plus 1m downpipe on west. From a durability point of view it would not be wise to re-use these remnants, which should be removed and handed to RIM. The new rainwater gutters and downpipes of the taller part of the building need to be of steel or cast iron components of sections matching the original [replacing ‘like’ for ‘like’]

b. The remnants of asbestos gutteringon the lower part of the building are to be removed and replaced with fibre cement of matching profile.

Fig.18. East elevation with extant section of steel guttering.

Fig 19 & 20 West Elevation

c. A rainwater downpipe on the west elevation ingresses the building where a steel pipe carries the flow of rainwater through the building from west to east, where it drains into a tank. The internal pipe compromises functional requirements of the archive for fire protection and safe environment. It should be recorded, then removed and handed to RIM.

Fig. 21. West face

Fig.22. East face showing exit point of western down pipe.

Fig.23. Steel rain water pipe through building.

4.3. Skirting, main double volume section

A double row of red clay tiles similar to those on the floor forms a skirting round the interior of the main building. These must be retained and missing tiles be made good from the floor tiles.

Fig.23. Showing skirting outline with missing tiles.

4.4. Steel ladder, South wall interior of main building

To be salvaged and re-used. In its current position its rentention conflicts with the proposed mezzanine level. It should be moved to the North wall diagonally opposite where the double volume space can accommodate it. This position from an interpretive point of view is still compatible with the ladder's original function to to provide access to service the gantry crane

Fig.24. Steel ladder in SE corner and double wooden door opposite

4.4. Doors

The wooden door and frame in the SW corner is worthy of retention but it cannot be moved to the proposed new position in the centre of the south wall as this requires a full fire protection door. The door should be recorded, removed and handed to RIM.

4.5. Windows

Window frames should as far as possible be retained and made good. Should it be necessary to replace a window it should be replicated. All replication and repair to be done in the same materials as the original

4.6. Floor

The original floor of the main room was of 6" square quarry tiles, but is now incomplete. To conserve and indication of the original tiled floor, a perimeter border of between 3 and 6 tiles [depending on number available for re-use] is to be retained/ restored using existing tiles. The remainder of the floor space will be a new floor finish selected for its utility for the proposed new use of the space.

Original trench lines be distinguished by a distinct colour or material whether used or not.

Fig.25. Floor tiles

Fig.26. Trenches

4.7. Mobile Gantry crane

To be retained, de-rusted and decorated. Chain, pulley and hook component to be located in double volume space but moved along track to out of way adjacent to north wall to west of reinstated entrance.

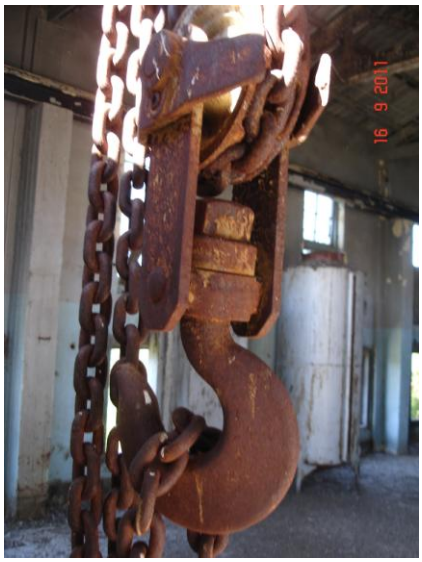


Fig.27 to 29 Hoist and gantry

4.8. Transformer room

Floor and floor channels to be treated as main room.

Badly corroded. To be removed and scrapped. A replica in galvanized steel is to be provided and decorated.

Fig.30. Steel ladder on South exterior wall

4.9. Water tanks

The design concept proposes the reintroduction of the harvesting of rainwater for use in the garden. Two asbestos fibre cement tanks are still extant. The eastern tank is to be replaced with a matching fibre cement tank in its current location. The western tank on the roof of the transformer room must be removed and replaced at ground level with a matching fibre cement replacement. The motivation for the replacement is the requirement to reduce the asbestos register

4.10. Fire bucket and hose reel stand

The fire bucket stand on the western side of the building is to be retained. It is corroded at ground level but is to be de-rusted and decorated and fitted into new galvanized steel sleeves set in concrete pads. The fire hose reel stand on the eastern side to be retained. To be removed for derusting and painting and hten to be reset in original position. Reel clamps to be greased to prevent coorosion.

Fig.31. Left, East elevation tank

Fig.32. Right, tank on roof of transformer room

Fig.33. Left fire bucket holder west

Fig.34. Right, fire hose reel

5. REMOVAL

5.1. Exhaust pipe

One of the original four remains. This is to be retained but relocatedin the middle of the five bays of the east elevation where the hole in the masonry of the original pipe exists and can give sounder weight –bearing support that the window frame which it is currently situated in. Stainless steel pipe to be cleaned and refixed in original vertical position. A top bracket plus an additional bracket as fail-safe to be provided. Grille to be fitted in pipe at exhaust exterior end to prevent bird nesting. Pipe to be cut short at interior end, sealed of and then secured in masonry. Other exhaust pipe penetrations to be identifiable. Two galvanized steel plates to be fitted in two locations in lieu of single window panes where exhaust pipes originally exited the building. Former pipe penetrations to be indicated with painted circles on these plates. Holes in mesh grilles to be repeated in new mesh grilles. Remaining hole in wall to be bricked up, with bricks set back and plaster painted black.

