

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

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 7

OCTOBER 15TH TO OCTOBER 20TH

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 October 15th to October 20th, 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	Traditional Land Use/Heritage Resource : 6TLU 61 SSKP 834+560/62 SSKP 835+240/63 SSKP 835+420/64 SSKP 835+500and Heritage Resource areas HER-154 SSKP 834+370/155 SSKP 835+480 all areas Coating mainline worked through safely.		
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		American Lopseed VG-78 VG-86 Eastern Yellow Star Grass SSKP 886+720 10 plants were observed approximately 40 m southeast of the trench line. Medicinal Indigenous Plants: 2 - Grandfathers Beard plants located at SSKP 901+510 on ROW. -Thousands of Bulrushes on ROW in wetland ID MB-129 SSKP 901+510. The area will not be stripped wetland ramps to be built over sensitive area.	area has been stripped, reseed clean up phase.	
Aquatic Life	N/A			
Animal Observations or Burrows	25-30	25 to 30 Bonaparte's Gull eating worms after		

		<p>Grade crew stripped top soil.</p> <p>WF-110 Ducks Unlimited Canada Wetland Project SSKP 886+030 RAP Restricted Activity Period additional mitigation measures taken as well as approvals.</p> <p>- WF-111 Manitoba Habitat Heritage Conservation Agreement SSKP 886+030 RAP Restricted Activity Period additional mitigation measures taken as well as approvals</p> <p>- WF-112 Northern Leopard Frog SSKP 886+760 They are 30 m of Construction right-of-way, overwintering period October to March. Area swept construction approved in area.</p> <p>Richardson's Ground</p>		
--	--	--	--	--

		Squirrel under skid pile under pipe. They will hibernate for winter soon.		
Bird Nests	N/A			
Trees (Red Willow)	N/A			
Wetlands	34	<p>Wetlands : 10 -MB-038 Seasonal Marsh Class 3 Wetland Complex SSKP 828+530 Coating Repair crew.</p> <p>-MB-043 Ephemeral/Temporary Marsh Class 1&2 SSKP 832+930 Coating mainline.</p> <p>-MB-044 Ephemeral/Temporary Marsh Class 1&2 SSKP 833+340 Coating Mainline.</p> <p>-MB-045 Ephemeral/Temporary Marsh Class 1&2 SSKP 833+910 Coating Mainline.</p> <p>-MB-046 Open Water Pond Class 5 Wetland</p>		

		<p>Complex SSKP 834+220 Coating Mainline.</p> <p>-MB-090 Ephemeral/Temporary Marsh Class 1&2 SSKP 862+930 Engineering crew.</p> <p>-MB-091 Seasonal Marsh Class 3 Wetland Complex SSKP 863+460 Bending crew.</p> <p>-MB-092 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 864+210 Bending crew.</p> <p>-MB-093 Temporary Marsh Class 2 SSKP 865+140 Stringing crew.</p> <p>-MB-094 Broad-Leaf Treed Swamp SSKP 865+190 Stringing crew.</p> <p>MB 1039 wetlands, semi marsh permanent class 4 complex.</p> <p>MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex</p>		
--	--	---	--	--

		<p>SSKP 818+250 Wetlands Crew digging ditch.</p> <p>-MB-046 Open Water Pond Class 5 Wetland Complex SSKP 834+220 Coating mainline.</p> <p>-MB-1048 Seasonal Marsh Class 3 SSKP 836+060 Coating mainline.</p> <p>-MB-1049 Seasonal Marsh Class 3 SSKP 836+420 Coating mainline.</p> <p>-MB-089 Ephemeral/Temporar y Marsh Class 1&2 SSKP 860+810 Pipegang Welding.</p> <p>-MB-122 Ephemeral/Temporar y Marsh Class 1 & 2 SSKP 892+940 Access crew installing wetland ramp and flume pipe for drainage.</p> <p>MB-038-2 Class 3 seasonal wetlands complex.</p>		
--	--	--	--	--

