Report #1

Prepared by: Michael Schwartz, Director June 6th 2008

Report on emergency restoration work at Content Great House using tranche 1 of funds





Report to Mr Jim Parrent: 6th June 2008

Summary

Approximately half of the budget has been spent and the house is now watertight and structurally sound. Next steps will be to replace all the floor joists in the living room and then to build the concrete nog infill to the reconstructed wall.

Work to date

The following paragraphs refers to the Living Room interior wall (see Figure 1)

1. After removing the tray ceilings, the western part of the interior wall was demolished. The eastern third seemed sound and currently has not been disturbed. The entire baseplate seemed sound and was not disturbed.

The structure was rebuilt using 3 thicknesses of 2 x 6 WPP to match the original timber frame width. Note that the central member of the posts uses 2 x 4 WPP so that there was a "key" for the masonry infill.

- 2. Rot was found to extend into the outer wall and one post together with approximately 14 ft of wallplate were replaced (see fig 5)
- 3. All rafter and hip feet in the affected area (northern wall) had rotted: in most cases, after jacking the roof trusses to the correct position, new ends were spliced on to existing lumber (see fig 4). Ten rafters were in such poor condition (mostly due to termite damage) that they were completely replaced, using local hardwoods (size was an issue as the original material was a full 2 in by 4 in.). Similarly, most of the roof ties were completely replaced (using WPP) as a result of termite damage.
- 4. The existing valley was removed and a new support structure with new Alu-zinc sheeting was installed. A single layer of new cedar shingles was used to maintain visual continuity in areas where the existing shakes had to be cut back for valley repair work.
- 5. The existing "zinc" was removed and lathes were nailed through the existing cedar shakes to rafters (see fig 4).
- 6. New Alu-zinc roofing was installed on the two slopes above the damaged wall (fig 4)

Next steps

We will replace ten rafters on the opposite slope of the roof in the living room: these are badly damaged by termites. Native lumber (breadnut) has been ordered.

We will replace all floor joists in the living room with double 2*8 wolmanised pine and we will splice new ends on the remainder of floor joists, as required.

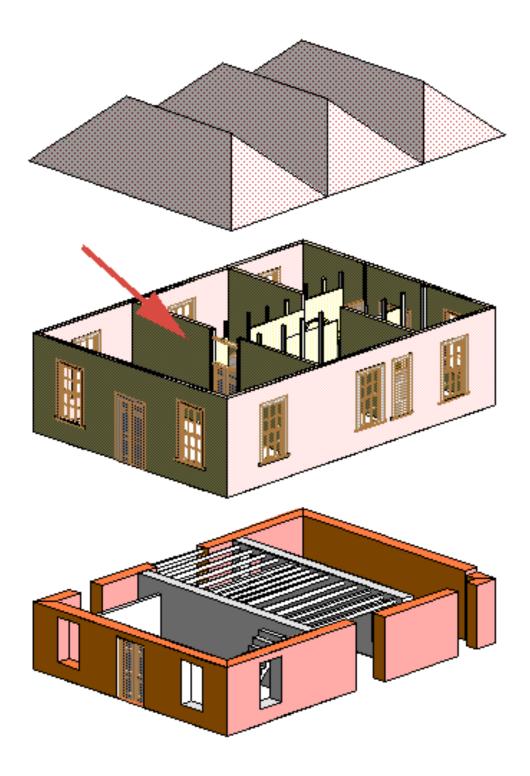
We will then rebuild the concrete infill to the wall with lime-based concrete (with instruction from FHG experts).

Estimated time: six to eight weeks

Budget & expenditure to date

Item	Estimated Cost (J\$)	Actual Expenditure to date (J\$)
Interior wall material (lumber)	\$80,350	\$40,945
Concrete nog & render (materials)	\$83,000	\$2,000
Valley material	\$31,500	\$30,437
Roof material	\$66,500	\$82,301
Floor joists (lumber)	\$39,000	\$0
Labour (carpentry)	\$129,000	\$191,671
Labour (masonry)	\$24,000	\$0
Transport	\$20,000	\$8,500
Tools / Equipment	\$20,000	\$405
Supplies	\$5,000	\$2,296
Total for emergency work	\$506,350	\$358,555
Architrave mouldings material	\$21,320	\$0
Labour	\$14,213	\$0
Total	\$541,883	\$358,555
Contingency (20%)	\$108,377	\$0
Grand Total (to date)	\$650,260	<u>\$358,555</u>

Figure 1



The red arrow shows the damaged wall.

Figure 2 View of rebuilt wall structure in Living Room



Figure 3 View of collapsing wall in Living Room before intervention



Figure 4 Various snapshots of work done to date

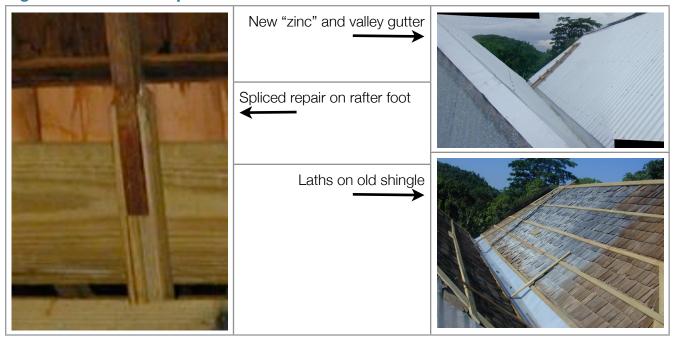


Figure 5 Photo of east side of house showing new post and clamps.

