

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

**INDIGENOUS CONSTRUCTION MONITORING**

**WEEKLY REPORT**

**SPREAD 7**

**NOVEMBER 19<sup>TH</sup> TO NOVEMBER 24<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 November 19<sup>th</sup> to November 24<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)	3	1 KP-824+500 Heritage resource - TLU ID # 57.	Clean Up Crew in area.	Yes
		Native Prairie at SSKP 821+852 Further action yes.	Clean Up crew in area.	Yes
		Traditional Land Use: 1 SSKP-863+200. Native prairie ID # HER 160.	Trenching Crew in area.	Yes
		Traditional Land Use: 1 Excavator is loading Rock Truck in HER-155 Traditional Land Use area.		Yes
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	20	Wetlands: 2 KP-841+300 Semi permanent marsh MB-054 class 4 wetlands.	Access crew in area.	Yes
Wetlands		KP-843.75+843.91 Ephemeral/Temporary Marsh ID # MB-063.Class 1&2.	Tackifying Crew in area.	Yes
Wetlands		MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 822+050	Clean Up crew in area.	Yes
Wetlands		MB-064 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 844+ 450	Clean Up crew in area.	Yes
Wetlands		MB-073 Seasonal Marsh Class 3 Wetland Complex	Welders welding Excavator in	Yes

		SSKP 850+100	area.	
Wetlands		MB-123 Seasonal Marsh Class 3 Wetland Complex SSKP 894+510	Coating Mainline in area.	Yes
Wetlands		MB-124 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+700	Coating Mainline in area.	Yes
Wetlands		MB-125 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+780	Coating Mainline in area.	Yes
Wetlands		MB-126 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+890	Coating mainline in area.	Yes
Wetlands		MB-127 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 895+520	Coating Mainline in area.	Yes
Wetlands		KP-838+132.8 Ephemeral/Temporary marsh class 1 & 2 MB- 053	Access crew installing aqua dam.	Yes
Wetlands		KP-843+400 east wetlands crossing ID # MB-061	Excavator loading sand in area.	Yes
Wetlands		KP-851+560.5 Wetlands crossing ID # MB-075.	Walkthrough area clean and tidy.	Yes

Wetlands		MB-1049 Seasonal Marsh Class 3 SSKP 836+420	Wetlands Crew in area	Yes
Wetlands		MB-079 Seasonal Marsh Class 3 SSKP 854+060	multiple crews in area	Yes
Wetlands		MB-080 Seasonal Marsh Class 3 Wetland Complex SSKP 854+260		Yes
Wetlands		MB-081 Broad-Leaf Treed Swamp SSKP 854+650	Trenching crew in area	Yes
Wetlands		MB-082 Broad-Leaf Treed Swamp SSKP 855+150	Trenching crew in area	Yes
Wetlands		MB-039 Ephemeral/Temporary Marsh Class 1&2 SSKP 829+200	Tie In Backfill/Hydro-vac crew in area.	
Wetlands		MB-1039b Seasonal Marsh Class 3 SSKP 829+260	Tie In Backfill/Hydro-vac crew in area	
Wetlands		MB-129 Seasonal Marsh Class 3 Wetland Complex SSKP 901+510	Coating Mainline/Buffer Mulch crews in area.	
Wetlands		MB-046 Open Water Pond Class 5 SSKP 834+220	Coating Tie Ins in area.	Yes
Wetlands		MB-072 Ephemeral/Temporary Marsh Class 1&2 SSKP 849+930	Fencing Crew in area.	Yes
Wetlands		MB-053 Ephemeral temporary marsh. Class 1	Access Crew in area.	Yes

		# 2. Wetlands complex. SSKP 839+580.		
Wetlands		MB-086 Broad-Leaf Treed swamp SSKP 859+230	Trenching Crew in area.	Yes
Wetlands		MB-087 Ephemeral/Temporary Marsh Class 1&2 SSKP 859+760	Trenching Crew in area.	Yes
Wetlands		MB-088 Seasonal Marsh Class 3 SSKP 859+970	Trenching Crew in area.	Yes
Wetlands		MB-089 Ephemeral/Temporary Marsh Class 1&2 SSKP 860+810	Trenching Crew in area.	Yes
		MB-089 Ephemeral/Temporary Marsh Class 1&2 SSKP 860+810	Trenching Crew in area.	Yes
Watercourse Crossing	3	MB-WC30 Drainage SSKP 901+970	Coating Mainline/Buffer Mulch crews in area.	
Watercourse Crossing		MB-WC84 Drainage SSKP 902+530	Coating Mainline/Buffer Mulch crews in area.	
Watercourse Crossing		MB-WC31 Drainage SSKP 903+090	Coating Mainline/Buffer Mulch crews in area.	