		<p>MB-050 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 838+120 Coating crew. No ground disturbance.</p> <p>-MB-110 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 886+900 Grade/Access crew. Installing wetland ramps.</p> <p>- MB-129 Seasonal Marsh Class 3 Wetland Complex SSKP 901+510 Grade crew. Installing wetland ramps.</p> <p>MB-038 Seasonal Marsh Class 3 Wetland Complex SSKP 828+530</p> <p>-MB-039 Seasonal Marsh Class 3 SSKP 828+925</p> <p>-MB-061 Broad-Leaf Treed Swamp Wetland Complex SSKP 843+340</p> <p>-MB-062 Ephemeral/Temporar</p>		
--	--	--	--	--

		<p>y Marsh Class 1 & 2 SSKP 843+550</p> <p>-MB-063 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 843+750</p> <p>-MB-073 Seasonal Marsh Class 3 Wetland Complex SSKP 850+000</p> <p>-MB-113 Seasonal Marsh Class 3 SSKP 887+650 Grade crew stripping topsoil.</p> <p>-MB-114 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 888+360 Grade crew Stripping topsoil.</p> <p>-MB-115 Seasonal Marsh Class 3 SSKP 889+230 Access installing wetland ramps.</p> <p>-MB-116 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 889+920 Access setting up wetland ramps.</p> <p>-MB-129 Seasonal Marsh</p>		
--	--	--	--	--

		<p>Class 3 SSKP 901+510 Grade crew setting up ramp in wetlands.</p> <p>Wetlands crossing KP-886+290. Class 4. MB-110. Semi permanent marsh 1 MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex Tie ins and Backfill crews working in area work ongoing monitoring required.</p>		
Watercourse Crossing	4	<p>- Black Creek they are clearing out water from the HDD section with pig SSKP 899+760 MB-WC29 Drainage has a planned pipeline crossing method of open cut SSKP 901+540 Grade crew in area.</p> <p>-MB-WC30 Drainage has a planned pipeline crossing method of open cut SSKP 901+970 Grade crew in area.</p> <p>Watercourse : 1 Souris River</p>		

		HDD section coating HDD section and welding wing sections. More monitoring required.		
--	--	--	--	--

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.

October 15, 2018: Safety - Wear the proper P.P.E, Helmet, gloves, ear plugs, safety glasses, boots. Housekeeping, keep company vehicle clean at all times windows brake lights head lights. Lifting/handling lift with the knees not your back. Ice & snow. Stay alert, slow down and stay in control. Drive according to road and weather conditions. Keep a safe distance between you and the vehicle ahead of you. Avoid situations where you may have to brake on a slippery surface. 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. Also, high winds today be careful around crews for dust contamination/coating fumes/welders fumes and also when opening doors vehicles/office doors/bathroom doors.

Environment - Periods of snow ending early this evening then cloudy with 60 percent chance of flurries. Wind northwest 20 km/h gusting to 40 becoming light this evening. Low minus 9. Wind chill minus 7 in the evening and minus 16 overnight. Keep all areas of work clean and gravel roads travelled as well. 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:

After our daily morning meeting we decided to go monitor Stringing, Engineering and Bending as they are going to be working through sensitive areas. SSKP 864+667 Stringing crew was laying pipe on ROW with Engineering crew making measurements for the pipe, they are working in wetlands and Traditional Land Use areas. MB-090/091/092/093/094 and Heritage site HER-160. Also, no ground disturbance in this area without archaeologist present. The Stringing crew and Engineering crossed highway 250 today by the Enbridge West Souris Station. SSKP 863+150 Bending crew also working in Wetlands and Traditional Land Use area bending pipe where engineering marked it for them. SSKP 841+600 Went to assess the wetlands ramp that was stopped because it's too wet. The water is starting to freeze but need more cold weather before they commence work in area as Banister is waiting for wetlands MB-054 Semi-Permanent marsh Class 4 Wetland Complex to freeze. Currently no work in area. SSKP 834+050 Coating mainline also working in wetlands areas MB-043/044/045/046 and also Traditional Land Use area heritage site HER-154. SSKP 828+550 Coating repair crew fixing indications and Buffer Mulch crew spraying buffer in wetlands MB-038.

