

**SWAN LAKE FIRST NATION – MATRIX SOLUTIONS  
INC. PARTNERSHIP**

**INDIGENOUS CONSTRUCTION MONITORING**

**WEEKLY REPORT**

**SPREAD 7**

**SEPTEMBER 10<sup>TH</sup> TO SEPTEMBER 15<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 seven. 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 September 10<sup>th</sup> to September 15<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)	1	SSKP 884+890		
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	1	Grandfathers Beard SSKP 884+890		
Aquatic Life	N/A			
Animal Observations or Burrows	1	Deer 884+890		
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	2	ID's MB-039 SSKP 828+222 & MB-103 SSKP 884+890	MB-039 work in progress MB-103 work to be done at	yes

			later date	
Heritage Sensitive Area	1	ID HER-186 -SSKP 884+890	Work to be done at later date	yes
Watercourse Crossing	N/A			

## Additional Observations and Summary of Activities or Concerns

Weekly activity included attending daily tailgate meetings and continue to check access points on the ROW and checking, SF, 1, 2, 3, 4, 5, 20, 26

September 10, 2018 - Safety included: Driving conditions, Pay attention to road conditions and wide load semi-trucks, very dusty and dry.

Weather forecast; Sunny with a high of 24.

Daily objectives today would involve the junior monitors heading to kick-off and making their way down the ROW observing stripping crews and any work being done in sensitive areas. The senior monitor would head to Souris River and Black Creek as work is currently being done in those sensitive areas. SSKP 899+950 Three automatic welders finished setting up to be ready for welding tomorrow on the east side of Black Creek. If we get a lot of rain it may be too wet to get into area. SSKP 899+760 Black Creek (WC) will be active this week with work. The Horizontal Directional Drilling (HDD) is currently setting up work area for bore on the west side of Black Creek. They dropped off a lot of equipment and rig mats today. They unloaded an excavator mid-day and will get lots done before end of shift. SSKP 908+000 pipe is all ready to go and set up as they finished End Prepping on the east side of Rd # 64 the pipe will be used for the HDD at Souris River (WC) and will pull it from the east side to the west. Junior monitor travelled to SF # 26 Four D8-dozers starting to strip topsoil. Workers starting to lay the geo tech down. Boneyard SF # 4, Premay trucking unloading pipe, excavator getting camera installed. Very congested. SF # 2, Building wetland ramps between SF # 2 and SF # 3, stripping topsoil. No environmental concerns. Workers got extra spill tray for the auger. SF # 1, No activity happening, clean and tidy. SF # 5, No activity, clean and tidy. SF # 20 Workers coating the bore section, no concerns.

Work Forecast: Monitor areas of work in sensitive areas.

September 11, 2018 – Safety included: All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. All employees are responsible for safety.

Weather forecast: Sun with cloud and a high of 23 degrees.

SF # 26, very wet and muddy. Attended morning meeting at SF # 26. Observed the workers stripping topsoil. SF # 27, Workers unloading geo tec. Checked on the rare plants. No concerns. SF # 22, Very congested, no environmental concerns. SF # 15, Machine getting a clean, excavator waiting to get cleaned. SF # 6, Excavator moving pipe.

Work Forecast: Return and monitor the line.

September 12, 2018 - Safety included: Driving hazards. keep at a safe distance when driving. Keep fully focused on road conditions. Keep windows, lights clean. Slow down when approaching work zones. Children back in school, so be alert when passing school bus signs and stops. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled.

Weather forecast: Increasing clouds in the morning. Wind becoming east 20 km/h late in afternoon. High 19. UV index 4 or moderate.

Environment: Wetlands: 1 status working being done at SSKP 838+030 to 838+120 laying protective barrier. Wetland: 1 Semi-permanent Marsh Class 4 status work in progress SSKP 819+175 SF # 50 Walked in 700 meters, medicinal plant on the right of way. Observed the Wetlands seasonal marsh (MB-103) class 111. SF # 27 Worker's laying geo tech at the front entrance of SF # 27, excavator removing tree stumps. 2 tractors starting to disk. SF # 22 Hydro-vac pumping out the open ditch. 1 D8-dozer stripping top soil. SF # 12 Observed welders, environmentally safe. 2- Premay trucking being towed in the SF by a D8-Dozer.

