

Appendix E CANADA: 3980 NORTH FRASER WAY BURNABY BRITISH COLUMBIA V5J 5K5 T: 604.527.8378 F: 604.527.8368 www.qai.org • info@qai.org

Regarding : 2640 Whistler Road, Whistler BC

Roof replacement project involving metal panels to asphalt shingles.

This strata complex was constructed in or around 1988 and the existing roof system has been under repair for many years. When reviewing the buildings it was noticed that damage from sliding snow had ben re-occurring in many areas where snow from two or more areas converged and likely slid downward in a compacted state damaging details such as skylights down slope. Looking into three random attic spaces it was found that the roof is 26 ga. Mmetal panels on spaced sheathing. This type of assembly can flex downward as the snow weight slides over it which loosens the exposed fasteners causing more leaks.

After review with the owner's representatives it was decided that a solid plywood deck with asphalt shingles would be the best solution to the roof problems. The specification was written with regard to the typical weather in the area.

The new roof assembly will have 5/8" plywood sheathing overlay on the existing spaced sheathing as recommended by the snow clip manufacturer which allows the clips to be fastened into the immediate substrate as opposed to finding the structural support for each one. This also provides more rigid support and better nail retention for the asphalt shingles.

The asphalt shingle roof system is specified to have a full self-adhered modified bitumen eaves protection membrane as an underlayment. This will be carried a minimum 6" up all adjacent walls and details such as skylight curbs. All outside perimeters will have edge metal flashing for shingle support and fascia protection. The asphalt shingles will be Certainteed Northgate, a class 4 hail rated shingle.

Siding and trim cut/removed at walls to allow new flashings is specified to be replaced with matching colour new trim boards. When reviewing the buildings it was noticed that the gable vents are appearance only with plywood sheathing etc behind them. As many are on walls that would not provide flow from the attic it was decided to add a tall metal vent near the peak of each unit to draw air through the cathedral ceiling areas to the small attics at the top of each unit. There are currently attic ventilation strips at all soffits including gables that will provide intake. The new vents will be a flanged 12" diameter fully soldered 24ga. steel set in the centre on opposite sides of the peak roof between adjacent units with cross bracing between vent stacks.

QAI Laboratories has sealed the schedule B and two sets of building plans. RDH is being retained to do the snow assessment per Council policy G-16. QAI Laboratories will provide the final sign off on the project when completed as well as the ongoing field reviews while work is in progress

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