SSKP 907+650 Towards end of shift went to Souris River HDD section that they were testing. Will find out tomorrow how the test went. SF # 51 Walked down the SF to the heritage site. Light snow cover on the ground. No concerns. SF #51 West side. Equipment waiting to get their machines cleaned with the blower before crossing over to the east side SF # 51. Excavator building a ramp crossing east side of SF # 51 entrance. SF # 38 Bending crew working east of SF # 38. Parked bending machine, spill trays are in proper place under the bending machine. SF # 10 Workers getting the ditch wheel serviced before using. Snow cat parked at the entrance of SF # 10. SF # 24 Observed the mainline coating crew brushing on the epoxy onto the pipes. No concerns.

Work forecast: Continue to monitor sensitive areas and adapt to changing weather conditions for work.

October 16, 2018 - Safety included: Weather, dress for the season not for the day. Slips trips falls watch footing, pay attention to the terrain. Driving, pay attention to the road and conditions. Housekeeping keep vehicle clean at all times, lights windshield brake 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. Also, high winds 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. 30 percent chance of flurries in the morning. Wind becoming northwest 20 km/h late in the afternoon. High plus 4. UV index 3 or moderate.

Keep all areas of work clean and gravel roads travelled as well. 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:

After our morning meeting we were going to assess more work being done in sensitive areas. SSKP 818+250 In wetland MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex the Wetland crew was digging ditch with Side booms standing by to lower in pipe. Also there was hydro vac draining the water out of holes being dug. SSKP 835+900 Coating mainline working through many sensitive areas. Traditional Land Use/Heritage resource areas TLU-61/62/63/64 HER-154. Rare plant American Lopseed VG-78. Wetlands MB-046/1046/1048/1049. SSKP 861+150 In wetland MB-089 Pipe Gang welding crew went through wetlands working their way to West Souris Station. SSKP 892+900 Access crew setting up wetland ramp in wetland MB-122 and Drainage

MB-WC25 Watercourse. Also, to west of Access crew was the Grade crew that has an Indigenous foreman working with Banister and he's looking after 2 Grade crews. He's a friend and is doing a great job keeping the crews active and safe. On a personal note it did me good seeing him in an important role and excelling at it as well, someone to look up to. SSKP 892+700 Animal Observation on ROW 25-30 Bonaparte's Gull birds eating worms as Grade crew stripped top soil. Bonaparte's Gull commonly have a distinguished blackish smudge behind each eye with a black beak. They are social flying in flocks and look like terns. SF # 9. badger truck pumping the water out of open ditch west side of SF # 9. Excavators trenching in the wetlands west side of SF#9. No concerns. SF # 16 Workers back filling east side, moving ramps. Clean and organized. No concerns. SF # 21 East side hydro seeding mulcher finished spraying the mulch on the buffer. Now moving to SF # 22. SF # 38 Welders at the entrance of SF # 38 south end. Moose was running north side of SF # 38 .Work Forecast: Continue to monitor sensitive areas. I also found out a personal friend of mine that was on this job passed away after work hours. They're having a collection for money in the morning meeting Wednesday out on the ROW I will be there.

