

Archaeological Impact Assessment of McElhanney’s Rip-Rap Project along the Doré River Interim Report

1. PROPONENT AND DEVELOPMENT

Proponent:	McElhanney	Norcan Operating Area:	Prince George
Contact Name:	Ethan Hoffman	Development Type:	Proposed Rip-Rap Installation
Address:	12-556 North Nechako Road, Prince George, BC, V2K 1A1	Development Location:	UTM Zone 10 685355 (E) 5911855 (N) (Figures 1 & 2)
Phone:	250-561-2229	BCGS Map Sheet:	093H039
Email or Fax:	ehoffman@mcelhanney.com	NTS Map Sheet:	093H08

2. ASSESSMENT SUMMARY AND RESULTS

Permit Holder: Brett Nuttall
Report Author: Brett Nuttall
Report Editor: Alisha Nuttall
Report Completion Date: 10 January 2024, V1

Survey Dates	Field Director on Site?	Field Supervisor	Other Crew	Type of Assessment	Comments
17 October 2023	Brett Nuttall – Yes	Brett Nuttall	Winston Alphonse (XFN), Cy Celesta (SFN), Eugene Celesta (SFN), Rebecca Lewthwaite, Curtis Patrick	Stratified Survey 1 m to 5 m apart	Survey Completed
18 October 2023	Brett Nuttall – Yes	Brett Nuttall	Winston Alphonse (XFN), Cy Celesta (SFN), Eugene Celesta (SFN), Rebecca Lewthwaite, Curtis Patrick	Subsurface Testing	STA1 Testing Completed; Started Testing STA2
19 October 2023	Brett Nuttall – Yes	Brett Nuttall	Winston Alphonse (XFN), Cy Celesta (SFN), Eugene Celesta (SFN), Rebecca Lewthwaite, Curtis Patrick	Subsurface Testing	STA2 & STA3 Testing Completed; Started Testing STA4
20 October 2023	Brett Nuttall – Yes	Brett Nuttall	Winston Alphonse (XFN), Cy Celesta (SFN), Rebecca Lewthwaite, Curtis Patrick	Subsurface Testing	STA4 Testing Continued
21 October 2023	Brett Nuttall – Yes	Brett Nuttall	Winston Alphonse (XFN), Rebecca Lewthwaite, Curtis Patrick	Subsurface Testing	STA4 Testing Completed
Protected HCA Sites	Untested AOPs	Shovel Tests Completed	TUS CMTs	TUS Trails	Heritage Finds
None	None	166	None	None	Modern Refuse and Disturbances

3. MANAGEMENT SUMMARY

The proposed rip-rap installation locations contain no archaeological or cultural heritage resources. Provided no changes are made to the current development boundary, it is recommended that rip-rap installation operations may proceed without further archaeological concerns and no further archaeological investigations are recommended. However, due to ongoing erosional activity within the proposed development area, two conditional recommendations were made:

- 1.) If erosional activities within the project area continue 5 m from the Doré River’s current margin before development activities commence: it is recommended that McElhanney contact a professional archaeologist to provide on-site monitoring for all subsurface developmental impacts.
- 2.) If erosional activities within the project area continue 10 m or more from the Doré River’s current margin before developmental activities commence: it is recommended that additional subsurface testing be required prior to the start of developmental activities.

Additionally, this project was designed solely as an archaeological impact assessment and was not intended to evaluate traditional Aboriginal use of the proposed development area. It is recommended that McElhanney contact affected First Nations to discuss any concerns or needs they may have relating to the proposed project.

4. FIRST NATION COMMUNICATION AND PARTICIPATION

Archaeology Branch Project Officer: Mary Simonds

Notice of Intent (NOI) Submission Date (Submitted by the Archaeology Branch): 11 August 2023

First Nation Name	Communication and Participation Status
Lheidli T’enneh First Nation	No Response Received. Norcan reached out again on September 15, 2023, via email; however, no response was received.
Lhtako Dene Nation	No Response Received. Norcan reached out again on September 15, 2023, via email; Bruce McDonald responded stating, “we are short staff at the moment, thank you for reaching out and please keep us in mind for further work.”
Neskonlith Indian Band	No Response Received. Norcan reached out again on September 15, 2023, via email; however, no response was received.”
Northern Shuswap Tribal Council	No Response Received
Simpcw First Nation	Response Received: Simpcw First Nation responded to the NOI stating that they exercise their rights under UNDRIP Articles 11 and 24; based on this, they would like to participate in the field assessment. Norcan reached out to Kerri Jo Fortier and Lynn Guitard to schedule representatives for the field assessment (Cy Celesta and Eugene Celesta).
Xat’sull First Nation	Response Received: Xat’sull First Nations responded to the NOI stating that they would like to be contacted for participation in fieldwork. Norcan reached out to Glen Dixon to schedule a representative for the fieldwork (Winton Alphonse).

5. PRE-FIELD METHODOLOGY

<input checked="" type="checkbox"/> Archaeological potential and sites are indicated on the Study Area Map.
Details: During the archaeological overview, several data sources were consulted to make inferences concerning archaeological potential. In addition to applying a predictive model, sources include TRIM-based maps (typically produced between 1:2500 and 1:50000 scales), satellite imagery, RAAD, VRI data, and Norcan’s proprietary database of known and suspected heritage trails (Canuel, 2008). Provincial lake, stream, and wetland classifications were also reviewed. Based on these sources, targeted survey areas (TSAs) containing high archaeological potential were identified throughout the proposed rip-rap installation locations due to the proximity of the Doré River (Figure 2).
<input checked="" type="checkbox"/> An AOA and/or archaeological predictive model exists for the study area.
Details: Canuel (2006) was applied to the proposed development. Based on environmental criteria manually input into the predictive model, Canuel (2006) produced a numerical value of 510, which indicates that the development contains areas of high archaeological potential. Following this, an archaeological overview was conducted that considers additional data sources and factors not included in the model to further refine the parameters of the field survey.
<input type="checkbox"/> Previous field studies influenced this assessment.
Details: N/A
<input checked="" type="checkbox"/> Review of Provincial Heritage Register (RAAD).
Date Accessed: 1 August 2023

Archaeological Sites within 5 km of the Study Area*

Borden No.	Distance and Direction from Development Center	Site Type	Permit No. of Previous Visit	Site in Conflict?
FhRb-1	3.70 km southeast	McBride Heritage Railway Station	N/A	No

* No known archaeological sites are located within 5 km of the proposed development.

6. IN-FIELD METHODOLOGY

<input checked="" type="checkbox"/> Subsurface test measurements are a minimum of 35 cm x 35 cm.
The proposed development area was subjected to a stratified pedestrian survey. On October 17, a crew of six (6) entered the development from the northern end of Dyke Road and proceeded southwest and west along the Doré River’s southern margin until they reached its southern extent. From there, the crew proceeded to their point of entry and exited to their vehicles. The crew then continued by truck to the Doré River’s northern margin, where they initially assessed the northern-most TSA before restaging on River Bend Drive and proceeding north through the southern-most TSA. From October 18 to 21, a crew of four (4) to six (6) returned to complete subsurface testing within the STAs. As the development was not flagged when it was assessed, the crew followed the referred shapefile and margins of hydrological features.

7. IN-FIELD OBSERVATIONS

Surface:	Materials: Glaciolacustrine; Fluvial Expression: Riverbanks and Terraces; Plain to Moderate Slopes; Undulating to Hummocky Topography Aspect: Variable
Overall Slope:	Slope within the surveyed area ranges from 0° to 14°.
Hydrology:	The Doré River bisects the development area and is bordered along its southern margin by poorly draining and flat to undulating floodplains with elevated and well-defined terraces (Figure 2; Plates 1 to 10). Along its northern margin, the Doré River is bordered by terracing and

	riverbanks separated by hummocks and low-lying, flat, and poorly draining floodplains (Figure 2; Plates 11 to 16). Additionally, the margins of the Doré River have been highly disturbed by previous alterations (i.e., natural erosion, road construction, industrial and residential development, and recreational use; Figure 2; Plates 2, 3, 5, 6, 8, 10, 11, 12, 14, & 15).
Forest Cover:	The forest cover throughout the surveyed area is spruce dominant and cottonwood secondary with occasional paper birch and trembling aspen. Pine was not observed within the surveyed area.
Vegetation:	Typical vegetation within the surveyed area includes prickly rose, red raspberry, bunchberry, green wintergreen, Prince's pine, rattlesnake plantain, sweet-scented bedstraw, trailing raspberry, various grasses, and red-stemmed feathermoss. Green alder, prickly rose, red raspberry, soopolallie, bunchberry, green wintergreen, Prince's pine, rattlesnake plantain, sweet-scented bedstraw, trailing raspberry, various grasses, pixie-cup lichens, reindeer lichens, and red-stemmed feathermoss were noted within the STAs.
Sediments:	An examination of sediment exposures and subsurface tests revealed predominantly a greyish-brown sand to silty sand with up to 50% inclusions (Plates 17 to 48). However, within the low-lying and poorly draining floodplains, sandy clay to sandy clay loam was observed.
Terrain:	The terrain along the Doré River's southern margin is an undulating to flat and poorly draining floodplain within the northern TSA, while elevated, flat, and well-defined terraces occur within the central and southern TSAs (Figure 2; Plates 1 to 10). Additionally, previous attempts at shoring were observed throughout the southern margin's surveyed area (Figure 2; Plates 2, 3, 6, & 8). The terrain along the Doré River's northern margin is artificially terraced within the northern TSA before becoming hummocky, leading to low-lying and poorly draining sections to its south (Figure 2; Plates 11 to 13). The terrain within the southern TSA is a flat to gently sloping riverbank; defined on the east by the Doré River, to the north by a low-lying and poorly draining floodplain, and to the west by steep slopes outside of the permitted area (Figure 2; Plates 14 to 16).

