

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

INDIGENOUS CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 7

DECEMBER 10TH TO DECEMBER 15TH

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 December 10th to December 15th, 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	December 13, 2018: Wetland area MB-1034 semi-permanent marsh (class		

		4) Wetland area MB- 1049 seasonal marsh (class 3), Wetland area MB - 053 ephemeral / temporary marsh (class 1 / class 2) Wetland area MB- 054 semi-permanent marsh (class 4);		
		December 14, 2018: Wetland crossing MB - 115 seasonal marsh (class 3). Wetland crossing MB - 117 ephemeral / temporary marsh (class 1 / class 2). Wetland crossing MB - 114 ephemeral / temporary marsh (class 1 / class 2).		
		December 15, 2018: Wetland area MB - 092 semi-permanent marsh (class 4) wetland complex; Wetland crossing MB - 093 temporary marsh (class 2). This wetland area is going to be a seed mix area; Wetland crossing MB - 094 broadleaf treed swamp.		
Watercourse Crossing	N/A			

Additional Observations and Summary of Activities or Concerns

On December 10th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site; High minus 9. Wind chill minus 24 in the morning and minus 14 in the afternoon, UV index 1 or low; RD# 2 (SSKP 808 + 837) Monitor banister cleaning ice out of the ditch between the Enbridge corridor and road 2; RD# 26 (SSKP 837 + 500) Banister cleaning ice out of the ditch at sf 26. The ice has to be removed before they could start to backfill the ditch. The ice could cause the pipe to shift; RD# 28 (SSKP 842 + 300) Monitor banister hauling pre-existing containment soil from the archaeology site east of 28; RD# 37 (SSKP 861 + 900) Banister cleaning crumb subsoil off the buffer mulch between SF 37 and 38 . Banister was also using a sweeper attached to a skid steer to clean the buffer once the crumb subsoil is removed. This sweeper is doing an amazing job to the buffer; RD# 51 (SSKP 884 + 200) Monitor banister backfilling the ditch at sf 51. Site is clean and organized.

On December 11th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site, stop at all railroad crossings. Have eye contact with equipment operator at all times, do not use cruise control on slippery roads and do not use your cell phone while driving; High minus 2. Wind chill minus 13 in the morning and minus 6 in the afternoon. Wind up to 15 km / h. Low minus 8; RD# 12 (SSKP 819 + 500) Monitor banister prepping sf 12 to install the bore pipe under the roadway. Banister was excavating the ditch and have also installed the trench box for safety precautions in the open ditch. Horizontal directional drilling will be reaming a 30" hole under the roadway. The pipe is approximately 480 feet long to go under the roadway; RD# 28 (SSKP 849 + 800) Banister pumping water and welding from the bore section west of sf 29. Site is clean and organized; RD# 35 (SSKP 860 + 100) Banister has remove the crumb subsoil off the buffer mulch and clean up this buffer very nice. Banister is using a sweeper attach to a skid steer to sweep the buffer once the crumb subsoil is remove. Buffer is put back to its natural state; RD# 49 (SSKP 882 + 200) Banister lower in crew is between sf 49 and sf 50. The site is very clean and organized.

On December 12th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site, stop at all railroad crossings. Slow down in foggy conditions make sure all your lights are working; Buckle up your seatbelts before driving away. High minus 1, risk of freezing rain early in the afternoon. Wind becoming south 20 km /h gusting to 40 near noon, High plus 1. Wind chill minus 16 in the morning; RD# 32 (SSKP 853 + 600) Monitor banister at the open cut road at sf 32. Banister has located the bore pipe. Banister prepping to hook up and pull the bore pipe in place. Site is very clean and organized; RD# 38 (SSKP 863 + 500) Banister removing crumb subsoil of the buffer mulch at the archaeology site. Buffer back to its natural state. Archaeologists are also present at the Native Prairie site; RD#45 (SSKP 876 + 300) Monitor banister welding a tie-in at SF 45. Site is very clean and organized; RD# 49 (SSKP 883 + 300) Banister

backfilling at sf 49. Banister is also using a spotter for the excavator operator as they do the backfilling; RD# 50 (883 + 700) Monitor banister lower in crew at sf 50. Banister has completed lowering the pipe in the ditch. They are also backfilling the ditch.

