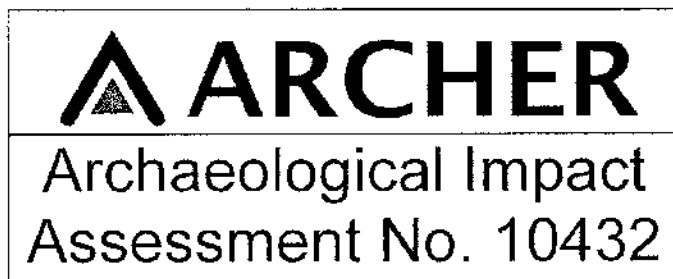


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OGC / ILMB #

1 Administrative Information

| | | | |
|--------------------------|--|----------------------------|----------------|
| 1.1 Date | October 23, 2014 | 1.2 Survey # | None |
| 1.3 Project Name | Proposed Pattullo Bridge Seismic Retrofit and Rehabilitation – Stage 1 Preliminary Design | | |
| 1.4 HCA Permit # | 2014-0154 | 1.5 Project Officer | Steven Acheson |
| 1.6 Other Permits | Seyem Qwantlen Permit #2015-02; Squamish Permit #14-0111; Stó:lō Permit #2014-037; Tsleil-Waututh Permit #2014-023 | | |
| 1.8 Permit Holder | Rémi Farvacque | 1.9 Field Lead | Rémi Farvacque |
| 1.10 Proponent | McElhanney Consulting Services Ltd. on behalf of TransLink | 1.12 Contact | Steve Carney |

2 Project Area Information

| | | | |
|----------------------------------|---|-----------------------|--------|
| 2.1 Components & Size | <ul style="list-style-type: none"> • 18 Environmental Borehole Test Locations s.18 s.18 Area of subsurface ground disturbance not to exceed 10 inches/254 mm in diameter x 6 to 8 m deep using a hollow stemmed auger and split spoon to sample soils and sediments. <i>Some locations have been provisionally relocated since the original assessment was done. Relocations were made due to conflicts with archaeological sites and logistical issues related to access for the drill rig. The new locales are pictured in Figures 1-10 along with the original locales.</i> • 2 Environmental Borehole Test Locations s.18 Maximum depth of testing will be 8 m below the existing grade using a hydrovac. • 1 Geotechnical Borehole Test Location for Mud Rotary Borehole s.18 Area of subsurface disturbance not to exceed 5 inches/127 mm in diameter x 60 m deep using a rotary drill bit, split spoon and a Shelby tube to sample appropriately consolidated materials. • 4 Geotechnical Borehole Test Locations for Seismic Cone Penetration Tests [SCPT] (s.18). Area of subsurface ground disturbance not to exceed 10 inches/ 254 mm in diameter x 60 m deep using a hollow stemmed auger and split spoon to 3 m and a SCPT probe with the impact diameter of 1.46 inches/37 mm thereafter to a depth of 60-70m¹. • Figures 1-10. | | |
| 2.2 Sites, Revisit | s.18 | 2.3 Sites, New | s.18 |
| 2.4 Borden Block | s.18 | 2.5 NTS Map | 92G/02 |
| 2.6 Geographic Location | The assessed areas of the project footprint consist of a series of proposed borehole locations running east to west along the TransLink R/W associated with the Pattullo Bridge. Eastern | | |

¹ Hollow stemmed augers and split spoons will only be employed in borehole locations that are monitored by archaeologists.

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POC NAD 83 Zone 10 E. 508607 N. 5450333 N. Western POT E. 507347 N. 545719

2.7 Management Summary

ARCHER conducted an AIA on 25 proposed geotechnical and environmental borehole locations at the request of Steve Carney of McElhanney Consulting Services Ltd. As a result of this assessment, forty (40) subsurface tests were placed at fifteen (15) locations exhibiting archaeological potential, with positive results.

Eight (8) tests from five (5) of the assessed locations proved positive for archaeological remains, resulting in the identification of previously unrecorded sites S.18 and S.18. Investigations also resulted in the extension of the boundaries of the previously identified site of S.18. No CMTs were identified.

Proposed borehole locations S.18
S.18

(Figures 1 and 2) could not be tested using shovels and manual augers due to the existence of impediments such as deeply compacted ground surfaces, concrete in old and current roadways and deep fill deposits. At these locations monitoring of ground altering activities for environmental and geotechnical testing is recommended in order to document stratigraphy. This information will allow for a critical assessment of the potential for intact cultural deposits to exist in the vicinity of these boreholes prior to more extensive ground altering activities.

It is recommended that the client not conduct ground altering activities within the boundaries of archaeological sites. However, if testing locations cannot be relocated and ground disturbance is unavoidable it is recommended that an HCA Section 12 permit be acquired and testing be monitored by a qualified archaeologist. For detailed management recommendations see Section 11 of this report.

3 All Known Archaeological Sites Within 250 m

| Site No. | Direction and distance from proposed project footprint | Type | Possibility of impact by project development |
|----------|--|---|--|
| s.18 | Inside Project Footprint | Lithic | high |
| | Inside Project Footprint | Former BCER Interurban Line – an elevated rail line on a trestle | low |
| | Inside Project Footprint | Faunal, lithic, petroglyph, cultural landform, traditional use, domestic, legendary | high |
| | Inside Project Footprint | Lithic, faunal | high |
| | Inside Project Footprint | Lithic | high |
| | Inside Project Footprint | Lithic | high |
| | S.18 | Heritage ² : Queens Park | nil |
| | | Heritage: Woodlands Nurse's Lodge | nil |
| | | Heritage: Woodlands Wall | nil |
| | | Heritage: Disney House | nil |
| | | Heritage: 109 Angus Street | nil |
| | | Heritage: 107 Angus Street | nil |
| | | Heritage: Woodlands School | nil |

² These sites post-date AD 1846 but are designated as Heritage sites and are protected under the *Heritage Conservation Act*.

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| | | | |
|---|------|---------------------------------------|-----|
| s.18 | s.18 | Heritage: Woodlands Recreation Centre | nil |
| | | Heritage: English Corners | nil |
| Previously recorded archaeological site information obtained from HRIA on August 5th, 2014. | | | |

4 Five Closest Known Archaeological Sites Between 250 & 5000 m

| Site No. | Direction and distance from proposed project footprint | Type | Possibility of impact by project development |
|---|--|------------------------------------|--|
| s.18 | | Heritage: Bilodeau House | nil |
| | | Heritage: Woodlands School | nil |
| | | Heritage: Dr. Cartwright Residence | nil |
| | | Heritage: Woodlands Carpentry Shop | nil |
| | | Heritage: Nidaros Lutheran Church | nil |
| Previously recorded archaeological site information obtained from HRIA on August 5th, 2014. | | | |

5 Methodology

| | | | |
|-----|----------|--|---|
| 5.1 | Date | Field Director | Crew |
| | 28-07-14 | R. Farvacque (on site) | J. Martyn (supervising archaeologist), G. Guss, N. Joe, J. Johnson, S. Jordan, L. Williams |
| | 29-07-14 | R. Farvacque (on site) | J. Martyn (supervising archaeologist), A. Storey (supervising archaeologist), G. Guss, N. Joe, S. Jordan, D. Wadsworth |
| | 30-07-14 | R. Farvacque (on site) | J. Martyn (supervising archaeologist), A. Storey (supervising archaeologist), G. Guss, N. Joe, S. Jordan, D. Wadsworth |
| | 31-07-14 | R. Farvacque (on site) | J. Martyn (supervising archaeologist), A. Storey (supervising archaeologist), J. Antone, G. Guss, N. Joe, S. Jordan, |
| | 01-08-14 | M. Mitchell (on site) | J. Martyn (supervising archaeologist), A. Storey (supervising archaeologist), G. Guss, N. Joe, S. Jordan, F. Mahar, A. Storey, D. Wadsworth |
| 5.2 | Remarks | <p>Prior to fieldwork, the project area was subject to a desktop map and literature review to identify areas of subsurface archaeological potential and the presence of protected CMTs. Information used included HRIA, historic air photos, orthophotographs, and records of adjacent prior archaeological assessments. Identified areas of archaeological potential subject to possible impact were visually assessed by crew members on the ground. The terms and conditions guiding the overview and identification of archaeological potential are defined in the relevant <i>Permit Application</i>. During the field assessment the locales in and around the potential borehole locations were visually assessed by two crews of between three and four crew members. Where applicable, natural and anthropogenic soil exposures in the project footprint were visually examined for cultural remains in disturbed or secondary contexts.</p> <p>In areas exhibiting the potential to contain archaeological materials, sub-surface tests measuring 35 x 35 cm in area were placed one metre from proposed borehole locations in each of the cardinal directions. The depths of the tests varied from 26 to 220 cm, at which point either fluvial and/or alluvial sediments were encountered or natural or anthropogenic impediments were encountered and the test was discontinued. In a few cases the use of shovels and manual augers was not sufficient to reach sterile deposits and in such cases further assessment of specific locales in the study area may be warranted.</p> | |

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The purpose of subsurface assessment prior to environmental and geotechnical testing was the evaluation of soils and sediments for indicators of intact cultural deposits. As a result minimally invasive techniques were used. When artifacts were recovered no further tests were conducted, unless the stratigraphy was unclear. Delineation of sites will be reserved for areas that may be impacted by upgrade activities when a final plan is developed. These preliminary assessments have provided guidelines about which areas are likely to contain archaeological deposits and are more at risk during seismic upgrade activities. This will inform not only the placement of borehole locations but also future design for rehabilitation of the structure.

In addition, evidence collected in the field and cross-checked with a variety of maps and online resources has been used to plot the property boundaries of lots along the Fraser River from 1861 onwards. The establishment of these legal lot boundaries appear to have been based on low tide shorelines in the Fraser River. These property boundaries provide a guideline to locate the shoreline in the past and indicate a limit past which recent filling has occurred and therefore low archaeological potential exists (see Figure 11).

All recovered artifacts were recorded with respect to provenance and material type. Only formal tools were measured and those measurements are presented in each applicable site subsection. Debitage was categorized according to the stage of the reduction process from which it resulted.

6 Project Area Environment

6.1 20 Environmental Borehole Locations and 5 Geotechnical Testing Locations

Figure 1-10.

6.2 Survey Coverage 100% by foot.

6.3 Project Area Demarcated? ☐ Yes
☒ No

6.4 Terrain & Vegetation Cover The terrain in the study area has been heavily influenced by industry and infrastructure over the past 150 years. To the east, the Surrey side is mainly flat, except where fill has been added to provide support for on and off ramps for bridges and to support railways. To the west, the New Westminster side of the study area is more steeply sloping but no less impacted by urbanisation and industrialism.

The vegetation in the study area reflects the long history of anthropogenic disturbance. The primary vegetation is grass with abundant blackberry and raspberry, with nettle, wild carrot and scotch broom. There are few trees in the study area, but those that occur include juvenile red alder, vine maple and cottonwood.

6.5 Previous Disturbance The banks of the Fraser River, within the study area, have been extensively used by humans for at least 1,500 years (Golder Associates, 2011). Ethnographic records specify that people came to the banks of the Fraser to fish for salmon, as well as to hunt a range of local terrestrial fauna including ungulates and birds (Neary, 2011). Oral traditions suggest that marsh or wetland areas on the Surrey side of the project area were artificially filled with rocks and earth to build up a solid foundation for a seasonal fishing village (Hill-Tout, 1978; Neary, 2011). Archaeological evidence confirms the existence of a fishing village along this bank of the Fraser river at the sites of S.18 (Golder Associates, 2011; AMEC Environment and Infrastructure, 2013). Local ethnographic and historical information indicates that the village at this locale was known as Qayqayt (alternatively *qeqəyt*, *Kikayt*, *qiqá:yt*, *Qaxqa'yət*).