8. FIELD ASSESSMENT RESULTS

During the field portion of the assessment, no archaeological or cultural heritage resources were identified.

However, four (4) subsurface test areas (STAs) were assessed for archaeological materials through shovel testing with negative results (Figures 3 to 6). The STAs were photographed, mapped to scale, and recorded with a GPS.

STA1:	23_Doré_River_Rip_Rap_Project_STA1 is located adjacent to an old mill site on an artificially flat and well-defined terrace elevated approximately 5 m above the Doré River's northern margin within the northwestern TSA and measures approximately 37 m by 10 m or 360 m ² (Figures 2 & 3; Plates 11 to 13). Due highly disturbed nature of the terrain and the resulting extremely compacted sediments preventing access to approximately 38% of the subsurface matrix, the STA covers 223 m ² . A total of 15 shovel tests (STs) ranging in depth from 20 to 50 cm (dbs) were placed at the STA following a systematic testing pattern with STs spaced approximately 5 or 10 m apart in three (3) parallel rows spaced approximately 5 m apart (Plates 17 to 19; Table 1). The associated cut bank exposure was also visually examined for archaeological materials. The vegetation includes green alder, soopolallie, various grasses, pixie-cup lichens, and reindeer lichens.
STA2:	23_Doré_River_Rip_Rap_Project_STA2 is located on a gently sloping to flat riverbank elevated approximately 1 m above the Doré River's northern margin within the southwestern TSA and measures approximately 135 m by 15 m or 1722 m ² (Figures 2 & 4; Plates 14 to 16). Due to tree cover and low-lying and poorly draining sections preventing access to approximately 13% of the subsurface matrix, the STA covers 1498 m ² . A total of 55 shovel tests (STs) ranging in depth from 14 to 60 cm (dbs) were placed at the STA following a systematic testing pattern with STs spaced approximately 5 m apart in two (2) or three (3) parallel rows spaced approximately 5 m apart

	(Plates 20 to 31; Table 1). The associated eroding riverbank exposure was also visually examined for archaeological materials. The forest cover within the STA is spruce dominant and cottonwood secondary with occasional trembling aspen and the vegetation includes soopolallie, bunchberry, fireweed, green wintergreen, various grasses, and red-stemmed feathermoss.
STA3:	23_Doré_River_Rip_Rap_Project_STA3 is located on a well-defined and moderately well-draining terrace elevated approximately 3 m above the Doré River's southern margin within the southeastern TSA and measures approximately 57 m by 6 m or 385 m ² (Figures 2 & 5; Plates 9 & 10). Due to tree cover, blowdown, and modern push-piles preventing access to approximately 4 % of the subsurface matrix, the STA covers 369 m ² . A total of 21 shovel tests (STs) ranging in depth from 25 to 66 cm (dbs) were placed at the STA following a systematic testing pattern with STs spaced approximately 5 m apart in two (2) parallel rows spaced approximately 5 m apart (Plate 32 to 36; Table 1). The forest cover within the STA is spruce dominant and cottonwood secondary with occasional paper birch and the vegetation includes prickly rose, red raspberry, Prince's pine, rattlesnake plantain, sweet-scented bedstraw, various grasses, and red-stemmed feathermoss.
STA4:	23_Doré_River_Rip_Rap_Project_STA4 is located on a well-defined, and moderately well-draining terrace elevated approximately 3 m above the Doré River's southern margin within the east-central TSA and measures approximately 142 m by 12 m or 1819 m ² (Figures 2 & 6; Plates 4 to 6). Due to residential disturbance preventing access to approximately 4% of the subsurface matrix, the STA covers 1747 m ² . A total of 75 shovel tests (STs) ranging in depth from 17 to 88 cm (dbs) were placed at the STA following a systematic testing pattern with STs spaced approximately 5 m apart in three (3) parallel rows spaced approximately 5 m apart (Plates 37 to 48; Table 1). The associated eroding terrace edge was also visually examined for archaeological materials. The forest cover within the STA is spruce dominant and cottonwood secondary and the vegetation includes prickly rose, bunchberry, green wintergreen, trailing raspberry, various grasses, and red-stemmed feathermoss.

Low archaeological potential has been confirmed throughout the remainder of the surveyed area due to the prevalence of undulating to flat, poorly draining to low-lying and wet terrain, and a corresponding lack of additional defined, dry landforms suitable for temporary or permanent encampment. The potential for protected (i.e., pre-1846 AD) culturally modified trees (CMTs) within the remainder of the development is considered low due to the evidence of previous land alterations (i.e., harvesting, land-clearing, residential and industrial development, etc.) and absence of lodgepole pine and CMTs observed within the surveyed area.

9. DISCLOSURE STATEMENT AND SIGNATURE

This project was designed solely as an archaeological impact assessment and was not intended to evaluate traditional Aboriginal use of the proposed development areas. The results of this assessment should not be considered valid for that purpose. The developer should also be aware that even the most thorough investigation might fail to locate all archaeological materials. In the event any archaeological materials are encountered during development, all ground disturbance activities in the vicinity should be suspended immediately, and the District Manager and Archaeology Branch should be informed.

Signed by:
 Permit Holder: Brett Nuttall

10. WORKS CITED

Canuel, N. (2006). *Archaeological Predictive Model for the Headwaters Forest District*. Prince George, BC: Norcan Consulting Ltd.

Canuel, N. (2008). *Trail Database for Central and Northern British Columbia*. Prince George, BC: Norcan Consulting Ltd.

11. SHAPE FILES

Study area shape files will be sent to archpermitspatial@gov.bc.ca with submission of the final HIP report.

12. APPENDICES

- Subsurface Test Log
- CMT Summary Table
- Photo Plates
- General Area Map (Figure 1)
- Study Area Map (Figure 2)
- Detailed Development Map
- Site Forms, Site Maps, and Related Documents

Other Details: Yes

Private landowner consent forms also attached.

Table 1: Subsurface Test Log

STA#	ST#	Depth (cm)	Results	Stratigraphy and Sediment Description (cm dbs)
1	1	23	Negative	0 – 23: highly compacted and coarsely textured orangish-brown loamy sand with 65% angular, sub-angular, and sub-rounded boulder, cobble, and pebble inclusions.
1	2	20	Negative	Same as ST1.
1	3	25	Negative	Same as ST1.
1	4	32	Negative	Same as ST1.
1	5	50	Negative	Same as ST1; moderately compacted.
1	6	26	Negative	Same as ST1.
1	7	25	Negative	Same as ST1.
1	8	30	Negative	Same as ST1; moderately-highly compacted.
1	9	25	Negative	Same as ST1; moderately-highly compacted.
1	10	26	Negative	Same as ST1; moderately compacted.
1	11	34	Negative	Same as ST1; moderately-highly compacted.
1	12	27	Negative	Same as ST1; moderately-highly compacted.
1	13	34	Negative	Same as ST1; moderately-highly compacted and 70% inclusions.
1	14	35	Negative	Same as ST1; moderately-highly compacted.
1	15	35	Negative	Same as ST1; moderately compact.
2	1	38	Negative	0 – 13: loosely compacted and finely textured humic layer with 5% rounded and sub-rounded cobble and pebble inclusions. 13 – 19: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions. 19 – 38: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
2	2	46	Negative	Same as ST1.
2	3	33	Negative	Same as ST1; a large root obstructed the testable area.
2	4	35	Negative	Same as ST1.
2	5	44	Negative	0 – 22: loosely compacted and finely textured humic layer with 5% rounded and sub-rounded cobble and pebble inclusions. 22 – 37: loosely compacted and finely textured orangish-brown silt with 20% rounded and sub-rounded cobble and pebble inclusions. 37 – 44: moderately compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
2	6	42	Negative	Same as ST5.
2	7	22	Negative	0 – 10: moderately compacted and finely textured humic layer with 5% rounded and sub-rounded pebble inclusions. 10 – 22: moderately compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
2	8	50	Negative	Same as ST5.

2	9	38	Negative	Same as ST7.
2	10	45	Negative	Same as ST5.
2	11	44	Negative	<p>0 – 6: moderately compacted and finely textured humic layer with minimal inclusions.</p> <p>6 – 13: moderately compacted and moderately coarsely textured orangish-brown sandy silt with minimal inclusions.</p> <p>13 – 21: loosely compacted and coarse greyish-brown sand with minimal inclusions.</p> <p>21 – 26: moderately compacted and moderately coarse greyish-brown sandy silt with minimal inclusions.</p> <p>26 – 44: loosely compacted and coarsely textured greyish-brown sand with 40% rounded and sub-rounded cobble and pebble inclusions.</p>
2	12	40	Negative	<p>0 – 8: moderately compacted and finely textured humic layer with minimal inclusions.</p> <p>8 – 26: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.</p> <p>26 – 40: loosely compacted and coarsely textured greyish-brown sand with 50% rounded and sub-rounded inclusions.</p>
2	13	25	Negative	Same as ST7.
2	14	15	Negative	<p>0 – 15: loosely compacted and finely textured humic layer with 5% rounded and sub-rounded cobble and pebble inclusions.</p> <p>* Large roots obstructed the testable area</p>
2	15	42	Negative	Same as ST12
2	16	60	Negative	<p>0 – 15: loosely compacted and finely textured humic layer with minimal inclusions.</p> <p>15 – 25: loosely compacted and coarsely textured greyish-brown sand with 50% rounded and sub-rounded cobble and pebble inclusions.</p> <p>25 – 40: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.</p> <p>40 – 43: moderately compacted and moderately-coarsely textured orangish-brown sandy silt with minimal inclusions.</p> <p>43 – 60: moderately compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.</p>
2	17	60	Negative	Same as ST16
2	18	54	Negative	Same as ST16
2	19	30	Negative	Same as ST16; however, large roots obstructed the testable area.
2	20	38	Negative	Same as ST16 with slightly fewer inclusions; however, large roots obstructed the testable area.
2	21	50	Negative	Same as ST16.
2	22	31	Negative	Same as ST16.
2	23	42	Negative	Same as ST16.