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## 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 Spread 7.

November 19, 2018 - Safety included: Slips, trips, falls. Watch where your stepping. Pay attention to the terrain. Proper P.P.E. on the work sites. Heavy equipment. Be aware of your surroundings. Keep eye contact with the operator. Weather. dress properly.

Housekeeping. Keep clean vehicle. Clean windshield. brake lights. head lights.

All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out.

Muddy conditions and snow be aware of surroundings on foot and when driving.

High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:** 30 percent snow. Mainly sunny. Wind up to 15 km/h. High minus 14. Wind chill minus 26 in the morning and minus 20 in the afternoon. Risk of frostbite. UV index 1 or low.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** In our morning meeting we discussed safety and the conditions on ROW as some areas are compacted snow and when the hits it gets slippery.

SSKP 822+050 Clean Up crew working in Native Prairie at SSKP 821+852 and wetland MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 822+050 They are removing wetland ramps and replacing organics between Rd #14 and Rd #15.

SSKP 844+550 Clean Up crew levelling subsoil and replacing cuts east of Rd # 28. They are working through wetlands MB-064 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 844+450.

SSKP 850+100 Welders welding corks on Excavator tracks for better traction as areas on our ROW have become hard packed snow and heavy equipment can slide especially on slopes and uneven grade. There also working in wetlands MB-073 Seasonal Marsh Class 3 Wetland Complex SSKP 850+100.

SSKP 896+100 Coating Mainline had good conditions to blast and coat as there was no snow or heavy winds, they worked through wetlands including MB-123 Seasonal Marsh Class 3 Wetland Complex SSKP 894+510, MB-124 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+700, MB-125 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+780, MB-126 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 894+890 and MB-127 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 895+520.

RD # 17 KP-824+500. Badger truck pumping the water out of the open ditch. Excavator breaking up the frozen dirt, so the coating crew can start the coating onto the pipes. Heritage resource -TLU ID # 57. Right of way is levelled off. Clean and tidy. No concerns. RD # 21 KP-827+332.7. Excavator operator back filling the pipe. Checked the right of way for cigarette butts, garbage, gas or oil spills. No issues.

RD # 28 KP-841+300. Semi-permanent marsh wetlands. Class 4. MB-054. Dozer levelling off the sand on the wetlands ramp. Checked the right of way for cigarette butts, garbage, gas or oil spills. Clean and tidy. RD # 29 KP-843.75+843.91. Workers spraying the beet juice onto the topsoil at the wetlands crossing ID # MB-063. Ephemeral temporary marsh. Class 1 & 2.

**Work Forecast:** Continue to monitor sensitive areas and areas of priority.

November 20, 2018 - Safety included: Wild life, stay alert, drive slowly. Heavy equipment, keep eye contact with operator at all times. Wear proper P.P.E. Weather dress for the season not the day. Communication, let your co-workers know where you are going and when you will be back. Ice and snow. Take it slow, slow down, stay in control at all times when driving. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety.

Safety is 24/7 and it benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season.

Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving. High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:** Mainly cloudy. 60 percent chance of flurries early in the morning. Wind up to 15 km/h. High minus 5. Wind chill minus 14 in the morning and minus 9 in the afternoon. UV index 1 or low.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** In morning toolbox we discussed the possibility of flurries on the roads and to be aware of changing conditions.

SSKP 836+420 Wetlands Crew Excavator prepping RD #26 east for open cut on Thursday and they also pumped the water out. Working in wetlands MB-1049 Seasonal Marsh Class 3 SSKP 836+420. SSKP 854+060 Lots of activity in this area. HD Bores crew #1 is reaming 42" and pull bore section at Rd #32 with the "220".

