

DISCUSSION

Issues Affecting Business Loss

The owners/tenants hold the view that the median installations on Fraser Highway and 184 Street are the primary reason for declining sales at their premises and the impending need for the City to "do something" to preserve their businesses.

The commercial/retail market area where these two businesses (Coffee King and Husky Service Station) are located has changed dramatically with recent growth and development. New business competitors have moved into the area (a new service station at Fraser Highway and 188 Street, coffee shops at Fraser Highway and 188 Street, and at 64 Avenue and 184 Street). These competitors are located within a kilometer of the subject site and in areas closer to new residential areas, and in some respects better located to serve commuter type traffic. This growth pattern is expected to continue and new businesses to open, which will add to the competition. Also noteworthy is the fact that Petro Canada has purchased the site on the northwest corner of Fraser Highway and 184 Street directly across the street from the subject properties; and thus, must view the location, with the existing medians in place, as viable for a directly comparable business. Access improvements alone will not necessarily guarantee an improvement in business viability in such a changing market.

Access Management In Context

The primary function of major arterial roads is to move traffic safely and with as little interference as possible. Eliminating left turn movements along arterials from individual properties (by installing medians among other methods) helps to achieve this important transportation objective, especially at high volume intersections such as Fraser Highway and 184 Street.

Most service station properties located at an intersection of multi-lane arterial roads in Surrey have access restrictions or are aware that such restrictions will affect them at some future date.

Access Improvement Options

Several access improvement options for the subject site, including some suggested by the business owner, were reviewed and considered by the Engineering Department as follows:

1. Allowing a median break on the Fraser Highway fronting the properties;
2. Constructing a signalized all movement access on Fraser Highway;
3. Constructing a "left-in" only access for westbound Fraser Highway traffic;
4. Constructing a mid-block U-Turn facility on 184 Street for southbound to northbound traffic; and
5. Allowing northbound U-Turns at the signalized intersection of 184 Street and Fraser Highway.

A detailed discussion regarding each access improvement option is shown in Appendix A and a sketch of each of the options, together with photographs of the existing situation, are attached.

Of these options, 1 and 5 adversely affect intersection safety, and Option 2 is very costly, requires an access easement agreement with a neighbouring residential property and reduces the capacity of Fraser Highway. Consequently, the Engineering Department can only support Option 3, the protected left-in on Fraser Highway, which requires an easement agreement with the neighbours, and/or Option 4, the mid-block U-turn option on 184 Street.

Previous Discussions with Property Owner

Staff contacted the owner of the subject commercial property at the start of the project to determine if a widening strip could be acquired along 184 Street. At that time, the scope of the project was explained and the option of a joint three-property access on Fraser Highway was outlined. Considerable design and study effort was put into how best to make the two commercial sites function, including the preparation of redevelopment options and the potential sale of City property to the immediate south of the Husky Station at the top of the bank of the adjacent ravine. In the end, the owners decided not to come to an agreement with the City to sell any land, and did not pursue the joint access. Consequently, 184 Street was not widened to the ultimate road width in this location and a joint three-property left-in access was not constructed on Fraser Highway (Option 3).

Cost Issues

When access points are constructed as part of the initial construction works, they are either funded by the project or through an agreement with the benefiting owners as part of a property acquisition settlement. When requests are received after construction is complete, the City's position has been that the property owner is responsible for the costs involved in enhancing the access to an individual property. This position applies to Option 3 as the owners did not pursue a joint access at this location as part of the original works. However, since Option 4 would also provide benefit to traffic other than just the Husky Station traffic, the City is prepared to cost share on a 50/50 basis on this option.

CONCLUSION

The recent installation of raised medians at the intersection of Fraser Highway and 184 Street are both appropriate and necessary to allow the safe and efficient flow of traffic through this intersection and along the Fraser Highway. Several access improvement options have been reviewed with respect to the commercial development in the southwest corner of this intersection and are presented in Appendix A. Only Options 3 and 4 are considered acceptable from a transportation perspective. Both will cost approximately \$40,000 to construct and Option 3 will require the cooperation of the adjacent landowners for the registration of reciprocal access easements.

There are quite a few similar circumstances in Surrey of service stations on corners of two arterial roads where only right-in/right-out access is available. In fact, Petro Canada

is planning to pursue such a station at the northwest corner of Fraser Highway and 184 Street, directly to the north of the subject businesses. This site at the northwest corner will have the same access conditions as the existing Husky Station.

Engineering staff will meet with the owners/tenants in the coming weeks to discuss this Corporate Report, and subject to Council endorsing the recommendations, will advise them that the City is willing to allow for the construction of either of Options 3 or 4, provided the owners of the subject businesses fund Option 3, or cost share on a 50/50 basis with the City on Option 4.