On December 13th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site. Do a 360 walk around your vehicle before leaving for site. Do not use cruise control on slippery roads. Stop at all railroad crossings. Good house-keeping at all times. Make sure you have your boot cleats on they prevent you from slipping on ice. High -3. UV index 1 or low. Wind chill minus 17 in the morning and minus 9 in the afternoon. Wetland area MB-1034 semi-permanent marsh (class 4) Wetland area MB-1049 seasonal marsh (class 3), Wetland area MB - 053 ephemeral / temporary marsh (class 1 / class 2) Wetland area MB- 054 semi-permanent marsh (class 4); RD# 2 (SSKP 809 + 400) Monitor banister backfilling the ditch north of sf 2. Site is very clean and well organized; RD# 2 (SSKP 810.26 + 810.91) Banister did a good job of digging up the wetland between sf 2 and sf 3. Wetland MB-1049 semi-permanent marsh (class 4); RD# 26 (SSKP 836 + 600) Monitor banister did a good job of cleaning and levelling next to the wetland. This wetland area is a MB-1049c seasonal marsh (class 3); RD# 27 (SSKP 838 + 900 to 841 + 100) Banister access crew packing frost in between the wetlands. These wetlands area are MB- 053 ephemeral/temporary marsh (class 1/ class 2). This wetland area will be a seed mix area. The second wetland area is a MB- 054 semi-permanent marsh (class 4).

On December 14th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site. Do a 360 walk around your vehicle before leaving for site. Do not use cruise control on slippery roads. Stop at all railroad crossings; High plus 3. UV index 1 or low. Wind west 20 km/ h becoming light this morning. Wetland crossing MB - 115 seasonal marsh (class 3). Wetland crossing MB - 117 ephemeral / temporary marsh (class 1/ class 2). Wetland crossing MB - 114 ephemeral / temporary marsh (class 1/ class 2); RD# 52 (SSKP 888.36 to 888.39) Wetland crossing MB - 114 ephemeral / temporary marsh (class 1 / class 2). This wetland area will be a seed mix area; RD# 52 (SSKP 889 to 890.32) Re-assess wetland crossing MB - 115 seasonal marsh (class 3). No disturbance was done to this wetland; RD# 53 (SSKP 890 + 500) Monitor banister backfill crew at sf 53. Banister is also using a spotter for the excavator operator to do the backfilling of the ditch. Site is clean and organized; RD# 53 (SSKP 890.28 to 890.32) re- assess wetland crossing MB - 117 ephemeral / temporary marsh (class 1 / class 2); This wetland area will be a seed mix area.

On December 15th, Medics camp 1-780-329-9183. Virden Hospital (204) 748-1230. Don't use cruise control on slippery roads. Do a 360 walk around your vehicle before leaving for site. Do a 360 walk around your vehicle before leaving for site. Do not use cruise control on slippery roads. Stop at all railroad crossings; Wetland area MB - 092 semi-permanent marsh (class 4) wetland complex; Wetland crossing MB - 093 temporary marsh (class 2). This wetland area is going to be a seed mix area; Wetland

crossing MB - 094 broadleaf treed swamp; RD# 38 (SSKP 863 + 700 to 864 + 400) Re - assess where banister have remove crumb subsoil off the buffer mulch between sf 38 to sf 39. Banister did a very good of removing the subsoil. This buffer is back to its natural state; RD# 38 (SSKP 864.21 + 864.46) Re- assess wetland area MB - 092 semi-permanent marsh (class 4) wetland complex; RD# 38 (865.14 + 865.16) Re-assess wetland area MB - 093 temporary marsh (class 2).This wetland area is a seed mix area; RD#39 (865.14 + 865.16) Re - assess wetland area MB - 094 broad leaf treed swamp. No disturbance done to the wetland; RD# 56(SSKP 894 + 400) Monitor banister backfilling at sf 56 and sf 57.Site is very clean and organized; RD# 57 (SSKP 894 + 900) Monitor banister lowering-in the pipe between sf 57 and sf 58.Site is clean and very organized.