The boundaries of Qayqayt were later incorporated into the *Quontiln* Colonial Indian Reserve in 1861, and subdivided in 1879 into the smaller lots designated Musqueam #1, Langley #8, and New Westminster (Turner, 1861; Crockford, 2010) (Figure 11). In the late 1880s work began on the New Westminster Southern Railway which connected Herring's Point, northwest of the study area, with the United States Border and passing through the designated Indian Reserves (Anonymous, 2013).

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New Westminster was the former capital of the colony of British Columbia, chosen due to the proximity to the Fraser River. Within the project area several major roads were established early in the historic period. Front Street was built in 1863 and was named for its location along the river at the 'front' of the city and along the railway line northwest of the docks (Williams, 1892; New Westminster Public Library, n.d.). The contemporary Columbia Street was established by the Royal Engineers between 1859 and 1863 (New Westminster Public Library, n.d.).

The Fraser River is large enough to accommodate passage of ocean going vessels. As a result, docks and port facilities were prevalent along both banks of the Fraser River in the late 1800s and early 1900s. On the Surrey side of the study area the town of Brownsville was the end of the line for southern rail lines established in 1891 (Brown, 2012). Brownsville was connected to the city of New Westminster by a steam powered ferry until 1904 when the railway bridge was built s.18 (Anonymous, 2011). In 1936-37 the Pattullo bridge was constructed.

In the intervening years a variety of urban, commercial, and industrial developments have occurred within the study area. On the Surrey side of the river a pronounced build up of material can be observed in the area now occupied by Brownsville Bar Park and areas to the north. Industrial uses of this area are dominated by salvage yards and one of these can be observed in the 1974 air photo (Plate 1). The remnants of this activity are evident along the southeastern shoreline near Brownsville Bar Park (Plate 2). Numerous tires, bedsprings and other debris belie the nature of the fill to the southeast of the documented archaeological sites. Shovel tests conducted in this area for the current assessment revealed compacted sand and silt with frequent inclusions of concrete, asphalt and car parts.

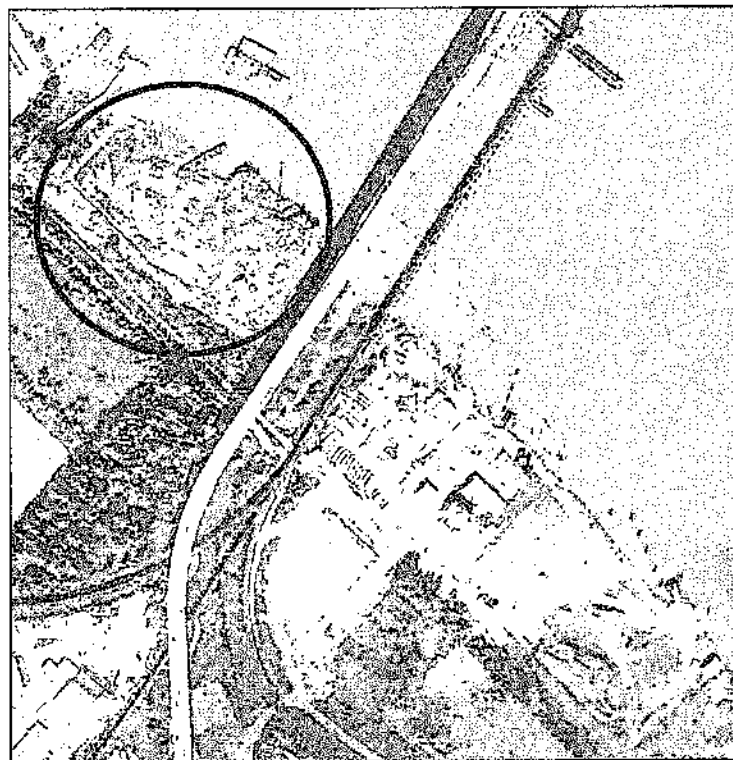


Plate 1 Detail from 1974 air photo showing Auto Wrecker in operation in the current location of Brownsville Bar Park. The location is circled in Red.

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Plate 2 Accumulated industrial waste along the Surrey shoreline at the northern edge of the slough in July 2014.

Presently the study area is bisected and paralleled by numerous utilities including gas lines, fibre optic cables, telephone lines, and sewer and water mains, as well as four railway lines, two of which are elevated tracks. Several roads bisect the study area including Columbia and Front Streets in New Westminster and the South Fraser Perimeter Road in Surrey. A slough parallels the northeastern edge of the study area on the Surrey side, extending inland from the river for approximately 400 m. The Slough then diverts southeast to east shortly after which it has been directed under the South Fraser Perimeter Road. The slough then runs along the southwest side of the study along the southern edge of across 111a Avenue.

- 6.6 *Potential* *Subsurface:* Yes, intact archaeological deposits exist in the study area.
Pre AD 1846 CMT: No, mature timber is absent in the study area.
- 6.7 *Subsurface Assessment* Subsurface testing was warranted, and location-specific information is provided below.

| Test Location | ST # | Shovel test depth (cm) | Auger test depth (cm) | Description of test area | Cultural Material Identified? | Figure Number |
|---------------|------|------------------------|-----------------------|--|-------------------------------|---------------|
| s.18 | 1 | 88 | 90 | Generalized stratigraphy is as follows: 10 cm of firm brown sandy silt with sub-angular gravels and pebbles, over 10 cm of compact brown sandy silt with sub-angular gravel and pebbles, over 40 cm of very compact angular gravels, pebbles, cobbles and boulders with brown silt and clay, over 8 cm of firm subangular gravel with sand and clay, over 27 cm of compact firm grey sandy clay and lenses of organic-rich sandy-gravels, over 42+ cm of firm brown sand with rounded and angular gravels and pebbles. Auger testing terminated at Test (T) 1 and 2 due to the presence of large clasts starting at 135 cm and 137 cm depth below surface (dbs), respectively. | No | 10 |
| | 2 | 135 | 137 | | | |

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s.18

| | | | | | |
|---|----|-----|--|-----------|---|
| 1 | 90 | 165 | Generalized stratigraphy is as follows: 14 cm of firm tan silty-sand with rounded and angular gravel and pebbles and concrete, over 17 cm of compact rounded and sub-angular gravel with coarse sand, bottle glass, plastic and metal, over 48 cm of compact rounded and angular brown sand, over 4 cm of firm grey clay with a rounded cobble lag at the basal extent, over 126 cm of loose mottled black and light brown sand with grey sand and charcoal fragments of >1 cm diameter. Auger testing terminated at T1 due to the presence of large unidentified material that prevented additional testing. Auger testing terminated at T2 when auger reached it total extent. | Yes in T1 | 6 |
| 2 | 92 | 209 | | | |
| 1 | 70 | 178 | Generalized stratigraphy is as follows: 94 cm loose grey sand with rounded pebbles, bottle glass, plastic, and rubber, over 20 cm of firm dark brown silty-clay, over 95+ cm of compact grey clay with charcoal fragments of >2 cm diameter, water table encountered at 112 cm. Auger testing discontinued at T1 due to inability of auger to extract sediment within the water table. Auger testing at T2, 3 and 4 terminated when the auger reached it total extent. | No | 9 |
| 2 | 60 | 213 | | | |
| 3 | 60 | 210 | | | |
| 4 | 60 | 211 | | | |
| 1 | 65 | 149 | Generalized stratigraphy is as follows: 92 cm of firm light brown silty-sand with rounded and sub-angular pebbles, plastic, metal, and glass, over 27 cm of firm light grey clay, over 29 cm of firm light grey sandy clay, over 62+ cm of firm dark brown silty clay with rounded pebbles, plastic and charcoal fragments of >2 cm diameter. Auger testing at T1 and 2 abandoned due to test pit wall cave-ins. Auger testing at T3 and 4 terminated when auger reached total extent. | No | 9 |
| 2 | 53 | 185 | | | |
| 3 | 67 | 210 | | | |
| 4 | 53 | 220 | | | |
| 1 | 50 | 165 | Stratigraphy is as follows: 28 cm of loose light brown silty-sand with rounded pebbles and cobbles, plate and bottle glass, metal and rubber, over 52 cm of loose light brown fine sand with rounded and angular gravel and pebbles, over 25 cm of firm dark brown clay with rounded and angular pebbles, over 55 cm of firm light tan silty-clay mottled with orange silty-clay, over 5 cm of firm light grey clay with mottled orange silty-clay. Auger testing terminated at T1 due to the presence of large unidentified material that prevented additional testing. | Yes in T2 | 5 |
| 1 | 52 | 210 | Stratigraphy is as follows: 23 cm of firm light brown silty-sand with rounded and sub-angular pebbles and cobbles, over 19 cm of compact light brown silty-sand with plate and bottle glass, metal and charcoal fragments of >5 cm diameter, over 33 cm of firm light brown silty-sand mottled with compact grey clay-silt, over 102 cm of firm medium grain brown sand with charcoal fragments of >1 cm diameter, over 23 cm of compact grey clay with charcoal fragments of >5 cm diameter at the basal extent of test. Auger testing terminated at T1 when auger reached total extent. | Yes in T1 | 5 |
| 1 | 60 | 126 | Generalized stratigraphy is as follows: 23 cm of compact fine grey sand with round and angular gravel, pebbles and cobbles, pane and bottle glass and plastic, over 63 cm of compact dark brown/black sand with rounded gravel, pebbles and cobbles, pane and bottle glass and plastic, over 88 cm of compact grey-blue sand with clay and rounded gravel and pebbles. Auger testing terminated at T1 and 2 due to presence of large unidentified material that prevented additional testing. | Yes in T2 | 3 |
| 2 | 80 | 178 | | | |