Paul Ham, P. Eng.
General Manager, Engineering

RAW/PH/VL/KDZ/LD/rdd

Attachments - Appendix A – Access Improvement Options 1 to 5
- Area Plan
- Site Photographs (4)

OPTION 1

Access Improvement - Allowing Median Break Fronting Properties

Allowing a break in the newly constructed median on 184 Street and/or Fraser Highway for the subject commercial sites would be the least disruptive and least expensive option to improving access to the commercial sites. We estimate the cost to be approximately \$2,000. This option however, is the least desirable from a safety perspective because left-turns into/out of the commercial sites would be occurring:

- Very close to the intersection (within 20m on 184 Street and 40m on Fraser Highway);
- Would be crossing through left-turn lanes; and
- Would be crossing through regularly forming traffic queues at the intersection.

The Engineering Department has tried this approach, on an interim basis, at another major arterial intersection in a similar situation within the last year on an experimental and temporary basis (driveway was approximately 40m from the intersection). A number of vehicle collisions occurred at that location within the first few weeks, confirming that this type of approach to improving access is inappropriate.

The Engineering Department cannot support a median break fronting the commercial sites at this location, due to safety considerations.

OPTION 2

Access Improvement - Constructing All Movement Access on Fraser Highway Fronting 18368 and 18341 Fraser Highway

The property and business owners have suggested that the City could allow an all-movement (signalized) access on Fraser Highway approximately 190m west of the intersection of Fraser Highway and 184 Street. They cite similar access considerations for commercial properties along the Fraser Highway in Aldergrove. The access could be located to provide access to Ben's Market's westerly driveway on the north side of Fraser Highway (the subject of earlier access negotiations) and the multi-family residential site on the south side of Fraser Highway (18368). A connection to the commercial sites at 18394 and 18398 Fraser Highway could then be provided from the new signal location via a shared access driveway.

This type of arrangement is technically feasible, but would be expensive and would reduce the capacity of Fraser Highway in this area. It would also necessitate that the owners of the three properties on the south side of Fraser Highway (18368, 18394, and 18398) enter into reciprocal access agreements. The owner of the residential property is unlikely to be agreeable to such an arrangement as the commercial-related traffic would have to traverse through the privately owned residential property. During an earlier stage of our negotiations with the property owners of the subject commercial properties, they advised that they had no interest in pursuing access easements with the residential property owner.

Generally traffic signals are installed only where significant side street/driveway traffic volumes exist. The subject sites will not generate sufficient driveway traffic to justify the installation of full traffic signals. Where full movement intersections and traffic signals are provided for commercial enterprises, the commercial enterprise(s) pay for them. We anticipate that the cost of providing this type of access improvement would be at least \$250,000.

The Engineering Department does not recommend allowing such an all-movement signalized or unsignalized access.

OPTION 3

Access Improvement – "Left-In" Facility on Fraser Highway

Consistent with the City's policy, constructing a westbound "left-in" type of driveway on Fraser Highway to the existing driveway at the residential site at 18368 Fraser Highway would be acceptable provided the three property owners on the south side of Fraser Highway agree to provide access easements for joint use of the left in median opening. This option would provide westbound traffic on Fraser Highway an opportunity to make left-turns only into the residential and commercial sites. It would also serve to provide access to the subject commercial properties for northbound 184 Street traffic after first making a northbound to westbound left-turn onto Fraser Highway from 184 Street. This type of arrangement has been initiated successfully at several City locations. Again, the feasibility of this option would depend on the approval of an access easement by the residential property owner to the west. The cost of construction is estimated to be \$40,000.

Where access and easement arrangements between private property owners can be made prior to construction of the median, the Engineering Department has constructed the required facilities at no cost to the private property owners since there is no appreciable cost differential to the City at the time of construction. Where this type of access improvement is requested after construction of the medians has been completed, the Engineering Department has required that the owners of the benefiting properties pay for the alterations.

OPTION 4

Access Improvement – Mid-Block U-Turn Facility on 184 Street

The City could consider constructing a mid-block u-turn facility on 184 Street approximately 140m south of the Fraser Highway. Essentially, a southbound left-turn lane would be constructed in the area where the recently completed landscaped median has been installed to facilitate U-Turns by southbound vehicles on 184 Street. Vehicles exiting the subject commercial sites would turn right to head south on 184 Street and pull into the newly constructed left-turn lane and then u-turn to head back north on 184 Street to the Fraser Highway. This type of facility is becoming increasingly popular in the United States because it allows the benefits of the raised median to be retained whilst still providing some level of reasonable accessibility to properties. The Engineering Department is currently constructing one of these types of u-turn facilities along King George Highway in the South Surrey area to test it and could consider a similar test case on 184 Street.