SSKP 884+890 The Senior and Junior monitors went to a highly sensitive environmental area with Heritage sensitive, Seasonal Marsh Class 3 Wetland Habitat, Rare Plant Crystalwort as well as a Medicinal plant called Grandfather's Beard, Wasp area, Traditional Land Use for Hunting and Rock Formations. I wanted to teach them about the environmental aspect of our job as monitors and how will have to come back here and monitor when the work gets here. SSKP 899+760 Road # 60 east access Black Creek bore section was being welded by automatic welders, the process seems sophisticated, but it is really an interesting job. Before pipe is positioned for welding by the pipe gang, the pipe ends are cleaned and bevels are checked for damage. Line-up clamps are used inside the pipe with a pneumatic internal welder to align the pipe ends before welding, they have a process of a root, hot pass and cap with their welding. Automatic pipe welding is a tightly specified and controlled process to make the welds stronger than the pipe itself. The welds are visually inspected by RTD Applus Rotoscan. Any defective welds are cut out or repaired. SSKP 819+175 Measurement crew placing identifying stakes into ground in wetlands to indicate where the pipe will go into ground and to measure the sags, over bends and side bends for the different types of elevation on the ground and also the turns we have on our projected ROW. They have an important role for bending to help them know where to bend the pipe. On my travels I also made a list of deficiencies for environmental and safety issues that need mitigation in our work areas.

#### Deficiencies

No Heavy Haul Trucks sign knocked down and broken needs reinforcement as winds overcame it location at road 48N & 143W intersection. At Rd # 12 the road that we use at crossing needs to be fixed from the ruts were causing. At Rd # 17 there's a compressor that's not self-contained for spills and it has no spill tray. Stop sign at Rd # 20 on east side of road crossing needs to be fixed with new 2x2 wood and reinforced, also at Rd # 21 the stop sign on the north side of crossing has been dispositioned by heavy winds and needs alignment with reinforcement. Rd # 60 at the Black Creek access there's an overhead powerline sign down on the north side that I had asked almost two weeks ago for Enbridge to get the contractor Banister to repair which I stated on previous reports that it needs to be fixed. These are safety and environmental concerns and I let my supervisor know I hope they are dealt with because the NEB (National Energy Board) will flag these as deficiencies and by fixing them will make our job safer with proper mitigation and give the NEB less to worry about.

Work Forecast: Return and monitor the line. Going on bus tour.

September 13, 2018 - Safety included: House-keeping, area free of debris, material, tripping hazards.

Weather forecast: 30 % chance of rain early in the morning with a high 18.

Attended tailgate meeting. Met up with M.M.F, Enbridge, Matrix at the Clarion Hotel for the bus tour. Left for Virden to see some sites where the work was taken place. Arrived at Black-Creek at SF # 60, to show the MMF how the project was about everything. Senior monitor drove to SSKP 810+260 to 810+910 the work being done at the Semi-Permanent Marsh Class 5 is in progress and the wetland ramp is complete. Scanned the topsoil and did a sweep of the piles could not find anything of significance. Noticed two garbage bags in the wetlands at SSKP 809+520 and added it to deficiency list and will let the supervisor know. SSKP 813+100 The Ditcher machine used to dig ditch has a 54 foot wheel that digs and penetrates through the earth at an incredible rate. The mechanic is doing maintenance and their projected start date is September 24th. They have offered to take the Monitors on a ride to see it first hand on how they operate it as there is lots of room in there operating area. Will ask our supervisor if it is possible. Road # 5 on west side on the north side of ramp there is a No Trespassing sign knocked, added it to deficiency list. SSKP 818+428 a Semi-Permanent Marsh class 4 wetland habitat ID MB-1039. There is a wetland ramp completed that's in good condition and has had the stringing crew and measurement crew set up pipe and their stakes. Bending and End Prep will be next than Pipe Gang and Coating. Will concentrate on this area most throughout the job to see how it changes from each crew. I have previously took pic of the wetland in its natural state to when they started building the ramp to completing the ramp I will make a before and after photo album of this area and share it when I'm done. Road # 20 stop sign fixed on east side but west side needs reinforcement as heavy winds have displaced it, added to deficiency list. SSKP 826+450 Welders helpers cleaning and bevelling end of pipe and bore head preparing to weld together than bore into ground. SSKP 832+632 Went to assess a Tradional Land Use area that had Canada Geese 200 m south of the project, could not locate any Geese in area they seem to have left.

Work Forecast: Return and monitor the line.

September 14, 2018 - Safety included: Lifting and handling, use the buddy system. Lift with knees, not your back. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled.

Weather forecast: Cloudy. 30 percent chance of showers early in the morning. High 18.

