

**MANITOBA METIS FEDERATION – MATRIX  
SOLUTIONS INC. PARTNERSHIP**

**INDIGENOUS CONSTRUCTION MONITORING**

**WEEKLY REPORT**

**SPREAD 9**

**OCTOBER 15<sup>TH</sup> TO OCTOBER 20<sup>TH</sup>**

## 1. PURPOSE OF THIS REPORT

The report is a weekly summary of the daily reports submitted by the Indigenous Construction Monitors that are working on spread nine. The social and cultural findings have been tabulated with locations and mitigation measures below. A summary of the construction activities has been summarized for the weeks of October 15<sup>th</sup> to October 20<sup>th</sup>, 2018.

### Social and Cultural Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Traditional Use Area (hunting, fishing, gathering, trapping)	N/A			
Rock Formations (rocks of significance, tipi rings, etc.)	N/A			
Artifacts	N/A			
Bones	N/A			
Potential Gravesites	N/A			

### Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants	N/A			
Aquatic Life	N/A			
Animal Observations or Burrows	N/A			
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	N/A			
Watercourse Crossing	4	Buffalo Creek(WC1013),	10M riparian	

		Rosenheim Dam(WC76) Thornhill Coulee(WC3) Dead Horse Creek SSKP- 1041.790-(HER-175)	bufferzone, no refuelling within 100M  Berm Wraps and Posts  Jute Matting, Hemp Cloth	
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### **Additional Observations and Summary of Activities or Concerns**

On October 15<sup>th</sup>, safety theme was rain and snow in the forecast, watching for slippery conditions, defensive driving, un-controlled intersections, congested areas. Awkward body positioning, slips, trips, falls, wildlife, theft, and maintaining communication amongst the crew. Environment: Respect for the Environment noted, ensure vehicle/equipment is cleaned and inspected, tires are cleaned and inspected, vehicle is equipped with bleach and spill kits and proper bio-security is followed as directed. Ensure proper disposal and separation of garbage and recycling, smoke in designated area's only and proper disposal of cigarette butts.

Monitor arrived at inspectors meeting at 6:00 for safety, environment, and construction meetings, monitored Rosenheim Drain Heritage site (HER-176) SSKP 1071-1071.600 and (MB-WC76) SSKP 1071.790 referring to Section 9.0 in the E.P.P. and Appendix D15. At Rosenheim drain they are setting up the horizontal direction drill to begin drilling under the creek sometime soon. Monitored Buffalo Creek 1078.780 (MB-WC1013) referring to section 9.0, Appendix D15 in the E.P.P. and details 39 and 40 in Appendix E. Monitored the bridge crossing the creek heading into site has geo tech along the railing for erosion control measures, the geo tech barrier set up was in good condition and holding strong.

On October 16<sup>th</sup>, safety theme was slips, trips, falls, awkward body position, communication, driving in un-controlled intersections & congested areas, wildlife, theft, ROW is wet, and wearing hi-vis PPE. Environment: Ensure proper disposal and separation of garbage and recycling, Smoke in designated area's only, proper disposal of cigarette butts. Ensure vehicle/equipment/Tires is cleaned and inspected and vehicle is equipped with bleach and spill kits. Monitor arrived for 6:00 to attend Inspectors Environment and Construction meetings. Updates include frog sweep taking place at 1057, entry pit dug at Rosenheim Drain, and construction at watercourse WC1004. Monitored Rosenheim Drain SSKP 1071.790-(MB-WC76)-(HER-176) referring to section 9.0 in the E.P.P. and Appendix D15 (Mud release contingency plan). HDD being prepared, entry pit dug out to contain frac outs, fencing, erosion control in place. Monitored Buffalo Creek SSKP 1078.780-(MB-WC1013) referring to section 9.0 and Appendix D15 in the E.P.P. Same precautions in place as MB-WC76, emergency response equipment such as sandbags, filter cloth (Silt fence), straw bales and shovels present. Signage for buffer zones and no refuelling signs were in place. Monitored Buffalo Creek SSKP 1078.780-(MB-WC1013) referring to section 9.0 and Appendix D15 in the E.P.P.