Trenching Crew's Excavator's are mobilizing towards Rd #32 East, so they can crumb the ditch so the Lowering In crew can put the pipe to bed in the ditch. They are working in wetlands MB-079 Seasonal Marsh Class 3 SSKP 854+060 and MB-080 Seasonal Marsh Class 3 Wetland Complex SSKP 854+260. SSKP 854+464 The Side Boom has

a generator on sled trailer to pump water out of ditch using a 6" hose. The side Boom uses a larger water pump and lowers it in the water hooked up to a sling.

SSKP 855+072 Trenching Crew working through wetlands MB-081 Broad-Leaf Treed Swamp SSKP 854+650 & MB-082 Broad-Leaf Treed Swamp SSKP 855+150.

RD # 27 east walked onto the wetlands. Workers drilling holes on the right side of the aqua dam at KP-838+132.8 east. RD # 28 East Excavator loading up a tandem truck with sand at the wetlands crossing ID # MB-061. RD # 30 East Walked the right of way clean and tidy. Lighting plant is well contained. Wetlands crossing ID # MB-075 KP-851+560.5. RD # 38 East. Excavator digging out the trench and loading the sand onto the rock truck. Workers getting ready to pull the bore across the road. SSKP-863+200. Native prairie ID # HER 160. RD # 60 Walked the right of way checking for cigarette butts, gas or oil spills. No concerns. Workers coating the pipe. Side booms have the heating coils to heat the pipe before the coaters can coat the pipe. Sand blasters are sand blasting the pipe getting it ready for the heating coils to be placed on the pipe.

**Work Forecast:** Continue to monitor sensitive areas and areas of priority.

### **November 21, 2018 - Safety included:**

Communication let your supervisor know your where about and what you are doing at all times. Focused on job at hand. Equipment keep good eye contact with the operator.

Lifting and handling lift with your knees not your back. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled.

As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving. High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:** Cloudy with 60 percent chance of flurries. Wind southeast 20 km/h. High minus 7. Wind chill minus 22 in the morning and minus 14 in the afternoon.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** In our morning meeting we discussed driving and it is snowing outside right now so will be needing to be extra cautious.

SSKP 826+545 Tie In Backfill in area. Excavator filling trench and using bucket to pack soil down. Spotter with excavator to watch out for rocks which can hit pipe and sometimes require repair.

SSKP 827+750 Tie In Backfill filling ditch with subsoil. Excavator mixes and breaks up soil as it freezes in colder weather making the soil come out of piles in chunks that can damage the coating on pipe. They also can cause indications that they call buckles

when they test pipe. When they use more fine soil it works more efficiently as dig ups can be costly.

SSKP 829+253 Two Hydro-vacs cleaning up overflowed pig pens that contain and filter water they pump out of trenches. Also in area is Tie In Backfill. They are also working in wetlands MB-039 Ephemeral/Temporary Marsh Class 1&2 SSKP 829+200 and MB-1039b Seasonal Marsh Class 3 SSKP 829+260.

SSKP 902+102 Coating Mainline working through several sensitive areas. Wetland MB-129 Seasonal Marsh Class 3 Wetland Complex SSKP 901+510. Watercourses MB-WC30 Drainage SSKP 901+970, MB-WC84 Drainage SSKP 902+530 and MB-WC31 Drainage SSKP 903+090. Buffer Mulch Crew was in the areas as well and they passed Mainline Coating today.

RD # 21KP-826+650. Ice and water being pumped out of the open ditch. Checked the right of way for gas or oil spills. No concerns. RD # 27 East KP-838+132.8. Walked the right of way checking for fallen debris, garbage, cigarette butts, gas or oil spills. No issues. Ephemeral temporary marsh. Class 1 & 2. RD # 28 West KP- 841+400. Sand being hauled from RD # 28 east to RD # 28 west. Clean and tidy.

RD # 30 KP-851+560.5 Clean and organized. No concerns. Rd # 32 KP-853+629.2 East workers are working on the horizontal reaming machine.

**Work Forecast:** Continue to monitor sensitive areas and areas of priority.

November 22, 2018 - Safety included: Congested sites. Be aware of moving equipment. keep eye contact with operator at all times. Driving, pay attention to road conditions and signs. Stay alert. Vehicles keep clean headlights brake lights windshield take garbage out after each shift. Proper P.P.E. to be worn on the job site. Weather dress for the season not the day. Lifting and handling. Lift with the knees not the back. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and it benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving. High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:** A mix of sun and cloud. Fog patches dissipating near noon. Wind becoming south 20 km/h gusting to 40 this morning then light this afternoon. High plus 1. Wind chill minus 9 in the morning. UV index 2 or low.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** In the morning we had our weekly meeting with Matrix General Manager.