Environment: Wetlands:1 Semi-Permanent Marsh Class 4 MB-1039 status work in progress SSKP 818+428. Attended tailgate meeting at SF # 27, Workers getting ready to remove the rest of the topsoil. SF # 20 Observed the excavator digging up soil for the metal box, No environmental concerns. SF # 21 No activity. Checked out a parked excavator, no issues or concerns. SF # 11 Observing the bending machine and manderial machine.

Work Forecast: Return and monitor the line.

September 15, 2018 - Safety included: Driving hazards- drive slow in congested areas. Keep windshield clean.

Weather forecast: Cloudy with a high of 18.

Environment: Wetland:1 Broad Leaf Treed Swamp ID MB-094 SSKP 865+190 status no work being done, swept area no findings. Attended tailgate meeting. SF # 3 Tractor discing, D8-dozer waiting to start discing. SF # 6 Observed workers getting pipe ready for the welders. SF # 20 Observed the workers loading the ditch witch. SF # 27 Observing 9 D-8 dozer's, 1 excavator, 3 John Deere tractors sitting waiting to be washed. Very clean and tidy, No concerns. Senior monitor travelled to SSKP 865 +400 Swept area on east side of West Souris Pump Station. Could not find anything of significance. It looks like the farmer will have to get his crops off before the work gets here. Also assessed the Wetland Broad Leaf Treed Swamp ID MB-094. The trees will need to be removed within our workspace. There was about 6 Canada Geese 300 m north of this location in the field. At the intersection of 51N and 147W located south a flagging sign broke off t-posts from heavy winds and needs reinforcements. At SSKP 818+220 a wetland sign needs tie wire on the bottom of sign as it can fall off with more winds. East of intersection 121W+44N Road # 41 sign damaged needs repair. East of road # 42 flagging sign needs repair. North of Rd # 43 Rd # 42 sign needs repair. All added to deficiency list. SSKP 836+550 Monitored cleaning station, they do a really fine job cleaning and washing takes time but they make sure its good to go to next area cleaned. Seen some of the heavy equipment in action in this area. An excavator was stripping seconds and touching up ROW with a dozer pushing top soil and seconds and piling it into proper piles. The operator on the dozer got out of his machine to make sure the piles weren't going past boundary when they were pushing piles. Good job on contractor for taking the time to check to make sure proper mitigation measures are met. Work Forecast: Go to observe the line and check out the wetlands. Rain will slow this job down as it's wet season, we will monitor what we can and assess and sweep new areas before work gets there.



## Photos of Sites Visited & Topics Discussed This Week



Sept 10/18 KP\_813+200.0  
Photo taken facing south.  
Unloading pipe



Sept 10/18  
Description & Location: SSKP 899+950  
3 automatic welders  
18 sections to weld for Black Creek bore  
Photo taken East



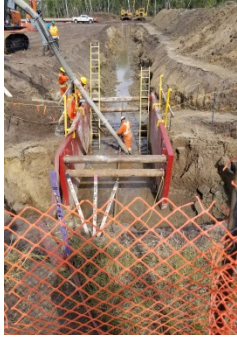
Sept 10/18  
Description & Location: SSKP 908+000  
Sections of pipe all End Prepped  
Ready to be welded  
For the Souris River bore Photo taken east



Sept 10/18  
Description & Location: SSKP 899+760  
Black Creek Water Course  
Work being done active all week  
Facing East



Sept 10/18  
Description & Location: SSKP 899+760  
HDD pad for Black Creek  
Entry hole for bore will start here



Sept 11/18  
Description & Location KP-817+741.1  
Photo taken facing north  
Workers preparing for reaming



sept 11/18  
Description & Location KP-822+125.6  
Photo taken facing east  
Workers cleaning mud of the tracks



Sept 11/18  
Description & Location: SSKP 828+222  
Hydro-vac sucking water up  
Excavator removing clay and water  
Drilling crew changing out reamer  
In Wetlands facing South West



Sept 11/18  
Description & Location: SSKP 884+890  
Medicinal Indigenous Plant  
one plant of Grandfather's Beard  
Facing north



Sept 11/18  
Description & Location: SSKP 884+890  
Wasp area labelled with stakes/red ribbon  
Also Traditional Land Use area for Hunting  
Also A Seasonal Marsh Wetland Class 3  
Heritage Sensitive area Photo facing South



Sept 11/18  
Description & Location: SSKP 884+300/750  
Rocks spread out over laocation  
May need to mitigate Rock Shield for pipe