When this type of facility is constructed as part of the contract related to the widening the arterial road the City will pay for its installation since the incremental costs are relatively low. However when access improvements are requested post construction, the benefiting landowners are required to pay for the alterations. It is estimated that the cost of construction of this option is in the \$40,000 range. This option will provide benefit to traffic other than just the traffic associated with the subject businesses and, as such, the Engineering Department would recommend cost sharing on a 50/50 basis.

OPTION 5

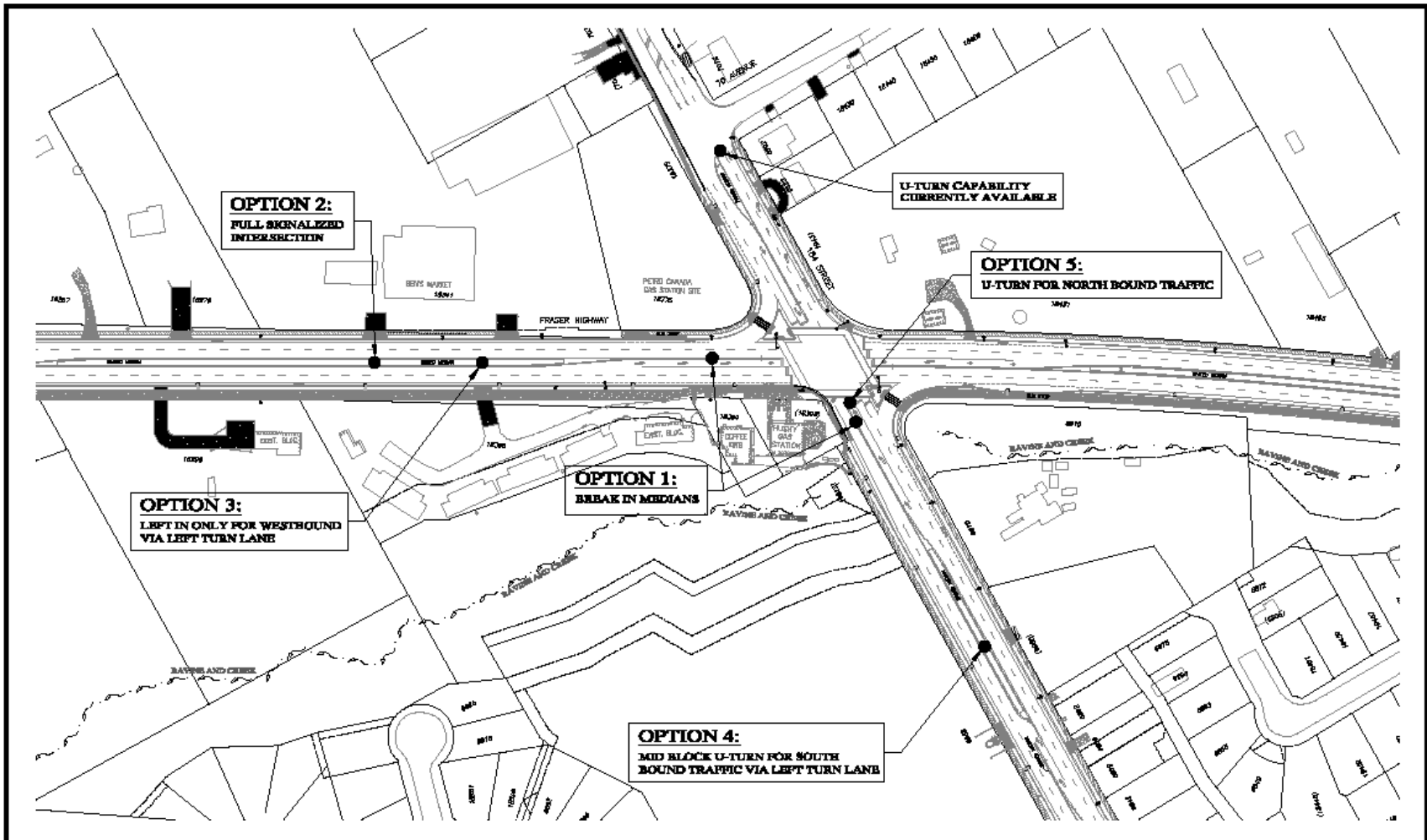
Access Improvement - Allow Northbound U-Turns on 184 Street at the Signalized Intersection of Fraser Highway

Making a U-turn at a signalized intersection is prohibited under the Motor Vehicle Act. However, under certain conditions an exemption to the Motor Vehicle Act can be obtained and the movement permitted with explicit signing. Allowing the U-Turn on 184 Street northbound at Fraser Highway would assist northbound vehicles in getting to the subject commercial sites.

