1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Summit Earthworks Inc. to undertake a traffic impact assessment (TIA) for the proposed Derwent Way Transfer Station to be located on a vacant lot adjacent to Derwent Way in New Westminster, British Columbia (BC). This traffic impact assessment analyzed both the weekday a.m. and p.m. peak hour conditions for the opening year and opening + 20-year horizon. The analysis covered the impact of site traffic at the intersections of Derwent Way/Ewen Avenue, Derwent Way/Salter Street, Derwent Way/South Dyke Road and Derwent Way/Annacis Parkway.

As part of the traffic study, the need for a southbound left-turn lane at Derwent Way/Salter Street was reviewed. This memo provides a summary of our findings from the analysis of the southbound left-turn movement.

2.0 EXISTING TRAFFIC VOLUMES

Turning movement counts were undertaken in the a.m. and p.m. peak periods at the intersection of Derwent Way and Salter Street in January 2017. No vehicles were observed making the southbound left-turn during the a.m. peak hour and only one vehicle was observed making the left-turn during the p.m. peak hour. A summary of the background traffic volumes is provided in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Southbound</th>
<th>Northbound</th>
<th>Westbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Left-turn</td>
<td>Through</td>
<td>Through</td>
</tr>
<tr>
<td>a.m. Peak Hour</td>
<td>0</td>
<td>192</td>
<td>124</td>
</tr>
<tr>
<td>p.m. Peak Hour</td>
<td>1</td>
<td>202</td>
<td>367</td>
</tr>
</tbody>
</table>

Based on these traffic volumes a left-turn lane is not warranted. The existing queue should not exceed more than two vehicles under these traffic conditions.
3.0 TRAIN TRAFFIC

The Port of Vancouver has indicated that trains cross Salter Street approximately 10 times a day and may stop access to the site for around 5 minutes every time. This would temporarily delay southbound left-turn vehicles from making a turning onto Salter Street; however, southbound through vehicles would be able to pass vehicles waiting to turn left into Salter Street on the shoulder.

4.0 SITE TRAFFIC IMPACT

The site is anticipated to generate 11 inbound trips and 8 outbound trips in the a.m. peak hour and 8 inbound trips and 11 outbound trips in the p.m. peak hour. All site traffic will be routed to/from the south via Cliveden Avenue and Belgrave Way (i.e., no southbound left-turns from Derwent Way and westbound right-turns from Salter Street), as such it will not have any impact on the southbound left-turn movement from Derwent Way.

5.0 CONCLUSIONS

Based on this analysis the site will not trigger the need for a left-turn lane into Salter Street as all site traffic will be routed to/from the south. The southbound left-turn traffic volumes will remain unchanged from background conditions. Under these conditions a left turn lane is not warranted. A summary of our findings is provided below:

- Traffic counts conducted in January 2017 recorded only one vehicle making the southbound left-turn in the p.m. peak hour and no vehicles were observed making the movement in the a.m. peak hour.
- The intersection does not warrant a left-turn lane under existing conditions;
- All site traffic will be routed to/from the south; and as such will not add to the southbound left-turn movement.
6.0 CLOSURE

We trust this memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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