

# Environmental Surveillance Activity

Project Name	Trans Mountain Pipeline Reactivation
Parks Canada Internal File	J17-015
Project Proponent	Trans Mountain Pipeline ULC (TM)
Prime Contractor	Simpco Ledcor Limited Partnership (SLLP)

Event Type	Parks Canada - IAMC Joint Field Inspection
Date	October 28-29, 2020
Location	Various locations within Jasper National Park
Environmental Surveillance Officer(s)	<ul style="list-style-type: none"> <li>• Jasper National Park ESO</li> <li>• Indigenous Monitor – Alexander First Nation</li> <li>• Indigenous Monitor – Sucker Creek First Nation</li> </ul>
TM or SLLP representative	<ul style="list-style-type: none"> <li>• Trans Mountain Indigenous Monitors (accompanied inspection for Day 2)</li> <li>• Pre-construction site visits with TM Lead Environmental Inspector, SLLP Environmental Manager and Assistant Construction Superintendent, TM Damage Prevention.</li> </ul>
Description of Field Inspection	<ul style="list-style-type: none"> <li>• Construction Sites – Vine Creek natural hazard remediation</li> <li>• Post Construction sites – Dig 26, 27, 28, Sleeve 10, 11, 12</li> <li>• Pre-Construction Sites – Dig 30B, 30C, Miette River Bridge Temporary Installation, Sleeve 5</li> </ul>
Activities Monitored	<ul style="list-style-type: none"> <li>• Pre-Construction</li> <li>• Post-construction/Restoration</li> <li>• Construction</li> </ul>

Observations  
October 28, 2020

Oct 28,  
2020

JNP ESO

- ESO and IMs meet at Parks Canada Compound in Jasper
- Review maps, discuss plans for site visits, areas of interest and concern.

**Dig 30B and 30C**  
**KP 386.93, KP387.29**  
**Pre-Construction**

- Site visit with SLLP Assistant Superintendent, SLLP Environmental Manager, TMC Lead Environmental Inspector, TMC Damage Prevention to walk through plan for access and dig execution for Digs 30B and 30C.
- Discussed plan to construct temporary gravel ramp off highway over steep slope. Gravel will be placed on woven geocloth to protect vegetation (mostly grasses and forbs). Four large fallen trees will be moved out of the way of the ramp, and replaced after ramp is removed. The rest of the access into the digsites will be matted.
- Some vegetation removal required for access and mat placement, primarily alder, willow and small poplar. Shrubs will be flush cut at ground without disturbing roots or soil. Smaller stems will be laid down under mats. Most of the access is over grassy or low-lying vegetation.
- Three creeks require bridging to access digsites. Plan to use rigmats for crossings, no instream activity is required, no work below top of bank. Riparian alders and willows at crossing points will be cut flush to allow mat placement on top. No disturbance to roots or soils required.
- IM identified single birch tree near crossing of westernmost creek. Construction will shift bridging location slightly north to avoid impacting this tree. Top branches may require tie-back so they don't lean over access.
- Access between digsites crosses a portion of shrubby swamp. Mostly sedges, currently no standing water. Mats will be placed three wide plus two offset on top to disperse weight and avoid digging in to wetland area.
- Dig 30C is located within 30m of emergent marsh. Digsite is currently dry, and requires removal of shrubby vegetation. Mature vegetation within the northern edge of footprint will be retained and 15m of additional workspace outside of the riparian will instead be matted and used to store subsoils.
- Noted coyote, fox and deer tracks.

**Dig 26, 27, 28**  
**Sleeve 10, 11, 12**  
**KP 382.5 - 383**  
**Post-Construction/Restoration**

- **Dig 26** – overland flows from beaver pond to the north freezing up over digsite, some flowing water in warm temperatures.
- **Sleeve 10** – Trans Mountain recently brought in several quad trailer loads of topsoil to fix issue with subsidence of ditchline at this site. Still some grade drop at north side of footprint. Will need to be reseeded in spring and monitored for non-native plants.
- **Dig 27** – beaver pond to the north is overflowing, water has carved small channels across digsite, but appears stable. Water still flowing through main, dammed channel.
- **Caledonia Bridge** location – alders and willows that were cut for temporary bridge installation showing regrowth up to 2ft tall.

- **Dig 28, Sleeve 11-12** – mostly under snow.
- Coyote and deer tracks noted in area.

Oct 28, 2020 | Indigenous Monitor – Sucker Creek First Nation

**Digs 30 B and C**

- Matting/flip remediation
- 2 digs
- Build in a road access which will be removed
- Dig 30 completed
- Remove some willow regrowth to place mats.

**Dig 26**

**Sleeve 10**

- Sleeve 10 dirt fill: caved in dirt quad in and carried by pails

**Dig 27**

**Caledonia Creek**

- dogwood and Alder. Fish bearing creek

**Sleeve 11,12 and dig 28 Integrity**

Oct 28, 2020 | Indigenous Monitor – Alexander First Nation

We met with the Parks Canada ESO at the Jasper compound went over what was happening and what was currently being done at the sites we planned to look at. We Reviewed which areas we would like to look at. Miette River, Conifer Creek and Caledonia Creek were crossing we visited along with several sleeve and dig sites.