2	24	55	Negative	0 – 16: loosely compacted and finely textured humic layer with minimal inclusions. 16 – 55: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.
2	25	30	Negative	0 – 15: loosely compacted and finely textured humic layer with minimal inclusions. 15 – 25: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions. 25 – 30: moderately compacted and finely textured greyish-brown silt with minimal inclusions.
2	26	30	Negative	Same as ST7.
2	27	40	Negative	Same as ST7.
2	28	42	Negative	0 – 20: loosely compacted and finely textured humic layer with minimal inclusions. 20 – 32: moderately compacted and finely textured greyish-brown silt with minimal inclusions. 32 – 42: loosely compacted and coarsely textured sand with 60% rounded and sub-rounded cobble and pebble inclusions.
2	29	48	Negative	Same as ST12.
2	30	30	Negative	Same as ST28.
2	31	45	Negative	Same as ST12.
2	32	30	Negative	Same as ST12.
2	33	15	Negative	0 – 15: moderately compacted and finely textured humic layer with 80% rounded and sub-rounded boulder and cobble inclusions. * A large boulder obstructed the testable area.
2	34	35	Negative	0 – 25: loosely compacted and finely textured humic layer with 5% rounded and sub-rounded cobble inclusions. 25 – 35: moderately compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble inclusions.
2	35	30	Negative	Same as ST34.
2	36	32	Negative	0 – 10: moderately compacted and finely textured humic layer with minimal inclusions. 10 – 22: moderately compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions. 22 – 32: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
2	37	30	Negative	Same as ST36.
2	38	34	Negative	Same as ST36.
2	39	45	Negative	0 – 10: moderately compacted and finely textured humic layer with minimal inclusions. 10 – 35: moderately compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions. 35 – 45: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.

2	40	14	Negative	0 – 14: moderately compacted and finely textured humic layer with minimal inclusions. * Large boulders and roots obstructed testable area.
2	41	44	Negative	0 – 30: moderately compacted and finely textured humic layer with minimal inclusions. 30 – 44: moderately compacted and moderately coarsely textured blackish-brown loamy sand with 70% rounded and sub-rounded boulder, cobble, and pebble inclusions.
2	42	42	Negative	0 – 3: moderately compacted and moderately coarsely textured humic layer with 15% rounded and sub-rounded cobble and pebble inclusions. 3 – 20: moderately compacted and coarsely textured greyish-brown loamy sand with 50% rounded and sub-rounded cobble and pebble inclusions. 20 – 23: moderately compacted and finely textured humic layer with minimal inclusions. 23 – 35: highly compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions. 35 – 42: highly compacted and moderately finely textured orangish-brown silt with 60% rounded and sub-rounded cobble and pebble inclusions.
2	43	30	Negative	Same as ST41. * Boulder obstructed testable area.
2	44	36	Negative	0 – 3: moderately compacted and moderately coarsely textured humic layer with 15% rounded and sub-rounded cobble and pebble inclusions. 3 – 20: moderately compacted and coarsely textured greyish-brown loamy sand with 50% rounded and sub-rounded cobble and pebble inclusions. 20 – 35: highly compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions. 35 – 36: highly compacted and moderately finely textured orangish-brown silt with 60% rounded and sub-rounded cobble and pebble inclusions.
2	45	36	Negative	Same as ST41.
2	46	37	Negative	0 – 9: moderately compacted and finely textured humic layer with minimal inclusions. 9 – 17: moderately compacted and finely textured greyish-brown loamy sand with minimal inclusions. 17 – 30: moderately compacted and moderately coarsely textured silty sand with minimal inclusions. 30 – 37: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.
2	47	50	Negative	Same as ST46. * Modern processed faunal material revealed at 20 cm dbs. Reburied.
2	48	50	Negative	Same as ST24.
2	49	37	Negative	0 – 9: moderately compacted and finely textured humic layer with minimal inclusions. 9 – 17: moderately compacted and finely textured greyish-brown loamy sand with minimal inclusions.

				<p>17 – 30: moderately compacted and moderately coarsely textured silty sand with minimal inclusions.</p> <p>30 – 37: loosely compacted and coarsely textured greyish brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.</p>
2	50	35	Negative	Same as ST49.
2	51	30	Negative	Same as ST49.
2	52	34	Negative	Same as ST49.
2	53	30	Negative	Same as ST49
2	54	35	Negative	<p>0 – 12: loosely compacted and finely textured humic layer with minimal inclusions.</p> <p>12 – 35: moderately compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.</p>
2	55	25	Negative	Same as ST54.
3	1	36	Negative	<p>0 – 16: loosely compacted and finely textured humic layer with minimal inclusions.</p> <p>16 – 36: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.</p>
3	2	29	Negative	Same as ST1.
3	3	30	Negative	<p>0 – 10: highly compacted and finely textured humic layer with minimal inclusions.</p> <p>10 – 15: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.</p> <p>15 – 30: moderately compacted and coarsely textured greyish-brown sand with 70% rounded and sub-rounded cobble and pebble inclusions.</p>
3	4	32	Negative	Same as ST3.
3	5	27	Negative	Same as ST3.
3	6	37	Negative	Same as ST3.
3	7	50	Negative	Same as ST8.
3	8	66	Negative	<p>0 – 10: moderately compacted and finely textured humic layer with minimal inclusions.</p> <p>10 – 61: moderately compacted and moderately finely textured brownish-grey sandy silt with minimal inclusions.</p> <p>61 – 66: moderately compacted and coarsely textured greyish-brown silty sand with 40% rounded and sub-rounded pebble inclusions.</p>
3	9	65	Negative	Same as ST8.
3	10	55	Negative	Same as ST8.
3	11	60	Negative	Same as ST8.
3	12	35	Negative	Same as ST3.
3	13	40	Negative	Same as ST3.
3	14	27	Negative	0 – 7: moderately compacted and finely textured humic layer with minimal inclusions.

				7 – 27: moderately compacted and coarsely textured blackish-brown loamy sand with 70% rounded and sub-rounded cobble and pebble inclusions.
3	15	33	Negative	Same as ST14.
3	16	45	Negative	0 – 8: moderately compacted and finely textured humic layer with minimal inclusions. 8 – 15: moderately compacted and moderately coarsely textured orangish-brown silty sand with minimal inclusions. 15 – 35: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions. 35 – 45: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
3	17	40	Negative	Same as ST16.
3	18	30	Negative	Same as ST14.
3	19	25	Negative	Same as ST14.
3	20	35	Negative	Same as ST14.
3	21	34	Negative	Same as ST14.
4	1	42	Negative	0 – 42: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.
4	2	35	Negative	0 – 35: loosely compacted and coarsely textured greyish-brown sand with 70% rounded and sub-rounded cobble and pebble inclusions.
4	3	45	Negative	Same as ST2.
4	4	40	Negative	0 – 3: moderately compacted and moderately coarsely textured humic layer with 10% rounded and sub-rounded pebble inclusions. 3 – 20: moderately compacted and moderately coarsely textured greyish-brown silty sand with 20% rounded and sub-rounded cobble and pebble inclusions. 20 – 40: moderately compacted and coarsely textured greyish-brown sand with 50% rounded and sub-rounded cobble and pebble inclusions.
4	5	35	Negative	Same as ST4.
4	6	33	Negative	0 – 6: highly compacted and moderately coarsely textured humic layer with 10% rounded and sub-rounded pebbles. 6 – 25: moderately compacted and moderately coarsely textured greyish-brown silty sand with 20% rounded and sub-rounded pebbles. 25 – 27: moderately compacted and finely textured humic layer with minimal inclusions. 27 – 33: moderately compacted and coarsely textured greyish-brown sand with 50% rounded and sub-rounded cobble and pebble inclusions.
4	7	40	Negative	Same as ST4.
4	8	50	Negative	Same as ST4.
4	9	30	Negative	Same as ST2.
4	10	37	Negative	Same as ST4.

4	11	40	Negative	Same as ST4; slightly thicker humic layer.
4	12	30	Negative	Same as ST4.
4	13	35	Negative	Same as ST15.
4	14	40	Negative	Same as ST15.
4	15	35	Negative	0 – 7: moderately compacted and finely textured humic layer with minimal inclusions. 7 – 13: moderately compacted and moderately coarsely textured greyish-brown sand with 30% rounded and sub-rounded cobble and pebble inclusions. 13 – 35: loosely compacted and coarsely textured greyish-brown sand with 50% rounded and sub-rounded cobble and pebble inclusions.
4	16	30	Negative	Same as ST15.
4	17	40	Negative	Same as ST15.
4	18	30	Negative	Same as ST15.
4	19	48	Negative	Same as ST23.
4	20	64	Negative	0 – 6: loosely compacted and finely textured humic layer with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 6 – 16: moderately compacted and coarsely textured greyish-brown sand with 30% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 16 – 60: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions. 60 – 64: extremely compacted and finely textured orangish-brown clay with 20% rounded and sub-rounded cobble and pebble inclusions.
4	21	32	Negative	Same as ST15.
4	22	53	Negative	Same as ST23.
4	23	88	Negative	0 – 8: highly compacted and finely textured humic layer with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 8 – 18: moderately compacted and coarsely textured greyish-brown sand with 30% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 18 – 88: loosely compacted and coarsely textured greyish-brown sand with minimal inclusions.
4	24	44	Negative	Same as ST23.
4	25	31	Negative	Same as ST15.
4	26	54	Negative	Same as ST23.
4	27	68	Negative	0 – 8: highly compacted and finely textured humic layer with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 8 – 18: moderately compacted and moderately coarsely textured blackish-brown loamy sand with 50% rounded, sub-rounded, and sub-angular cobble and pebble inclusions.