October 17, 2018 - Safety included: Weather dress for the season not for the day. Slips, trips, falls, watch footing, pay attention to the terrain. Wild life be alert and watch out for moose, deer, dogs, fox, brush, wolves and coyotes. Watch for children waiting for the school bus in the morning and 3pm to 4pm. 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. Also high winds 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: Sunny. Wind becoming southwest 20 km/h late in afternoon. High 12. UV index 3 or moderate. Keep all areas of work clean and gravel roads travelled as well. 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 was about working in areas with congestion, as we have currently 793 people on the job including Subcontractors and Banister. We've been doing great with no issues. It's good to have a refresher that will be our biggest hazard is monitoring other crews being in their workspace and most importantly driving. Headed out to monitor sensitive areas. SSKP 838+200 Went out to Coating mainlines morning meeting and monitored them work. They would finish off 17 welds to coat then demobilize and move to Rd # 28 and head east from continued welded pipe on ROW. East of Rd # 27 it's too wet to install wetland ramps is the reason why they have to

demobilize. They also worked through MB-050 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 838+120. I also observed them calibrating the holiday detector. They do a verification to make sure the calibrator and the holiday detector have the same number of voltage for the thickness of the coating on pipe. SSKP 824+500 Backfill crew working in 3 different areas Rd # 4/17/20. Attended their morning tailgate and discussed their work scope for the day and hazards. One hazard was fatigue as the crew worked late yesterday. SSKP 887+507 Access building road approaches and wetland ramps. Grade crew stripping ROW in close proximity to Access crew. Also in area MB-110 Semi-Permanent Marsh Class 4 Wetland Complex SSKP 886+900 Wildlife feature WF-110 Ducks Unlimited Canada Wetland Project SSKP 886+030 RAP Restricted Activity Period additional mitigation measures taken as well as approvals WF-111 Manitoba Habitat Heritage Conservation Agreement SSKP 886+030 RAP Restricted Activity Period additional mitigation measures taken as well as approvals WF-112 Northern Leopard Frog 400 m from breeding pond, overwintering period October to March. Area swept construction approved in area. SSKP 901+510 Grade crew stripping close to MB-129 Seasonal Marsh Class 3 Wetland Complex. In the area on ROW there's 2 types of Indigenous plants the Bulrush and Grandfathers Beard. SSKP 899+760 Black Creek Watercourse they are clearing water out of HDD test section with pig.

Work Forecast: Continue to monitor sensitive areas and new areas we haven't been to.

October 18, 2018 - Safety included: Slips, trips, falls, pay attention to the terrain you are walking on. Wildlife, be alert when driving. Proper PPE on the job site. Hard hat, boots, gloves, safety glasses and high vis vest. 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. Also high winds 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: Sunny. Wind southwest 20 km/h. High 19. UV index 3 or moderate.

Keep all areas of work clean and gravel roads travelled as well. 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: During our meeting a new topic of discussion was about our vehicles were driving as we've been driving over 10,000 kms and we will have to arrange tire rotation and make sure we go back once complete to get tires re-torqued. We also have meeting with General Manager of Matrix Solutions towards end of shift today. SSKP 850+000 Bores and Test crew was working in MB-073 Seasonal Marsh Class 3

Wetland Complex. The ground where they were working is very unstable. They did amazing job with the trench box and even pounded plates to help secure it more. They also used a pulley with chain to secure plates to the trench box for extra support. On spread 3 & 4 of the L3R I seen a worker I helped train on the utility crew I was on. Was nice to see him doing well. SSKP 849+760 Animal Observation on ROW seen a Richardson's Ground Squirrel under skid pile under pipe. They will hibernate for winter soon. SSKP 843+925 Blasting flat deck truck was stuck in the sandy conditions on the ROW. A Dozer safely pulled the truck out. Coating mainline working through sensitive areas. Wetlands MB-060 Broad-Leaf Treed Swamp Wetland Complex SSKP 843+250 MB-061 Broad-Leaf Treed Swamp Wetland Complex SSKP 843+340 MB-062 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 843+550 MB-063 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 843+750 SSKP 828+000 Lowering in and Backfill crew working through wetlands. MB-038 Seasonal Marsh Class 3 Wetland Complex SSKP 828+530 MB-039 Seasonal Marsh Class 3 SSKP 828+925. SF # 6 Side booms placing the side bend pipe than the workers will weld the tie-in. Cigarette butt found on the ground near the bend in the pipe. All containers and jugs are in proper containment on SF # 6 west side. SF # 6 east side. Pig pen on the road allowance was full, Badger hydro vac truck their pumping out the pig pen. Work truck had 3 jerry cans on the back of it I spoke to the foreman and he corrected it. He put the jerry cans in a spill tray. SF # 7 East Monitored the ROW for cigarette butts, gas, garbage or diesel spills. No concerns. SF # 42 East. Very congested pipe gang moving very fast. Observed the equipment for leaks or spills. No issues.

