

S D E
E ES I



Parks Canada

Parcs Canada

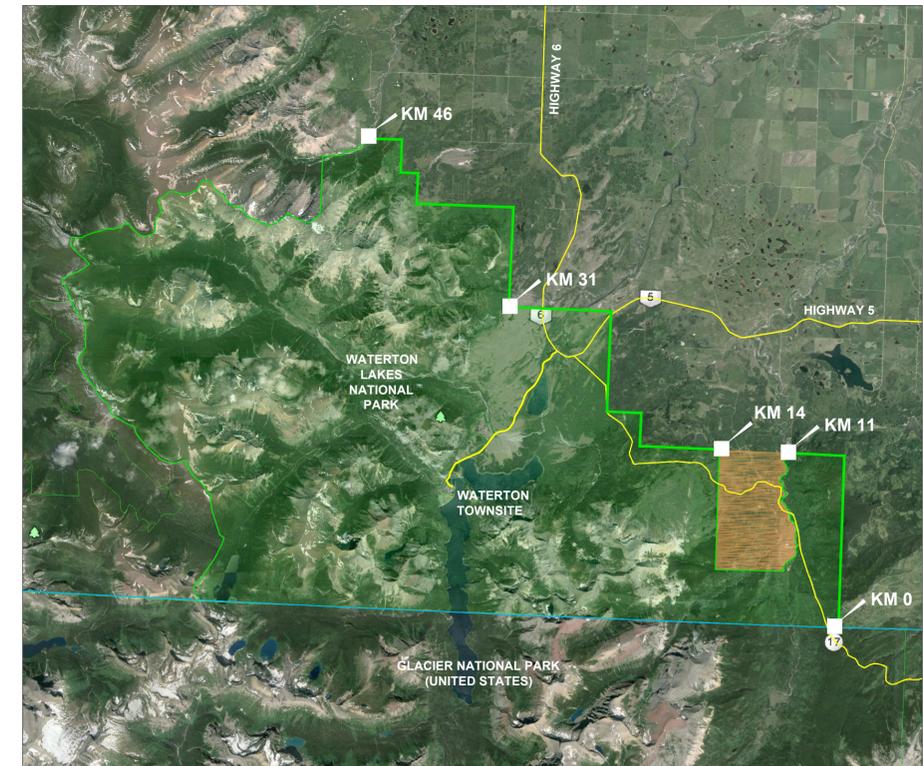
63 D E E I I I I I I I I

ISSUED FOR TENDER

LIST OF PROJECT DRAWINGS

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0001	ESS
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E0001	M S 1 13
E0002	M S 2 13
E0003	M S 3 13
E0004	M S 4 13
E0005	M S 5 13
E0006	M S 6 13
E000	M S 13
E0008	M S 8 13
E000	M S 13
E0010	M S 10 13
E0011	M S 11 13
E0012	M S 12 13
E0013	M S 13 13
E DE	
0001	E DE 1
0002	E DE 2