SSKP 849+930 Skidsteer with post pounder attachment pounding posts making alleyway across ROW for cattle. In frozen conditions in the soil they use propane and

tiger torch to heat ground than they use an auger to start a pilot hole for the post pounder. There working through wetlands MB-072 Ephemeral/Temporary Marsh Class 1&2 SSKP 849+930. SSKP 853+629 HD Bores # 1 pulling bore section under Rd #32. There using a 42" reamer attached to 36" pipe to give it more room to pull through.

SSKP 836+000 Tie In Backfill Crew is backfilling ditch. They are hauling subsoil from SSKP 835+380 as another Excavator is loading Rock Truck in HER-155 Traditional Land Use area. SSKP 834+240 Coating Tie Ins working in wetland MB-046 Open Water Pond Class 5 SSKP 834+220. The coating applicator was heating up pipe with tiger torch getting rid of moisture and to get proper temperature to apply coating.

RD # 60 Black Creek KP- 899+760.0 MB-WC-31. ID # Drainage. SSKP # 903:09. Water course crossing. Drove the right of way. Clean, tidy, organized. No concerns.

RD # 62 KP-904+100. Coating crew coating the pipe. Clean and organized. No issues.

RD # 61 Water crossing. MB-WC-84. ID # Drainage. SSKP: 902.53. Workers left the heating coil on the pipe to long. Has to be cut out and replaced. Checked for cigarette butts, garbage, gas or oil spills. No concerns.

RD # 34 KP-858+335.0 Workers cleaning the ditch wheel scoops. Excavators removing the fallen debris from the trench. Farmer hauling manure at the cattle crossing that banister put up.

**Work Forecast:** Continue to monitor sensitive areas and areas of priority.

November 23, 2018 - Safety included: Slips, trips, falls. Watch where your stepping. Pay attention to the terrain. Proper P.P.E. on the work sites. Heavy equipment. Be aware of your surroundings. Keep eye contact with the operator. Weather. dress properly. House-keeping. Keep clean vehicle. Clean windshield. brake lights. head lights.

All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety. Safety is 24/7 and it benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out.

Muddy conditions and snow be aware of surroundings on foot and when driving.

High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:** Cloudy. High plus 1. UV index 1 or low.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** Our morning meeting we discussed the weather warming up and the ROW getting muddy again. To drive with caution around people and equipment as vehicles can slide on slopes.

SSKP 826+645 Tie In Crew cleaning out ice in ditch around pipe inside bell hole. Hydro-vac sucking out water in trench west of Rd #20.

SSKP 829+303 Tie In Crew Side Booms holding two ends of pipe in air with sling while the Excavator digs out soil to make room in ditch to start tie in with welders.

SSKP 832+561 Tie In crew workers breaking ice off of pipe in bell hole. Side Booms holding pipe in slings. There getting area ready to be welded in safely.

SSKP 860+070 Trenching Crew digging out trench so they can lower in pipe. They are also working in wetlands MB-086 Broad-Leaf Treed swamp SSKP 859+230, MB-087 Ephemeral/Temporary Marsh Class 1&2 SSKP 859+760, MB-088 Seasonal Marsh Class 3 SSKP 859+970 and MB-089 Ephemeral/Temporary Marsh Class 1&2 SSKP 860+810. RD # 21 KP-827+600. Dozer levelling off the right of way. Clean and organized. RD # 22 east. KP829+253. Observed the workers filling in the trench. Workers doing the tie-ins. 3 side-booms holding the pipe. Clean and tidy. No concerns.

RD # 26 KP-836+409. Observing the excavator back filling the open cut. Lighting plant well contained. Compact test to be done as they go along. RD # 27 SSKP-839+580. Excavator loading the rock truck with sand from the borrow pit to haul to the wetlands. MB-053. Ephemeral temporary marsh. Class 1 & 2. Wetlands complex. SSKP 839+580.