Work Forecast: Continue to monitor sensitive areas and be up to date on the contractors daily objectives/locations.

October 19, 2018 - Safety included: Slips, trips, falls, watch your footing. Pick-up any garbage, cords, cans, boards. 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 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. Also high winds 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: Sun and cloud. 60 percent chance of rain. Wind northwest 20 km/h. High 10. UV index 2. Keep all areas of work clean and gravel roads travelled as well. 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: The monitors have been doing such a good job. They are reaching out throughout spread 7 work areas from kick off in Virden, Manitoba all the way to the end of line by Souris River. I'm going to organize a supper for them and take them to a place of their choosing as they've been making my job easier. Our morning meeting went really good as today with high winds we were prepared for safety issues and also covering areas that are sensitive on our ROW. SSKP 889+240 Access crew building two different wetland ramps at MB-115 Seasonal Marsh Class 3 SSKP 889+230 and MB-116 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 889+920 SSKP 888+000 Grade crew stripping and pushing topsoil and working in 2 wetlands MB-113 Seasonal Marsh Class 3 SSKP 887+650 and MB-114 Ephemeral/Temporary Marsh Class 1 & 2 SSKP 888+360. Received call from General Manager of Matrix that the truck I was using was being recalled and I am to switch vehicles. I went to car wash to clean out rental and then headed to rental company to switch. Once switched I had to do inspection and disinfect at car wash cleaning truck. Once I was finished cleaning and rigging up truck I was good to go on ROW. SSKP 902+160 The Grade crew was building wetland ramps through 2 watercourses and 1 wetland. Wetland MB-129 Seasonal Marsh Class 3 SSKP 901+510 Watercourses MB-WC29 Drainage has a planned pipeline crossing method of open cut SSKP 901+540. MB-WC30 Drainage has a planned pipeline crossing method of open cut SSKP 901+970. Leaving for Souris to monitor SF # 52 east side. Signed in with the foreman. Stripping topsoil with the D-8 dozer. Workers putting a ramp in the wetlands. Workers going to lay the geotech than the soil will be laid and spread over that. MB-113 seasonal marsh class 3. SF # 54 observing the D-8 dozer stripping the topsoil. 2 Marocas and 2 nodwells with dump boxes hauling the soil to the wetlands to lay on top of the geotech. Dozer going behind levelling out the soil. Excavator ahead pulling up the small willows.at KP- 829+400 Seasonal marsh class 3 wetland complex. SF # 53 Monitored banister fuel truck fuelling up the D-8 dozer. One worker smoking 4 feet away from the fuelling of the dozer. I asked him to move away from the fuelling area. He did butt out the cigarette. Work Forecast: Checking out Black creek area. Monitor sensitive areas and coordinate with Banister in their work areas.

October 20, 2018 - Safety included: Slips, trips, falls, pay attention to the terrain you are walking on. Wildlife- be alert when driving. Proper PPE on the job site. Driving, pay attention to road conditions and signs. 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. Also high winds 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: Sunny. Wind northwest 20 km/h gusting to 40. High plus 5. UV index 2 or low. Keep all areas of work clean and gravel roads travelled as well.