LIST OF REFERENCE DRAWINGS



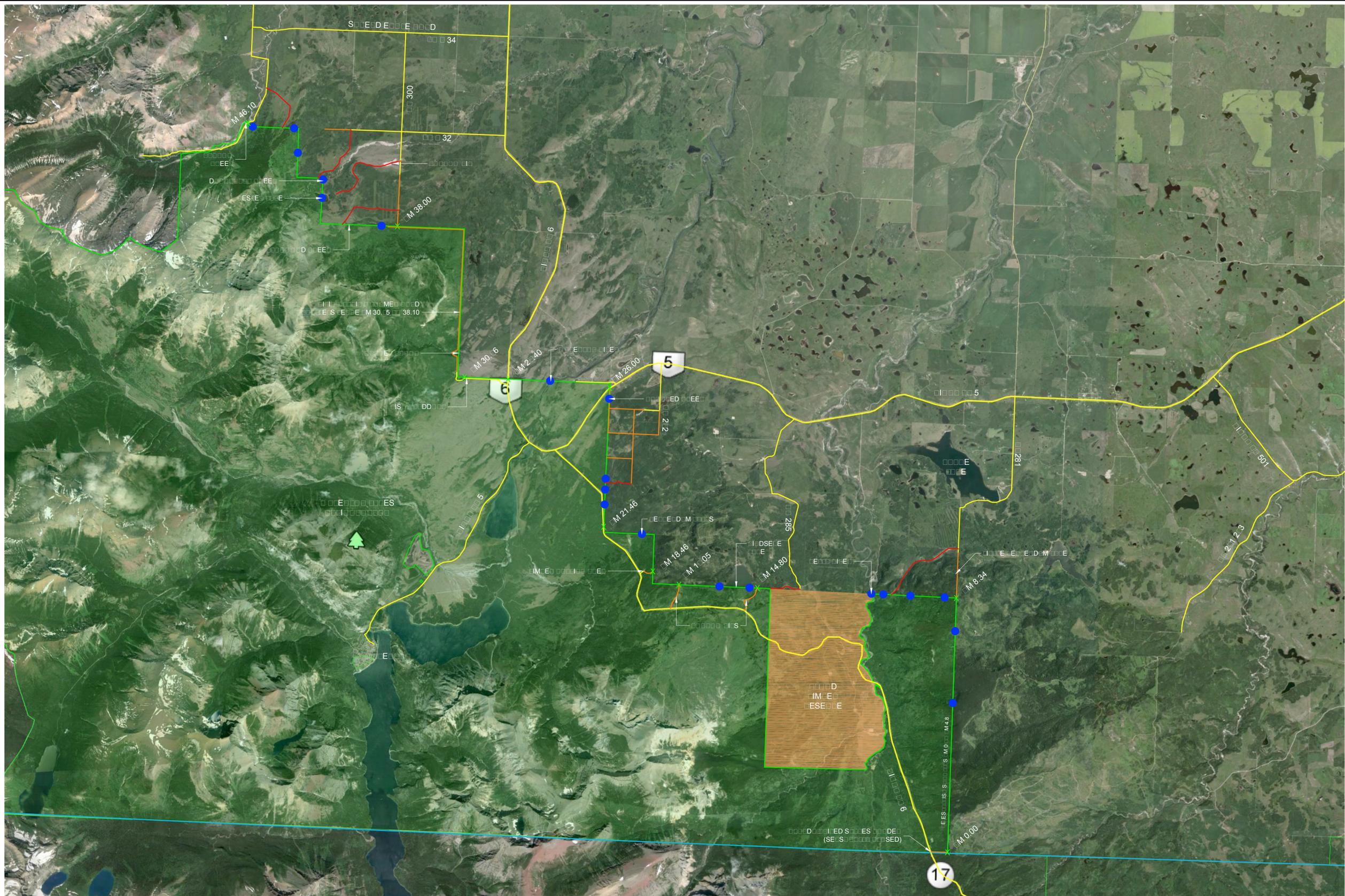
KEY PLAN

Issue Date: June 1, 2016



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D SIZE 22 x 34" (558.8mm x 863.6mm)
 PLOT: 5/20/2016 10:09:16 AM BY: LEONHARDT, KENN
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- LEGEND**
- NATIONAL PARK BOUNDARY
 - DEVELOPED ROADWAY
 - UNDEVELOPED ROAD ALLOWANCE
 - POTENTIAL PRIVATE ACCESS ROUTE
 - X KNOWN ACCESS POINT
 - NON-PASSABLE OBSTACLE TO MECHANICAL EQUIPMENT

NOTES

THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY, AND HAS BEEN PREPARED BASED ON PUBLICLY AVAILABLE INFORMATION.

ROUTES AS SHOWN ARE CONTINGENT ON MAKING APPROPRIATE ARRANGEMENTS WITH LAND OWNERS, ROAD AUTHORITIES, AND OTHER GOVERNING BODIES AS APPLICABLE. SOME ROUTES AS SHOWN MAY NOT BE ACCEPTABLE.

KNOWN ACCESS POINTS ARE ROUTES THAT HAVE BEEN USED FOR PERIODIC ONGOING NON-MECHANICAL FENCE MAINTENANCE THAT PASS ONLY THROUGH PUBLIC LANDS. THERE IS EVIDENCE OF OTHER PRIVATE ACCESS POINTS BEING USED DURING PAST EXTENSIVE BRUSHING/FENCING ACTIVITIES THAT USED MECHANICAL EQUIPMENT.