Sept 12/18  
Description & Location KP-819+500  
Photo taken facing north.  
Worker's welding the pipe at SF # 12



Sept 12/18  
Description & Location KP-838+132.8  
Semi-Permanent Marsh Class 4 Wetland  
Photo taken facing east.  
Worker's laying geo tech at entrance of SF # 27



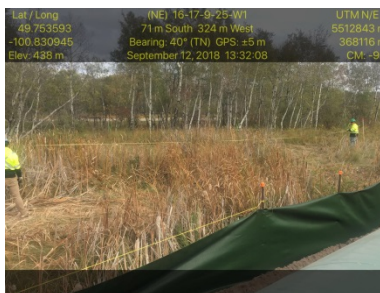
Sept 12/18  
Description & Location: SSKP 899+760  
Poor Boy crew cleaning and checking bevels making sure good, pre-heating. The automatic welders doing a Root, Hotpass and Cap, photo taken SE



Sept 12/18  
Description & Location: SSKP 899+760  
Getting ready to line up pipe and start the root weld, the pipe was previously pre-heated before this process photo North



Sept 12/18  
Description & Location: SSKP 822+300  
Not a self contained unit for spills  
Needs spill tray  
Environmental Coordinator said they need them



Sept 12/18  
Description & Location: SSKP 819+175  
Semi-Permanent Marsh Class 4 Wetland  
Measurement crew staking in wetlands  
Photo facing North

Lat / Long	(SW) 4-23-9-26-W1	UTM N/E
49.765392	131 m North 306 m East	5613191 m
-100.913139	Bearing: 17° (TN) GPS: ±5 m	362201 m
Elev: 433 m	September 13, 2018 11:26:03	CM: -89



Sept 13/18  
Description & Location: SSKP 813+100  
Ditcher has arrived as of yesterday  
Side boom holding bore head in sling  
Mechanic is doing maintenance getting it ready  
54 foot digging wheel  
Will start ditching crew on Sept.24th

Lat / Long	(SE) 1-11-9-25-W1	UTM N/E
49.728805	399 m North 361 m West	5509971 m
-100.763106	Bearing: 21° (TN) GPS: ±5 m	372937 m
Elev: 444 m	September 13, 2018 12:38:05	CM: -96



Sept 13/18  
Description & Location: SSKP 826+450  
Welders helpers prepping bore for welding



Sept 13/18  
Description & Location: SSKP 809+520  
Unidentified caterpillar on ROW

Lat / Long	(NE) 15-17-9-25-W1	UTM N/E
49.753423	89 m South 668 m West	5512833 m
-100.835718	Bearing: 299° (TN) GPS: ±5 m	367772 m
Elev: 441 m	September 13, 2018 11:57:21	CM: -99



Sept 13/18  
Semi-Permanent Marsh Class 4 MB-1039  
Stringing crew has pipe ready for End Prep  
Facing NW



Sept 14/18  
Description & Location KP-819+239  
Photo taken facing west  
workers getting pipe ready for the bending machine



Sept 15/18  
Description & Location KP- 838-132.8  
Photo facing north  
Equipment operators waiting to get machines washed



Sept 15/18  
Description & Location KP- 838-132.8  
Equipment operators waiting to get machines washed



Sept 15/18  
Description & Location: SSKP 865+ 260  
Broad Leaf Treed Swamp Wetland  
South Boundary (pink) stakes  
Area swept for bones, artifacts, wildlife, etc.



Sept 15/18  
Description & Location: SSKP 865+000  
West Souris Pump Station facing West  
Stakes indicating boundary and clipper line  
Farmers crops need to be removed



Sept 15/18  
Description & Location: SSKP 836+600  
Cleaning section 200 m west  
Dozers lined up waiting to be cleaned  
Dozer to left pushing topsoil  
Photo facing west



Sept 15/18  
Description & Location: SSKP 836 + 700  
Dozer pushing and piling topsoil  
Photo facing west

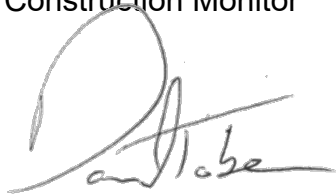
**APPROVALS**



\_\_\_\_\_  
Lee Bear  
Construction Monitor

\_\_\_\_\_  
November 13, 2018

Date



\_\_\_\_\_  
Daniel Tober  
Senior Environmental Scientist

\_\_\_\_\_  
November 13, 2018

Date