Photos of Sites Visited & Topics Discussed This Week

December 10, 2018



RD# 2 (SSKP 808 + 837)

Banister backfilling at sf 2
Photo taken facing south



RD# 26 (SSKP 837 + 500)

Banister cleaning out the ice sf 26
Photo taken facing west



RD#28 (SSKP 842 + 300)

Banister at sf 28
Banister hauling pre-existing containment
soil
Photo taken facing west



RD# 37 (SSKP 861 + 900)

Banister cleaning crumb subsoil off the
buffer mulch between sf 37 and sf 38
Photo taken facing east

December 11, 2018



RD# 49 (SSKP 882 + 200)

Banister lower in crew sf 49
 Photo taken facing east



RD# 28 (SSKP 849 + 800)

Banister tie- in crew sf 28
 Photo taken facing west



RD#12 (SSKP 819 + 500)

Banister prepping sf 12
 Horizontal Directional Drilling going to
 ream
 30" hole for the bore pipe under the road
 Photo taken facing east



RD#35 (SSKP 860 + 100)

Banister removing crumb subsoil sf 35
 Photo taken facing east

December 12, 2018



RD# 32 (SSKP 853 + 600)

Banister open cut road sf 32
Photo taken facing west



RD# 38 (SSKP 863 + 500)

Banister removing crumb subsoil at sf 38
Heritage Resource # 160 Native
Prairie
Photo taken facing east



RD# 45 (SSKP 876 + 300)

Banister welding a tie-in SF 45
Photo taken facing east



RD# 49 (SSKP 883 + 300)

Banister backfilling at sf 49
Banister using a spotter
Photo taken facing north

DECEMBER 13, 2018



RD# 2 (SSKP 809 + 400)

Banister backfilling sf 2
Photo taken facing north



RD# 2 (SSKP 810.26 + 810.91)

Wetland area MB-1034, Semi- permanent
marsh (class 4). Photo taken facing north



RD# 26 (SSKP 836 + 600)

Banister leveling next to the wetland
Wetland area MB- 1049, seasonal marsh (class
3). Photo taken facing south



RD# 27 (838+ 900 to 841 + 100)

Banister backing frost by the wetlands MB-053 ephemeral / temporary marsh (class 1 / class 2). Photo taken facing east

DECEMBER 14, 2018



RD# 52 (SSKP 889 + 300)

Wetland crossing MB - 115
Seasonal marsh (class 3)
Photo taken facing west



RD# 53 (SSKP 890.28 +890.32)

Wetland crossing MB - 117
Ephemeral / temporary marsh (class 1/
2)
This wetland area going to be seed



RD# 53 (SSKP 890 + 500)

Banister backfilling at sf 53
Photo taken facing east



RD#52 (SSKP 888.36 + 888.39)

Wetland crossing MB - 114
Ephemeral / temporary marsh (class 1/
2)
This wetland area going to be seed mix

DECEMBER 15, 2018



RD# 38 (SSKP 864.21 to 864.46)

Wetland area MB - 092
Semi permanent marsh (class 4)
Photo taken facing north



RD# 38 (SSKP 863 + 700 to 864 + 400)

Banister remove crumb subsoil sf 38
The buffer back to it's natural state
Photo taken facing east



RD#39 (SSKP 865 + 200)

Wetland crossing MB - 094
Broad leaf treed swamp
Photo taken facing west



RD#38 (SSKP 865.14 +865.16)

Wetland MB-093
Temporary marsh (class 2)
This wetland area going to be a sed mix area

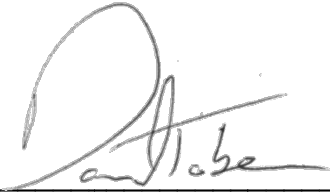
APPROVALS



Arnold Breland
Construction Monitor

January 14, 2019

Date



Daniel Tober
Senior Environmental Scientist

January 14, 2019

Date