

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

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 9

OCTOBER 9TH TO OCTOBER 13TH

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 9th to October 13th, 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	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 monitor activities on Spread 9.

October 9, 2018 - Safety included: Slips, trips, falls: watch your footing. Dangers today wet conditions and raining, wild-life: scan the ditches practice defensive driving. Proper disposal of cigarettes butts. Tie boots watch step tree point contact. Be wary of equipment in high congestion area. Slow down meeting traffic. Drive to condition of road
Weather forecast/Environment: Temperature, 2 degrees

Help to keep clean R.O.W. clean of garbage and recycling. Keep land owner wishes honored. Use access roads, stay off farmer's fields. While driving R.O.W. try not to create deep ruts for land owners.

General: Safety meeting conducted by myself, Indigenous Construction Junior environmental Monitor, Lorne Parisian. All team players were in attendance. Safety concerns were read out and fed back on safety was opened up for any further suggestions. Areas handed out to be monitored are, Rosenheim drain SSKP 1071.5, Dead Horse Creek SSKP 1041.03, Thornhill Coulee. SSKP 1035.7. Highway 3 Ditch crossing SSKP 1047.5. while on the journey past Shoo-fly 51 Monitored the trucks and equipment working in and around area. Made way to SSKP 1071.5 Drove as far conditions permitted walked through rest of the way. Parked on access road snapped first photo at SSKP 1071.600 Monitored the welding crew. Crossed the riparian buffer zone checked on soil barriers on way. noted that some stakes were lose and someone had dropped a oil cloth on right of way. Snapped photo at SSKP 1071.700. Made way to Dead Horse Creek spoke to Biologist working with Sickle back fish SSKP 1041.600. The team indicated that this is they're last day at the creek as they are lifting fish traps. Made way to monitor Hwy 3 Pipe crossing SSKP 1047.544 team here is welding pipe to lengthen to join pipe on north side of hwy. Made way to Morden field office to complete report. Total kms today 170 plus three car washes at ten dollars as a massive build up of mud making the vehicle shimmy and shake. Today was given direction by our senior monitor to go to sskp 1071.900 to monitor the bending crew and the welding crew to check out the riparian buffer zone. Did a sweep of the area checked and monitored from 1071+600. up to 1071+950 as the welding crew were there till late afternoon everything was good. We travelled to 1041+675 dead horse creek did a sweep of the riparian buffer zone everything was in good shape. We travelled to 1042+000 we had talk to lady biologist as she was finishing up with the sweep of fish suckers, flatheads and brook stickleback's as we finished the day off to come in and do our reports all areas of interest were good.

Work Forecast: Plans for tomorrow October 10 2018 is to continue monitoring spread 9 line three replacement. Go to SSKPS of interest

October 10, 2018 - Safety included: Slips trips falls. Tie boots watch step tree point contact. Be wary of equipment in high congestion area. Slow down meeting traffic. Drive to condition of road.

Weather forecast/Environment: -1 degree

Help to keep clean R.O.W. clean of garbage and recycling. Keep land owner wishes honored. Use access roads, stay off farmers fields. While driving R.O.W. try not to create deep ruts for land owners.

General: Safety meeting this morning Conducted by senior monitor. Areas suggested to be monitored are as follows: SSKP 1000-SSKP 1026- SSKP 1018 -Mary Jane-SSKP,1000.800-MB-WC58, Morning journey on to Mary Jane area. Found that the kick off construction area is back filled and graded. Hill escarpment SSKP 1026.400 the pipeline in this area has been buried with grey clay. The top soil has to be re-applied. While here also monitored hill area for signs of stones and bones. SSKP 1018.900-MB-192 wetland complex repairman buffer zone in good condition and standing. Today was given direction by our senior monitor to travel to kpp 1026+100 and did a sweep checking the ROW soils and conditions of all top soil, subsoil and clay were in good condition as we swept up to 1027+400 ROW for the morning. We had travelled to 1018+600 to check on the Riparian Buffer Zone as we check out geo tech around the area and check out the burlap that was put in placed at 1027+475 as picture shown it was taken facing north east. We had travelled to1009+500 as the 3 dozers were covering the final top soil at 1009+475 as in the picture shown taken facing west.