				<p>18 – 34: moderately compacted and coarsely textured greyish-brown sand with 50% rounded, sub-rounded, and sub-angular cobble and pebble inclusions.</p> <p>34 – 54: moderately compacted and coarsely textured greyish-brown sand with minimal inclusions.</p> <p>54 – 68: moderately compact and coarsely textured brownish-orange sand with minimal inclusions.</p>
4	28	66	Negative	<p>0 – 3: loosely compacted and finely textured humic layer with minimal inclusions.</p> <p>3 – 30: moderately compacted and moderately coarsely textured greyish-brown sand with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions.</p> <p>30 – 66: moderately compacted and coarsely textured greyish-brown sand with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions.</p>
4	29	56	Negative	Same as ST28.
4	30	46	Negative	<p>0 – 45: loosely compacted and coarsely textured greyish-brown sand with 60% rounded, sub-rounded, angular, and sub-angular cobble and pebble inclusions.</p> <p>45 – 46: moderated compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions.</p>
4	31	66	Negative	<p>0 – 3: loosely compacted and finely textured humic layer with minimal inclusions.</p> <p>3 – 30: moderately compacted and moderately coarsely textured greyish-brown sand with 20% rounded, sub-rounded, angular, and sub-angular cobble and pebble inclusions.</p> <p>30 – 66: moderately compacted and coarsely textured greyish-brown sand with 20% rounded, sub-rounded, angular, and sub-angular cobble and pebble inclusions.</p>
4	32	65	Negative	<p>0 – 10: moderately compacted and finely textured humic layer with minimal inclusions.</p> <p>10 – 45: loosely compacted and coarsely textured greyish-brown sand with 60% rounded, sub-rounded, angular, and sub-angular cobble and pebble inclusions.</p> <p>45 – 46: moderated compacted and moderately coarsely textured greyish-brown silty sand with minimal inclusions.</p>
4	33	40	Negative	Same as ST23.
4	34	42	Negative	Same as ST31.
4	35	60	Negative	Same as ST31.
4	36	31	Negative	<p>0 – 5: moderately compacted and finely textured humic layer with minimal inclusions</p> <p>5 – 31: loosely compacted and coarsely textured greyish-brown sand with 60% rounded, sub-rounded, angular, and sub-angular cobble and pebble inclusions.</p>
4	37	40	Negative	<p>0 – 3: moderately compacted and finely textured humic layer with minimal inclusions.</p> <p>3 – 40: moderately compacted and moderately coarsely textured silty sand with minimal inclusions.</p>
4	38	64	Negative	Same as ST28.

4	39	40	Negative	Same as ST27.
4	40	55	Negative	Same as ST37.
4	41	60	Negative	Same as ST37.
4	42	28	Negative	0 – 3: loosely compacted and finely textured humic layer with minimal inclusions. 3 – 28: moderately compacted and moderately coarsely textured greyish-brown sand with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. * Buried cable obstructed the testable area.
4	43	50	Negative	0 – 50: loosely compacted and coarsely textured greyish-brown sand with 75% rounded and sub-rounded cobble and pebble inclusions.
4	44	40	Negative	0 – 40: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
4	45	58	Negative	Same as ST44.
4	46	50	Negative	Same as ST43.
4	47	45	Negative	0 – 10: highly compacted and finely textured humic layer with minimal inclusions. 10 – 45: loosely compacted and coarsely textured greyish-brown sand with 60% rounded and sub-rounded cobble and pebble inclusions.
4	48	38	Negative	Same as ST47.
4	49	44	Negative	Same as ST43.
4	50	38	Negative	0 – 8: highly compacted and finely textured humic layer with minimal inclusions. 8 – 35: moderately compacted and coarsely textured blackish-brown loamy sand with 20% rounded and sub-rounded cobble and pebble inclusions. 35 – 38: loosely compacted and coarsely textured greyish-brown sand with 20% rounded and sub-rounded cobble and pebble inclusions.
4	51	32	Negative	0 – 32: loosely compacted and coarsely textured greyish-brown sand with 75% rounded and sub-rounded cobble and pebble inclusions. * Modern refuse (i.e., PVC tubing) obstructed the testable area.
4	52	47	Negative	Same as ST43.
4	53	35	Negative	Same as ST28.
4	54	45	Negative	Same as ST44.
4	55	47	Negative	Same as ST44.
4	56	17	Negative	0 – 17: loosely compacted and moderately finely textured humic layer with minimal inclusions. * Large roots obstructed the testable area.
4	57	45	Negative	Same as ST37.
4	58	30	Negative	0 – 8: highly compacted and finely textured humic layer with minimal inclusions.

				8 – 30: moderately compacted and coarsely textured blackish-brown loamy sand with 20% rounded and sub-rounded cobble and pebble inclusions. * Large roots obstructed the testable area.
4	59	40	Negative	Same as ST50.
4	60	48	Negative	Same as ST44.
4	61	50	Negative	Same as ST44.
4	62	30	Negative	Same as ST50.
4	63	68	Negative	0 – 10: moderately compacted and finely textured humic layer with minimal inclusions. 10 – 20: moderately compacted and moderately coarsely textured orangish-brown silty sand with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 20 – 50: moderately compacted and coarsely textured greyish-brown silty sand with 20% rounded, sub-rounded, and sub-angular cobble and pebble inclusions. 50 – 68: loosely compacted and coarsely textured greyish-brown sand with 10% rounded, sub-rounded, and sub-angular pebble inclusions.
4	64	55	Negative	Same as ST63.
4	65	35	Negative	Same as ST37.
4	66	52	Negative	Same as ST63.
4	67	36	Negative	Same as ST70.
4	68	40	Negative	0 – 6: highly compacted and finely textured humic layer with 10% rounded, sub-rounded, and sub-angular pebble inclusions. 6 – 24: moderately compacted and moderately finely textured sandy silt with 20% rounded, sub-rounded, and sub-angular pebble inclusions. 24 – 40: extremely compacted and finely textured orangish-brown silt with minimal inclusions.
te4	69	48	Negative	Same as ST63.
4	70	44	Negative	0 – 6: highly compacted and finely textured humic layer with 10% rounded, sub-rounded, and sub-angular pebble inclusions. 6 – 24: moderately compacted and moderately finely textured sandy silt with minimal inclusions. 24 – 44: extremely compacted and finely textured orangish-brown silt with minimal inclusions.
4	71	41	Negative	0 – 6: highly compacted and finely textured humic layer with 10% rounded, sub-rounded, and sub-angular pebble inclusions. 6 – 24: moderately compacted and moderately finely textured sandy silt with minimal inclusions. 24 – 29: highly compacted and finely textured humic layer with minimal inclusions. 29 – 41: extremely compacted and finely textured orangish-brown silt with minimal inclusions.

1877 Queensway St., Prince George, BC, V2L 1L9
Phone: 250-614-1653
Email: norcan.admin@norcanc.com



APTS Report No. 2023-0362-001
HCA Permit No: 2023-0362
Project No.: 23- McElhanney -DoréRipRapProject

4	72	36	Negative	Same as ST70.
4	73	55	Negative	Same as ST63.
4	74	41	Negative	Same as ST70.
4	75	42	Negative	Same as ST63.



Plate 1. Undulating and poorly draining floodplain (SW).



Plate 2. Moderately sloping leading to flat and poorly draining floodplain. Note concrete barriers in bottom left corner are from a previous shoring attempt (W).



Plate 3. Machine push-pile from a previous shoring attempt (NE).



Plate 4. Elevated and well-defined terraced terrain within STA4 (SW).



Plate 5. Actively eroding shoreline within STA4 (SW).



Plate 6. Western extent of STA4 is an unnatural berm elevated above a floodplain (W).



Plate 7. Undulating and low-lying floodplain (NE).



Plate 8. Previous rip-rap installation (SW).



Plate 9. Elevated and well-defined terraced edge of STA3 (W).



Plate 10. Defined terraced landform of STA3 ends and drops down to a low-lying and disturbed area (W).



Plate 11. Artificially flat and disturbed area within STA1 (W).



Plate 12. Fill materials associated with the adjacent mill site (W).



Plate 13. Western extent of STA1; hummocky terrain leading to a low-lying and poorly draining floodplain (SW).



Plate 14. Elevated and defined riverbank of STA2 (NE).



Plate 15. Ongoing erosion within STA2 has washed out a modern rec trail (SW).



Plate 16. Northern extent of STA2; undulating to flat, poorly draining, and featureless floodplain (E).



Plate 17. ST1 within STA1; highly compacted fill (N/A).



Plate 18. ST5 within STA1; slightly less compacted fill (N/A).



Plate 19. ST15 within STA1; no change (N/A).



Plate 20. ST1 within STA2 (N/A).



Plate 21. ST5 within STA2; extra thick humic layer (N/A).



Plate 22. ST7 within STA2 (N/A).



Plate 23. ST11 within STA2; moderately coarse alluvial deposits (N/A).



Plate 24. ST12 within STA2; coarse alluvium (N/A).



Plate 25. ST16 within STA2; moderately coarse to coarse alluvium (N/A).



Plate 26. ST25 within STA2; fine to coarse alluvium (N/A).



Plate 27. ST36 within STA2; moderately to loosely compacted alluvium (N/A).



Plate 28. ST41 within STA2; thick humic and loamy sand (N/A).



Plate 29. ST42 within STA2; showing a prominent buried surface amidst alluvial deposits (N/A).



