TECHNICAL MEMORANDUM

Date: June 7, 2010

File: 91010-20/3410A

To: Pam Ryan, Communications Counsel

From: Gerry Fleming, Project Director

Re: Fraser Heights West Street Local Area Consultation – Input Consideration Memo

The area of Fraser Heights West is on the north side of Highway 1 between 152 Street and 164 Street in Surrey. It is in close proximity to Highway 1, which affects residents in the area, particularly in regards to noise from existing traffic. With the PMH1 Project, the area is also affected by permanent changes to traffic patterns with the reconfiguration of the 152 Street Interchange, which results in closures at the intersection of 110 Avenue and 152 Street.

In December 2009, a local area consultation was held to provide an update on the construction and future traffic pattern changes, and to discuss options and gather input for noise mitigation and landscaping in the areas affected by construction for the Port Mann/Highway 1 Project. The consultation included direct invitations to the Fraser Heights Community Association, first responders, and Fraser Heights property owners and residents as well as advertising to inform the general public. There were 270 participants at the meeting, and 124 feedback forms were submitted. It should be noted that less than half, and sometimes as few as a quarter, of the questions were completed. This is likely due to the broad range of participants who were interested in the project update, leaving the noise mitigation choices to residents within the immediate area. Most of the respondents provided general comments rather than indicating a preference for the noise mitigation and landscaping options.

In response to questions regarding sound measurements for Fraser Heights, the sound measurements taken in 2004 formed a baseline, and were followed by additional testing in 2009 based on the contractor's more detailed design. These measurements are used to compare against future estimated noise levels based on traffic modeling and to determine whether noise mitigation is required.

The PMH1 Project team is working to consider and appropriately address the input provided on noise mitigation and landscaping preferences, as well as comments made both on the feedback form and during the question and answer period. Following is the project team's response to the consultation summary report, which has been posted to the project web site at www.pmh1project.com.

Noise Mitigation:

- A berm will be constructed on the north side of Highway 1 near 152 Street, from 111A Avenue to 110 Avenue, between the property line and the roadway. The berm will be

three metres high above the road level and up to 12 metres wide (as illustrated on page 6 of the Discussion Guide) and will extend lengthwise as far as possible to maximize noise reduction benefits. The berm plantings will involve a combination of plantings, and Kiewit/Flatiron is investigating options to use evergreens to minimize seasonal leaf drop. These plantings will use native species that are selected based on their root systems which help to reinforce the stability of the berm as well as improve the aesthetic appearance of the area.

- Infill planting is planned between 164 Street and just west of Fraserglen Drive on the north side of Highway 1 to provide a visual screen between the Fraser Heights community and Highway 1. These plantings will be a combination of shrubs and trees, with an emphasis on blending with existing trees in the area. Selection of trees involves considerations such as full-growth height of trees in terms of potential risks and visibility.
- The noise walls along the north side of Highway 1 from 154 Street to 156 Street and from 156 Street to 158 Street will be built using the alternative finish preferred by residents in the area. The noise wall system uses concrete panels that are approximately two inches thick with six inch thick concrete posts, which is designed to achieve the required noise reduction.
- The Ministry of Transportation and Infrastructure's noise mitigation guidelines call for a maximum noise wall height of three metres. It is not feasible to consider a taller wall for various reasons, including:
    - Limiting visual impacts and shading effects from the noise walls
    - Maintaining structural stability (the higher the wall, the less stable it is)
    - Controlling project costs.

Tolling:

- In response to comments related to tolling and toll rates on the Port Mann Bridge it was noted that bridge tolls will be used to pay for the project as well as to help manage growth in traffic over time so that the benefits of the bridge in terms of travel time savings and efficiency are maintained. Some discounts have already been determined to provide incentives for carpooling or travelling off peak. Currently planned discounts include the following:
    - Registered HOVs will also receive a 25% discount during peak commuting periods, as an added incentive to consider carpooling – reducing transportation impacts on the environment.
    - Special vehicles such as taxis, persons with disabilities, vanpools and transit vehicles will be exempt from tolls.
    - Registered commercial trucks will receive an overnight discount of 50%, to help encourage them to travel outside of busy commuting times.

A comprehensive tolling information plan will be developed closer to the start of tolling, when the new bridge opens, and will detail additional incentives and payment mechanisms.

Construction:

- Where feasible, a combination of wall/berm may reach heights of more than 3 m to ensure an average 5 dB reduction benefit. In this instance, only a berm is required. Construction of the noise wall and berm in these areas will take approximately four months. The closures at 152 Street and 110 Avenue must take place before the berm can be built. These closures began in March 2010 to allow for utility relocation and site preparation before construction of the berm can begin. Phase 2 of the closures is scheduled for summer 2010. Due to construction requirements and the location of the noise wall at 156 Street, construction of the wall will begin after highway widening work in the area is complete. As much work as possible will take place during the day; however, some of the work may take place at night due to a requirement for highway lane closures to access the site. Residents will be notified in advance and all effort will be made to keep construction noise levels to a minimum.

  In an effort to minimize the congestion related to construction and the closures at 152 Street and 110 Avenue, and in response to concerns raised by area residents, the construction staging was revised to shift the Phase 1 closures, which include the 108 Avenue exit lane and those at 152 Street and 110 Avenue to March 8, 2010 and to delay the Phase 2 closure of the on-ramp from 110 Avenue to Highway 1 westbound until summer 2010. It is expected that the loop ramp at the 160 Street Interchange will be available in summer 2011. It is not feasible to delay the Phase 2 closure for a year as construction at all of these interchanges must start now to meet the completion date for the project.

Other Considerations:

- Turning lanes and traffic lights will be installed as part of the 156 Street Interchange on and off-ramps.
- TI Corp will work with the contractor to retain as many existing trees as possible during construction.
- All existing emergency access routes will be maintained. In addition, emergency vehicles will be permitted to use the HOV ramps at 156 Street as an additional turnaround. We are also reviewing other safety considerations, including speed reduction areas for merging ramps, designated walkways for first responders to cross the median between eastbound and westbound bridge lanes in the event of emergency incidents, and possible use of movable barriers to detour traffic around significant incidents at key locations on Highway 1.
- In response to questions arising from the pre-consultation meeting with the Fraser Heights Community Association Executive, the Project team reviewed options for use of quiet pavement in this area and it was noted that quiet pavement is not suitable for a highway with this volume of truck traffic. It would require more maintenance and lane closures during repair. Noise walls and berms are a more appropriate and permanent solution.

Suite 1420, 1111 W Georgia, Vancouver BC V6E 4M3 | T: (778) 783-1200 | F: (778) 783-1201 | Info Line: 1866-999-7641 (PMH1)

- The PMH1 Project team has worked with TransLink to address route adjustments related to the traffic pattern changes for the area. Buses that currently use 152 Street to access Fraser Heights have been rerouted to 156 Street. Details on bus route modifications can be obtained through TransLink at 604-953-3333.

Yours truly,

Gerry Fleming
PMH1 Project Director
Transportation Investment Corporation

Copy: Sheila Chan, Transportation Investment Corporation
Bob Falk, Kiewit/Flatiron General Partnership