This location is not suitable for this type of exemption given the restricted road width available in the southbound lanes (south of the intersection) and the high right turning volume from Fraser Highway eastbound to 184 Street southbound. The Engineering Department does not recommend this option.

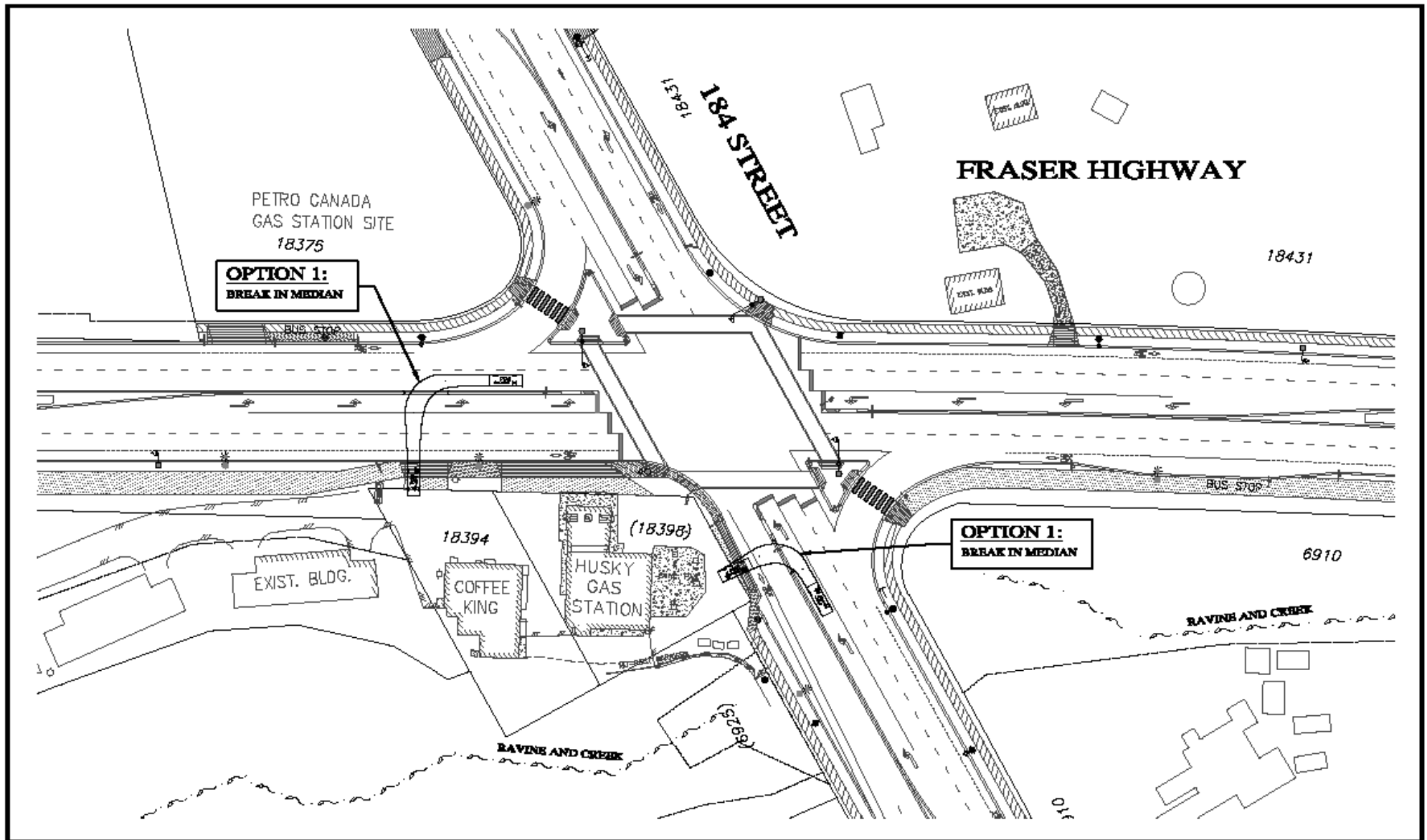
Northbound vehicles on 184 Street wanting to access the subject commercial properties can as an alternative, travel north on 184 Street through the intersection to the end of the median immediately south of 70 Avenue and make a U-turn there. Legislatively, U-turns (reverse turns) can only be made if the vehicle making the reverse turn can do so without interfering with other traffic (i.e., blocking other northbound or southbound traffic on 184 Street). The ability to make this reverse turn would legally be possible more often in times when there is less traffic on the road.