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 where we will go to monitor areas. SSKP 908+000 Souris River HDD section was being coated and the wing sections was being welded. While I was making my way to the wetlands area towards MB-1039. On 46 N between Rd # 30 & 31 a small front-end loader with a forklift attachment was leaking oil while driving down the gravel road. By the time he stopped he left a trail of oil about 600 m long. It's hard to detect leaks because its noisy in the cab. I once worked for Banister and was operating a D6 Dozer plowing snow on ROW and I left a trail about 1 km on top of snow from transmission fluid. As what happened today the indicator doesn't go off in cab till really low levels. It would be nice one day if they invented a device to indicate if your losing fluid more than normal to reduce the amount of spills on environment. SSKP 817+472 Tie in crew setting up pipe in trench so they can begin welding also working in MB-1039 Semi-Permanent Marsh Class 4 Wetland Complex. SSKP 818+347 Lots of water in trench. Workers on both sides of ditch using rope to lower water pump to drain water. There was also hotline in area that they'll have to get pipe under once they maintain water levels to low. The plug will have to be pulled and then line up pipe to make weld. Do their first weld then make a cut to finish off tie in. SF # 52 West walked down to the wildlife feature leopard frogs. ID # WF-112. Over winter months October to march hibernation period. Location north of the ROW KP-886+900. Thin layer of ice on the pond. Frost on the marsh cattails. SF # 53 West frost and thin layer of ice on the pond. Wetlands MB-110. KP-886+600. Semi-permanent marsh Class 4. Wetlands complex. No activity. SF # 53 East walked down the ROW checked for oil gas garbage. No concerns.

Work Forecast: Day off tomorrow get rest. Continue to monitor sensitive areas on Monday.

Photos of Sites Visited & Topics Discussed This Week



Oct 15/18 Description & Location KP- 884+072
Photo taken west.
Grater waiting for workers to blow any debris that is on machine before it can cross road at SF 51



Oct 15/18 Description & Location KP- 818+856
Photo taken facing east.
Parked snow cat checked for oil & leaks.



Description & Location: SSKP 864+667

Stringing crew
Offloading pipe on ROW
Conditions on ground were frozen
Facing Northwest



Description & Location: SSKP 863+250

Bending crew
Bending section of pipe close to Heritage
Conditions on ground were frozen



Description & Location: SSKP 828+550

Buffer Mulch & Coating repair crews
Mulching the ROW
Repairing indications on pipe
Facing northeast



Description & Location: SSKP 907+650

Souris River HDD section
Hydro vac trucks hooked up taking fluid
Conditions on ROW slippery from melting

OCTOBER 16, 2018

Photo



Description & Location KP- 826+332.7

Photo taken facing east.
Hydro seeding mulcher workers spreading the mulch.

Lat / Long (NE) 15-17-9-25-W1 UTM N/E
753423 89 m South 661 m West 5512833 m
835623 Bearing: 295° (TN) GPS: ±5 m 367778 m
438 m October 16, 2018 10:22:48 CM: -99



Description & Location: SSKP 818+250

Wetlands crew
Digging up wetlands for trench
Side booms standing by to lower in
Facing northwest

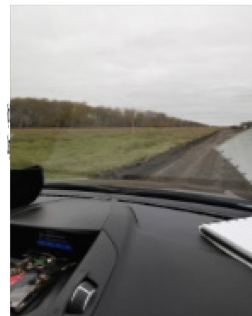
Lat / Long (SW) 3-32-7-18-W1 UTM N/E
49.608259 207 m North 439 m East 5495455 m
99.887116 Bearing: 287° (TN) GPS: ±5 m 435908 m
Elev: 430 m October 16, 2018 13:11:21 CM: -99



Description & Location: SSKP 892+900

Access and Grade crew
Grade stripping topsoil
Access building wetland ramp
Facing west

Photo



Description & Location KP-863+371.9

Photo taken east.
Moose running north side off the buffer zone.