**Work Forecast:** Continue to monitor sensitive areas and areas of priority.

November 24, 2018 - Safety included: Wild life, stay alert, drive slowly. Heavy equipment, keep eye contact with operator at all times. Wear proper P.P.E. Weather dress for the season not the day. Communication, let your co-workers know where you are going and when you will be back. Ice and snow. Take it slow, slow down, stay in control at all times when driving. All injuries, incidents, and occupational illnesses can be prevented. All operating exposures can be controlled. As a Senior Monitor I'm accountable for safety performance. All employees are responsible for safety.

Safety is 24/7 and it benefits family, friends, co-workers and community. Be aware of students and children in Brandon area and gravel roads as school is in season. Dress in layers cold weather season here and drink plenty of water as dehydration can happen when cold out. Muddy conditions and snow be aware of surroundings on foot and when driving. High winds possible today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

**Weather forecast/Environment:**

Mainly cloudy with 30 percent chance of flurries. Wind becoming north 20 km/h gusting to 40 near noon. Temperature falling to minus 10 in the afternoon. Wind chill minus 10 in the morning and minus 18 in the afternoon. UV index 1 or low.

Minimize the number of environmental non-compliances. Provides Environmental Due diligence. Increase and strengthen the communication links between Contractors and Enbridge Construction and Environmental staff regarding environmental considerations and mitigation. Provide daily on the job awareness/education through assessment and communication of the environmental considerations and mitigation.

**General:** Discussed in morning meeting the chances of high winds and to be aware of wind direction when monitoring around crews.

SSKP 858+200 Mainline Backfill Crew in area backfilling trench. Excavator backfilling ditch while Dozer touches up ROW.

SSKP 859+050 Lower In Crew waiting on water to be drained before lowering pipe. There is lost of water and they are using two large pumps to drain faster. Good job for the Lower In crew with all the water they've been dealing with.

SSKP 860+000 Trenching Crew Crew working through wetland MB-089 Ephemeral/Temporary Marsh Class 1&2 SSKP 860+810.

SSKP 861+500 Excavators digging ditch in area. Swampier helping Excavator operator measure the depth so they know how far to dig.

RD # 1 KP-808+568.2 Attended the tailgate meeting on banister work bus. Walked the right of way checked for cig butts, gas or oil spills. Generators and lighting plants were well contained. No concerns. RD # 12 KP-819+432. Checked the water holding tank it is being pumped out into a filtered bag. The water has a sheen on the top of it which is caused from the organic matter. RD # 13 Native prairie SSKP: 821+008 TO 821+183. Walked the right of way checked for gas or oil spills. No concerns. The sf is all levelled off.

**Work Forecast:** Day off tomorrow, return Monday continue to monitor sensitive areas and areas of priority.

## Photos of Sites Visited & Topics Discussed This Week

November 19, 2018



Description & Location KP- 827+332.7

Photo taken facing east.  
Excavator back filling the pipe in the open ditch.



Description & Location KP-843.75+843.91

Photo taken facing east.  
Workers spraying the beet juice onto the topsoil.



Description & Location: SSKP 822+050

Clean Up Crew  
Dozer replacing organics and touching up  
Working in Native Prairie and Wetlands  
Facing north



Description & Location: SSKP 844+550

Clean Up Crew  
Dozer Leveling subsoil & replacing cuts  
Conditions on ROW are dry and frozen  
Facing west



Description & Location: SSKP 849+100

Buffer Crumb Crew  
Excavator get corks welded on  
They need them for traction in winter  
Facing southwest



Description & Location: SSKP 896+100

Coating Mainline Crew  
3 Blasters blasting pipe for coating  
Conditions were good for coating  
Facing east



November 20, 2018



Description & Location 838+132.8

Photo taken facing east.  
Walked into the wetlands. Clean and organized. Ephemeral temporary marsh Class 1 & 2. MB-53.



Description & Location KP-843+400

Photo taken facing east.  
Excavator loading sand into the tandem truck. Wetland crossing MB-061.