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| | | | | | | |
|------|---|----|-----|--|---------------------------|---|
| s.18 | 1 | 65 | 93 | Generalized stratigraphy is as follows: 40 cm of light brown silty-sand with round and angular gravels, pebbles, cobbles and boulders, identified historic debris includes bottle and pane glass, plastic, Styrofoam and metal, over 63+ cm of firm dark brown silt sand with round and angular gravels and pebbles, identified historic debris includes bottle and pane glass. Auger testing terminated at T1, 2 and 3 due to presence of large unidentified material that prevented additional testing. Auger testing at T4 not undertaken as sediment was loose and unconsolidated and could not be collected by auger. | No | 8 |
| | 2 | 66 | 103 | | | |
| | 3 | 70 | 88 | | | |
| | 4 | 42 | N/A | | | |
| | 1 | 60 | N/A | Generalized stratigraphy is as follows: 75 cm of firm light brown silty sand with rounded and angular gravels, pebbles, cobbles and boulders. Historic debris includes bottle and plate glass, metal, plastic and rubber. Auger testing not commenced at T1, 3 and 4 as large metal fragments impeded additional excavation. Auger testing at T2 not undertaken as sediment encountered in test was loose and unconsolidated and could be collected by auger. | No | 8 |
| | 2 | 75 | N/A | | | |
| | 3 | 45 | N/A | | | |
| | 4 | 48 | N/A | | | |
| | 1 | 70 | 194 | Generalized stratigraphy is as follows: 12 cm of loose brown sand with rounded pebbles, over 10 cm of compact rounded and angular gravel, over 26 cm of compact mottled yellow and red silty-sand with round and angular pebbles, ceramic, glass and plastic, over 10 cm of loose mottled yellow and red sand with rounded gravel and pebbles, over 8 cm of mottled yellow and red clay sand with rounded pebbles, over 4 cm of firm mottled grey clay and coarse red sand, over 10 cm of large rounded cobbles, over 40 cm of rounded gravels, pebbles and cobbles with mottled grey and orange silty-sand, over 35 cm of firm grey red silt, over 49+ cm of firm grey silt with rounded gravel. Auger testing at T1 terminated when auger reached total extent. Auger testing at T2, 3 and 4 terminated due to the presence of large clasts. | Yes in T1, T2, T3, and T4 | 4 |
| | 2 | 73 | 77 | | | |
| | 3 | 80 | 80 | | | |
| | 4 | 80 | 120 | | | |
| | 1 | 26 | N/A | Generalized stratigraphy is as follows: 16 cm of firm brown sand with rounded gravels and pebbles, over 38 cm of very compact rounded and angular gravels, pebbles and cobbles with sand, asphalt and concrete. Shovel testing was abandoned due to heavy soil compaction. Auger testing not commenced due to heavy soil compaction and inability of auger to collect sediment. | No | 7 |
| | 2 | 54 | N/A | | | |
| | 1 | 42 | N/A | Generalized stratigraphy is as follows: 6 cm of loose tan silt with glass, metal and plastic, over 73+ cm of compact tan silt with round and sub-angular pebbles, glass, metal and plastic. T1, T2 and T3 were excavated to average depth of 42 cm and T4 proceeded to a depth of 79 cm. Auger testing not undertaken subsequent to shovel testing due to presence of concrete slabs at basal extent of all tests. | No | 8 |
| | 2 | 46 | N/A | | | |
| | 3 | 43 | N/A | | | |
| | 4 | 79 | N/A | | | |
| | 1 | 55 | 115 | Generalized stratigraphy is as follows: 63 cm of brown sandy-silt with round and angular pebbles and cobbles, plate and bottle glass, plastic and metal, over 54+ cm of brown-grey sandy silt with rounded pebbles. Auger testing terminated at T1, 2 and 3 when water table encountered, due to inability of auger to extract sediment within the water table. Shovel testing at T4 terminated when a concrete pillar form was encountered during testing. | No | 9 |
| | 2 | 63 | 117 | | | |
| | 3 | 54 | 63 | | | |
| | 4 | 40 | N/A | | | |

6.8 Results Eight (8) subsurface tests proved positive for cultural material remains at five (5) of the test locations. A total of thirteen (13) artifacts were recovered from the subsurface tests. These include formed and expedient tools, debitage, cores, a marble, and a cow bone. These sites

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have been designated as s.18

and an extension to known site

s.18 No CMTs were identified.

Archaeological sites are evaluated in this report following the "British Columbia Archaeological Impact Assessment Guidelines." This is an evaluation in terms of the site's scientific, ethnic, public significance:

- *Scientific significance* is based upon the potential of an archaeological site to answer questions that would increase our understanding of human history in British Columbia;
- *Ethnic significance* is the level of importance the archaeological site has to a particular community, and;
- *Public significance* refers to the potential of an archaeological site as an interpretive, educational or recreational area. The level of significance for each category is rated as low, moderate or high.

7 DhRr-02 Archaeological Site Description

7.1 **Supporting documents** • Site map (Figure 2 and 3)

7.2 **Site Type** Precontact – cultural material – subsurface – lithic.

7.3 **Dimensions (m)** NE- 92.0
SW:
NW- 45.0
SE:

7.4 **Artifacts Recovered** Shovel Test 2 (T2) – a secondary reduction flake of grey chert.

7.5 **Location & Summary** This site was first identified when Ham et al. (1979) recorded a lithic scatter on the surface of this locale. During a 2010 excavation program Golder (2011) recovered 45 stone artifacts at s.18. This site, along with the nearby site of s.18 are identified in ethnographies and by local communities as the locale of the fishing village *Qaiqá:yí* which was situated along the south bank of the Fraser River. The village appears on a map by Gibbs (1858) and was documented by Hill-Tout (1978), among others.

During the current AIA two subsurface tests were excavated in the vicinity of proposed borehole locations s.16 T2 was positive for cultural remains. This find resulted in an extension of s.18 s.18

Vegetation in the area is predominantly short grass with large stands of blackberry around the northeast and northwest of the pillar. The full extent of s.18 has yet to be determined. Information provided to Golder (2011) suggests that the seasonal village of *Qayqayt* may have once stretched from s.18 s.18

7.6 **Present Condition** Heavily Disturbed, *in situ* deposits may be buried below fill deposits.

7.7 **Disturbance Factors** Establishment and maintenance of the Pattullo Bridge, industrial development in the area, establishment and maintenance of railways, establishment and maintenance of utilities, archaeological subsurface testing & evaluation.

7.8 **Possible Impacts** Upgrades and maintenance of the bridge, establishment and maintenance of utilities, industrial or commercial development, geotechnical and environmental testing.

7.9 **Soils** Layer 1: 23 cm of compact, fine grey sand with round and angular gravel, pebbles and cobbles, pane and bottle glass and plastic, over;

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Layer 2 *Cultural Horizon*: 63 cm of compact, dark brown/black sand with rounded gravel, pebbles and cobbles, pane and bottle glass and plastic, over;
 Layer 3: 88 cm of compact, grey-blue sand with clay and rounded gravel and pebbles.

- 7.10 **Remarks** The flake was recovered from a disturbed context 10 m northwest of the known site boundary. Further assessment is required to delineate the full extent of this site and characterise its nature and extent.
- 7.11 **Scientific significance** High: Excavations at this site by Golder (2011) revealed *in situ* cultural deposits than can be clearly connected to ethnographic accounts and existing traditional knowledge.
- 7.12 **Ethnic significance** High: The relevant First Nations rate all archaeological sites in their traditional territories as high.
- 7.13 **Public significance** Moderate: This site is likely linked to the nearby site of S.18 which has both pre-contact and historic significance. Due to the potential size of the original village site, the presence of historic trade beads and other historic artifacts in the S.18 site, and ethnographic accounts which link the site to early contacts with Simon Fraser (Neary, 2011) the site is likely to be valued by the general public as well as the First Nations.

8 DhRr-376 Archaeological Site Description

- 8.1 **Supporting documents** • Site map (Figure 4)
- 8.2 **Site Type** Precontact – cultural material – subsurface – lithic;
 Historic – cultural material – subsurface – faunal, a glass marble.
- 8.3 **Dimensions (m)** N-S: 7.0
 E-W: 7.0
- 8.4 **Artifacts Recovered** T1 – a metatarsal of a cow (*Bos taurus*);
 T2 – one utilized flake of dacite (Plate 3), one secondary reduction flake of dacite;
 T3 – one primary reduction flake of dacite;
 T4 – one glass marble (Plate 4).
- 8.5 **Location & Summary** The site is located S.18
 S.18 The locale is maintained by the city. All subsurface tests placed at the location were positive for cultural materials. The tests were constrained to the immediate locale around the proposed environmental borehole location and the extent of the site has not been delineated.
- 8.6 **Present Condition** Heavily disturbed, *in situ* deposits may be buried below fill deposits.
- 8.7 **Disturbance Factors** Filling for the establishment of on and off ramps for bridges, excavation and establishment of utilities, prior geotechnical testing, archaeological subsurface testing & evaluation.
- 8.8 **Possible Impacts** The site is likely to be impacted by environmental testing, and the establishment and maintenance of utilities.
- 8.9 **Soils** Layer 1: 12 cm of loose, brown sand with rounded pebbles, over;
 Layer 2: 10 cm of compact, rounded and angular gravel, over;
 Layer 3: 26 cm of compact, mottled yellow and red silty-sand with round and angular pebbles, ceramic, glass and plastic, over;

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Layer 4 *Cultural Horizon*: 10 cm of loose, mottled yellow and red sand with rounded gravel and pebbles, over;

Layer 5: 8 cm of mottled yellow and red clay sand with rounded pebbles, over;

Layer 6: 4 cm of firm, mottled grey clay and coarse red sand, over;

Layer 7 *Cultural Horizon*: 40 cm of rounded gravels, pebbles and cobbles with mottled grey and orange silty-sand, over;

Layer 8: 35 cm of firm grey red silt, over;

Layer 9: 49+ cm of firm grey silt with rounded gravel

- 8.10 **Remarks** The deposits at the site appear to be mixed and are unlikely to represent *in situ* deposits. It is possible that deeply buried *in situ* deposits are present at this site.
- 8.11 **Scientific significance** Low: Lithics were recovered from this location from mixed deposits. As it is unlikely that *in situ* cultural deposits occur at this locale it is also unlikely to provide significant information if further assessment is undertaken.
- 8.12 **Ethnic significance** High: The relevant First Nations rate all archaeological sites in their traditional territories as high.
- 8.13 **Public significance** Intermediate: The site type and extent was not adequately established during this AIA.
- 8.14 **Tool attributes**
- | Test # | Tool type | L (mm) | W (mm) | T (mm) | Worked edge (mm) | Weight (g) |
|--------|----------------|--------|--------|--------|------------------|------------|
| T2 | Utilized flake | 24.38 | 23.73 | 6.99 | 19.11 | 5.0 |
- 8.15 **Plates**

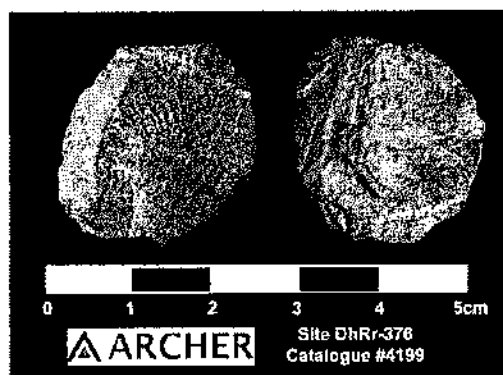


Plate 3 DhRr-376: Utilized flake. Dorsal pictured on left, ventral on right.

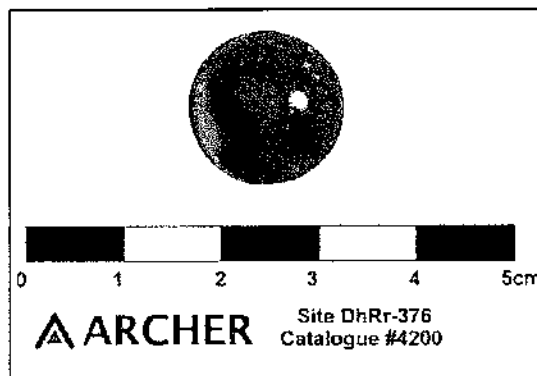


Plate 4 DhRr-376: Glass marble.