NON-PASSABLE OBSTACLES TO MECHANICAL EQUIPMENT ARE MAJOR FEATURES SUCH AS RIVERS, CREEKS, LAKES, STEEP SLOPES, LARGE WETLANDS, AND SO FORTH WITHOUT A PRE-EXISTING SHOOFLY WITHIN THE PARK BOUNDARY. THESE POINTS ARE FOR GUIDANCE ONLY, AS SOME MECHANICAL EQUIPMENT MAY BE CAPABLE OF WORKING THROUGH THESE AREAS, WHILE OTHER EQUIPMENT MAY FIND ADDITIONAL AREAS CHALLENGING THAT HAVE NOT BEEN EXPLICITLY LABELED.

ALL WORK MUST BE DONE IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES TO MITIGATE ENVIRONMENTAL IMPACTS OF CONSTRUCTION ACTIVITIES.

Parks Canada Agency
 763 - Waterton Boundary Fence Rehabilitation
Fence Access Routes

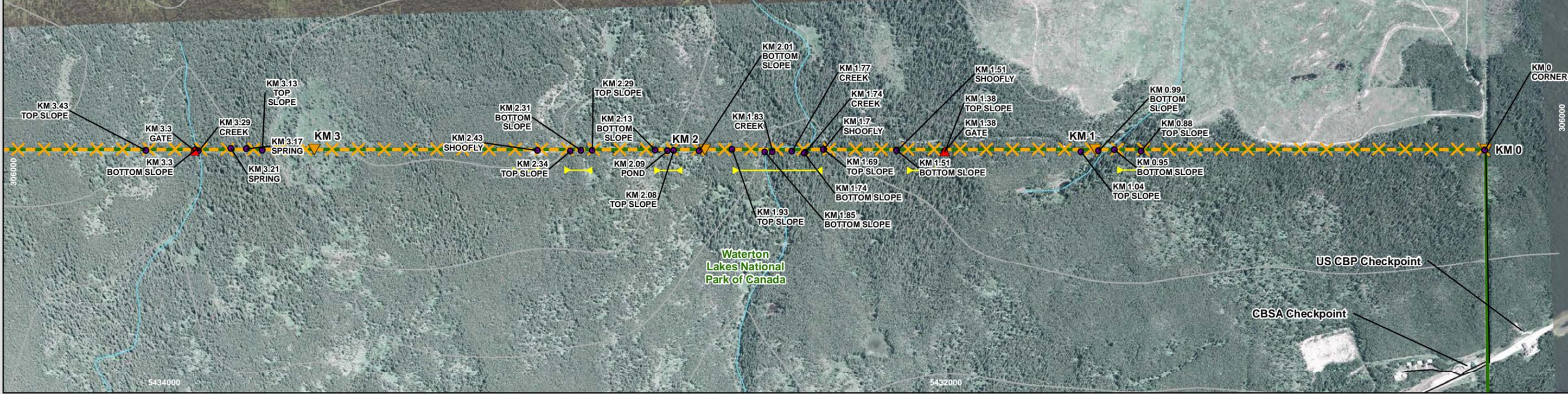


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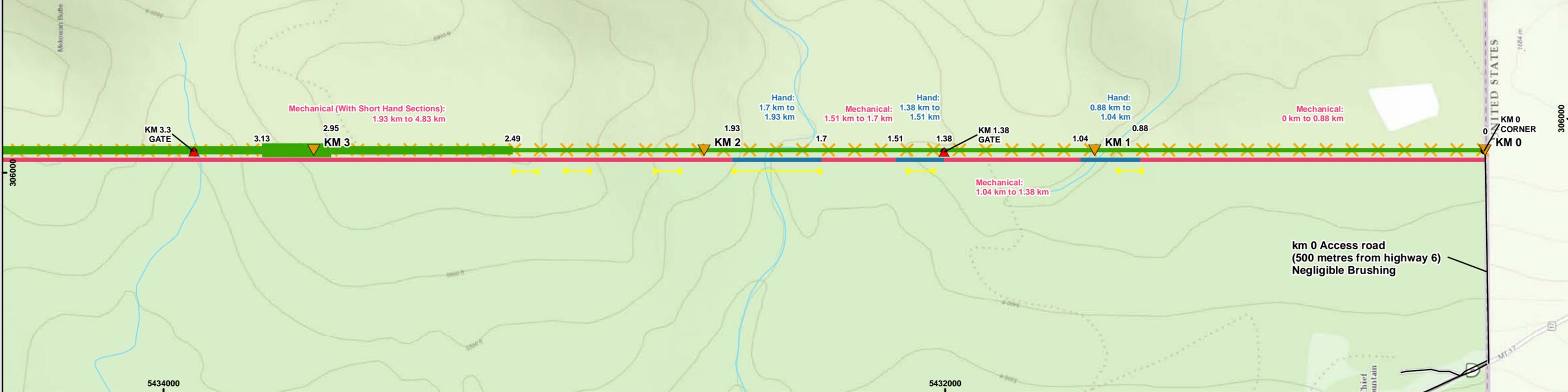
AECOM Project # 60485867
G0001

