



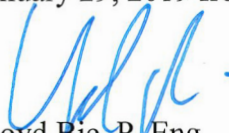
City of Richmond

Report to Committee

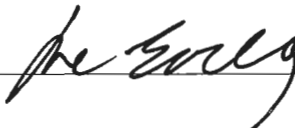
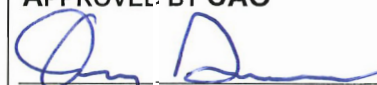
To: Public Works and Transportation Committee **Date:** January 29, 2019
From: Lloyd Bie, P. Eng.
 Director, Transportation **File:** 10-6360-01/2019-Vol 01
Re: **Potential Accommodation of Tour Buses on Dyke Road**

Staff Recommendation

That the report titled "Potential Accommodation of Tour Buses on Dyke Road" dated January 29, 2019 from the Director, Transportation, be received for information.


 Lloyd Bie, P. Eng.
 Director, Transportation
 (604-276-4131)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Arts, Culture & Heritage	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: CJ	APPROVED BY CAO 

Staff Report

Origin

At the February 28, 2017 meeting of the Parks, Recreation & Cultural Services Committee, discussion occurred regarding the development of tour bus access to Britannia Heritage Shipyard along Dyke Road. Staff were subsequently directed to consider:

- (1) repaving a portion of Dyke Road from Trites Road around Paramount Pond to London Landing; and*
- (2) remove speed bumps.*

The same topic was also discussed at the March 22, 2017 Public Works and Transportation Committee. The Committee provided the following direction:

That staff investigate upgrading Dyke Road to industrial/park standards, from Trites Road around Paramount Pond to the foot of No. 2 Road, sufficient to accommodate tour buses and industrial traffic and report back.

This report responds to both referrals.

Analysis

Existing Conditions

Figure 1 illustrates the existing alignment of Dyke Road east of Trites Road to No. 2 Road. Currently, this section of Dyke Road is built on the dike and follows the perimeter of Paramount Pond. There are no road or weight limit restrictions that would prohibit use of the road by larger vehicles.

Although this connection is circuitous, the road is adequate for the very low traffic volume that it serves as the majority of vehicles are destined for the Steveston Harbour Authority (SHA) properties to the south. Accordingly, the road is built to a rural standard of a 4.5 m pavement width with gravel shoulder on either side. There are three speed bumps located along the north-south portion of Dyke Road that serve as traffic calming devices along the straight portion of the road.

From a transportation capacity perspective, the current operation of this section of Dyke Road does not warrant any geometric alterations at this time. As with any other local road, larger vehicles are not precluded from using the road today but may encroach into the opposing lane, particularly when turning.



Figure 1: Current Dyke Road Alignment

Road Widening Concept

While Dyke Road is functional today, the road would need to be widened to allow for separated two-way travel if traffic volumes including larger vehicles/tour buses were to increase. Staff developed a conceptual road plan for the widening of Dyke Road around Paramount Pond with the objectives of:

- determining the amount of road widening required to accommodate larger vehicles including tour buses such that the vehicles would not need to cross the centerline when turning; and
- identifying the potential impacts and costs associated with the construction works.

Attachment 1 illustrates the road widening required to accommodate large vehicles. There are several impacts that would need to be addressed to better accommodate larger vehicles along this section of Dyke Road.

- Potential Private Property Impacts: Based on the conceptual plan, it appears that the road widening could be accommodated within the existing road right-of-way. Further, more detailed design would be required to confirm the extent of any private property impacts.
- Parking Impacts: The road widening would necessitate the loss of existing shoulder parking comprising approximately 15 spaces.