Plate 30. Modern processed faunal remains located within STA2 at approximately 20 cm dbfs within ST47. The fauna was reburied within ST47 (N/A).



Plate 31. ST54 within STA2 (N/A).



Plate 32. ST1 within STA3 (N/A).



Plate 33. ST8 within STA3; alluvium with minimal inclusions (N/A).



Plate 34. ST14 within STA3; coarse loamy sand (N/A).



Plate 35. ST16 within STA3 (N/A).



Plate 36. ST20 within STA3; coarse loamy sand (N/A).



Plate 37. ST1 within STA4; alluvial deposit with minimal inclusions (N/A).



Plate 38. ST2 within STA4; coarse fill materials from residential development (N/A).



Plate 39. ST4 within STA4; alluvial deposit with inclusions (N/A).



Plate 40. ST6 within STA4; fill materials atop a buried surface (N/A).



Plate 41. ST20 within STA4; alluvium atop glaciolacustrine subsoil (N/A).



Plate 42. ST23 within STA4; thick alluvial deposit (N/A).



Plate 43. ST27 within STA4; fill materials atop alluvium (N/A)



Plate 44. ST30 within STA4; fill materials (N/A).



Plate 45. ST37 within STA4; fine silty sand alluvium (N/A).



Plate 46. ST43 within STA4; fill materials (N/A).



Plate 47. ST63 within STA4 (N/A).



Plate 48. ST70 within STA4; alluvium atop glaciolacustrine subsoil (N/A).

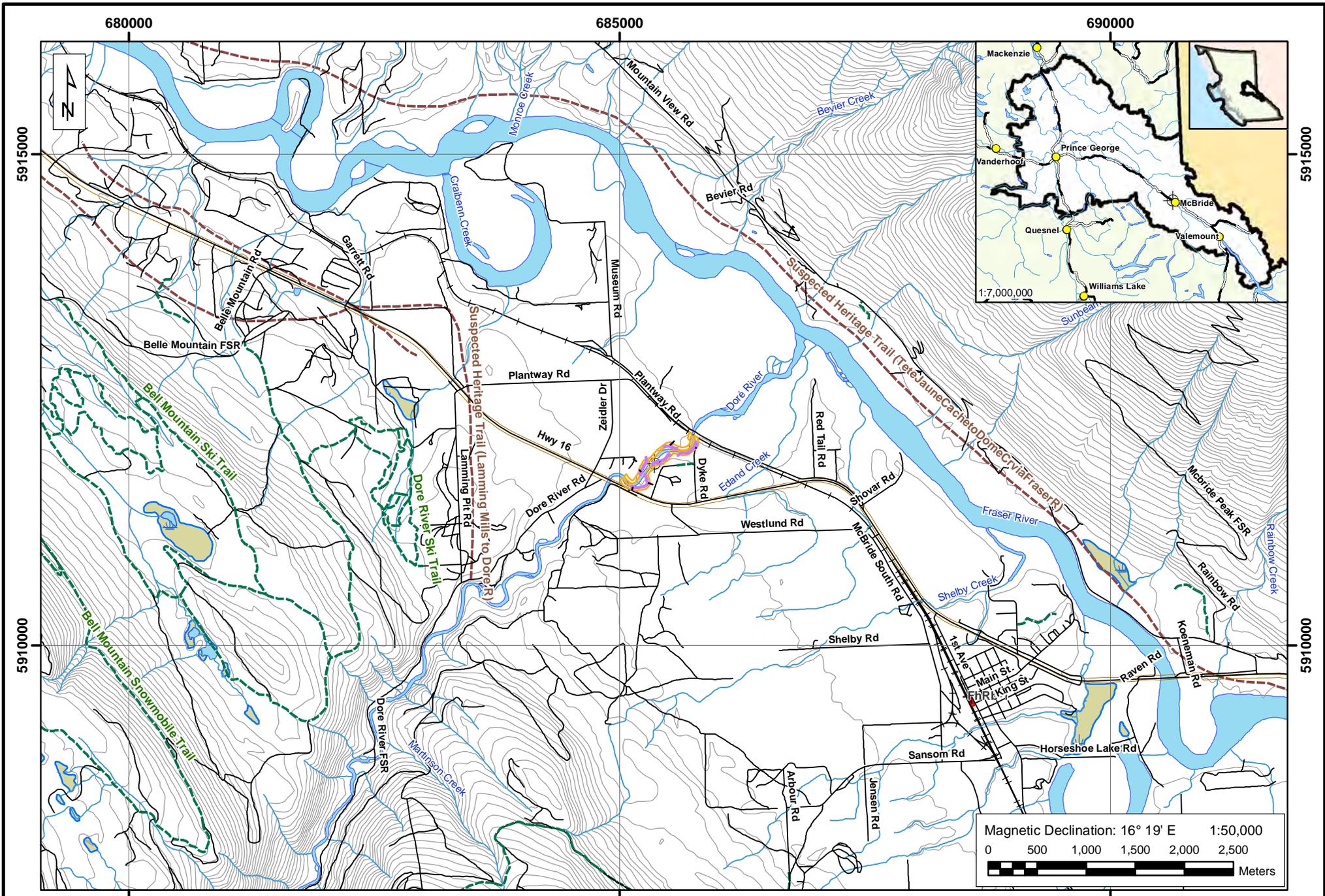


FIG. 1: DORÉ_RIVER_RIP_RAP_PROJECT PERMIT OVERVIEW MAP

Client: McElhanney
 Operating Area: Prince George
 BCGS Mapsheet: 093H.039
 Development Center: UTM 10 685355 E 5911855 N

HIP: 2023_0362
 Development Area: 8438 m².
 Date Surveyed: 10/20/2023
 Date Mapped: 01/09/2024



Legend

- | | | | | |
|-----------------------|------------------|-------------------|------------|--------------------------------|
| Development Center | Contour | Transmission Line | Waterway | Arch Site > 1500m ² |
| Proposed Access Route | Existing Road | Railway Track | Lake/River | |
| Revised Development | Road Atlas Trail | | Wetland | |
| Referred Permit Area | Possible Trail | | | |

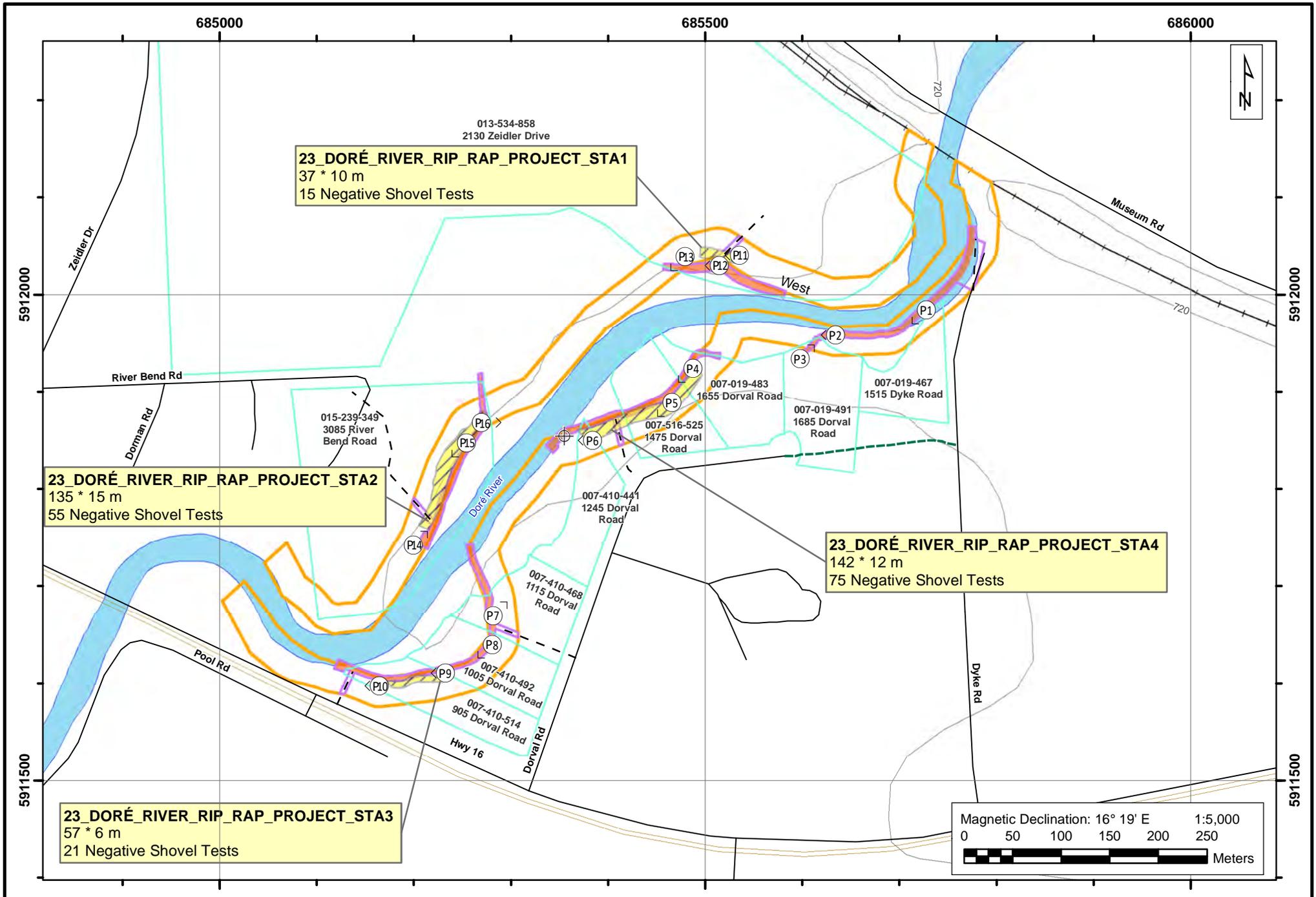


FIG. 2: DORÉ RIVER RIP RAP PROJECT ARCHAEOLOGICAL ASSESSMENT MAP

Client: McElhanney
 Operating Area: Prince George
 BCGS Mapsheet: 093H.039
 Development Center: UTM 10 685355 E 5911855 N