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

9 DhRr-377 Archaeological Site Description

| | | | | |
|------|--------------------------------|---|-----|---|
| 9.1 | Supporting documents | • Site map (Figure 5) | | |
| 9.2 | Site Type | Precontact – cultural material – subsurface – lithic. | 9.3 | Dimensions (m) NW-SE: 50.0 NE-SW: 5.0 |
| 9.4 | Artifacts Recovered | Shovel test (T1) – a bipolar core of quartzite/felsite (Plate 5). T2 – one spokeshave of black basalt (Plate 6). | | |
| 9.5 | Location & Summary | s.18 s.18 Sediments and soils observed in the stratigraphy of the site are similar to those of s.18 and may represent a continuation of the site. The terrain at s.18 has been heavily impacted by contemporary and historic disturbance. Vegetation in the area reflects a history of disturbance and is predominantly covered in grasses, blackberries, wild carrot, scotch broom and juvenile cottonwood. | | |
| 9.6 | Present Condition | Heavily Disturbed, <i>in situ</i> deposits may be buried below fill deposits. | 9.7 | Disturbance Factors Establishment of pillars for the Pattullo Bridge, railways, town of Brownsville, establishment of utilities including water and sewer mains, gas lines, and numerous fibre optic and other cables, archaeological subsurface testing & evaluation. |
| 9.8 | Possible Impacts | Maintenance and addition of utilities, maintenance and upgrade of the bridge pillars, geotechnical and environmental testing. | | |
| 9.9 | Soils | Layer 1 <i>Cultural Horizon</i> : 28 cm of loose, light brown silty-sand with rounded pebbles and cobbles, plate and bottle glass, metal and rubber, over; Layer 2 <i>Cultural Horizon</i> : 52 cm of loose, light brown fine sand with rounded and angular gravel and pebbles, over; Layer 3: 25 cm of firm, dark brown clay with rounded and angular pebbles, over; Layer 4: 55 cm of firm, light tan silty-clay mottled with orange silty-clay, over; Layer 5: 5+ cm of firm light grey clay with mottled orange silty-clay. | | |
| 9.10 | Remarks | Artifacts were recovered from fill layers of both subsurface tests. The presence of intact deposits to the s.18 suggests that these may be of local origin disturbed and re-deposited during the establishment or maintenance of local utilities. Stratigraphy identified beneath the fill has commonalities with stratum described for nearby sites of s.18 (Golder Associates, 2011) and DhRr-74 (Golder Associates, 2011; AMEC Environment and Infrastructure, 2013). | | |
| 9.11 | Scientific significance | Intermediate: To date only preliminary assessments have been conducted at s.18. <i>In situ</i> deposits may be buried below the fill deposit. Given the proximity to two nearby sites there is the potential for this site to provide additional information of value in classifying use of the landscape prior to European contact in the area. | | |
| 9.12 | Ethnic significance | High: The relevant First Nations rate all archaeological sites in their traditional territories as high. | | |
| 9.13 | Public significance | Intermediate: This site may be part of the well documented and nearby sites of s.18. If the site is part of the larger complex of sites it may hold interest for the general public as well as First Nations. | | |

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

2014 10-23-19:33

| 9.14 Tool attributes | Test # | Tool type | L (mm) | W (mm) | T (mm) | Worked edge (mm) | Weight (g) |
|-----------------------------|--------|------------|--------|--------|--------|------------------|------------|
| | T2 | Spokeshave | 29.44 | 21.11 | 10.62 | - | 12.2 |

9.15 **Plates**

Plate 5 DhRr-377: Spokeshave. Both aspects pictured.

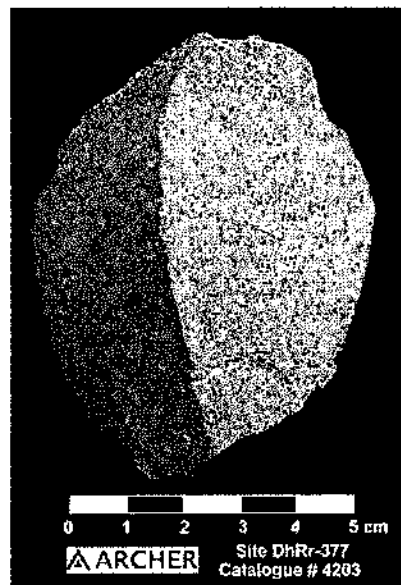


Plate 6 DhRr-377: Bipolar Core.

10 DhRr-378 Archaeological Site Description

| | | | |
|------------------------------------|--|----------------------------|----------------------|
| 10.1 Supporting documents | <ul style="list-style-type: none"> Site map (Figure 6) | | |
| 10.2 Site Type | Precontact – cultural material – subsurface – lithic. | 10.3 Dimensions (m) | N-S: 5.0 E-W: 5.0 |
| 10.4 Artifacts Recovered | T1 - one agate core (Plate 7), two secondary reduction flakes of dacite and two tertiary reduction flakes of dacite. | | |
| 10.5 Location & Summary | All five artifacts were recovered from T1 in the vicinity of proposed borehole location MW14-02. The site is located on the s.18 area beside the road s.18 Tests were placed along the flat area s.18 Vegetation includes grass, fern, blackberries and raspberries. | | |

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

2014-10-23-19:35

| | | | |
|--------------------------------------|--|---------------------------------|--|
| 10.6 Present Condition | Heavily disturbed; <i>in situ</i> deposits may be buried below fill deposits. | 10.7 Disturbance Factors | Building of the bridge and subsequent maintenance, establishment of utilities such as sewer lines, archaeological subsurface testing & evaluation. |
| 10.8 Possible Impacts | Establishment and maintenance of utilities, maintenance and changes to road design and off-ramps, seismic upgrades to the bridge, environmental and geotechnical testing. | | |
| 10.9 Soils | Layer 1: 14 cm of firm, tan silty-sand with rounded and angular gravel and pebbles and concrete, over; Layer 2: 17 cm of compact, rounded and sub-angular gravel with coarse sand, bottle glass, plastic and metal, over; Layer 3 <i>Cultural Horizon</i> : 48 cm of compact, rounded and angular fine to brown sand, over; Layer 4: 4 cm of firm, grey clay with a rounded cobble lag at the basal extent, over; Layer 5: 10+ cm of loose, mottle black and light brown sand with charcoal fragment of >1 cm diameter | | |
| 10.10 Remarks | The artifacts were recovered from mixed deposits at the toe of a slope that runs S.18 S.18 It is unlikely that intact cultural deposits occur at this location. | | |
| 10.11 Scientific significance | Low: Lithics were recovered from this location from mixed deposits. It is possible that deeply buried <i>in situ</i> deposits are present at this site. | | |
| 10.12 Ethnic significance | High: The relevant First Nations rate all archaeological sites in their traditional territories as high. | | |
| 10.13 Public significance | Intermediate: The site type and extent was not adequately established during this AIA. | | |
| 10.14 Plates | | | |

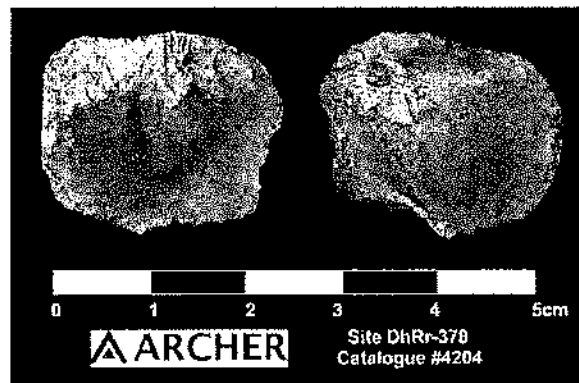


Plate 7 DhRr-378: Agate core. Both aspects pictured.

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

2014-10-23-19:33

11 Discussion and Recommendations

Our visual inspection and subsurface testing program of the proposed Seismic Retrofit and Rehabilitation of the Patullo Bridge – Stage 1 Preliminary Design for Translink resulted in the identification of archaeological sites s.18 s.18 inside proposed project boundaries. No

CMTs were noted in the course of our assessment. Site-specific recommendations are provided below, followed by general recommendations related to further development of the project area.

s.18 recommendations presented in order of preference:

1. **Avoidance through project redesign.** s.18 is located in the proposed project footprint as assessed, and will be impacted by geotechnical and environmental testing activities. Avoidance can be achieved by excluding the location from the study.
2. **Acquisition of a HCA Section 12 Permit.** If avoidance is not feasible, it is recommended that the project proponent acquire a HCA Section 12 Site Alteration Permit prior to testing at locations s.18 s.18 and that concurrent monitoring be undertaken by a qualified archaeologist. Issuance of this permit is warranted due to the nature of the environmental tests, the small impact zone of such tests on the integrity of the site as a whole and the level of subsurface assessment completed to date.

s.18 recommendations presented in order of preference:

1. **Avoidance through project redesign.** s.18 is located in the proposed project footprint as assessed, and will be impacted by geotechnical and environmental testing activities. Avoidance can be achieved by excluding the location from the study.
2. **Acquisition of a HCA Section 12 Permit.** If avoidance is not feasible, it is recommended that the project proponent acquire a HCA Section 12 Site Alteration Permit prior to testing at locations s.18 and that concurrent monitoring be undertaken by a qualified archaeologist. Issuance of this permit is warranted due to the mixed and disturbed deposits, the nature of the environmental tests, the requirement for a sample of soils and sediments from the ground surface downward, the small impact zone of such tests on the integrity of the site as a whole and the level of subsurface assessment completed to date.

s.18 recommendations presented in order of preference:

1. **Avoidance through project redesign.** s.18 is located in the proposed project footprint as assessed, and will be impacted by environmental testing activities. Avoidance can be achieved by excluding the location from the study.
2. **Acquisition of a HCA Section 12 Permit.** If avoidance is not feasible, it is recommended that the project proponent acquire a HCA Section 12 Site Alteration Permit prior to testing at proposed locations s.18 s.18 and that concurrent monitoring be undertaken by a qualified archaeologist. Issuance of this permit is warranted due to the mixed and disturbed deposits, the nature of the environmental tests, the requirement for a sample of soils and sediments from the ground surface downward, the small impact zone of such tests on the integrity of the site as a whole and the level of subsurface assessment completed to date.

s.18 recommendations presented in order of preference:

1. **Avoidance through project redesign.** s.18 is located in the proposed project footprint as assessed, and will be impacted by environmental testing activities. Avoidance can be achieved by excluding the location from the study.
2. **Acquisition of a HCA Section 12 Permit.** If avoidance is not feasible, it is recommended that the project proponent acquire a HCA Section 12 Site Alteration Permit prior to testing at proposed locations s.18 and that concurrent monitoring be undertaken by a qualified archaeologist. Issuance of this permit is warranted due to the mixed and disturbed deposits, the nature of the environmental tests, the requirement for a sample of soils and sediments from the ground surface downward, the small impact zone of such tests on the integrity of the site as a whole and the level of subsurface assessment completed to date.

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

Monitoring recommendations:

Eleven proposed geotechnical and environmental test locations could not be assessed by shovel and/or auger due to factors including sediment compaction, the presence of deep overburden deposits or anthropogenic impediments such as concrete or asphalt. At these locations it is recommended that monitoring of geotechnical and environmental testing be conducted by a qualified archaeologist using a sampling technique that will allow for examination of excavated sediments and soils to assess whether deeply buried cultural remains are likely to be present. Documentation of strata in these areas will provide an indication of whether additional archaeological assessment is warranted prior to future ground disturbance activities. It is recommended that the following geotechnical and environmental test locations be monitored by a qualified archaeologist. The justifications for monitoring are discussed in brief below.

1. s.18 The sediments are heavily compacted.
2. s.18 : The sediments are heavily compacted.
3. s.18 The location is capped by concrete.
4. The sediments are heavily compacted.
5. s.18 The sediments are heavily compacted.
6. s.18 The location is within the boundaries of the s.18
7. The location is capped by concrete.
8. The sediments are heavily compacted.
9. The test location is s.18 . Tests will be excavated using a hydrovac due to the presence of high pressure sewage forcemains and other utilities.
10. s.18 The test location is s.18 . Tests will be excavated using a hydrovac due to the presence of high pressure sewage forcemains and other utilities.
11. s.18 : The sediments are heavily compacted.