Observations  
October 29, 2020

Oct 29,  
2020

JNP ESO

- IMs meet with Trans Mountain IMs
- IMs, TM-IMs and ESO discuss plan for the day and safety considerations. TM-IMs accompany inspection for the day.

**Vine Creek  
KP351.32  
Construction**

- Forested area adjacent to digsite identified as sensitive – flagged and signed for avoidance. No issues.
- Silt fencing on bridge in good condition and installed properly.
- Two large barrel spill kits in place, tagged and accessible.
- Generators have built in secondary containment or are within constructed containment with volumes identified.
- Instream pumps adequate for handling current flow rates, isolation is effective – ditch is dry, no grey water issues.
- Two pig pens set up to manage greywater, only one has been used and no issues seen with erosion or sedimentation.
- Pipe has already been exposed, lathe and coating removed, inspected recoated and backfilled. Crews working within isolation to place riprap as per engineered drawing. Survey crew onsite to ensure proper elevations. Native bed materials will be replaced to maintain natural flows and potential for fish habitat.
- Orange tarping under mats is in poor condition. Will require additional attention to cleanup for tarp strings, mat shards and soil deposition over vegetation.
- Salvaged rootballs and willow stakes wrapped in silviculture tarp.
- Worksite generally clean and tidy, no garbage or wildlife attractants noted.

**Sleeve 5  
KP 357.06**

**Pre-Construction**

- Construction plan and schedule for this site have not been finalized.
- Access is near 3 large birch trees – can be avoided.
- Several large birch trees on west edge of footprint, should be able to avoid. No activity should occur within undisturbed forest west of the digsite footprint.
- Small diameter (<5cm dbh) birch regrowth over RoW on top of pipe at digsite – can not be avoided and will need to be removed.

**Miette River Bridge Temporary Installation**

**KP390.4**

**Pre-Construction**

- Field site visit with TM and SLLP to discuss preliminary plan for temporary bridge installation over the Miette River.
- Difficult access site given large span over river, RoW angle and equipment requirements.
- Potential to shift access slightly within the construction easement to better accommodate the bridge.
- Bridge abutments to be located above high water mark of river and conform to Navigable Waters requirements.

- Bridge would be ramped using gravel over geo, currently no plan to strip any of the access. Will require fewer large trees on south side to be removed, and additional trees (~<15) on north side to be removed. Could not access north side of river due to river flows.
- Careful consideration of equipment entry and offloading required – likely unable to utilize CN siding for a turnaround area.
- Bridge installation plan to be developed and finalized prior to any work.

Oct 29, 2020 Indigenous Monitor – Sucker Creek First Nation

- 8 am: meet with the Trans Mountain IM's
- 9 am: meet with Jasper ESO, both Trans Mountain IM's and Alexander First Nation IM to discuss the day's site Inspections
- First site Inspection at Vine Creek: Level 3 cleaning
- Second site Inspection at Sleeve 5: pre construction. Birch willows within footprint. Parks Canada ESO will follow up with pre construction regarding willows on footprint.

Oct 29, 2020 Indigenous Monitor – Alexander First Nation

- The preparations taken to ensure the conditions would be met along with any newly identified concerns were addressed and I felt confident that they were ensuring the impacts would be minimal.
- We looked at the restoration of several sleeve and dig sites all were done with no concerns.
- Flagging and markers all seemed to be in place.
- It was a good Inspection, erosion control in place, wildlife tracks noticeable, water flowing good.
- Overall very happy with the site inspections.

## Action Items

Item No.	Date Identified	Issue to be Addressed	Action	TM Response
1.	Oct 28, 2020	Revise SSEPP for Dig 30B and Dig 30C to reflect results of site visit. Include birch tree avoidance as Culturally Significant Feature.	TMEP will revise	Access shifted slightly to north and birch tree avoided. Upper branches tied back instead of trimming.
2.	Oct 28, 2020	Grade subsidence at Sleeve 10	Email to TMEP Environmental Inspector for update on plan for deficiency.	SLLP unable to complete deficiency repair due to soft soils and increased potential for admixing. Work will continue when the ground is frozen and can support UTV use to haul in soils (completed mid-November). Site will be monitored for non-native plants and seeded in spring.

3.	Oct 29, 2020	Orange tarp under mats tearing – potential for soil deposition on veg and tarp waste left behind.		Removed any subsoils on vegetation and hand picked all pieces of tarp from worksite. This type of tarp will no longer be used on the project.
4.	Oct 29, 2020	Birch trees on RoW and adjacent to Sleeve 5 footprint should be retained wherever possible	Spoke to TM Lead-EI about retaining trees	Site plans not yet developed but Birch trees on and off footprint will be considered in construction plan and avoided wherever possible.