



SEL Engineering Ltd.

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May 28TH, 2007

The Owners – Strata Plan LMS 2093

c/o Baywest Management Corp.
#10 – 32442 George Ferguson Way,
Abbotsford, B.C. V2T 4Y4

Attention: Berit Hansen

E-mail: bhansen@baywest.ca

Re: The Observatory
10899 West Whalley Ring Road

SEL Engineering Ltd. has now completed the review of Info-Tech's report and our own review, regarding the condition of the buildings exterior cladding systems. Our recommendations have not changed regarding the needed repairs/maintenance, as we outlined in our Preliminary Report dated April 25, 2007 and discussed with the Strata Council on May 8, 2007. We are still of the opinion that the major items of repair/maintenance are as follows:

- A thorough cleaning of all building surfaces.
- Repair and repainting of all concrete columns/walls, slab edges and eyebrow features.
- Repair and repainting of balcony concrete slab edges and upstands.
- Painting of stucco cladding.

In addition to the above repairs/maintenance items, our review has shown that the urethane membrane applied to the balcony surfaces requires re-freshing. We also consider this a major item.

The Info-Tech report and our investigation have also identified the following miscellaneous items which must be address during the repair/maintenance procedures. Many of these items were noted in our preliminary report:

- Review and repair as required currently placed caulk seals.
- Placement of needed miscellaneous caulk seals, such as Penthouse flashing joints, perimeter of ground floor exhaust vents, balcony railing mounts etc.
- Addition of glass block supports.
- Cleaning of exhaust vents.
- Cleaning of all drains and scuppers.
- Repair/replacement of main roof flashings.

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- Miscellaneous Window Wall repairs.
- Gum-lip flashings at the top of stucco panels.
- Metal hoods over grilled exhaust vents.

SEL Engineering Ltd. has commissioned Eric Vissers of Prime Coatings Ltd. to provide the requested budget pricing numbers for the major repair/maintenance items listed above. We prepared a short Scope of Work document for this purpose. This document is included in this report as Appendix A.

Eric Vissers has provided a budget price number of \$428,436.00 inclusive of GST to undertake the five major repair/maintenance items listed above. Eric Visser's pricing breakdown accompanies this report for your review. As discussed in the May 8, 2007 meeting, SEL Engineering Ltd is of the opinion that a Contingency Fund of 20% or approximately \$80,000.00 be carried to fund the undertaking of the minor repair/maintenance items listed above.

DISCUSSION:

When painting of a stucco clad wall is being contemplated, certain issues need to be considered. By painting a stucco surface, the dynamics of the assembly are changed to what is commonly known as a face seal system, meaning that the normal drying and drainage qualities of the stucco are greatly reduced. This increases the future maintenance requirement of the wall assembly. As the stucco's ability to dry is reduced, greater efforts must be made to assure water does not penetrate the system, particularly at connections to dissimilar materials such as windows, doors, and vents etcetera. The caulk seals applied at these connections must be diligently maintained. The caulk seals on The Observatory were completely re-done approximately three years ago. They remain in good condition with only minor repairs required. These repairs are recommended in the proposed repair/maintenance program. Secondly, the condition of the steel stud frame work of the exterior wall assemblies must be sound and unaffected by water leakage. SEL Engineering Ltd. investigated the condition of the steel stud framing by cutting several observation holes through the interior gypsum to confirm visually the condition of the frame work. These observations were made at randomly chosen locations at various floor levels of the south and east elevations which the largest percentage of stucco cladding and exposure to the elements is present and water leakage reported. Additionally, the three areas we were informed had experience water leakage to the interior were investigated. In total ten locations were investigated. One location showed minor water staining on the inboard side of the exterior gypsum sheathing and very minor rusting was noted in two locations. To summarize, we did not witness any damage worthy of repair or mould growth within the wall cavities in our investigation. Based on this information, we are of the opinion that the face seal approach to the stucco clad walls is sound technology. Photographs documenting the observation holes are attached under Appendix B.

SEL Engineering Ltd. must again inform the Owners, as discussed in our May 8, 2007 meeting; face seal systems must not be considered a permanent repair. This repair approached is intended to extend the lifespan of the cladding system 10 to 15 years. Major repairs cannot be ruled out as the building ages and building materials reach the end of their intended life spans. As noted above, maintenance procedures must be diligently addressed. Periodic investigations are also recommended to assure wall assemblies remain functional.