With respect to the remainder of the assessed project area, our visual and subsurface testing program did not result in the identification of additional archaeological or other cultural heritage remains. As such, and with respect to these latter areas, it is recommended that no further archaeological concerns be expressed for the placement of borehole locations as illustrated in the attached (Figures 1 and 2). This recommendation applies *only* to the small impact area of a borehole and does not extent to impacts with a larger footprint. More work will be needed for other types of ground disturbing activities in the area.

The justification for no further concern with respect to the placement of boreholes at these locations is discussed briefly below. However, it is recommended that the proponent develop or be in possession of a 'chance-find' due-diligence policy to address accidental discoveries of heritage remains protected by the Heritage Conservation Act. Despite the information presented in this assessment, the measure of archaeological potential is relative, not absolute. The possibility remains that cultural material remains may be uncovered in areas identified as possessing low archaeological potential.

1. s.18 Subsurface testing at this location revealed extensive debris associated with an Auto Wreckers that operated in the area in the 1970s (Golder Associates, 2011). Our reconstructions of the approximate shoreline prior to 1880 suggests this area has been built up in the last 150 years and is unlikely to contain cultural remains protected under the *Heritage Conservation Act* (Figure 11). See Section 6.7, page 8 for details. However, it is possible that artifacts deposited in the intertidal zone before the fill was introduced may be present beneath the fill.
2. s.18 Subsurface testing at this location revealed extensive debris associated with an Auto Wreckers that operated in the area in the 1970s (Golder Associates, 2011). Our reconstructions of the approximate shoreline prior to 1880 suggests this area has been built up in the last 150 years and is unlikely to contain cultural remains protected under the *Heritage Conservation Act* (Figure

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

- 11). See Section 6.7, page 8 for details. However, it is possible that artifacts deposited in the intertidal zone before the fill was introduced may be present beneath the fill.
3. s.18 Subsurface testing in this locale revealed mixed deposits and abundant historical debris. No cultural materials protected by the *Heritage Conservation Act* were recovered. See Section 6.7, page 7 for details. See Section 6.7, page 7 for details.
4. s.18 Subsurface testing in this locale revealed mixed deposits and historical debris. No cultural materials protected by the *Heritage Conservation Act* were recovered. See Section 6.7, page 8 for details.
5. s.18 Subsurface testing in this locale revealed mixed deposits and historical debris. No cultural materials protected by the *Heritage Conservation Act* were recovered. See Section 6.7, page 6 for details.
6. s.18 Subsurface testing in this locale revealed no cultural materials. See Section 6.7, page 6 for details.

Project footprint boundaries illustrated on the attached map(s) indicate those areas subject to the archaeological assessment described in this report, unless otherwise noted. If future or final construction and development plans differ from those presented here, the results of this assessment may not be applicable in part or in whole.

To address the prospect of unanticipated archaeological remains being discovered, it is recommended that the proponent inform its employees and contractors of this possibility. If archaeological materials or other heritage remains are uncovered during construction, work in the area of the find must immediately cease and the Archaeology Branch and/or ARCHER informed. It is recommended that the proponent also promptly inform the relevant First Nations concerning any unanticipated archaeological findings.

It was not the intent of this study to identify, evaluate, or comment on the presence or absence of Aboriginal Rights in the study area. Completion of this study does not "abrogate or derogate from aboriginal treaty rights" (Heritage Conservation Act Sec. 8). The study was conducted without prejudice to First Nations Treaty Negotiations, aboriginal rights or aboriginal title.

It is my opinion that the reported fieldwork and this corresponding report were completed in agreement with the requirements of the relevant Heritage Inspection Permit issued by the Archaeology Branch. I concur that the above information is true given available information.

Sincerely,



Rémi Farvacque, M.Sc., RPCA
Permit holder

12 References Cited

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Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

2014-10-23-10:33

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Subject Report Citation:

ARCHER CRM Partnership

2014 Archaeological Impact Assessment of Proposed Pattullo Bridge Seismic Retrofit and Rehabilitation – Stage 1 Preliminary Design. Consultant file 10432, HCA Permit 2014-0154. Report on File with the Archaeology Branch, Victoria, BC.

9 Distribution List

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|------------------|--|--------------|--------------|--------------------------------|
| June Harris | Kwikwetlem First Nation | 604.540.0680 | | june@kwikwetlem.com |
| Ashley Doyle | Seyem Quantlen | 604-888-5556 | | ashley.doyle@seyemquantlen.com |
| Cara Brendzy | Stó:lō Research and Resource Management Centre | 604-824-5113 | 604-824-5129 | Cara.Brendzy@stolonation.bc.ca |
| Dana Bayne | Squamish First Nation | 604-982-0510 | 604-982-0515 | dana_bayne@squamish.net |
| Amy Hodgins | Tsleil-Waututh First Nation | 604-924-4188 | 604-929-4158 | ahodgins@twnation.ca |
| Steve Carney | McElhanney Consulting Services Ltd. | 604.424.4915 | | scarney@mcelhanney.com |
| Darren Woodworth | TransLink | 778.375.7817 | 250.XXX.XXXX | Darren.Woodworth@translink.ca |
| Steven Acheson | Archaeology Branch | 250.953.3306 | 250.953.3340 | Steve.Acheson@gov.bc.ca |

10 Archaeology Branch Information

MAIL:
Archaeology Branch
Ministry of Forests, Lands and Natural Resource Operations
PO Box 9816
Stn Prov Govt
Victoria BC, V8W 9W3

LOCATION:
#3 - 1250 Quadra Street,
Victoria, BC V8W 2K7

CONTACT:
Reception (250) 953-3334
Fax (250) 953-3340

Report Submission Date: Original Submission: 23-Oct-2014, Resubmission: N/A

Page 19 to/à Page 29

Withheld pursuant to/removed as

s.18

From: Lizee, Yvette ABR:EX
To: Cummings, Fred; "darren.woodworth@translink.ca"
Cc: Sposato, Lulqi ABR:EX; Carey, Paul ABR:EX; Gereb, Attila ABR:EX; Foster, Margo L JAG:EX; Jordan, Ryan J ABR:EX
Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting
Date: Friday, November 14, 2014 5:02:00 PM
Attachments: RE Pattullo Bridge Seismic Upgrade Rehabilitation - Qayqayt First Nations Meeting.msg

ATTN: Fred Cummings / Darren Woodworth, Translink

Dear Fred and Darren,

Thank you for your call and follow up email clarifying our questions on the Pattullo Bridge Seismic Upgrade and Rehab project, and the consultation process conducted for the upcoming site investigation work that is scheduled to begin next week.

Based on the information provided by Translink (and BC Archeology Branch)....

A) it is our estimation that appropriate consultation procedures were followed for the archeological permit (tied to the site investigation work). Kwantlen First Nation was consulted but did not provide comment. In addition (per your attached email), it is our understanding that, at the time of consultation, Qayqayt provided comment and, where appropriate, their requests were accommodated. Specifically pertaining to Qayqayt's comments:

- Qayqayt First Nation expressed their opposition to "any site alteration pursuant to Section 12" (any further impacts to known archaeological sites). In response, TransLink's archaeologist ensured that all site investigations will only occur outside known archaeological sites. Translink is also employing a team of Archaeological monitors to monitor the work on site (including a representative for the Qayqayt First Nations).
- Qayqayt requested the inclusion of further archival references which Qayqayt has documented from their historical review of the pre-Confederation reserves established by Governor Douglas. In this instance, Translink did not concur with this request because an AIA does not usually contain such information.

B) Based on your follow up communications, it is also our understanding that the site investigation plan did not change following the comment period.

Assuming that points A and B are correct (and that there is no additional relevant issue that we are unaware of) it is our determination that appropriate procedures were followed for the consultation. **On that presumption, it is also our determination that the site investigation work can move forward based on your proposed schedule below.**

s.13

As you move forward we encourage Translink to continue to maintain good relations and communication with Qayqayt First Nation.

Please feel free to contact me if you have any questions.

Thank you,

Yvette

Yvette Lizée
Regional Manager, South Coast

Ministry of Aboriginal Relations and Reconciliation
200 - 10470 152 Street, Surrey, BC V4A 3K6
Office: 604.582.5258 | Mobile: 604.329-0499 | [MARR Website](#)

From: Lizée, Yvette ABR:EX

Sent: Friday, November 14, 2014 11:45 AM

To: 'darren.woodworth@translink.ca'

Cc: Cummings, Fred; Gereb, Attila ABR:EX; Carey, Paul ABR:EX

Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Darren,

I'm just following up on my voicemail to request a bit more information to help us better understand the context:

1. In your original email below you mention that *"TransLink has all the necessary permits in place including the archaeological permit which includes documentation where the Qayqayt First Nation approved TransLink's approach to the site investigation work"*.

1. Can you provide us a copy of the document showing Qayqayt FN approved the site investigation?
 2. Also can you confirm if the plans changed after this approval from Qayqayt?
 3. Can you confirm whether there were any issues raised with the project during your consultations (by Qayqayt or other FN)? *Note I'll check w archeology branch on the provincial consultation.*
 4. Your email mentions "permits". Were there other provincial permits issued beyond the archeological permit? If so were there any FN issues raised (especially by Kwantlen or Qayqayt)?
2. Also can you send us the parcel information for the site. If you have a project/site map with this information and project footprint that would be helpful too.

Thanks.

Yvette

Yvette Lizée

Regional Manager, South Coast

Ministry of Aboriginal Relations and Reconciliation

200 - 10470 152 Street, Surrey, BC V4A 3K6

Office: 604.582.5258 | Mobile: 604.329-0499 | [MARR Website](#)

From: Mayhew, Neilane ABR:EX [<mailto:Neilane.Mayhew@gov.bc.ca>]

Sent: Wednesday, November 12, 2014 3:59 PM

To: Cummings, Fred

Cc: Sposato, Luigi ABR:EX; McDonald, Alana G ABR:EX; Atlee, Brenda;

Subject: RE: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Fred,

I have just looked at my schedule and I am booked solid on Friday. My suggestion would be that you connect first with Yvette Lizée, MARR Regional Manager, South Coast. I trust that Yvette will be able to provide you with more timely assistance.

Neilane Mayhew

Associate Deputy Minister and

Chief Operating Officer

Ministry of Aboriginal Relations and Reconciliation

Phone: 250 356-1439

Fax: 250 387-6073

From: Cummings, Fred [<mailto:Fred.Cummings@translink.ca>]

Sent: November-12-14 9:59 AM

To: Berg, Shane ABR:EX

Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Mr. Berg,

I have a call into Steve Munro, but perhaps you can direct me to the correct contact. You can see by the brief memo that follows, that we are being challenged by the Qayqayt First Nation on our ability to conduct some geotechnical investigations for the purpose of rehabilitating the Pattullo Bridge between Surrey and New Westminister. I would like to discuss this with someone at the province to ensure that the concerns of the Qayqayt are addressed appropriately without causing delay to our program.

Regards,

Fred Cummings, P.Eng.

VP Infrastructure Management and Engineering

TransLink (South Coast BC Transportation Authority)

400 - 287 Nelson's Court

New Westminister, BC V3L 0E7

Ph: 778-375-7670

Email: fred.cummings@translink.ca

From: Woodworth, Darren

Sent: November-10-14 4:21 PM

To: Cummings, Fred

Cc: Zein, Sany; Russell, Shelley

Subject: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Fred

John Kafka (TransLink's First Nations Advisor) and I met with Chief Rhonda Larrabee and Sandra Isaac (Researcher) at the TransLink offices on November 10 at 2 PM.