AREA PLAN



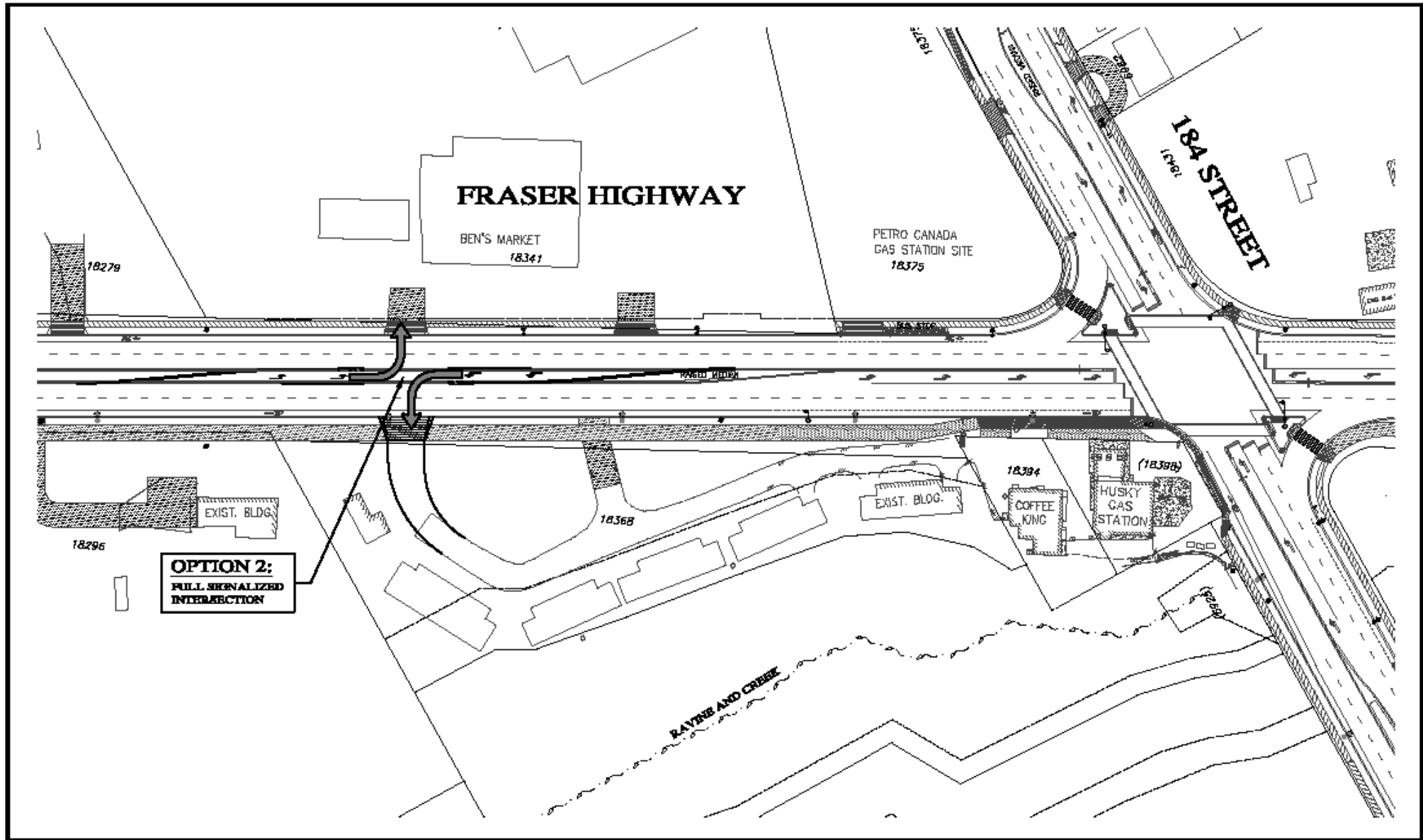
**ACCESS IMPROVEMENT OPTIONS 1 TO 5
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**



