



City of West Kelowna Boucherie Road Upgrades – Wine Trail Phase II

2019 PUBLIC WORKS ASSOCIATION OF BRITISH COLUMBIA PROJECT OF THE YEAR AWARD SUBMISSION

EXECUTIVE SUMMARY

Located in West Kelowna, Boucherie Road is an important roadway within the City's Lakeview Heights neighborhood which draws an abundance of tourism to the area each year due to the natural beauty of the surrounding area, numerous wineries and access to Okanagan lake.

Upgrades to the 1.5km stretch of road were vital to not only improve safety for pedestrians, cyclists and motorists within the corridor, but the upgrade also provided an opportunity to replace an existing 500mm spiral steel water main servicing the area that was at the end of its service life. Additional project scope items included the following key works:

- 15,300 m² of asphalt roadway
- 1,200 LM of storm main
- 3400 LM of concrete curb and gutter
- 1640 LM of 450mm water main
- 4100 m² of concrete sidewalk
- 80 ornamental street lights
- Retaining walls, trees, shrubs and irrigation
- Introduction of roundabouts at two key intersections

Through collaboration between the City, the Design Team and the Prime Contractor, the project was completed on-time and on-budget.



PROJECT DESIGN

The project design underwent an extensive review process which included City Council Reports and presentations, two public open houses, and a road safety audit conducted by ICBC.

The typical cross section for the roadway included 3.6m travel lanes, 1.8m sidewalks and 2.0m cycle tracks. The cycle tracks and sidewalks were designed to be separated from the travel lanes by introducing a 2.0m boulevard as an added safety measure.

PLANNING & COMMUNICATION

With a large project magnitude, a significant amount of planning was required throughout construction. This included efforts by the contractor, the City, and the Contract Administrator to establish and maintain an extensive project detour route which provided affected residents and businesses with continuous access, administering water shut-downs, and keeping the public well-informed of the project status and changes. Updates were provided to the public through public service announcements, amending local traffic signs and updating digital signage boards on Highway 97. Several workshops were also held with local businesses as a means to provide project updates and strategies in order to mitigate the construction impact to their operations.



PROJECT ACHIEVEMENTS

A significant milestone achieved as a result of the project was commissioning of the new 450mm water main, which replaced the 500mm spiral steel main. The existing spiral steel main required City crews to respond on a reactive basis to numerous leaks along this section of pipe. Within the last 8 years, City crews have estimated 25 leaks that required repairs.

Despite existing water valves located in adjacent neighborhoods being inoperable, tying in the new 450mm water main to the existing mains at all intersections was completed efficiently alleviating the impact to affected residents and businesses.

The new 450mm water main spanned approximately 1700 meters with tie-ins at Ogden road, Douglas road, Stevenson road, Anders road, Cordova way, Teal road, Skyline road, Hudson road, Stuart road and Concord road.



BUDGET

Funding for the project was provided from capital reserves, development cost charges and cash in lieu reaching a total budget of \$8,755,000. Additional funding of \$921,649 was provided through various approved grant applications including but not limited to the Bike BC Program, Transit Gas Tax Fund, ICBC and the BC Hydro Re-Greening Program.

The construction contract was awarded to Copcan Civil Ltd. in the amount of \$7,334,340. With additional costs required for land acquisitions, utility upgrades, geotechnical services and project contingency, the total expenses for the project was approximately \$9,276,649, well within the allocated budget.

PROJECT SUCCESS

The new roadway enhancements have provided significant safety measures along Boucherie road. The design incorporated recommendations from ICBC based on previous accident history in the corridor. It introduced two roundabouts at Anders road and Hudson road have provided an opportunity to lower travel speeds along Boucherie while also improving traffic flow. With the volume of traffic currently using Boucherie road on a daily basis, one-way traffic flow and angled entry lanes into the roundabouts have reduced the probability of collisions at these key intersections.

In addition to improved safety for motorists, safety measures for cyclists and pedestrians have considerably improved. Since the roadway officially open in late December 2018, there has been a noticeable increase in pedestrian flow utilizing the new sidewalks and bike lanes with feedback being quite positive.

Project Team



City of West Kelowna
Owner



Stantec Consulting Ltd.
Contract Administrator



Copcan Civil Ltd.
Prime Contractor