Lat / Long (NE) 15-34-8-24-W1 UTM N/E
49.709145 69 m South 589 m West 5507604 m
-100.652569 Bearing: 48° (TN) GPS: ±5 m 380855 m
Elev: 434 m October 16, 2018 11:04:24 CM: -99



Description & Location: SSKP 835+900

Coating crew
Painters coating welds
Working in wetlands
Photo facing northeast



Description & Location: SSKP 892+700

Bonaparte's Gull bird
Flying looking for worms to eat on ROW
Stripping crew helped them with food
Facing south

OCTOBER 17, 2018

Photo



Description & Location KP 829+253

Photo taken facing east
Photo of the wetlands
No concerns

Lat / Long (NW) 12-36-8-24-W1 UTM N/E
49.705246 499 m South 75 m East 5507119 m
-100.620225 Bearing: 321° (TN) GPS: ±5 m 383177 m
Elev: 431 m October 17, 2018 08:24:28 CM: -99



Description & Location: SSKP 838+200

Coating Mainline
Holiday detector (Orange) & Calibrator
Making verification on detector
Facing northwest

Lat / Long (SW) 6-25-7-18-W1 UTM N/E
49.597291 617 m North 487 m East 5494161 m
-99.795719 Bearing: 68° (TN) GPS: ±5 m 442499 m
Elev: 408 m October 17, 2018 13:30:56 CM: -99



Description & Location: SSKP 899+760

Black Creek HDD section
Clearing out water with pig
Grade crew working east of this location
Facing north

Photo



Description & Location KP 865+167

Photo taken facing south
Side booms moving the pipe
Welders to start the welding.

Lat / Long (NW) 12-36-8-24-W1 UTM N/E
49.705366 486 m South 40 m East 5507134 m
-100.620709 Bearing: 113° (TN) GPS: ±5 m 383143 m
Elev: 433 m October 17, 2018 08:48:50 CM: -99



Description & Location: SSKP 838+200

Coating Mainline
My friend blasting a repair on weld
The hardest job in pipeline sandblasting
Facing east

Lat / Long (SW) 3-30-7-17-W1 UTM N/E
49.594315 288 m North 561 m East 5493812 m
-99.771788 Bearing: 300° (TN) GPS: ±5 m 444224 m
Elev: 403 m October 17, 2018 13:17:20 CM: -99

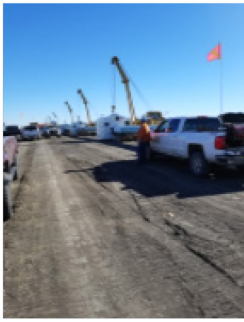


Description & Location: SSKP 901+510

MB-129 Seasonal marsh Class 3
Indigenous plants in area
Bulrush and Grandfather's Beard
Facing west towards Black Creek

OCTOBER 18, 2018

Photo



Description & Location KP-868+875

Photo taken facing east
Observing pipe gang welding

Photo



Description & Location KP-817+741.1

Photo taken facing south
Side booms placing the pipe into trench
Tie in crew will weld once in clamps



Description & Location: SSKP 850+000

Bores and Test crew
Installing trench box and pounding plates
Plates to support trench box
Facing east



Description & Location: SSKP 849+760

Richardson's Ground Squirrel
Resting by skid pipe under pipe
Was curious critter came towards me
Facing north



Description & Location: SSKP 828+000

Lowering In crew
Lowering in section into trench
Water in trench from wetland
Facing east



Description & Location: SSKP 843+925

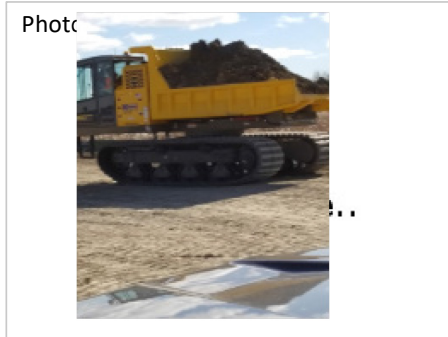
Coating Mainline
Tie-in coating truck stuck in sand
Rigging up slings Dozer pulled truck out
Facing west

OCTOBER 19, 2018



Description & Location KP-888+400

Photo taken facing east.
Wetlands seasonal marsh class 3 marsh.