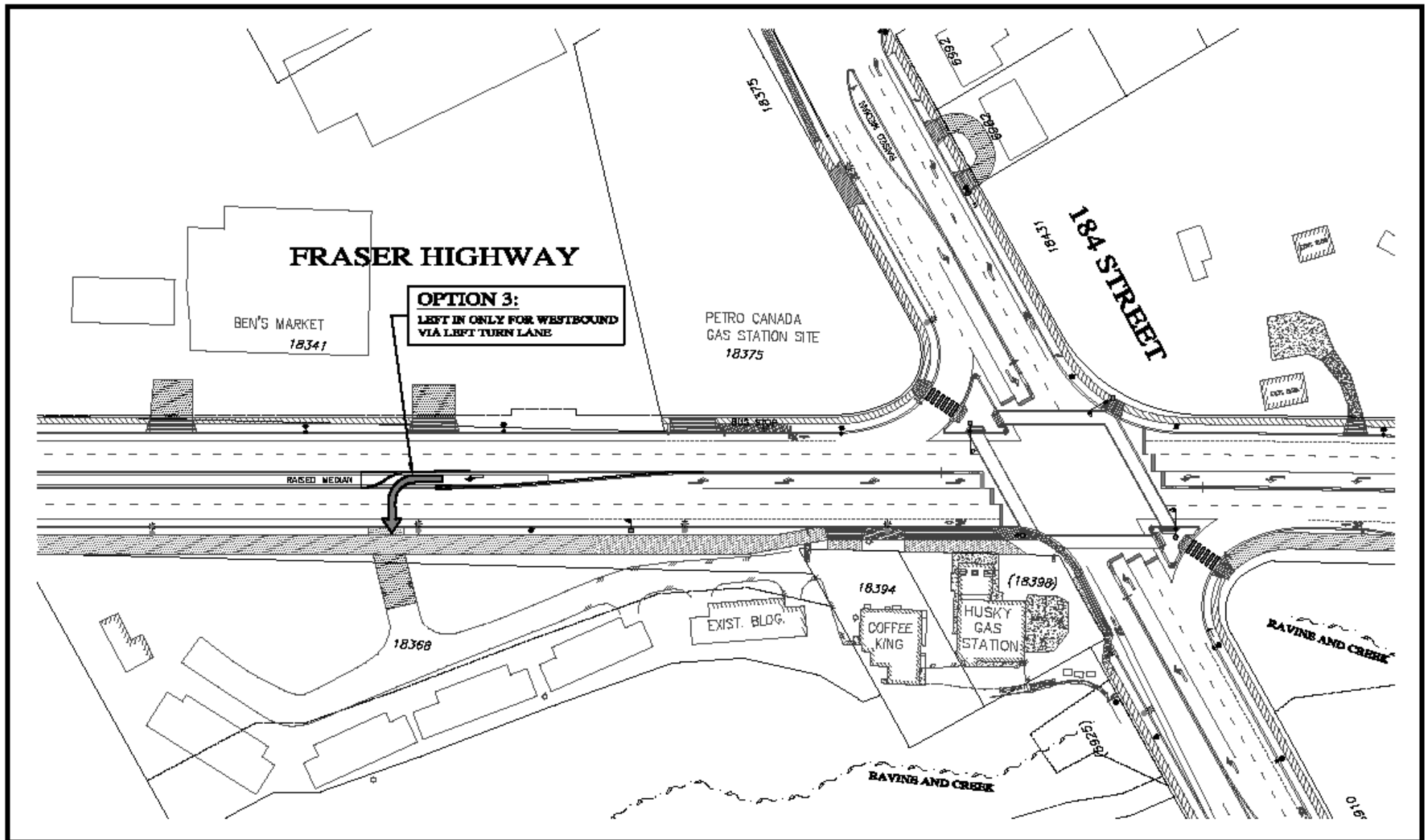
**ACCESS IMPROVEMENT OPTION 1
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**



