CITY OF KELOWNA

MEMORANDUM

Date:

November 19, 2008

File No.:

5400-02

To:

City Manager

From:

Director of Regional Services

Subject:

DESIGN OF LAKESHORE ROAD BRIDGE OVER MISSION CREEK

RECOMMENDATION:

THAT Council receive the report of the Director of Regional Services dated November 19, 2008 for information.

BACKGROUND:

At the meeting of the Transportation Directions Committee on October 10, 2007, the undersigned reviewed conceptual design scope for the proposed upgrading to Lakeshore Road and Gordon Drive in the vicinity of Mission Creek. At the time, the Committee of Council was informed that the design team was looking to elevate these roadways over Mission Creek to allow year round passage of the Mission Creek Greenway users beneath the structures. Since that time the design was completed for the Gordon Drive upgrades and bridge replacement that includes this year round 'grade separation' with the Greenway.

The preliminary design of the Lakeshore Road improvements has now commenced. A number of factors have come to light that have made the goal of year round grade separation with the Mission Creek Greenway extremely difficult if not unachievable. These factors included:

- The vertical profile of the proposed road created safety issues with the Truswell Road access to residential properties on the east side of Lakeshore Road. The raised bridge and road would create sightline issues for those wishing to use this access.
- Although Truswell Road on the west side of Lakeshore Road is planned to be redirected to Cook Road there is no easy way to provide alternate access to the Truswell Road developments on the east side. After accepting that this access will remain, it became desirable to keep the traffic signal in place after the road improvements. With the traffic signal remaining in place, then pedestrians can easily cross Lakeshore Road at this signal reasonably close to the Greenway.
- The higher road would require more retaining walls creating significant addition costs to the
 project and concerns over aesthetics. Without retaining walls the road embankment would
 encroach on a sensitive environmental feature (wetlands on east side of Lakeshore Road)
 and/or require additional land acquisition on the west side of Lakeshore Road.
- Concerns were expressed by neighbouring properties about additional traffic noise created by an elevated road and bridge in close proximity to their residences.



With the above concerns identified, the design consultant has recommended that the proposed bridge height be lowered. His recommended height would still allow pedestrian passage under the bridge for most of the year but the pathway would become flooded during high creek or lake levels. The recently reconstructed Casorso Road bridge was similarly designed. The lowering of the bridge height allows the bridge construction and road alignment to be situated within the existing Lakeshore Road dedication.

Given these additional considerations, I support the consultant's recommendation and will direct the design team accordingly.

Considerations that were not applicable to this report:

LEGAL/STATUTORY AUTHORITY
LEGAL/STATUTORY PROCEDURAL REQUIREMENTS
EXISTING POLICY
FINANCIAL/BUDGETARY CONSIDERATIONS
PERSONNEL IMPLICATIONS
TECHNICAL REQUIREMENTS
EXTERNAL AGENCY/PUBLIC COMMENTS
COMMUNICATIONS CONSIDERATIONS
ALTERNATE RECOMMENDATION

Submitted by:

Ron Westlake, P. Eng.

Director of Regional Services

CC:

Director Infrastructure Planning & Asset Management

Project Engineer