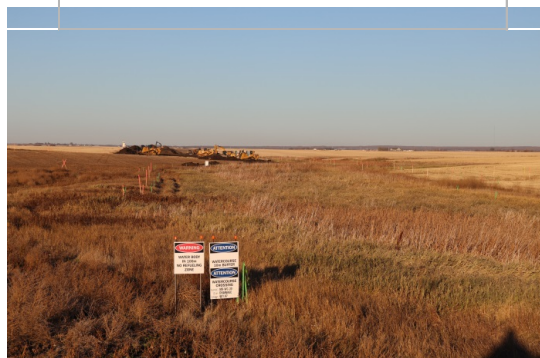
Description & Location KP- 829+400

Photo taken facing south
Nodwell hauling soil to wetlands ramps



Description & Location: SSKP 889+240

Access crew
Building wetland ramps in two areas
MB-115 & MB-116 wetlands
Facing east



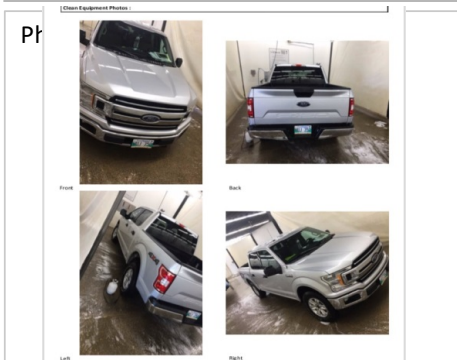
Description & Location: SSKP 902+160

Watercourse Drainage MB-WC30
Grade Crew in top of picture
Wetland ramp to be built tomorrow
Facing west, will monitor tomorrow



Description & Location: SSKP 888+000

Grade Crew
Stripping and pushing topsoil
Also in wetlands MB-113 & MB-114
Facing east



Description & Location: Car Wash Brandon

New truck disinfected and clean
Good for ROW driving
Old truck was recalled switched vehicles

OCTOBER 20, 2018

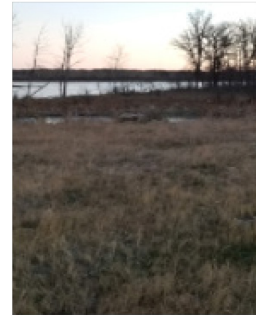
Photo



Description & Location KP-886+600

Photo taken facing north.
Ice and frost on pond and surrounding area.
No activity.

Photo



Description & Location & KP-886+900

Photo taken facing north.
Frost and thin layer of ice pond. No activity.



Description & Location: 908+000

Souris River HDD section
Coating on right coating HDD section
Welders on Left welding wing section
Facing west



Description & Location: 46N by Road # 30

Small front end loader
Leaking oil on gravel road
Operator didn't know he was leaking
Facing west



Description & Location: SSKP 817+472

Tie In crew
Getting lined up to make cut on pipe
Tie in once cut is made
Facing southwest



Description & Location: SSKP 818+347

Tie In crew
Preparing bell hole for welding tie in
Lots of water and unstable trench walls
Facing east

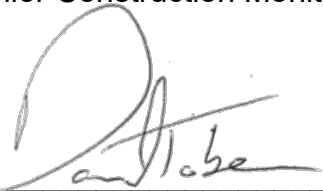
APPROVALS



Lee Bear
Senior Construction Monitor

January 14, 2019

Date



Daniel Tober
Senior Environmental Scientist

January 14, 2019

Date