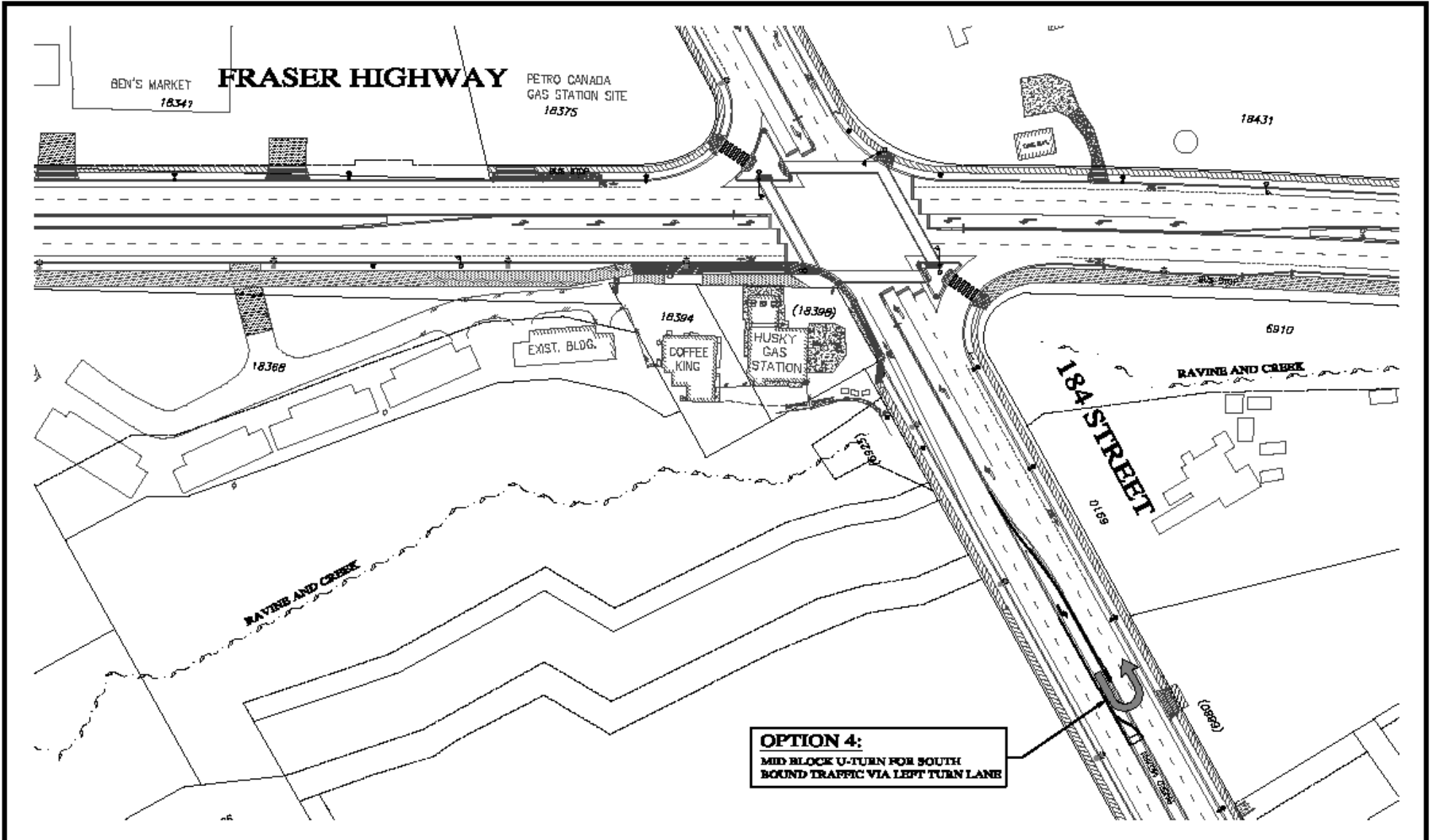
**ACCESS IMPROVEMENT OPTIONS 2
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**



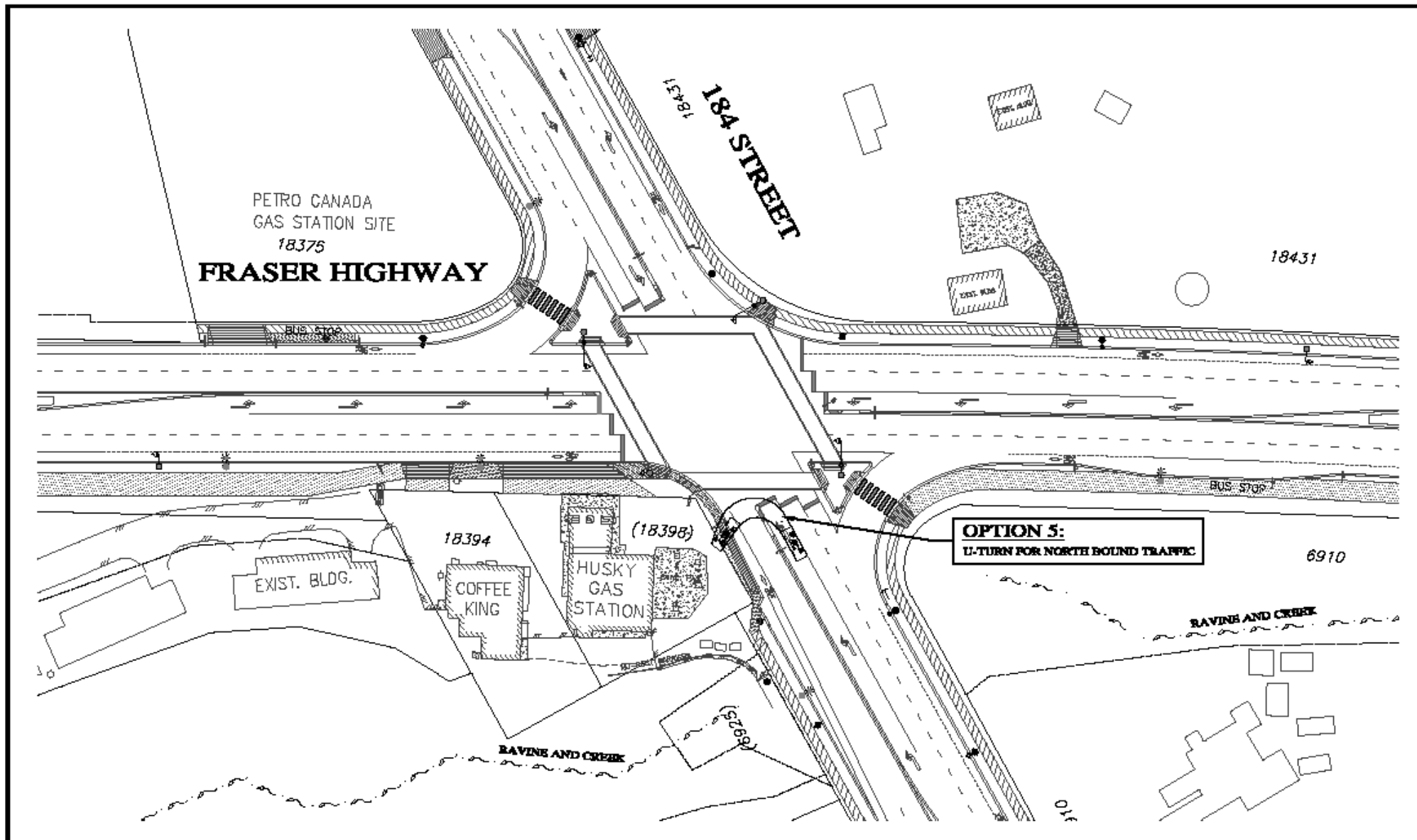
**ACCESS IMPROVEMENT OPTIONS 3
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**