Fig.36. Stainless steel exhaust pipe

5.2. Steel prison door

To be retained with lock function and operation to be restored. This store not to be independently fire proofed.

Fig.37. Modified prison door

5.3. Doors – other

Double doors on West Elevation: doors and frame to be retained, with repair and/or replication as required; then to be fixed shut and bricked up on inner side with outline of position scored in plaster; ventilation to interspace to be allowed for. Double doors on South Elevation: original to be restored/repaired/replicated re-using salvaged components. This door does not have any threshold and will need adaptation to provide weatherproofing.

Fig.38. Interior of door boarded up

Fig.39. South entrance with wooden door on its side on staircase

5.4. Cage

A diamond mesh and wooden framed cage used to store chain saws and related equipment will be removed. RIM to record photographically; then to be dismantled by contractor with components including door to be handed to RIM..[refer fig.38]

5.5. Walls – interior rooms

A number of internal walls inside the extension to the main building will be removed. The walls represent two distinct periods, *circa* 1980's and *circa* 1950's. Where appropriate their positions should be interpreted on the floor, walls and ceiling. Samples from the removed bricks must be labeled with source and handed to RIM. Removed doors with frames and windows to be offered to RIM and only disposed of by the contractor if RIM declines them.

Fig.41. Office

Fig.43. Earlier 1950's wall

Fig.42. Store Room

Fig.43. Door to cage

5.6. Steel diesel tanks

Agreed these must be retained as artifacts and that there was value in maintaining their association with this building. However they cannot remain in building because there is not sufficient height for them beneath the new mezzanine floor, and if placed in the limited double volume area they will obstruct activities in that area; further inside the building they could compromise environmental control objectives of the project.

The tanks are to be placed on the eastern side between the main building and the new proposed plant to be housed inside the cooling pond.

Fig. 44&45.
Diesel tanks

5.7. Toilet

In the space to be remodeled as disabled wc and shower there is an in-situ plastered urinal. While its retention would be of some heritage value, to do so would compromise the proposed uses of the space and contemporary standards of decoration, hygiene and functionality would be compromised. Thus it is accepted that the urinal cannot be retained but it is to be recorded before works in this space

commence. The original timber towel rail is to be retained, the rail restored and all parts decorated.

Fig.46. Left, Urinal and wash basin mounting

Fig.47. Right, modern bowl and cistern.

Fig.48. Wooden towel rail

5.8. Wooden electricity poles

To be retained. There are three, the third just outside boundary fence at NW corner of site. All three are to be creosoted; on the pole adjacent to the North elevation, the grass growing in the split is to be removed; the stainless steel hoop strapping is to be retained.

Fig.49. NE wood pole

Fig.50. South wooden pole

5.9. Log book holders

These have already been removed by RIM.

Fig.51. Log book holders

6. MODIFICATIONS

6.1. Ventilation openings

To be bricked up and plastered; external reveals to be retained and internally their outline scored in plaster. The external plaster faces to be painted matt black and salvaged or replica mesh grilles provided and refitted. There is no need to retain the original timber frames which are be removed and disposed of by the contractor. The northern end opening is slightly larger and had a louvred grille in a frame, not a mesh grille. Remains of this assembly are on site. This opening too is to be bricked up internally as the others. The louvred unit is to be restored or replicated and set in its original position.

Fig.53. Remaining example of steel mesh grille

Fig.54. Louvre still extant as at 1996.

7. OUTBUILDINGS AND ASSOCIATED LANDSCAPE

7.1. Guard house and facilities

Roofing, wall, windows and doors to be retained, with necessary repairs being 'like for like'. There appears to have never been any guttering but there is evidence of a water run-off system on the ground, which is to be retained.

Fig. 56 & 57 Guard house and facilities SE

7.2. Store

There are two rectangles of double thickness clay brick vent units, on the north and east elevations. The outer panels of vent units are to be retained *in situ; the* inner leafs are to be broken out and replaced with single leaf panels of brickwork to close the opening; then to be plastered internally with scoring to demarcate the position of the former vent area.

Store roof is missing, but seems to have been a low mono-pitch (rafters and purlins, then sheet material) with slight fall to east and possibly parapet brickwork on north and south flanks. New concrete slab should have sheet roofing of original form fitted over the slab and edge details to replicate original.

Fig.58. Entrance and west face

Fig.59. decorative ventilation interior east wall

7.3. Fence and entrance gate

To be retained. Draw wires to be renewed, poles to be creosoted and existing mesh panels to be re-hung; extensive repairs to be done to corroded gates, all to match existing.

7.4. Retaining walls

In good condition generally. Repair to be done at N-E corner (*circa* 2sqm on face), all in matching materials and detail.

7.5. Access from House 49

RIM preferred single access point to this site, and after discussion of pro's and con's it was agreed that there was no need for pedestrian link directly from this site to House 49.

7.6. Landscaping

Extent of paving is solely a heritage matter but also a matter for RIM as user to agree with architect as part of brief, and the working group agreed the brief should determine its extent, subject then to SARHA's permission. The working group did however observe that the site was not ever fully paved. The quadrant of stones demarcating a planting bed at S-W corner of site is to be retained.

Fig.60 to 66. Fence, gate , retaining walls