HIP: 2023_0362
 Development Area: 8438 m².
 Date Surveyed: 10/20/2023
 Date Mapped: 01/09/2024



Legend

Development Center	Photo Number and Direction	Contour	Transmission Line	Lake/River
Revised Development	STA	Proposed Access Route	Railway Track	Private Lot
Referred Permit Area		Existing Road		
Target Survey Area		Road Atlas Trail		

685450

685500

685550

5912050

5912050

5912000

5912000

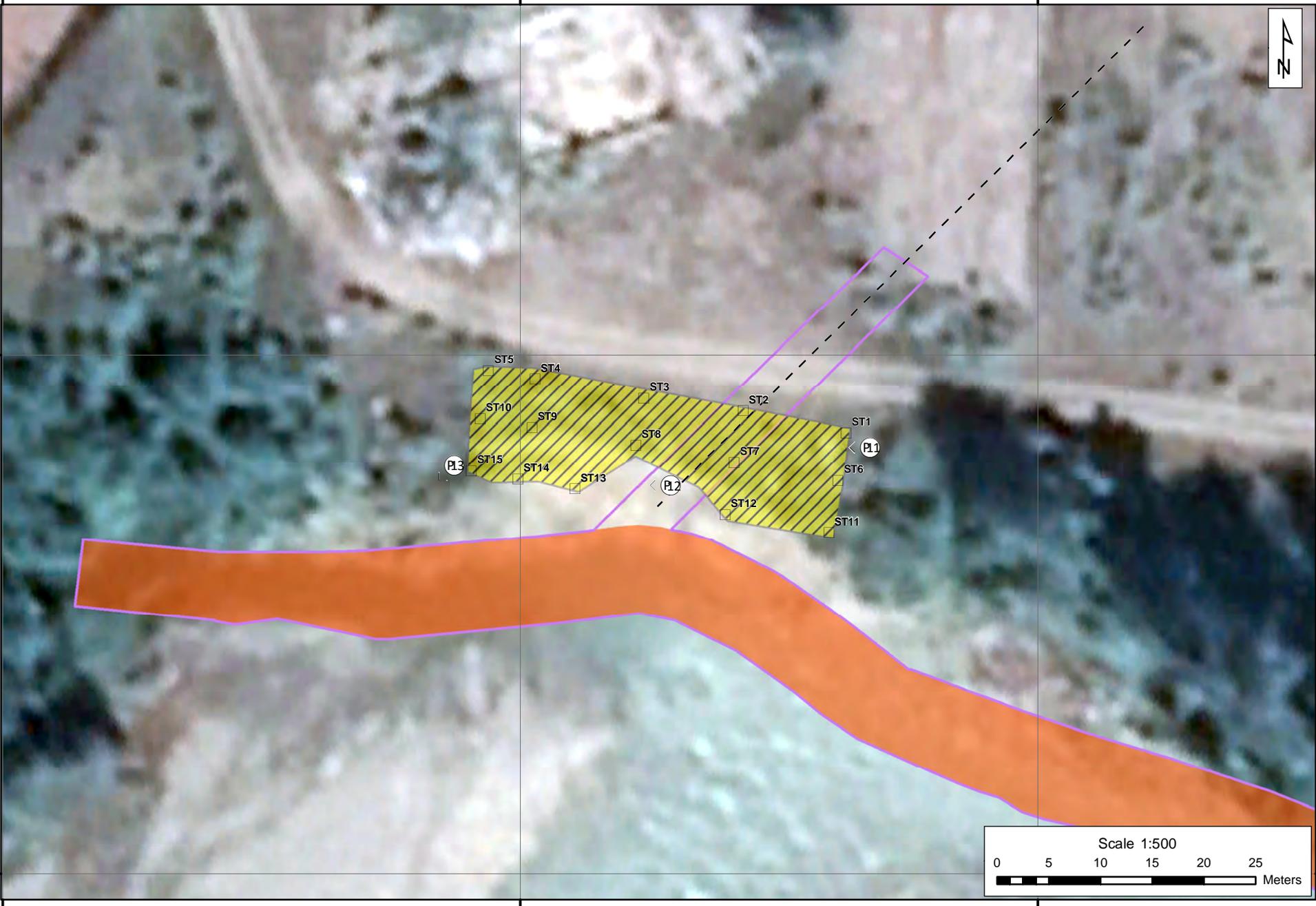


FIG. 3: 23_DORÉ_RIVER_RIP_RAP_PROJECT_STA1 DETAILED SHOVEL TEST MAP

Client: McElhanney
 HIP: 2023_0362
 UTM Point (ST1): UTM 10 685531 E 5912043 N
 Tested Area: 233.2 m²
 Date Mapped: 01/10/2024



Legend

- Revised Development
- Target Survey Area
- Negative Shovel Test 35 * 35 cm
- Photo Number and Direction
- STA
- Proposed Access Route

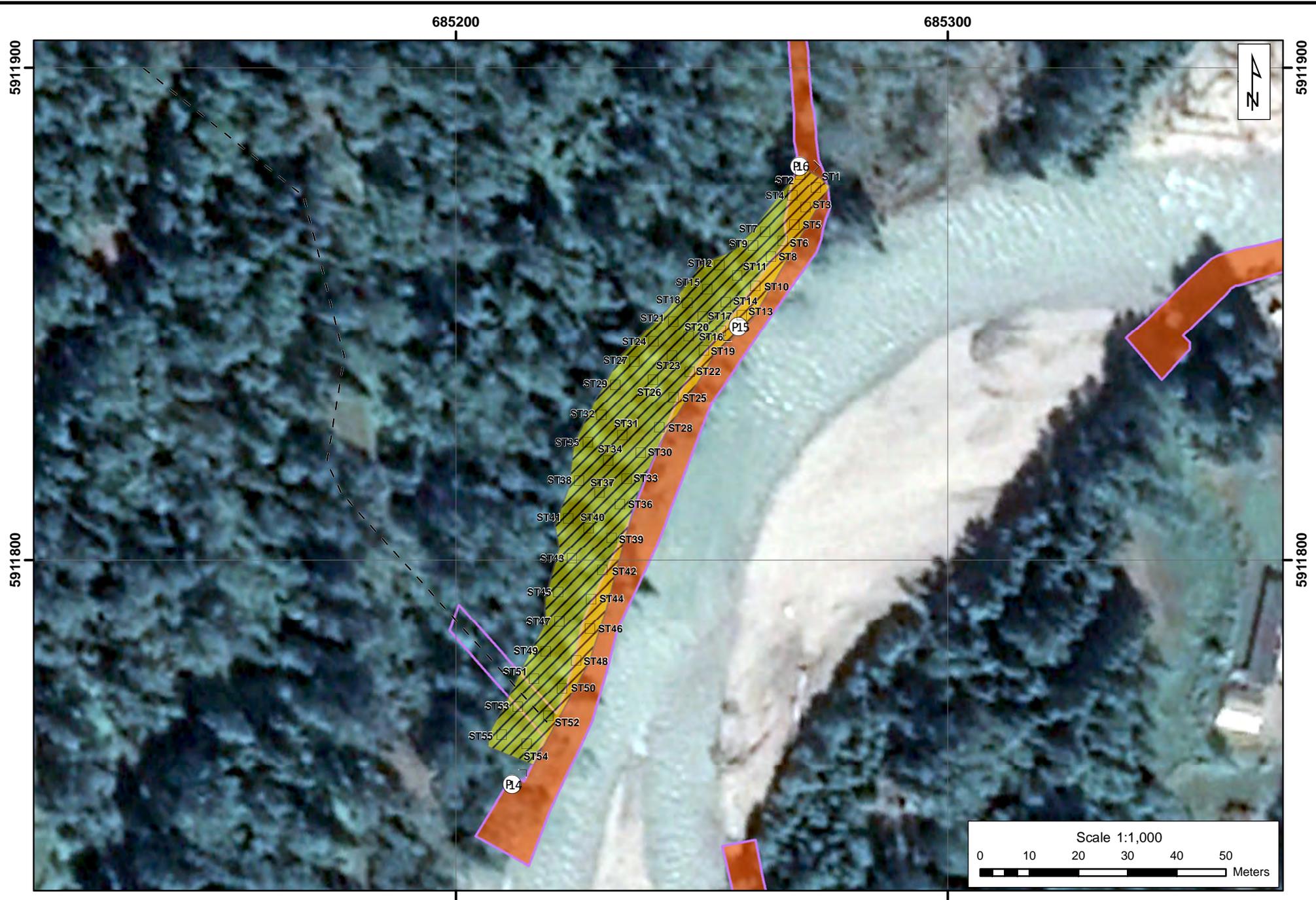


FIG. 4: 23_DORÉ_RIVER_RIP_RAP_PROJECT_STA2 DETAILED SHOVEL TEST MAP

Client: McElhanney
 HIP: 2023_0362
 UTM Point (ST1): UTM 10 685273 E 5911876 N
 Tested Area: 1498.48 m²
 Date Mapped: 01/10/2024



Legend

- Revised Development
- Target Survey Area
- Proposed Access Route
- Negative Shovel Test
35 * 35 cm
- Photo Number
and Direction
- STA

