

The Foundation Dilemma

BACKGROUND

Types of Buildings

1. Ground level close to bottom of shingles; roof slopes toward ground
2. Ground level distant from bottom of shingles; roof slopes toward ground
3. Ground level close to bottom of shingles; roof does not slope toward ground
4. Ground level distant from bottom of shingles; roof does not slope toward ground

Issues of Concern

Splash Back

Water falling from roof hits ground and splashes back onto shingles causing quicker than normal deterioration

Termites and other insects

Close proximity of mulch to foundation and low hanging shingles provides haven/"nourishment" for insects to attack buildings

Fire

Close proximity of mulch to foundation provides potential fuel for development of fires outside of buildings which could spread to the buildings themselves

Water Drainage

Water which does not properly drain from along side the buildings could leak into the basement area or come in contact with the low hanging shingles

Aesthetics

Any solution should be relatively uniform throughout the village and pleasing to the eye

Cost

The cost of the project should be in line with the benefits to be gained

SOLUTION APPROACH

Discuss issues with Briggs Engineering which conducted an extensive analysis of our buildings in 2004/2005 and is familiar with the issues and our particular situation.

POTENTIAL SOLUTIONS CONSIDERED

Gutters

This is the most obvious answer which would solve most of the water related issues. However, ARC is not likely to allow gutters at Maushop. Furthermore, any such gutters would not meet the "Aesthetic" criteria.

Increase Slope of Ground Away from Buildings

This would be difficult and expensive to effect. In some instances such a change could direct water toward other buildings or cause it to funnel into channels with no specific place to "run off."

French Drains

This could be used on those sides of the buildings where water falls directly. There are three issues here: where will the water collected in the drains empty, the difficulty installing such drains where patios end directly under building sidewalls, and the potential cost.

More Permanent Termite Protection

This would be especially helpful for buildings where it may not be possible to put a barrier between the ground and the building such as noted directly above. However, this potential solution does not address the water issue.

Strip of Stones and/or Shells

A narrow (perhaps 4-6 inch wide strip) but shallow (perhaps 2 – 3 inches deep) strip of pea stone or shells placed around the perimeter of the buildings. This would be primarily a cosmetic solution to the water issue, although it would provide some base into which water falling from the roofs could drain. It could be used on all our buildings providing a uniform appearance. Finally, it would provide a barrier and guide to the placement of mulch around the buildings.

RECOMMENDATIONS

Install permanent termite barrier for older buildings where there is little clearance between the ground and the bottom of the building sidewall.

Install narrow, shallow strip of shells or stone (depending on cost) around all buildings.

Install mulch only up to the new shell/stone strip.

Consider installation of French drain solution only where water issue is significant.

DISCUSSION

At this point, no one solution seems practicable, affordable or likely to address all of our issues.

Any solution should be one which blends aesthetically with the current style and feel of the village. It should also be one which is relatively cost efficient to install and maintain. It should balance the nature and extent of the problem(s) we are trying to address with the cost of the proposed solution.

The benefits of the proposed solution are as follow:

- it is doable and if it can not be implemented all at once, it can be done over time, section by section
- the termite portion can be treated as the first phase in a plan to treat this issue in a similar manner village-wide
- the plan, once implemented, should greatly reduce the dangers from termites and fires
- the plan will begin to address the water issue, both in terms of back-splash and drainage,
- the plan, once implemented, will enhance the overall appearance of the village, and
- the plan should be affordable

NEXT STEPS

Discuss the options and recommended solutions

Agree on potential solutions

Get cost and timing estimates to implement

Decide what intermediate actions should be taken for 2007