



December 4, 2011

File: 1613-11A

Attention:

Dear:

Re: Interior Heart and Surgical Centre, Kelowna, B.C.

Appendix B of the Request for Proposals, Item 3.2.3.9 (a) xiii, requests a brief description of neighbourhood and facility noise impact relating to mechanical systems. As sound consultant for the Plenary Health team, we are pleased to provide the following information in response to this item.

The potential for exterior noise from mechanical systems to adversely effect both neighbours and users within the facility has been addressed within the current stage of this project and noise mitigation measures will be further developed and implemented throughout the detail design stage. Adverse noise impacts will be avoided through appropriate selection and location of equipment and by providing silencers or acoustic screens where necessary to limit exterior noise to acceptable levels at property lines and at noise sensitive locations within the property. Mechanical systems being addressed include:

- Outside air intakes and exhaust air outlets from air handling units
- Rooftop exhaust fans, particularly those serving laboratories
- Cooling towers
- Remote radiators for emergency generators
- Air intakes and discharge from generator rooms
- Combustion exhaust outlets for emergency generators

Noise mitigation for some of the above systems, has already been designed in considerable detail. For example, the main air handling units and return fans will utilize fan arrays, which minimize noise levels at the source by using multiple smaller fans rather than single larger fans. The emergency generator rooms have also been carefully designed to limit exterior noise to 50 dBA at the nearest property line and also at the nearest neighbouring building within the facility. The generator rooms will be

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constructed using a “room within a room” design to ensure that noise levels in the patient area above, will comply with interior noise level requirements. Detailed noise mitigation designs for some of the other systems listed above will be confirmed once equipment selections have been finalized but we are confident that we can avoid any adverse impacts using the strategies noted above.

Sincerely,

BKL Consultants Ltd.

per

Douglas S. Kennedy, P.Eng.