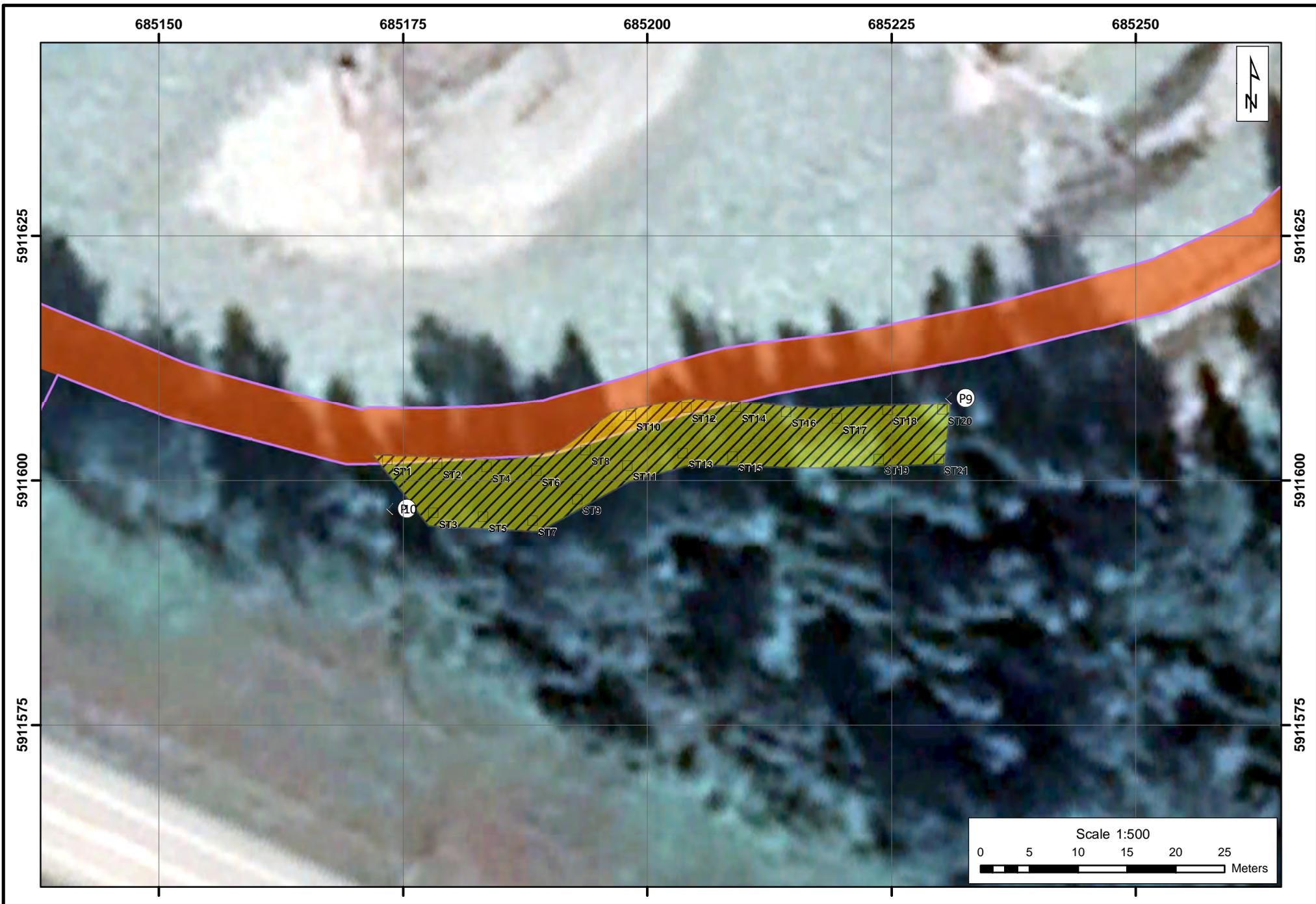


FIG. 5: 23_DORÉ_RIVER_RIP_RAP_PROJECT_STA3 DETAILED SHOVEL TEST MAP

Client: McElhanney
 HIP: 2023_0362
 UTM Point (ST1): UTM 10 685173 E 5911602 N
 Tested Area: 369.26 m²
 Date Mapped: 01/10/2024



Legend

- Revised Development
- Target Survey Area
- Negative Shovel Test
35 * 35 cm
- Photo Number
and Direction
- STA

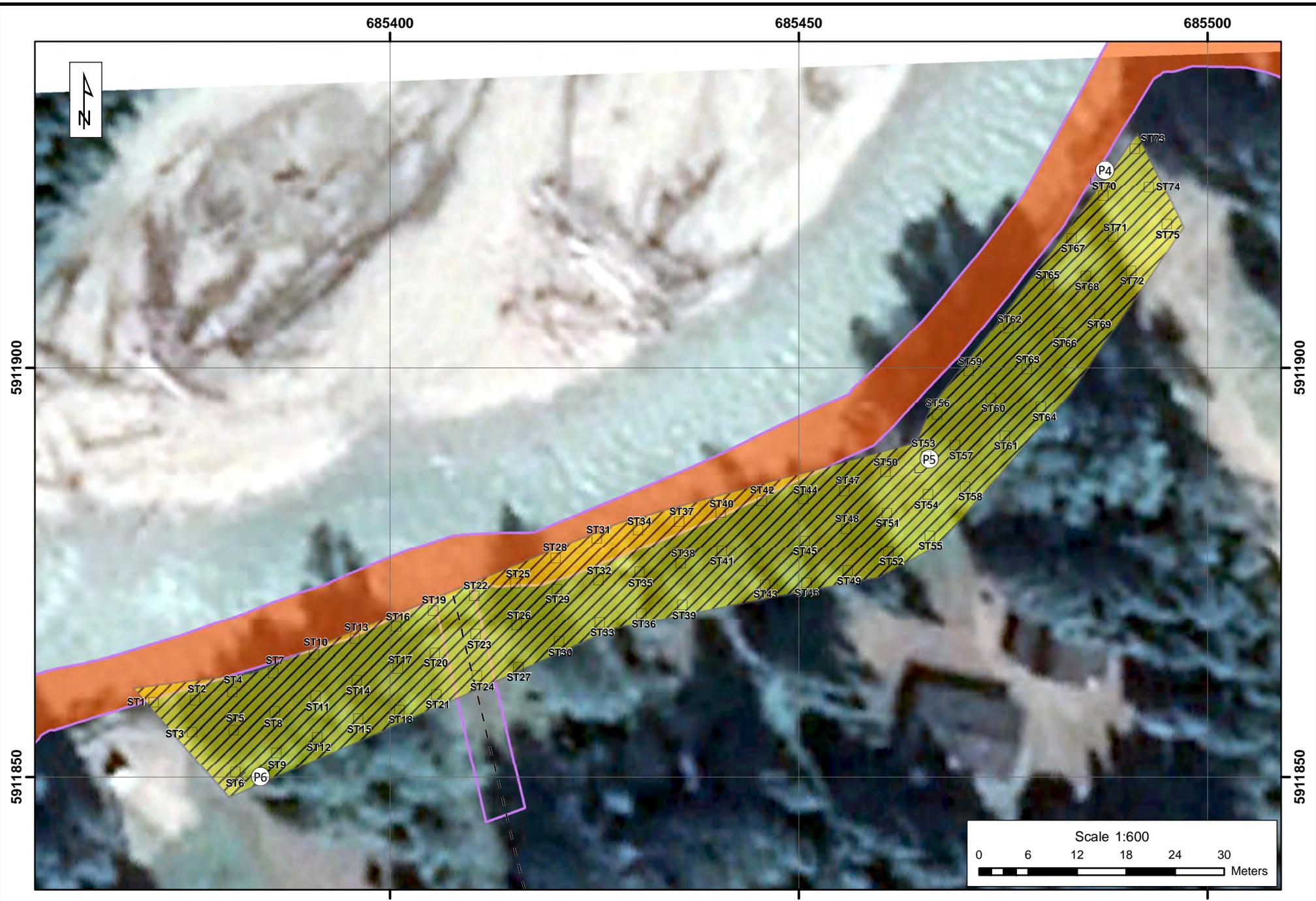


FIG. 6: 23_DORÉ_RIVER_RIP_RAP_PROJECT_STA4 DETAILED SHOVEL TEST MAP

Client: McElhanney
 HIP: 2023_0362
 UTM Point (ST1): UTM 10 685371 E 5911859 N
 Tested Area: 1746.53 m²
 Date Mapped: 01/10/2024



Legend

- Revised Development
- Target Survey Area
- Proposed Access Route
- Negative Shovel Test 35 * 35 cm
- Photo Number and Direction
- STA

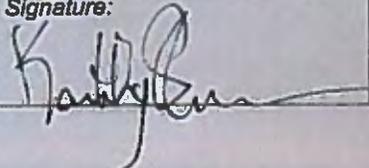
PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

Heritage Inspection Permit 2023-0362 was issued to Brett Nuttall of Norcan Consulting Ltd. to conduct an archaeological impact assessment for McElhanney's proposed rip-rap project in your local area (see attached map for project locations). Fieldwork is scheduled to commence on October 17, 2023, and continue until October 26, 2023. If additional dates are necessary, you will receive subsequent requests for access.

In-Field Contact: <u>Brett Nuttall</u>	Company: <u>Norcan Consulting Ltd.</u>
Phone: <u>250-617-1652</u>	Fax or Email: <u>norcan.admin@norcanc.com</u>

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

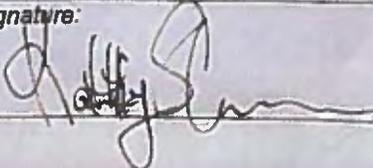
Date: <u>Oct 10/23</u>	Private Landowner's Name: <u>Kathy Shawara</u>	Address: <u>1515 Dyke RD</u>	Signature: 
------------------------	--	------------------------------	---

CONSENT TO THE USE OF PERSONAL INFORMATION

Private landowners must consent to the use of personal information as names, emails, phone numbers, and addresses may appear in site inventory forms, and/or permit reports. The collection, management, and distribution of personal information is subject to the [Freedom of Information and Protection of Privacy Act](#).