Description & Location: SSKP 836+419

Wetlands Crew  
Excavator preparing for open cut on Thursday  
They also pumped out water  
Facing northeast



Description & Location: SSKP 854+060

HD Bores #1/Trenching/Lower In  
Trenching mobilizing at top left of picture  
Lower In waiting for trench clearance



Description & Location: SSKP 854+464

Lower In Crew  
Using larger generator to pump water  
On sling is the pump that the Boom lowers  
In wetlands photo facing southwest



Description & Location: SSKP 855+072

Trenching Crew/Welders  
Excavator and Ditcher digging ditch to right  
Welders welding plate to seal pipe

November 21, 2018



Description & Location KP-838+132.8

Photo taken facing east.  
Aqua dam frozen. Light snow cover on the wetlands. Ephemeral temporary marsh. Class 1 & 2.



Description & Location KP- 853+629.2

Photo taken facing south.  
Horizontal drill being inspected by the workers.



Description & Location: SSKP 826+545

Tie In Backfill Crew  
Excavator Backfilling trench and packing  
Spotter watching for clumps/rocks  
Photo facing west



Description & Location: SSKP 827+750

Tie In Backfill Crew  
Two Excavators Backfilling trench  
The white hat (right) is Indigenous and is a Junior Inspector, facing south



Description & Location: SSKP 829+253

Two Badger Hydro-vacs  
Cleaning out pig pens with suction hose  
They break it up with high pressure water  
Tie In Backfill in area, facing southwest



Description & Location: SSKP 902+102

Coating Mainline at Rd #62 crossing  
Coating through wetland and watercourse  
Tractor pulling sandblast truck

November 22, 2018



Description & Location KP-904+100

Photo taken facing east.  
Coating crew coating the pipe .



Description & Location KP-858+335.0

Photo taken facing east.  
Ditch wheel digging a trench. Excavator taking the sand that is falling back into the trench.



Description & Location: SSKP 834+240

Coating Tie Ins  
Heating the weld for applying coating  
They heat pipe to 120 degrees and apply at 90 degrees  
Working in wetlands, facing north



Description & Location: SSKP 836+000

Tie In Backfill, facing east  
Excavator backfilling ditch and packing soil  
Rock Truck unloading soil for backfill



Description & Location: SSKP 849+930

Fencing Crew  
Skidsteer with post pounder pounding post  
They heat up ground with torch first  
Than use an auger to start a pilot hole  
Facing northwest



Description & Location: SSKP 853+629

HD Bores Crew #1  
Side Booms lining up pipe to pull rod  
The Reamer 42" is bigger than pipes 36" size so its easier to pull and has more room, facing northwest

November 23, 2018



Description & Location KP-827+600

Photo taken facing north.  
Dozer leveling off the right away.



Description & Location KP-836+409.1

Photo taken facing east.  
Workers guiding the excavator to backfill  
the pipe at the open ditch.



Description & Location: SSKP 826+645

Tie In Backfill Crew  
Cleaning out ice away from pipe  
Getting weld ready for rescan  
West of Rd #20



Description & Location: SSKP 829+303

Tie In Crew  
Excavator digging out bell hole  
Side Booms holding pipe in slings  
Facing east



Description & Location: SSKP 832+561

Tie In Crew  
Workers cleaning out ice in bell hole  
Side Booms supporting pipe in slings  
Facing east



Description & Location: SSKP 860+070

Trenching Crew  
Digging through wetlands  
Conditions starting to get muddy  
Facing east

November 24, 2018



Description & Location KP-808+568.2

Photo taken facing east.  
Leveled off the right away. Clean and tidy.



Description & Location KP-819+432.5

Water Containment Tank  
Facing east



Description & Location: SSKP 858+200

Mainline Backfill  
Excavator backfilling trench  
Dozer touching up ROW  
Facing east



Description & Location: SSKP 859+050

Lower In Crew  
Waiting for water to be drained  
Backfill working in far background  
Facing west



Description & Location: SSKP 860+000

Trenching Crew  
Working through wetlands  
Ground conditions soft from warm weather  
Facing northeast



Description & Location: SSKP 861+500

Trenching Crew  
Excavator digging ditch  
Spotter measures depth to be dug  
Facing west

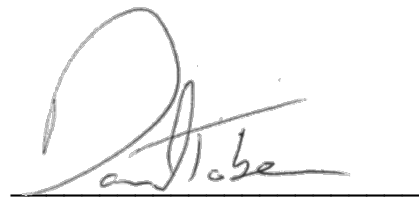
**APPROVALS**



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

\_\_\_\_\_  
January 14, 2019

Date



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

\_\_\_\_\_  
January 14, 2019

Date