Work Forecast: Monitor Spread 9 and possibly go to SSKP DEAD HORSE CREEK

October 11, 2018 - Safety included: Slips trips falls. Tie boots watch step tree point contact. Be wary of equipment in high congestion area. Slow down meeting traffic. Drive to condition of road.

Weather forecast/Environment: Temperature: 2 degrees.

Help to keep clean R.O.W. clean of garbage and recycling. Keep land owner wishes honored. Use access roads, stay off farmer's fields. While driving R.O.W. try not to create deep ruts for land owners.

General: Safety meeting this morning Conducted by senior monitor.

Areas monitored, are Road 7 and road 8. here construction crews are levelling top soil over installed pipeline to bring to conditions before disturbance. Went on to Dead Horse Creek SSKP 1941.790-MB-WC1002 and went into Dead Horse Creek-HER-175 SSKP 1041.03-1041.44. Here its noted that the HDD has moved on, just a skeleton crew left to tidy up. Down by the river most or all of the equipment used to count sickle back fish has been hauled away. Journeyed on to monitored pipe that crossed highway #3 SSKP-1047.40 noted that environmental procedures are looking to be in compliance. Noted that both ditchers were together at Shoo-fly 39. Stopped to witness welding crew crossing highway SSKP 1080 and closely falling behind was a HDD crew readying themselves to bore under Buffalo Creek SSKP 1078.78-MB-WC1013. Made way to Morden field office to compile report. Today was given direction by our senior monitor to travel to sskp1041.3-1041.44 Dead horse creek as we monitor the crew of Michael's HDD site clean-up, the crew were dismantling the equipment and we did our sweep of the area and checked on the geotec it was in good condition of what on the ground and area for this morning. We had travelled to buffalo creek as they were setting up to haul

in their equipment, we checked the riparian buffer zones, as we did our sweep of the crossing checking the geotec everything was in good condition. We had met the head construction supervisor Mark Woolf and we had introduced who were as Indigenous environment monitors.

Work Forecast: Monitor Spread 9 and possibly go to sskp 1071-1073.600-her-176

October 12, 2018- Safety included: Slips trips falls. Tie boots watch step tree point contact. Be wary of equipment in high congestion area. Slow down meeting traffic. Drive to condition of road.

Weather forecast/Environment: 9 degrees

Help to keep clean R.O.W. clean of garbage and recycling. Keep land owner wishes honored. Use access roads, stay off farmer's fields. While driving R.O.W. try not to create deep ruts for land owners.

General: Safety meeting this morning Conducted by senior monitor. Areas monitored, are Rd 80 SSKP 1080 a lot of machines and personal in the area. Welding crew and boring crew. Went on to SSKP 1078.78 where they are getting ready for hydro test and checked the erosion control silt fence for integrity. This fence is constructed to maintain a healthy aquatic environmental at watercourses. The fences are designed to limit the sediments caused by the construction process. Drove along R.O.W. on up to SSKP 1071.79-1071.71-(HER-70) up on to creek crossing. Here they are readying to bore under creek. Went on to SSKP 1014 (MB-188) - (MB-189) and viewed the ongoing reclamation, only the clay was being worked with at time of arrival and monitoring. Went onto Dead Horse Creek SSKP 1041.03-1041.44 (HER-175) to monitor area, found that the area has been cleaned and bio-security measures are still intact (matted area, wash station and bleach spray bottles). From here it was on to check on Rd 80 to check on the condition of a spill that may have been antifreeze, spill has been cleaned as there was no sign of it when we had arrived. Made way to Morden field office to compile information into daily report. Travelled to 1071+8.25 (HER-176) to check out and monitor riparian buffer zone and silt fence as they had started putting up there equipment and started to get ready to do hydrostatic test this morning. We had travelled to 1071+700-(HER-176) as we monitored HDD and did a sweep of the area up to 1072+475. We travelled 1041.03-1041.44-(HER-175) Dead Horse Creek to check up on clean up crew and monitored there for the rest of the afternoon. Finished of the day coming back to the office to do our reports and have weekly crew meeting with Matrix-Solutions manager Greg Lewis.