**ACCESS IMPROVEMENT OPTIONS 4
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**



**ACCESS IMPROVEMENT OPTION 5
TO #18394 FRASER HIGHWAY AND #18398 FRASER HIGHWAY**

**UTILITIES &
TRANSPORTATION
DIVISION**

SITE PHOTOGRAPHS



#18394 & 18398 Fraser Highway (Looking South)

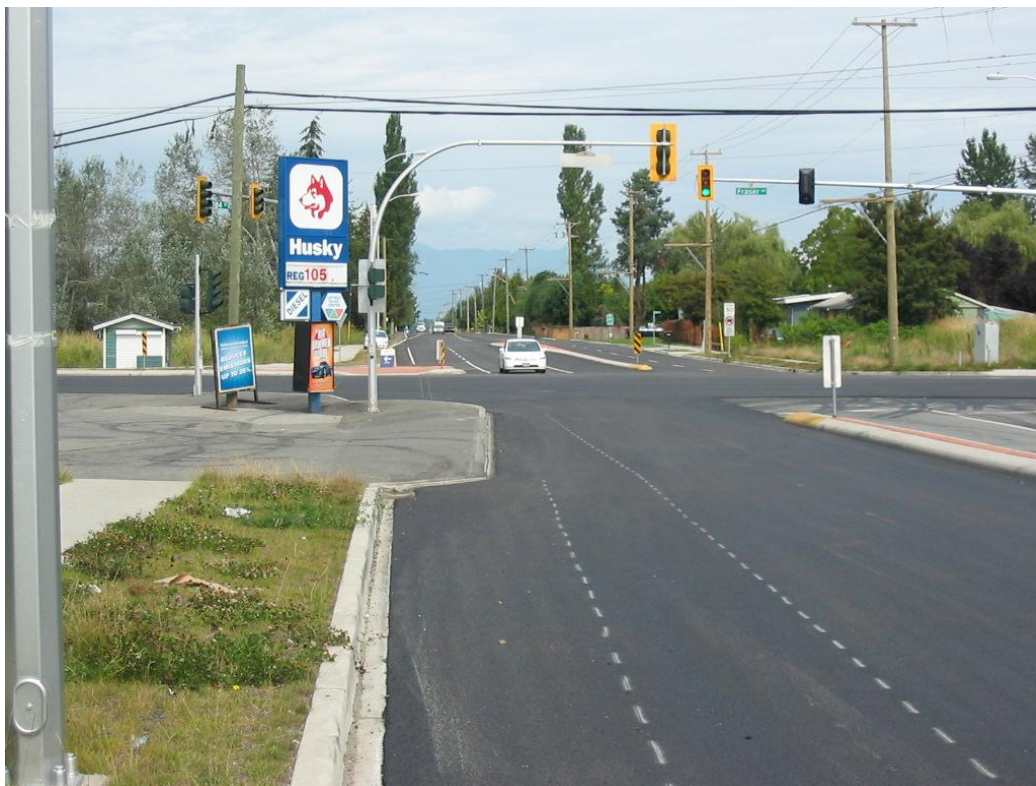


Fraser Highway (Looking East), Towards 184 Street

SITE PHOTOGRAPHS



184 Street (Looking South), From Fraser Highway



184 Street (Looking North), Towards Fraser Highway