We provided an update on the Pattullo Bridge rehabilitation project and provided two bridge drawings with red boxes shown around the areas where rehabilitation work would be performed to improve bridge safety.

s.13,s.14,s.16

Let me know if you have any questions Fred.

Thanks

Darren W. Woodworth, P.Eng.

Senior Project Manager

TransLink (South Coast British Columbia Transportation Authority)

#400-287 Nelson's Court, New Westminster, BC, V3L 0E7

Direct: (778) 375-7817

Email: darren.woodworth@translink.ca

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From: [Alice Storey](#)
To: [Woodworth, Darren](#)
Subject: FW: Permit 2014-0154 Pattullo Bridge : Monitoring of Boreholes
Date: Friday, November 14, 2014 2:19:24 PM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[Re 2014-0154 Pattullo Bridge Interim Report.msg](#)

From: Acheson, Steven FLNR:EX [mailto:Steve.Acheson@gov.bc.ca]
Sent: November-03-14 12:00 PM
To: Alice Storey
Subject: RE: Permit 2014-0154 Pattullo Bridge : Monitoring of Boreholes
Hi Alice, further to our discussion and my review of the attached interim report, the Archaeology Branch concurs with your findings and recommendations. s.13
s.13

s.13 For the

record, any additional archaeological work, including monitoring, is a voluntary matter for your client and not a Branch requirement.

Regards,
Steven

Steven Acheson, D.Phil. | Supervisor, Permitting and Assessment
Archaeology Branch | Ministry of Forests, Lands and Natural Resource Operations
Phone: 250-953-3306 | Fax: 250-953-3340 | e-mail: archpermitapp@gov.bc.ca
Unit 3 - 1250 Quadra Street, Victoria BC V8W 2K7 | PO Box 9816 Stn Prov Govt, Victoria, BC V8W 9W3
Visit our website at: <http://www.for.gov.bc.ca/archaeology/>

From: Alice Storey [mailto:A.Storey@archercrm.ca]
Sent: Monday, November 3, 2014 9:17 AM
To: Acheson, Steven FLNR:EX
Subject: Permit 2014-0154 Pattullo Bridge : Monitoring of Boreholes

Dear Steven:

Thanks so much for taking the time to talk to me this morning. As discussed we are going to inform our client that the geotechnical and environmental testing around the Pattullo Bridge may now proceed in areas that are not archaeological sites or that could not be assessed by us using shovels and manual augers. The First Nations have requested that we monitor all locations, even those determined to be of no further concern in our AIA report. The proponent is happy to oblige and this will allow us to collect more information on the soil and sediment profiles in the area in all test locales.

Please do write back and confirm this plan meets with Branch approval so that the auger rigs can be ordered ASAP.

Thanks very much for your time,
Alice Storey

Alice Storey, PhD
Project Manager
ARCHER CRM Partnership

Office: 1.604.336.6016
Mobile: 1.778.231.6156
Fax: 1.250.261.5474

Celebrating our 10,000th Project ...

April 4, 2013

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Seyem' Qwantlen Business Group

*Limited partnership economic development/ resource corporations of Kwantlen First Nation
Seyem' Qwantlen Development Ltd. – Seyem' Qwantlen Land Development Ltd. – Seyem' Qwantlen Resources Ltd.*

October 6, 2014

Via email: alice.storey@archercrm.ca

Dear Ms. Storey

Re: Pattullo Bridge Seismic Retrofit and Rehabilitation; Archer AIA No. 10432; Seyem' Qwantlen Permit #2015

We write in the interest of Kwantlen First Nation Council.

We thank you for providing us with a copy of the draft AIA report with regards the above, and thank you for your patience while we found the time to review and provide comments on the project.

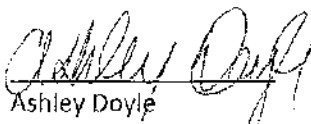
With respect to the report, we are in general agreement with Archer's recommendations for the site; specifically, we wish to see site avoidance where possible to maintain the integrity of archaeological deposits. This area of Surrey is very significant to Kwantlen First Nation, as it was a former Kwantlen Village site and subsequent reserve that was sold in the 1940's by Indian Affairs without any benefit to Kwantlen. In terms of ethnic significance, we wish to express to the permit holder and proponent that this site is rated very high to Kwantlen, and is seen as one of the most important sites in Kwantlen's traditional territory. Though the area has been disrespected in the past, we are hopeful that the new Pattullo Bridge project will be an opportunity for Seyem' Qwantlen to work with Translink in a meaningful way in terms of consultation and accommodation.

Where it is impossible for relocation of environmental and geotechnical boreholes, we ask that a Seyem' Qwantlen field worker be on site to monitor the soils that are brought to the surface.

On a technical note, the contact information for Ashley Doyle isn't correct. The email address should read: Ashley.doyle@seymqwantlen.ca

Please feel free to contact me via phone or email me if you have any questions or need any further clarification.

Sincerely,


Ashley Doyle
Seyem' Qwantlen Resources Ltd.
Lands Officer

P.O. Box 1623, Fort Langley, B.C. V1M 2S4

Phone: 604.888.5556 (Ext. 208) Fax: 604.888.5544 Email: Ashley.doyle@seymqwantlen.ca



Alice Storey
Project Manager
Archer CRM Partnership

September 22, 2014

Comments on behalf of Kwikwetlem First Nation on the draft report "Archaeological Impact Assessment No. 10432 (HCA Permit 2014-0154), Proposed Pattullo Bridge Seismic Retrofit and Rehabilitation – Stage 1 Preliminary Design (August 27, 2014)

Thank you for the opportunity to review and provide comments on the above-title draft report. We understand from Kwikwetlem Field Tech s.22 that the fieldwork was conducted in a thorough and professional manner.

We offer the following comments on the draft report.

- We question the utility of establishing two new site designations s.18 at the project location given their proximity to an ethno-historically known large village site. Using arbitrary distances between archaeological deposits to distinguish one site from another, especially when no assessment or testing in the intervening area has been conducted (to demonstrate an absence of cultural material) seems very conservative in this context. (The current distinction between s.18 seems arbitrary to us as well, but that's another discussion). Given how fragmentary *Kikayt* has become over the years due to intensive and extensive development, it seems fair and prudent to afford what remains as much protection as possible, and one way of doing so is to identify an inclusive site boundary.
- In a similar vein, we note that it is perhaps not unexpected that four tightly clustered shovel tests might return as negative (at geotest locations) if the testing location happens to be located in a disturbed or naturally low density portion of the site. We're concerned that labelling some areas as non-site based on a concentrated set of four negative tests may preclude further assessment at these locations and immediately surrounding areas in the course of development (Bridge related or otherwise).
- It would be helpful for the report to state the actual depths below surface at which cultural materials were encountered. Photos of select artifacts would also be helpful.
- Given the degree of disturbance, especially the presence of potentially thick fill deposits in some locations, and characteristics of some strata at terminal depths, it appears as though distinctly sterile deposits were not have been reached in many of the subsurface tests. Small-diameter hand augers are also of questionable value for site detection

where low-density sites may be expected. We suggest that all negative geotech test locations where shovel tests did not reach clearly intact sterile strata be monitored (with the exception of those in the historic fill zone on the south Fraser shoreline).

- With reference to the extension of fill on the south shore beyond the natural shoreline, we request mention in the report of some potential for perishables or other materials in the former intertidal zone beneath the fill. The likelihood of striking (or detecting) such material during geotech testing may be low, but the potential presence of material here should be on the radar for future planning and assessment.
- We note on this^{S.18} site forms that the proponent has agreed to forego or relocate geotests recorded as culturally positive. Can you clarify next steps? Will the proponent select alternate locations that will then be assessed? We were also wonder why the locations of some geotech tests are shown as 'relocated' (i.e. Figures 2 and 8), though not in apparent conflict with archaeology? Was this decided post-assessment, and will these new locations be assessed prior to drilling?
- Finally, given the significance of the study area to Kwikwetlem, we offer a reminder that the Nation will require full professional involvement in all future archaeological work pertaining to Pattullo Bridge upgrades and/or replacement. This would include participation in project planning, fieldwork, and the opportunity to review and comment on any archaeological/heritage study documents stemming from the Project.

We look forward to hearing from you.

Sincerely,

Doug and Nicole

From: [Alice Storey](#)
To: [Acheson, Steven](#) FLNB:EX
Cc: [Reni Farvacque](#)
Subject: Re: 2014-0154: Pattullo Bridge Interim Report
Date: Saturday, October 25, 2014 6:21:35 AM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[2014_0154_AIA_Int_Pattullo Bridge Upgrades.pdf](#)

Dear Dr. Acheson:

We recently undertook a small scale AIA under permit 2014-0153 for a programme of proposed geotechnical and environmental testing for the Pattullo Bridge Rehabilitation Project. An interim report is attached as I encountered persistent errors attempting to upload the file to APTS.

As a result of our assessments we identified three new sites [S.18](#) and extended the boundaries of one [S.18](#). Identification of these previously unrecorded sites resulted in the project's geotechnical team moving borehole locations outside of site boundaries to areas believe to be of low archaeological concern. The environmental team will suspend works in proximity to archaeological sites while we discuss the feasibility of avoidance versus applying for a Section 12 Site Alteration Permit under the *Heritage Conservation Act*. We have recommended monitoring of several proposed geotechnical drill locations that could not be assessed in the field due to impediments such as covering concrete and extremely compacted soils that prevented the use of conventional methods of archaeological investigation within a safe work environment. We have discussed our management recommendations with the Kwantlen, Sto:lo, Squamish, and Tsleil-Waututh First Nations from whom we have acquired permits concurrent our HCA S14 Permit 2014-0153. We have also, at the request of the client, asked for comment from Kwikwetlem and Qayqay't. The Nations have asked that we include monitoring of [S.18](#) and [S.18](#) in addition to the other locations recommended by us. We will monitor extraction of materials from these locales and document the sediments extracted from the top 3 m of sediments using a split spoon and a hollow tipped auger.

Monitoring is included in our permit but we would like to confirm with you that these methods are appropriate within the context of Branch standards. We aim to proceed as soon as possible in areas where no cultural materials have yet been identified. The goal of monitoring such small impact areas is to ensure we can document the soil profile, particularly in the case of deeply buried deposits which may exist beneath the fill deposited under the bridge in the last 80 years, to better guide planning of upgrades to avoid disturbing cultural materials.

Please don't hesitate to contact me if you have any questions or concerns.

I will follow up with you by phone next week.

Best,

Alice Storey

[Alice Storey](#), PhD

Project Manager

ARCHER CRM Partnership

Office: 1.604.336.6016

Mobile: 1.778.231.6156

Fax: 1.250.261.5474

Celebrating our 10,000th Project ...

April 4, 2013

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From: [Woodworth, Darren](#)
To: [Lizee, Yvette ABR:EX](#)
Cc: [Cummings, Fred](#); [Gereb, Attila ABR:EX](#); [Carey, Paul ABR:EX](#); [Law, Vivian](#)
Subject: RE: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting
Date: Friday, November 14, 2014 3:23:12 PM
Attachments: [image001.jpg](#)
[FW Permit 2014-0154 Pattullo Bridge Monitoring of Boreholes.msg](#)
[October 6, 2014 Signed AIA Response.pdf](#)
[Pattullo AIA response comments, Sept. 22, 2014.pdf](#)
[Reply to Draft AIA Report Qayqayt.docx](#)

Hi Yvette

As you requested, please find attached the following information to help you better understand the context of our current situation:

- Letters from the Kwantlen, Kwikwetlem and Qayqayt First Nations Bands with their comments on the report
- An email from the Archaeological Branch confirming they concur with our findings and recommendations

The answers to your questions in your email below are as follows:

Question 1: Can you provide us a copy of the document showing Qayqayt FN approved the site investigation?