Monitored the horizontal directional drill site at Buffalo Creek, the same measures and precautions were in place as stated above as well checked for emergency response equipment such as sandbags, filter cloth (Silt fence), straw bales and shovels. Signage for buffer zones and no refuelling signs were in place and separate soil piles that had come from the berms on both sides of the creek.

Monitored Thornhill Coulee SSKP 1035-(MBR-WC3) Referring to Section 9.0 in the E.P.P. Thornhill Coulee banks and channel had its native soils replaced and seeded with native grass mix, disturbed areas stabilized with bank wrap, posts bracing the

berms and banks to help keep their original state until its new revegetated state will hold its shape. Informed that bank wrap is composed of organic and natural materials (coconut fibre and hemp) and acts as erosion control to keep the native soils where they existed before ground disturbance took place. The channel and banks looks to be as close as feasible to their pre-construction profile.

On October 17<sup>th</sup>, safety theme was slips, trips, falls, awkward body position, communication, driving on dusty roads, un-controlled intersections & congested areas, wildlife, theft. Environment: Ensure proper disposal and separation of garbage and recycling, Smoke in designated area's only, proper disposal of cigarette butts. Ensure vehicle/equipment/Tires is cleaned and inspected and vehicle is equipped with bleach and spill kits. Monitor arrived for 6:00 to attend Inspectors, Environment and Construction meetings.

Monitored Rosenheim Drain SSKP 1079.790-(MB-WC76)-(HER-176) referring to Section 9.0 and Appendix D15 in the E.P.P. Monitor conducted a walk around ensuring silt fencing at equipment/vehicle bridge crossing, took note of fuel tank environmental measures, and fracking contingency plans.

Monitored Dead Horse Creek SSKP-1041.790-(HER-175) referring to section 9.0 and Bio-Security Measures in Appendix G in the E.P.P. Monitor noted prepping for test heads to run the pig through the pipe, work was being done on the stripped R.O.W. and bio-security measures were being followed as they were working (chlorine bleach clean boots) before they make contact with the rig mats. Contaminated geotec was set aside to be hauled out transferred to a environmental waste management facility.

Monitored Thornhill Coulee SSKP-1035-(MBR-WC3) referring to section 9.0 in the E.P.P. In process of re-creating a berm on the south side of a stripped area, re-enforced with jute matting(bio-degradable erosion control made of coconut fibres) S/A Energy Environmentalist was on site seeding a drainage ditch with seed mix 17 to the west of the Coulee and workers were installing the Jute matting.

On October 18<sup>th</sup>, safety theme was slips, trips, falls, awkward body position, communication, driving on dusty roads, un-controlled intersections & congested areas, wildlife, theft. Environment: Ensure proper disposal and separation of garbage and recycling, Smoke in designated area's only, proper disposal of cigarette butts. Ensure vehicle/equipment/Tires is cleaned and inspected and vehicle is equipped with bleach and spill kits. Monitor arrived for 6:00 to attend Inspectors, Environment and Construction meetings.

Monitored Rosenheim Drain SSKP-1079.790-(MB-WC76) referring to section 9.0 and Appendix D15 in the E.P.P. Monitored HDD at Rosenheim drain, drill not operations but saw the crew had their emergency response equipment on site and close by in the event of a mud release, this equipment consists of sandbags, filter cloth (silt fencing), T-bar posts, straw bales, light towers, shovels and have a vac truck permanent on site.

Monitored Thornhill Coulee SSKP-1035-(MBR-WC3) referring to section 9.0 in the E.P.P. Watercourse at Thornhill coulee had been reclaimed and is now awaiting revegetation, they had seeded the banks, berms and reinforced it with jute mat, hemp cloth and braced with un-treated fence posts. Monitored SSKP 1026-(Escarpmnt)

where pipe is back filled with clay, area is awaiting to be reclaimed with the native topsoil's in the area.