Work Forecast: Monitor Spread 9 and possibly go to sskp grass dancers 1071.49-1071.71

October 13, 2018- Safety included: Slips trips falls. Tie boots watch step tree point contact. Be wary of equipment in high congestion area. Slow down meeting traffic. Drive to condition of road.

Weather forecast/Environment: -2 degrees.

Help to keep clean R.O.W. clean of garbage and recycling. Keep land owner wishes honored. Use access roads, stay off farmer's fields. While driving R.O.W. try not to create deep ruts for land owners.

General: Safety meeting this morning Conducted by senior monitor. Areas suggested to be monitored; Monitored SSKP 1048.99-WC-1004 activity here is limited because of the foul weather same conditions here in SSKP 1047.860- Hwy #3 Road 60 Gretna Pump Station. SSKP 1096 Environmental note EN-7 EN-8 no activity in the area. Today was given direction by our senior monitor to travel and check out Rd.60-tackifier as things were shut down due to heavy rain and snow. We had travelled to 1048.99-WC-1004 and monitored the HDD crew, the weather was starting to get bad with rain and snow they had shut down at 12:00 as the weather permitted them to not continue. We headed back to do our reports and pictures.

Work Forecast: Monitor Spread 9 and possibly go to sskp.

Photos of Sites Visited & Topics Discussed This Week

October 9, 2018

Photo



Description & Location:

kp 1041+650 sweep the buffer zone
picture was taken south west

Photo



Description & Location:

kpp1041+600 picture was taking facing
north east

Photo



Description & Location:

kpp1071+950 welding crew
picture was taking facing east

Photo



Description & Location:

kp1071+900 picture was taken facing
north

Photo



Description & Location:

Shoo-fly 51 crew placing pipe for welding
looking
north

Photo



Description & Location:

SSKP 1071 looking south

Photo



Description & Location:

SSKP 1047.5 looking south pipe crossing hwy 3

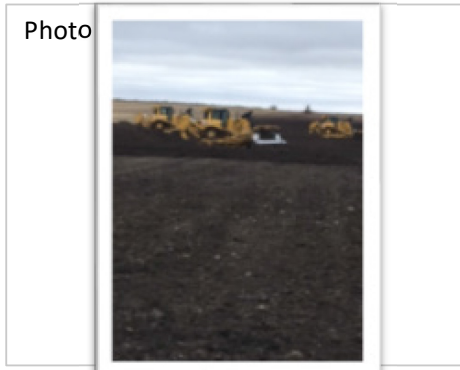
Photo



Description & Location:

Dead horse creek looking south

October 10, 2018



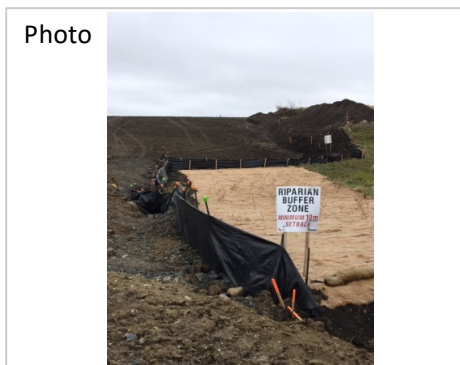
Description & Location:

KKP 1009+475 3 DOZERS PICTURE WAS
TAKEN
FACING WEST



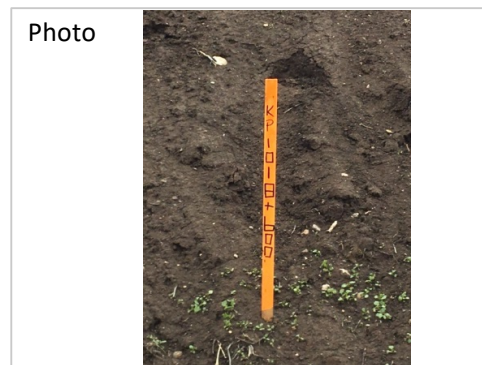
Description & Location:

KKP 1009+500 THE FIRST DOZER ON THE
WEST SIDE PICTURE WAS TAKEN FACING
SOUTHWEST



Description & Location:

RIPARIAN BUFFER ZONE AT 1018+675
PICTURE TAKEN FACING NORTH EAST



Description & Location:

KP1018+600 FACING WEST

Photo



Description & Location:

SSKP 1026 looking north

Photo



Description & Location:

SSKP 1026 looking south

Photo



Description & Location:

SSKP 1018 riparian buffer zone good condition

Photo

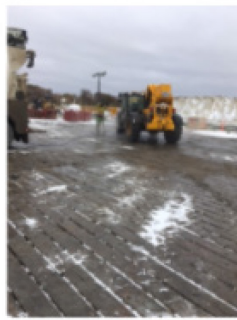


Description & Location:

kick off area ready for revegetation

October 11, 2018

Photo



Description & Location:

Dead horse creek sskp 1041.790-mb-wc-1002
picture was taken facing northeast

Photo



Description & Location:

Dead horse creek 1041.790-mb-we-1002
picture was taken facing south

Photo



Description & Location:

Pipes are drawn through at SSKP 1047.40
looking East

Photo



Description & Location:

Pipe pushed on through under Dead Horse
Creek looking North

Photo



Description & Location:

Photo of water flowing at Dead Horse Creek
looking North

Photo



Description & Location:

SSKP 1078.78 moisture barriers holding fast
looking North

October 12, 2018

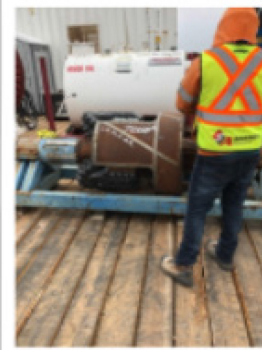
Photo



Description & Location:

kp1071-49-1071.71-her-176
did a sweep
Photo taken facing west

Photo



Description & Location:

Dead horse creek kp 1041.03-1041.44
HER-175
Photo taken facing south

Photo



Description & Location:

SSKP 1078.78 SSE

Photo



Description & Location:

SSKP 1074.9 North

Photo



Description & Location:

SSKP 1014 Facing west

Photo



Description & Location:

SSKP 1078.8 Drilling crew at this location
preparing for drilling

October 13, 2018

Photo



Description & Location:

kp 1048.99-WC-1004
Monitored till weather got to
bad picture was taken facing
southwest

Photo



Description & Location:

kp 1047.860-HWY 3 as they shut down
the picture was taken facing north

Photo



Description & Location:

travel to monitor the crew on
the line kp1087+000

Photo



Description & Location:

end off on kp1084+500

Photo



Description & Location:

SSKP 1048.99-WC-1004 south

Photo



Description & Location:

SSKP 1047.860-Hwy# 3North

Photo



Description & Location:

Gretna Pump Station SSKP 1096.21 facing
east

Photo

Right Click
Change Picture..

Description & Location:

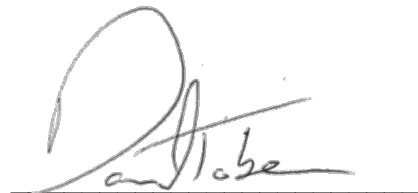
APPROVALS



Grant Manningway
Construction Monitor

November 26, 2018

Date



Daniel Tober
Senior Environmental Scientist

November 26, 2018

Date