I consent to the use of personal information contained in this document, as well as the personal information contained in the resulting site inventory form and permit report, for contact and verification purposes. I understand this information will be retained in the provincial archaeological site database and permit report. I also understand this information may be disclosed to researchers, consulting archaeologists and other users of the database and permit report. Database users must identify themselves and the purpose of their information request and are precluded from distribution of the information they obtain to unauthorized parties. The permit report will be available on the Provincial Archaeological Report Library (PARL) once it has been accepted as meeting permit terms and conditions.

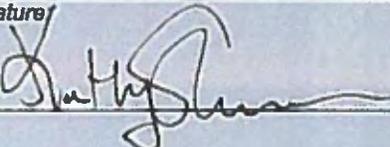
Private Landowner Consent to the Use of Personal Information

Date: <u>Oct 10/23</u>	Private Landowner Name: <u>Kathy Shawara</u>	Signature: 
------------------------	--	---

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Kathy Shawara	
Address: 1515 Dyke RD.	
Phone: 250-589-2576	Email: 
Date: Oct 10/23	Signature: 



REGIONAL DISTRICT
of Fraser-Fort George



McElhanney



**PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER
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In-Field Contact:		Company:	
Phone:		Fax or Email:	

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
Oct 10/23	Pamela Colleen Shawara	Box 37 McBride BC 1655 Dore Rd 1685 Dore Rd	Shawara

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Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
Oct 10/23	Pamela Colleen Shawara	Shawara

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Pamela Colleen Shawara	
Address: PO Box 37 McBride BC 1655 Dorval RD. 1685 Dorval RD.	
Phone: 250-569-2625	Email: Shawara - melko @ hotmail . com
Date: Oct 10/23	Signature: P. Shawara



REGIONAL DISTRICT
of Fraser-Fort George



McElhanney



PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

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In-Field Contact:	Brett Nuttall	Company:	Norcan Consulting Ltd.
Phone:	250-617-1652	Fax or Email:	norcan.admin@norcano.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
Oct 6/23	Colleen Schaffner	1475 DORVAL RD	Colleen Schaffner

CONSENT TO THE USE OF PERSONAL INFORMATION

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Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
Oct 6/23	Colleen Schaffner	Colleen Schaffner

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Colleen Schaffer	
Address: 1475 DORVAL RD	
Phone: 230-569-7563	Email: boondogg01@yahoo.ca
Date: Oct 6 / 23	Signature: Colleen Schaffer



REGIONAL DISTRICT
of Fraser-Fort George



McElhanney



PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

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In-Field Contact:	Brett Nuttall	Company:	Norcan Consulting Ltd.
Phone:	250-817-1832	Fax or Email:	NORCAN.CON@NORCAN.CO

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
OCT 17 2023	Rock BERG-PO	Box 294 1245 DUNK RD MCGRIE AL	

CONSENT TO THE USE OF PERSONAL INFORMATION

Private landowners must consent to the use of personal information as names, emails, phone numbers, and addresses may appear in site inventory forms, and/or permit reports. The collection, management, and distribution of personal information is subject to the Freedom of Information and Protection of Privacy Act.

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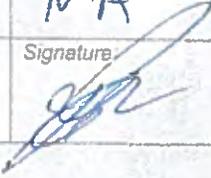
Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
OCT 17 2023	ROCK BERG-PO 1245 PONVER BOX 294	

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Rock Bergstrom	
Address: 1245 DRYAC RB BOX 294	
Phone: B.C	Email: N.A
Date: OCT 12/23	Signature: 



REGIONAL DISTRICT
of Fraser-Fort George



McElhanney



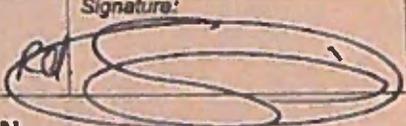
**PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER
SECTION 12.2 OF THE HERITAGE CONSERVATION ACT**

Heritage Inspection Permit 2023-0362 was issued to Brett Nuttall of Norcan Consulting Ltd. to conduct an archaeological impact assessment for McElhanney's proposed rip-rap project in your local area (see attached map for project locations). Fieldwork is scheduled to commence on October 17, 2023, and continue until October 26, 2023. If additional dates are necessary, you will receive subsequent requests for access.

In-Field Contact:	Brett Nuttall	Company:	Norcan Consulting Ltd.
Phone:	250-617-365	Fax or Email:	norcan_admin@norcano.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
Oct 10/23	CORAL JONES	1115 Dorval Rd	

CONSENT TO THE USE OF PERSONAL INFORMATION

Private landowners must consent to the use of personal information as names, emails, phone numbers, and addresses may appear in site inventory forms, and/or permit reports. The collection, management, and distribution of personal information is subject to the Freedom of Information and Protection of Privacy Act.

I consent to the use of personal information contained in this document, as well as the personal information contained in the resulting site inventory form and permit report, for contact and verification purposes. I understand this information will be retained in the provincial archaeological site database and permit report. I also understand this information may be disclosed to researchers, consulting archaeologists and other users of the database and permit report. Database users must identify themselves and the purpose of their information request and are precluded from distribution of the information they obtain to unauthorized parties. The permit report will be available on the Provincial Archaeological Report Library (PARL) once it has been accepted as meeting permit terms and conditions.

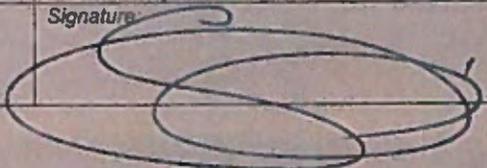
Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
Oct 10/23	CORA JONES	

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: CORAL JONES	
Address: 1115 Dorval Road	
Phone: 250-569-4030	Email: tryme751@hotmail.com
Date: Oct 10 23	Signature: 



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of Fraser-Fort George



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PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

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In-Field Contact: Brett Nuttall	Company: Norcan Consulting Ltd.
Phone: 250-617-1652	Fax or Email: norcan.admin@norcanc.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date: Oct 9, 2023	Private Landowner's Name: TERRANCE McNALLY	Address: 1005 Dewal Road - McBude BC V0S2E0	Signature: Terrance McNally Tommy McNally
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CONSENT TO THE USE OF PERSONAL INFORMATION

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Private Landowner Consent to the Use of Personal Information

Date: Oct 9, 2023	Private Landowner Name: TERRANCE McNALLY	Signature: Terrance McNally Tommy McNally
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PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:
I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: TERRANCE & TAMMY McNALLY	
Address: P.O. Box 25 1005 Dewal Road McBude BC V0S 2E0	
Phone: 250-569-7945	Email: ttmcnally1@gmail.com
Date: Oct 9, 2023	Signature: Terrance McNally Tammy McNally



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McElhanney Rip-Rap Project - Dore River
Norcan Consulting Ltd.

PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

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In-Field Contact:	Brett Nuttall	Company:	Norcan Consulting Ltd.
Phone:	250-617-1652	Fax or Email:	norcan_admin@norcano.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
Oct 6 2023	Jimmy O'Leary	905 Don Col Rd.	Jimmy O'Leary

CONSENT TO THE USE OF PERSONAL INFORMATION

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Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
Oct 6 2023	Jimmy O'Leary	Jimmy O'Leary

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: <i>Arny Quam</i>	
Address: <i>905 Donnal Rd</i>	
Phone: <i>250-561-3421</i>	Email:
Date: <i>Oct 10 / 2023</i>	Signature: <i>Arny Quam</i>



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**PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER
SECTION 12.2 OF THE HERITAGE CONSERVATION ACT**

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In-Field Contact: Brett Nuttall	Company: Norcan Consulting Ltd.
Phone: 250-617-1652	Fax or Email: norcan.admin@norcanc.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
Oct 12, 23	Terry Raymond	2130 Zeidler Dr.	

CONSENT TO THE USE OF PERSONAL INFORMATION

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Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
Oct 12, 23	Terry Raymond	

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Terry Raymond	
Address: 2130 Zeidler DR B.O. 791 McBride B.C. V0J 2E0	
Phone: 403-318-2368	Email: terry@fire-flood.com
Date: Oct, 12, 23	Signature: 



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PRIVATE LANDOWNER'S ACCESS APPROVAL FOR PERMITS ISSUED UNDER SECTION 12.2 OF THE HERITAGE CONSERVATION ACT

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In-Field Contact:	Brett Nuttall	Company:	Norcan Consulting Ltd
Phone:	250-617-165	Fax or Email:	norcan.admin@norcano.com

LANDOWNER'S APPROVAL TO ACCESS PRIVATE PROPERTY

I certify that I have granted access for an archaeological impact assessment to occur on my privately owned property as described below.

Date:	Private Landowner's Name:	Address:	Signature:
OCT 6 23	Kristine Grogan Drader	3085 RIVER BEN RD	Kristine

CONSENT TO THE USE OF PERSONAL INFORMATION

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Private Landowner Consent to the Use of Personal Information

Date:	Private Landowner Name:	Signature:
0 OCT 23	Kristine Grogan Drader	Kristine

PRIVATE LANDOWNER ACKNOWLEDGEMENT AND CONTACT INFORMATION

For applications where there are no recorded archaeological sites or where assessment is not required by another agency or under a Heritage Conservation Act Ministerial Order:

I acknowledge I have not been ordered to conduct a heritage inspection under S.12.3 of the Heritage Conservation Act.

Name: Kristine Greg Drader	
Address: 3085 BLUEBEND RD	
Phone: 250 569 7907	Email: krisdrader@gmail.com
Date: OCT 6 23	Signature: K Drader



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