A copy of the letter is attached, please note that in their letter the Qayqayt First Nations made two assertions:

- They expressed their opposition to “any site alteration pursuant to Section 12” (any further impacts to known archaeological sites). Therefore, TransLink’s archaeologist (Archer) ensured that all site investigations will only occur *outside* known archaeological sites. We are also employing a team of Archaeological monitors to monitor the work on site (including a representative for the Qayqayt First Nations).
- Qayqayt requested the inclusion of further archival references which Qayqayt has documented from their historical review of the pre-Confederation reserves established by Governor Douglas. We did not concur with this request because an AIA does not usually contain such information.

Question 2: Also can you confirm if the plans changed after this approval from Qayqayt?

- The plans did not change after receiving Qayqayt’s letter since our AIA met their requirements.

Question 3: Can you confirm whether there were any issues raised with the project during your consultations (by Qayqayt or other FN)? *Note I’ll check w archeology branch on the provincial consultation.*

- The Kwikwetlem and Qayqayt First Nations both expressed concerns about disturbing any registered archeological sites. TransLink explained that the site investigation work would attempt to stay away from any registered archeological sites and would only consist of some boreholes, CPT tests and environmental testing for contaminated soils. This work was important to facilitate the upcoming first stage of safety improvements to the bridge which involve replacing the existing bearings with new seismic isolation bearings, strengthening some steel truss member and rehabilitating the concrete bridge deck. All this safety work would be done to the bridge superstructure, all above ground with no work occurring on the foundations and no expansion of the foundation footprints at this stage.

Question 4: Your email mentions "permits". Were there other provincial permits issued beyond the archeological permit? If so were there any FN issues raised (especially by Kwantlen or Qayqayt)?

- A road closure permit from the City of Surrey is required for the site investigation team to close one lane of traffic S.18 to accommodate some of the site investigation work.

Thank you for your assistance and please let me know if you require any additional information
Thanks

Darren W. Woodworth, P.Eng.

Senior Project Manager

TransLink (South Coast British Columbia Transportation Authority)

#400-287 Nelson's Court, New Westminster, BC, V3L 0E7

Direct: (778) 375-7817

Email: darren.woodworth@translink.ca

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cid:image003.jpg@01CC537E.CDF82C40



From: Lizee, Yvette ABR:EX [<mailto:Yvette.Lizee@gov.bc.ca>]

Sent: Friday, November 14, 2014 11:45 AM

To: Woodworth, Darren

Cc: Cummings, Fred; Gereb, Attila ABR:EX; Carey, Paul ABR:EX

Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Darren,

I'm just following up on my voicemail to request a bit more information to help us better understand the context:

1. In your original email below you mention that *"TransLink has all the necessary permits in place including the archaeological permit which includes documentation where the Qayqayt First Nation approved TransLink's approach to the site investigation work"*.
 1. Can you provide us a copy of the document showing Qayqayt FN approved the site investigation?
 2. Also can you confirm if the plans changed after this approval from Qayqayt?
 3. Can you confirm whether there were any issues raised with the project during your consultations (by Qayqayt or other FN)? *Note I'll check w archeology branch on the provincial consultation.*
 4. Your email mentions "permits". Were there other provincial permits issued beyond the archeological permit? If so were there any FN issues raised (especially by Kwantlen or Qayqayt)?
2. Also can you send us the parcel information for the site. If you have a project/site map with this information and project footprint that would be helpful too.

Thanks,

Yvette

Yvette Lizée

Regional Manager, South Coast

Ministry of Aboriginal Relations and Reconciliation

200 - 10470 152 Street, Surrey, BC V4A 3K6

Office: 604.582.5258 | Mobile: 604.329-0499 | [MARR Website](http://MARR.Website)

From: Mayhew, Neilane ABR:EX (<mailto:Neilane.Mayhew@gov.bc.ca>)

Sent: Wednesday, November 12, 2014 3:59 PM

To: Cummings, Fred

Cc: Sposato, Luigi ABR:EX; McDonald, Alana G ABR:EX; Atlee, Brenda;

Subject: RE: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Fred,

I have just looked at my schedule and I am booked solid on Friday. My suggestion would be that you connect first with Yvette Lizee, MARR Regional Manager, South Coast. I trust that Yvette will be able to provide you with more timely assistance.

Neilane Mayhew

Associate Deputy Minister and

Chief Operating Officer

Ministry of Aboriginal Relations and Reconciliation

Phone: 250 356-1439

Fax: 250 387-6073

From: Cummings, Fred (<mailto:Fred.Cummings@translink.ca>)

Sent: November-12-14 9:59 AM

To: Berg, Shane ABR:EX

Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Mr. Berg,

I have a call into Steve Munro, but perhaps you can direct me to the correct contact. You can see by the brief memo that follows, that we are being challenged by the Qayqayt First Nation on our ability to conduct some geotechnical investigations for the purpose of rehabilitating the Pattullo Bridge between Surrey and New Westminster. I would like to discuss this with someone at the province to ensure that the concerns of the Qayqayt are addressed appropriately without causing delay to our program.

Regards,

Fred Cummings, P.Eng.

VP Infrastructure Management and Engineering

TransLink (South Coast BC Transportation Authority)

400 - 287 Nelson's Court

New Westminster, BC V3L 0E7

Ph: 778-375-7670

Email: fred.cummings@translink.ca

From: Woodworth, Darren

Sent: November-10-14 4:21 PM

To: Cummings, Fred

Cc: Zein, Sany; Russell, Shelley

Subject: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting

Hi Fred

John Kafka (TransLink's First Nations Advisor) and I met with Chief Rhonda Larrabee and Sandra Isaac (Researcher) at the TransLink offices on November 10 at 2 PM. We provided an update on the Pattullo Bridge rehabilitation project and

provided two bridge drawings with red boxes shown around the areas where rehabilitation work would be performed to improve bridge safety.
s.13,s.14,s.16

Let me know if you have any questions Fred.

Thanks

Darren W. Woodworth, P.Eng.

Senior Project Manager

TransLink (South Coast British Columbia Transportation Authority)

#400-287 Nelson's Court, New Westminster, BC, V3L 0E7

Direct: (778) 375-7817

Email: darren.woodworth@translink.ca

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Sandra Isaac
Research Consultant

New Westminster Indian Band's (Qayqayt First Nation) Response to Proposed Pattullo Bridge Seismic Retrofit and Rehabilitation – Archer Draft Archaeological Impact Assessment No. 10432

Overall, the report produced the predicted positive results of archeological potential. Qayqayt had already been well aware of S.18 as other previous AIA's had already verified the archaeological/cultural significance of the area. The identification of three new sites especially those that now represent a northeast extension of the S.18 boundary confirms that the proposed Pattullo Bridge Retrofit and Rehabilitation would potentially have negative impact on the existing archaeological sites and the new ones identified in Archer's Impact Assessment.

For these reasons, the Qayqayt First Nation must register their concerns for any site alteration pursuant to Section 12 of the Heritage Conservation Act. Any such plans for S.18 and those identified in the Archer Report as S.18 should be deemed or remain as "protected" under the Heritage Conservation Act pursuant to Section 13. Clearly, these sites are important because of their particular pre contact archaeological value. A site alteration permit under Section 12 would negate the warranted protection that HCA purports to provide.

With respect to aboriginal title, we believe that important archaeological sites and sacred spiritual places are the ultimate expression of our aboriginal title. It is our duty as aboriginal people to protect our ancestral places. This is consistent with Article 11 of the United Nations Declaration on the Rights of Indigenous Peoples:

"Indigenous peoples have the right to practice and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artifacts, designs, ceremonies, technologies and visual and performing arts and literature."

The Archer Report identifies at least 8 subsurface tests proved positive with at least 13 artifacts collected from the sites. The report also indicated that the archaeological sites may extend further than originally anticipated:

During the current AIA, two subsurface tests were excavated in the vicinity of proposed borehole locations S.18 was positive for cultural remains. This find resulted in an extension of S.18 S.18

Vegetation in the area is predominantly short grass with large stands of blackberry around the northeast and northwest of the pillar. The full extent of S.18 has yet to be determined. Information provided to Golder (2011) suggests that the seasonal village of Qayqayt may have once stretched from S.18 (Figure 11).

The Archer report confirms from the aforementioned reference to s.18 that, "Further assessment is required to delineate the full extent of this site and characterize its nature and extent."

Other related concerns expressed in the Archer report exemplify a more extensive impact of the potentially larger boundary of DhRr 2:

s.18

s.18 Sediments and soils observed in the stratigraphy of the site are similar to those of s.18 and may represent a continuation of the site. The terrain at s.18 has been heavily impacted by contemporary and historic disturbance. Vegetation in the area reflects a history of disturbance and is predominantly covered in grasses, blackberries, cow parsnip, scotch broom and juvenile cottonwood.

s.18

s.18 Sediments and soils observed in the stratigraphy of the site are similar to those of s.18 and may represent a continuation of the site. The terrain at s.18 has been heavily impacted by contemporary and historic disturbance. Vegetation in the area reflects a history of disturbance and is predominantly covered in grasses, blackberries, cow parsnip, scotch broom and juvenile cottonwood.

The report specifically cited impacts from the "Establishment of pillars for the Pattullo Bridge, railways, town of Brownsville, establishment of utilities including water and sewage mains, gas lines and numerous fibre optic and other cables."

Ultimately, the overall report recommends "avoidance through project redesign", however, we are of the opinion that avoidance can be achieved by excluding the location of the study for reasons stated above.

ARCHAEOLOGICAL FIELD WORK AND LITERATURE REVIEW

Specifically, the only additions we would make concerning the literature review undertaken by Archer is to point out further archival references which Qayqayt has documented from their historical review of the pre-Confederation reserves established by Governor Douglas. The following are excerpts from our legal facts established from the historical record and which provide the legal underpinning for our Specific Claim which was filed with Canada over two years ago:

1. Anthropologists reference the "Qeqa'yt" (Qayqayt) as "a small tribe living at New Westminster whose territory extended through to Mud Bay."¹
2. In a letter dated April 15, 1860, from Colonel Moody, Commissioner of Lands & Works to the Attorney General, he reported that in the execution of his duties as Chief Commissioner of Lands and Works, he had caused "certain posts to be put in the ground to make the boundary of the Indian Allotment on the left bank of the Fraser, yesterday afternoon". He further reported that the local Indian Chief and the tenant of the late Custom House, which sits on a piece of property that adjoined the designated Indian land, were informed of the action. He further reported that he discovered that the posts had been removed and the property trespassed upon by the erection of a fence by one "Mr. Herring" a subtenant of the lessee of the adjacent property. He requested that the Attorney General provide assistance as necessary to ensure protection of this Indian allotment and to ensure that such landmarks and survey beacons remain undisturbed.
3. On May 13, 1862, Royal Engineer R.E.J. Grant wrote to the Chief Commissioner of Lands and Works reporting on the survey of the Indian Reserve:

I have the honor to acquaint you that a portion of land with five chains frontage on the North Arm of the Fraser, has been laid out as an Indian Reserve, at a distance of ten chains west from the Suburban Lots of New Westminster.²

4. Grant did not specify what the acreage was, but subsequent surveys indicate that it was approximately 106 acres. The early maps indicate that it could have been as large as 289 acres.
5. On January 23, 1865, a letter from Charles Brew, Acting Commissioner of Lands and Works to the Colonial Secretary, explained the establishment of the Indian Reserve at Brownsville:

Many years since the Qwaotlin or Langley Indians used to camp in the salmon season where Herring's house now stands, but after Fort Langley was established by the H.B.C. those Indians gradually ceased to resort to their old fishing ground and in 1859 the clearing was quite abandoned. The Revenue Station was built on the place and when the station was moved to this side of the River the House and _____ were let by the Government to Sam Herring.