- *Environmental Impacts:* The entire foreshore around Paramount Pond is within a shoreline Environmentally Sensitive Area (ESA) designated by the Official Community Plan as shown in Attachment 2. Portions of the ESA habitat are contiguous with the riparian and park lands within Great West Cannery Park to the north. The ESA is measured 30 metres from the High Water Mark inland and 30 metres from High Water Mark into the foreshore. As such, the existing Dyke Road alignment falls within the inland portion of the shoreline ESA, although at present, it does not reflect any sensitive ecological features. The existing Dyke Road alignment around the northern perimeter of Paramount Pond is not an ideal site for compensation due to the existing disturbance related to riprap construction within the foreshore zone. Further analysis would be required to determine the extent and feasibility of any compensation requirements arising from road widening.
- *Dike Impacts:* The dike in this area will need to be raised in the future to address climate change induced sea level rise. Any proposed road widening will be reviewed in conjunction with the recommended dike improvements identified in the Dike Master Plan.
- *No. 2 Road South Drainage Pump Station:* Construction of a new drainage pump station at London Landing Park at the south end of No. 2 Road is scheduled to commence later in 2019. Once the construction is complete, the above ground structures at the existing pump station location can be removed. The existing canal and underground gravity outfall structure will remain in place. As part of the decommissioning of this station, the existing concrete slabs will be assessed and reinforced as required to accommodate full roadway loading.

The cost to widen Dyke Road between Trites Road and No. 2 Road is estimated at \$3.0 million. This estimate does not include any allowance for infilling of the existing ditch that may be necessary, property acquisition or dike raising.

Speed Bumps

A speed survey was conducted in March 2018 to assess the effectiveness of the speed bumps on the north-south section of Dyke Road. The results indicate that the speed bumps are functioning to maintain an operational speed on Dyke Road at 30 km/h, which is appropriate to manage travel speeds ahead of the sharp curves at the north and south ends of the road. As the speed bumps were installed many years ago, the design of the bumps is outdated and does not conform to the current, more gradual speed hump design that has been deployed elsewhere in the city to calm traffic. Notwithstanding, the City has not received any concerns from the public regarding the presence of the speed bumps.

If the speed bumps that exist today are removed and traffic calming measures are not reinstated, there is an increased potential for speeding on this roadway that has low vehicle volumes but can have high pedestrian and cyclist volumes, particularly on weekends. The potential for speeding would be exacerbated if parking adjacent to the road is removed to allow for road widening.

Consultation with City Heritage Sites

Museum and Heritage Services staff advise that no concerns have been raised with the current roadway access to Britannia Shipyards or London Farm by tour buses or school buses. Visitors to Britannia Shipyards, including bus operators, generally access Westwater Drive via Trites

Road or Railway Avenue. Visitors to London Farm generally use Dyke Road via Gilbert Road or No. 2 Road. Staff are not aware of any tour bus companies regularly using the section of Dyke Road around Paramount Pond.

As Steveston continues to evolve as a tourism destination, Museum and Heritage Services staff will continue to maintain an open dialogue with bus operators and work with Transportation to address any emerging issues.

Summary of Findings

The widening of Dyke Road between Trites Road and No. 2 Road to accommodate tour buses is technically feasible. However, staff do not recommend widening the road at this time due to the following:


- there is no evidence that tour bus companies desire to use this section of Dyke Road to access Britannia Shipyards;
- tour buses currently use the existing access to Britannia Shipyards via Trites Road with no reported concerns;
- the current Dyke Road width and alignment is fully functional for the existing low traffic volume and meets the needs of the general public today; and
- the removal of the existing speed bumps has the potential to increase motorist speeding and generate road safety concerns between motorists, cyclists and pedestrians.

Financial Impact

None.

Conclusion

Tour bus traffic and any parking issues arising from increased visitation to Britannia Shipyards and London Farm will be monitored. If required, transportation plans including road improvements will be developed to address any issues. Any future road improvements would be subject to Council approval via the annual capital budget process and include public and stakeholder consultation. Updating the existing speed bumps to the City's standard speed hump design to continue to slow traffic but limit the amount of vertical deflection to a more comfortable level would also be included as part of future road improvements.

For: 
Sonali Hingorani, P.Eng.
Transportation Engineer
(604-276-4049)
JC:jc


Joan Caravan
Transportation Planner
(604-276-4035)

Att. 1: Conceptual Road Widening of Dyke Road to Accommodate Large Vehicles

Att. 2: Shoreline Environmentally Sensitive Area at Paramount Pond

Conceptual Road Widening of Dyke Road to Accommodate Large Vehicles



Shoreline Environmentally Sensitive Area at Paramount Pond