APPENDIX A

Scope of Work

The Observatory – Strata Plan LMS 2093

10899 West Whalley Ring Road, Surrey, B.C.

REPAIR/MAINTENANCE PROCEDURES

Typical Concrete Repair & Coating:

- Wash all surfaces with 3000 psi. and Turbo-Head.
- Patch all large bug holes with Sonoskim.
- Rebar repair – a) remove all rust b) coat metal with Emaco P-24 c) Repair area with Gel-Patch.
- Apply Colorflex or Thorolastic Coating – Provide two prices a) 10 mil and b) 16 mil.
- Balcony Soffits to be coated with Thorocoat.

Stucco Repair and Coating:

- Power wash all surfaces using standard pressure – 600 to 800 psi.
- Crack repair using Sonneborn Patching Compound 748 – a) 1/16” to 1/8” wide use brush grade b) 1/8” to 1/4” use trowel grade.
- Apply Colorflex or Thorolastic Coating. Price both a) 12 dry mil thickness with 5 year warranty and b) 16 dry mil thickness with 10 year warranty.

Rooftop Eyebrow Detail:

- Wash all surfaces with 3000 psi. and Turbo-Head.
- Patch all large bug holes with “Sonoskim”.
- Apply base and top coat to top surface. Caulk connection of Eyebrow to cap flashings.
- Paint underside with Thorocoat.

Balcony Re-coat:

- Lightly grind entire surface to remove aggregate.
- Xylene wipe entire surface.
- Two step TOPCOAT SYSTEM: a) light coat of SonoGuard, no sand. Allow to set. b) Full top coat of SonoGuard and silica sand over first top coat.
- Full perimeter caulking cant.
- Return to top of inside face of balcony curb.

Note: All materials used are to be approved by SEL Engineering Ltd and/or BASF Construction Chemicals, LLS – Building Systems.



APPENDIX B

Photo Annotations

The Observatory – Strata Plan LMS 2093

10899 West Whalley Ring Road, Surrey, B.C.



Photo #1

- **Ste. #1506**
- **East Elevation**
- **No rusting or mould growth**

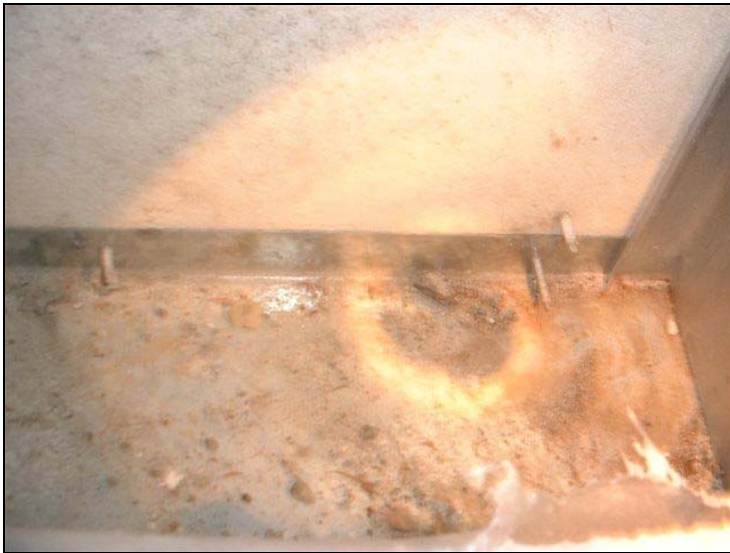


Photo #2

- **Ste. #2002**
- **South Elevation**
- **No rust or mould growth**



Photo #3

- **Ste. #502**
- **South Elevation**
- **Minor rust on sill track**
- **Previously reported water leakage in same area**
- **No mould growth**



Photo #4

- **Ste, #403**
- **South Elevation**
- **No rust or mould growth**



Photo #5

- **Ste #1107**
- **East Elevation**
- **Minor rust on cut edge of framing track**
- **Previously reported water leakage**
- **No mould growth**



Photo #6

- **Ste. #1602**
- **South Elevation**
- **Water staining on gypsum sheathing**
- **No rust or mould growth**



Photo #7

- **Ste. #1903**
- **South Elevation**
- **No rust or mould growth**
- **Previously reported water leakage**



Photo #8

- **Ste. #1503**
- **South Elevation**
- **No rust or mould growth**



Photo #9

- **Ste. #602**
- **South Elevation**
- **No rust or mould growth**



Photo #10

- **Ste. #1003**
- **South Elevation**
- **No rust or mould growth**



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If after review of this report, you have any questions or concerns, the writer would be pleased to meet with the Strata Council to further discuss our findings and opinions.

SEL Engineering Ltd.

per,

Gary L. Bawtinheimer
Senior Project Consultant

Reviewed by,



MAY 28 2007

Frits A. Huckriede, P. Eng.