At the time the Royal Engineers camp was found, Tsimlannah of the Mosqueam tribe of Indians and his relatives owned the ground where the Government House is & now stands. Tsimlannah was compelled to move therefrom and in compensation he got about half an acre, I think, of land below Herrings on the other side of the river. This spot of ground Tsimlannah fenced in and cultivated and planted with some fruit trees and he has lived on it ever since unless for a few weeks in each year when he visits his tribe on the North Arm.³

¹ Wilson Duff: Anthropology in British Columbia Memoir No. 1; 1952: The Upper Stalo Indians, B.C. Provincial Museum p. 24; Doc 78

Ibid., p. 24

² Letter from R.E. J. Grant to Chief Commissioner of Lands & Works dated May 13, 1862; Papers Relating to the Indian Land Question p. 23; Doc

³ Letter to the Colonial Secretary from Chartres Brew dated January 23, 1865; GR 504, File 1, BC Provincial Secretary; Doc

6. Brew informed the Colonial Secretary that, "it would be no disadvantage if they returned to Langley but if they wish to be near New Westminster and they cannot live where they are, they can reside on the Indian Reserve which is marked out below the Town". Brew was referring to the Indian Reserves below the town as those set aside by Douglas in the western portion of the City that would later be identified as Lots 145, 146, and 154 and reserved exclusively for Indians. The two reserves established next to Brownsville would eventually become known as Musqueam IR 1 and Langley IR 8. Together they comprised about 10 acres.
7. Joseph W. Trutch became the Chief Commissioner of Land and Works in 1864, after Douglas's retirement. In 1867, Trutch reported on the Indian Reserves in which were surveyed prior to Governor Douglas's retirement. Of these few, four were set apart for the New Westminster Indians:

Previous to 1864, very few Indian Reserves had been staked off, or in any way exactly defined. The only Indian Reserves on the lower Fraser actually surveyed off before Colonel Moody left the Colony, as far as I can ascertain, were the following: -

Three lots at the mouth of the North Arm of the Fraser:
 An Island at the mouth of the Coquitlam River
 Two lots on the banks of the Coquitlam River
 One lot opposite New Westminster
 Two lots at Keatsie, one of each side of the River.⁴

POST CONFEDERATION

Indian Commissioner Sproat confirmed the old colonial reserves in 1879. The following is a description of the reserve boundary of Brownsville as he redefined it in 1879:

...On the East and South East by Sections 8 and 17, Block 5 North Range 5 West on the West by Suburban lot No. 2 and on the North by Fraser River. This last described reserve includes the land formerly leased by the Provincial Government to the late Mr. Samuel Herring, and that portion is assigned Subject to any rights he may have acquired thereto, but this last described reserve is not to include as part of the New Westminster General Reserves the portions of the land assigned at that place to the Langley and Musqueam Indians and bounded as follows. From the North East corner of Suburban Lot No. 2 thence following the east boundary of said lot 600 links; thence at right angles in an easterly direction 1800 links more or less to the west boundary of a lot formally leased to the late Samuel Herring thence at right angles 600 links to Fraser River thence in a westerly direction following the bank of Fraser River to the initial point. Signed GMS.⁵

⁴ Papers Relating to Indian Land Question 1850-1875; Letter from Joseph Trutch, Chief Commissioner of Lands & Trusts to Acting Colonial Secretary dated August 28, 1867; p. 41; Doc 16

⁵ Minutes of Decision prepared by Indian Gilbert Malcolm Sproat; SCW Library; Sproats Minutes of Decision; Doc 28

8. Sproat stated he set about to lay off reserves confirming principally the old ones, but not assigning the reserves for any particular tribe. They were to be assigned for the New Westminster District "Nation" or group of Indians, to be managed by the Indian Department as was found expedient. ...The Poplar Island site was seen as a convenient place on which to deal with the problem of small pox among the Indians.
9. Pursuant to Sproat's 1879 Minutes of Decision confirming the old colonial reserves, a survey of Brownsville and the New Westminster reserves, including Poplar Island, was carried out by Surveyor Mohon and Jemmet in 1880-81.⁶ The survey was approved and signed by Canada pursuant to CLSR Plan 7052 in 1882.
10. Indian Agent Devlin had noted in 1890 that there were five families or 18 persons living permanently on this reserve having "good comfortable houses, a good Church and meeting house built thereon." He noted that if the land had not been disposed of, it should certainly be retained as a Reserve. His letter further stated that there was little available camping ground area near New Westminster and that Poplar Island was not suitable for this purpose. Indeed, he added, that the conditions that may have prompted McTiernan to give his advice no longer existed and given that the land had been equally divided between Musqueam and Langley Indians (and were occupied by both), it should be retained as an Indian Reserve.⁷ Devlin, in this instance, was referring to the two smaller pre-Confederation reserves that had been set apart for the Musqueam and Langley Indians which was distinctly separate from the larger 105 acre reserve which had been set apart for the New Westminster Indians.
11. In its Annual Report for 1909, the Department of Indian Affairs noted that the New Westminster "Band" which numbered 45 had occupied reserves at New Westminster and Brownsville:

Reserve - These Indians have reserves at New Westminster and at Brownsville respectively, comprising an area of 32 acres.

Population - The population of this band is 43.

Health & Sanitation - Their health has been good; their dwellings are kept clean and in a sanitary condition, and they have been vaccinated from time to time

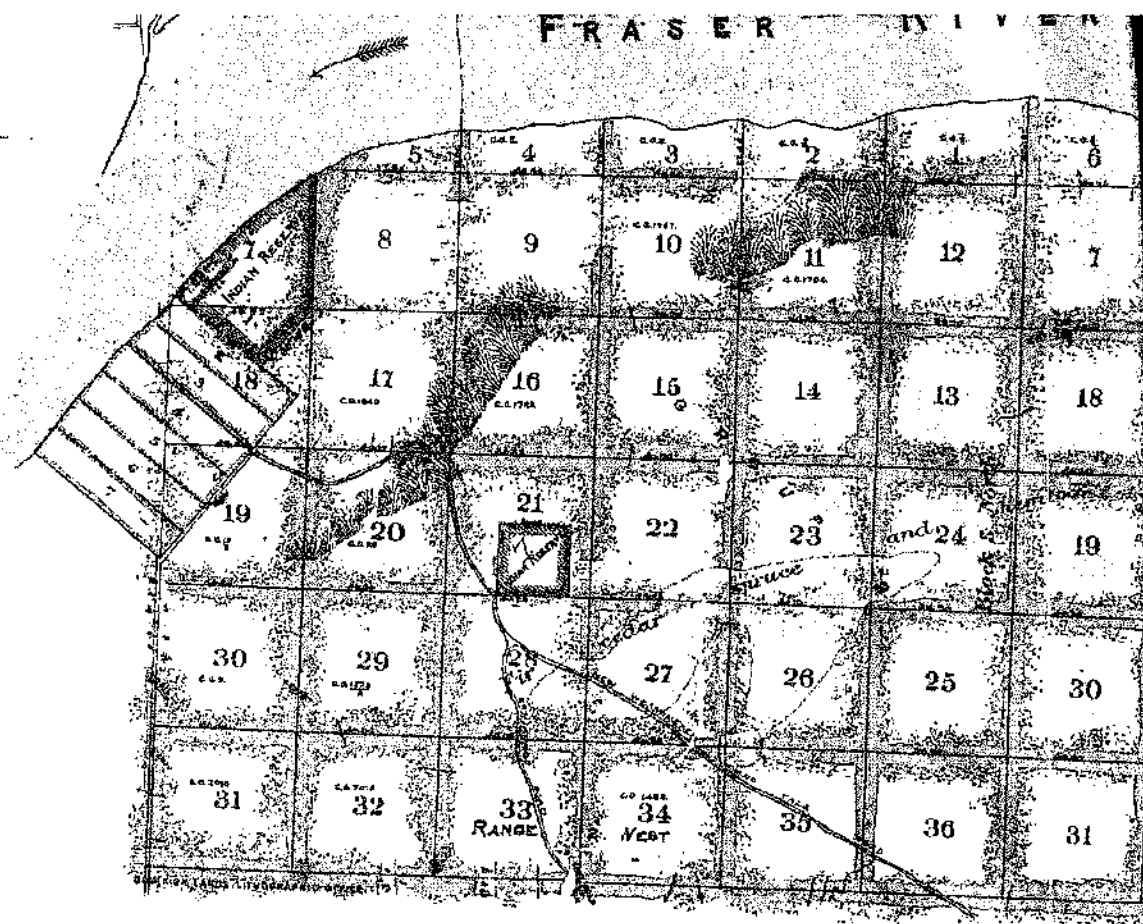
Occupations - They make a good living chiefly by fishing, hunting and trapping. Very little farming is done by them a few having small gardens.

Buildings, Stock and Farm Implements - Their houses are of a good class, and are repaired from time to time. They have very little stock, and only a few farm implements.⁸

⁶ Field Notes and Survey Plan of New Westminster Indian Reserves dated 1881; E Mohun, Surveyor; Doc 33

⁷ Letter to A.M. Vowell, Superintendent from Mr. Frank Devlin, Indian Agent of the Fraser Agency dated March 10, 1894; RG10, Volume 7788, File 27153-30, Pt. 1; Doc 50

⁸ Department of Indian Affairs Annual Report 1909; Sessional Papers 27, p. 225; Doc 60



Surveyed by

| | |
|------------------------|--------------|
| J.W. Trutch | 1869 |
| J. Meade R.E. | 1862 |
| J.T. Breakearidge R.E. | 1863 |
| G. Turner | 1869 1870 20 |
| W. G. Pinder | 1874 |
| W. B. Jemmett | 1876 |
| E. Mohr | 1881 |
| Peter Summerfield | 1884 |
| A. F. Cotton | 1887 |

Compiled from the certified
of the Field notes on file in
the Department of the Interior
from the survey of the Department

142838

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Withheld pursuant to/removed as

s.16;s.13

From: [Lizee, Yvette ABR:EX](#)
To: [Mayhew, Neilane ABR:EX](#); [Walters, Peter ABR:EX](#); [Sposato, Luigi ABR:EX](#)
Subject: FW: Pattullo Bridge Seismic Upgrade & Rehabilitation - Qayqayt First Nations Meeting
Date: Saturday, November 15, 2014 10:44:05 PM
Attachments: [ATT00001.htm](#)

Hi Neilane and Peter,

I saw your emails inquiry on the status of the Pattullo Bridge question. Below is a copy of the email sent to Fred Cummings and Darren Woodworth (Translink) giving ok to proceed with the work. s.13,s.14,s.16
s.13,s.14,s.16

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Withheld pursuant to/removed as

s.14;s.16;s.13