October 19<sup>th</sup> safety theme was slips, trips, falls, awkward body position, communication, driving on dusty roads, un-controlled intersections & congested areas, wildlife, theft. Environment: Ensure proper disposal and separation of garbage and recycling, Smoke in designated area's only, proper disposal of cigarette butts. Ensure vehicle/equipment/Tires is cleaned and inspected, vehicle is equipped with bleach and spill kits and proper Bio-Security is followed. Monitor arrived for 6:00 to attend Inspectors, Environment and Construction meetings. Oil rag disposal and top-soil disturbance from pig-pen removal as discussed at construction meeting.

Monitored Tackifier Rd.57 heading west, referring to Appendix D17 in the E.P.P The Tackification is a stabilizing substance and or binding agent that acts as a erosion control for topsoil piles, it is meant to prevent the loss of soils due to wind erosion potential. The tackifier has met Enbridge's requirements such as: fully operational equipment, bio-degradable/non-toxic products (Beet Juice) and approved water source for applications. Monitored Wash Station at Rd.16 referring to Appendix G in the E.P.P. The wash station is in place for equipment cleaning, bleach will be used to disinfect once the equipment has been cleaned. The wash station has been designed and built according to code in Appendix E in the E.P.P.

On October 20<sup>th</sup> safety theme was slips, trips, falls, awkward body position, communication, driving on dusty roads, un-controlled intersections & congested areas, wildlife, theft. Environment: Ensure proper disposal and separation of garbage and recycling, Smoke in designated area's only, proper disposal of cigarette butts. Ensure vehicle/equipment/Tires is cleaned and inspected, vehicle is equipped with bleach and spill kits and proper Bio-Security is followed. Monitor arrived for 6:00 to attend Inspectors, Environment and Construction meetings. Spill at 1092 erosion control at 1026 discussed.

Monitor arrived at Rd.2 and viewed the work of the straw crimper and restoration of the R.O.W. Day ended early due to personal reasons.

**Photos of Sites Visited & Topics Discussed This Week**

Photo



Description & Location:

Geotec barrier on Bridge  
Rosenheim Drain (MB-WC76)  
Photo taken South West

Photo



Description & Location:

Geotec barrier on bridge at  
Buffalo Creek (MB-WC1013)  
Photo taken South East

Photo



Description & Location:

Separated Berm Soils at Rosenheim Drain  
SSKP-1071.790-(MBR-WC76)  
Photo Taken facing South West

Photo



Description & Location:

Bank Wrap and Posts Reclamation  
at Thornhill Coulee SSKP-1035-(MBR-WC3)





Jute matting at Thornhill Coulee  
SSKP-1035-(MBR-WC3)  
Photo taken facing North West

Description & Location:

Environment seeding drainage and workers  
installing jute matting West of Thornhill  
Coulee  
Photo taken Facing North West

Photo



Description & Location:

Hydro Vac and water truck and  
at Rosenheim Drain  
Photo facing East

Photo



Description & Location:

Thornhill Coulee Restoration  
Jute Matt and Hemp cloth  
Photo taken North

Photo



Description & Location:

Tackifier at Rd.57  
Photo taken facing North West

Photo



Description & Location:

Wash Station at Rd.16  
Photo taken facing West

Photo



Description & Location:

Straw Crimper results at RD.4  
Photo taken facing South East

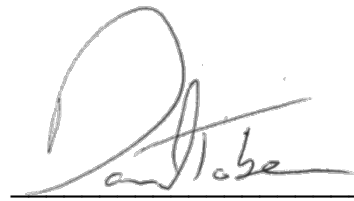
**APPROVALS**



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Corey Monkman  
Senior Construction Monitor

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November 13, 2018

Date



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Daniel Tober  
Senior Environmental Scientist

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November 13, 2018

Date