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 Scale is referenced to the specified paper size.
 Date Revised: July 07, 2016
 Prepared By: leeds1
 Reviewed By: MM
 Paper Size: 11"x17"

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Legend

- ▲ Gate Location
- GPS Field Observation
- ▼ KM Markers
- Access Road
- Fence Replacement
- Parks and Protected Area
- Main Road
- Watercourse (GIS)
- Contour (100m Index)
- Hand Brushing Area
- Mechanical Area
- Brushing Condition
 - Heavy
 - Moderate
 - Light
- ↔ Existing Shoofly (Detour)

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing
- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest
- Information is for guidance only and work is to be done in accordance with the Best Management Practices.
- Existing shooflies enable access up to km 4.83

Overview Map

Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet

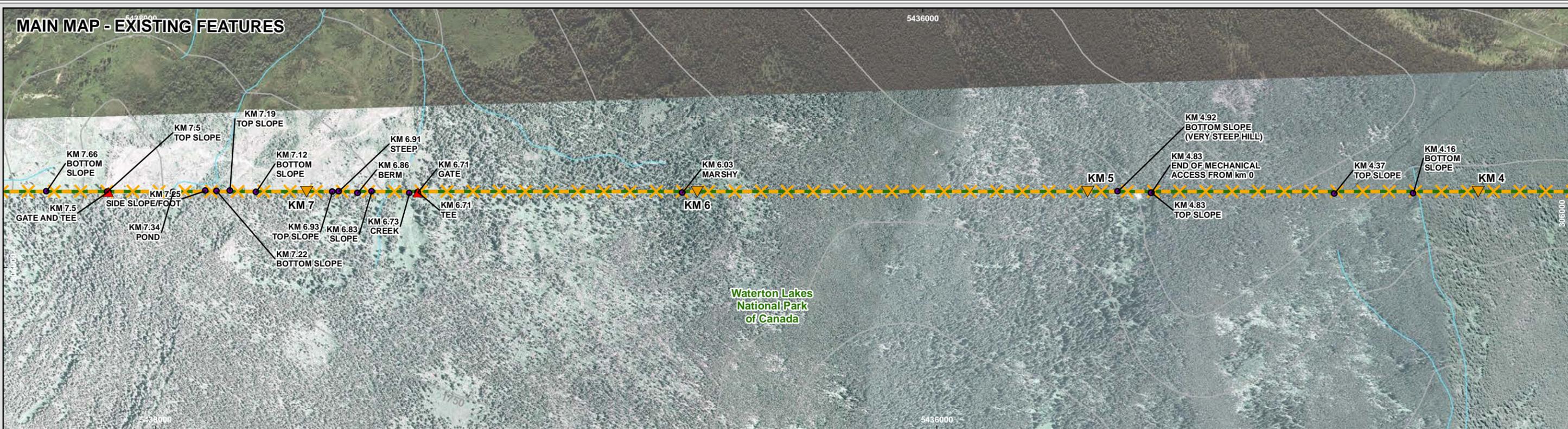
07 July 2016

AECOM

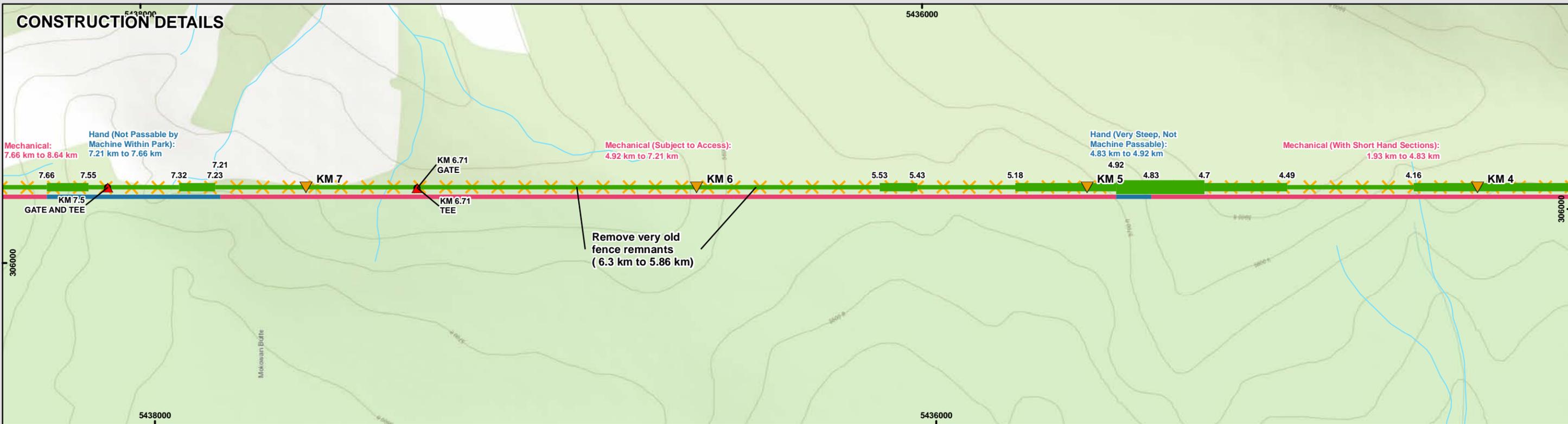
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 Prepared By: leeds1
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MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

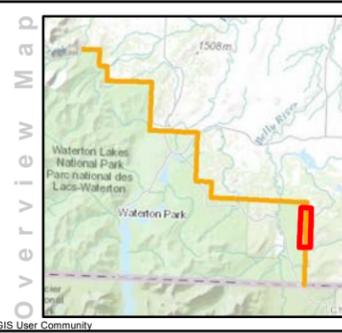
Legend

- ▲ Gate Location
- GPS Field Observation
- ▼ KM Markers
- ✕ Fence Replacement
- ▭ Parks and Protected Area
- Watercourse (GIS)
- Contour (100m Index)
- ▭ Hand Brushing Area
- ▭ Mechanical Area
- Brushing Condition**
- ▭ Heavy
- ▭ Moderate
- ▭ Light

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 -Existing shooflies enable access up to km 4.83



Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

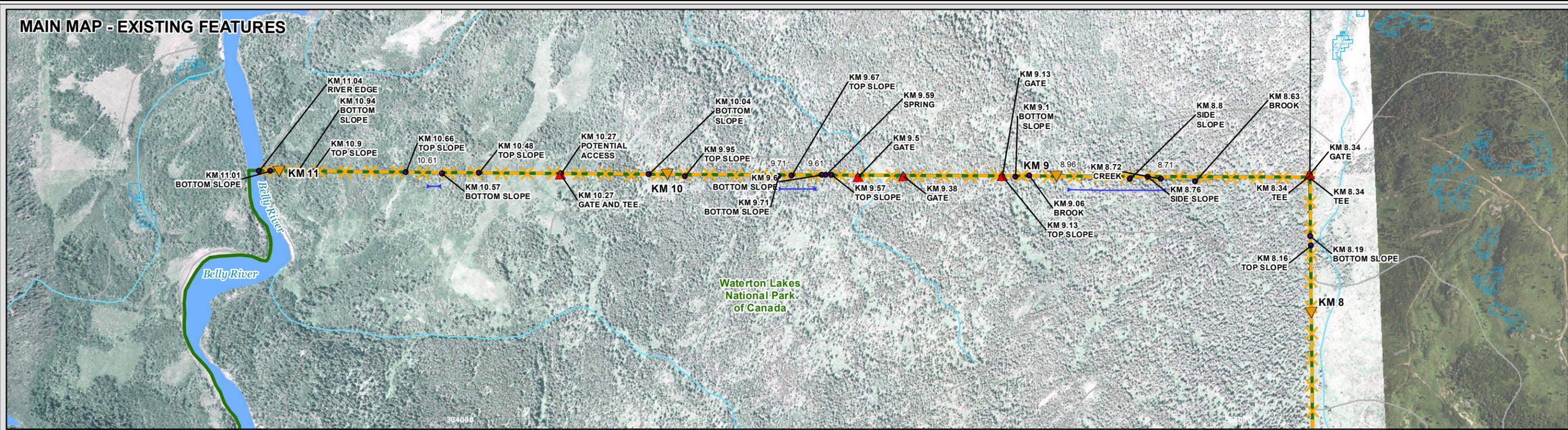
Environmental Alignment Sheet

07 July 2016

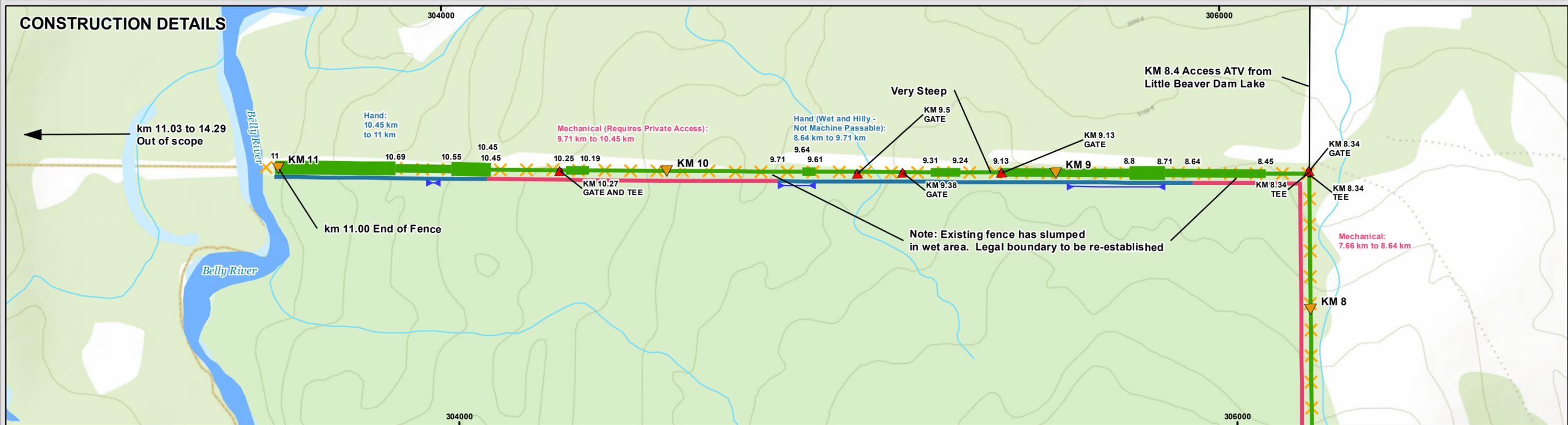
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 Scale is referenced to the specified paper size.
 Date Revised: July 07, 2016
 Prepared By: yuf3
 Reviewed By: MM
 Paper Size: 11"x17"

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Legend

- ▲ Gate Location
- GPS Field Observation
- ▼ KM Markers
- Access Road
- ✂ Fence Replacement
- ▭ Parks and Protected Area
- Watercourse (GIS)
- ▭ Wetland (GIS)
- ▭ Waterbody (GIS)
- Contour (100m Index)
- ▭ Hand Brushing Area
- ▭ Mechanical Area
- ▭ Light
- ▭ Wetland (Observed)

Brushing Condition

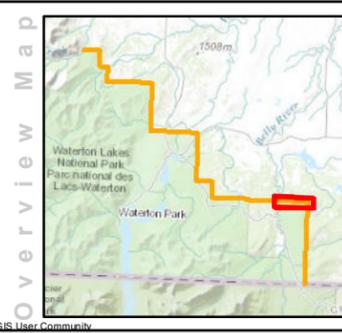
- ▭ Heavy
- ▭ Moderate

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing
- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface

-Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest

-Information is for guidance only and work is to be done in accordance with the Best Management Practices.



Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet

07 July 2016

AECOM

E0003

File Location: E:\GIS\GIS_pro\12016\Waterton Environmental Alignment Sheet\Fig-2016-06-01-EnvironmentalAlignmentSheetNoArch-60485667-010.mxd
 Date Revised: July 07, 2016
 Prepared By: leeds1
 Reviewed By: MM
 Paper Size: 11"x17"
 Scale is referenced to the specified paper size.

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

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Gate Location	Parks and Protected Area	Contour (100m Index)	Light
GPS Field Observation	Main Road	Hand Brushing Area	Negligible
KM Markers	Watercourse (GIS)	Mechanical Area	Seasonally Underwater
Access Road	Wetland (GIS)	Brushing Condition	Wetland (Observed)
Fence Replacement	Waterbody (GIS)	Heavy	
		Moderate	

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
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- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface

- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where stumping has occurred. Do not disturb previously untouched ground or forest
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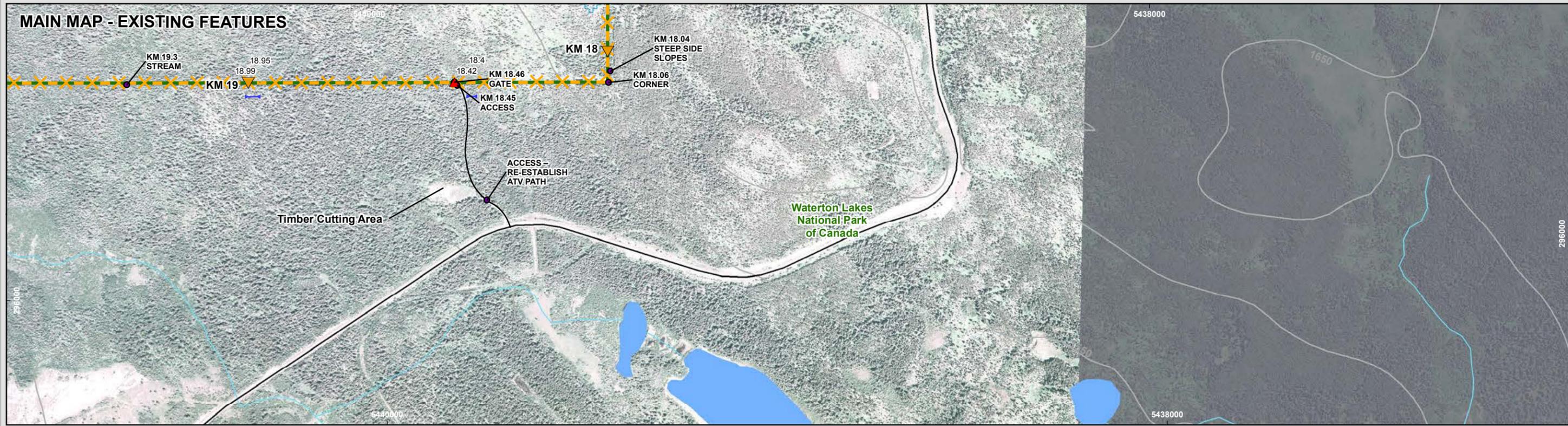
Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet
 07 July 2016

E0004

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 Date Revised: July 07, 2016
 Prepared By: leeds1
 Reviewed By: MM
 Paper Size: 11"x17"

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

Scale: 1:10,000
 NAD 1983 UTM Zone 12N

- Legend**
- ▲ Gate Location
 - GPS Field Observation
 - ▼ KM Markers
 - Access Road
 - X Fence Replacement
 - Parks and Protected Area
 - Main Road
 - Watercourse (GIS)
 - Wetland (GIS)
 - Waterbody (GIS)
 - Contour (100m Index)
 - Mechanical Area

- Brushing Condition**
- Moderate
 - ↔ Wetland (Observed)
- Notes**
- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
 - Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing

- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
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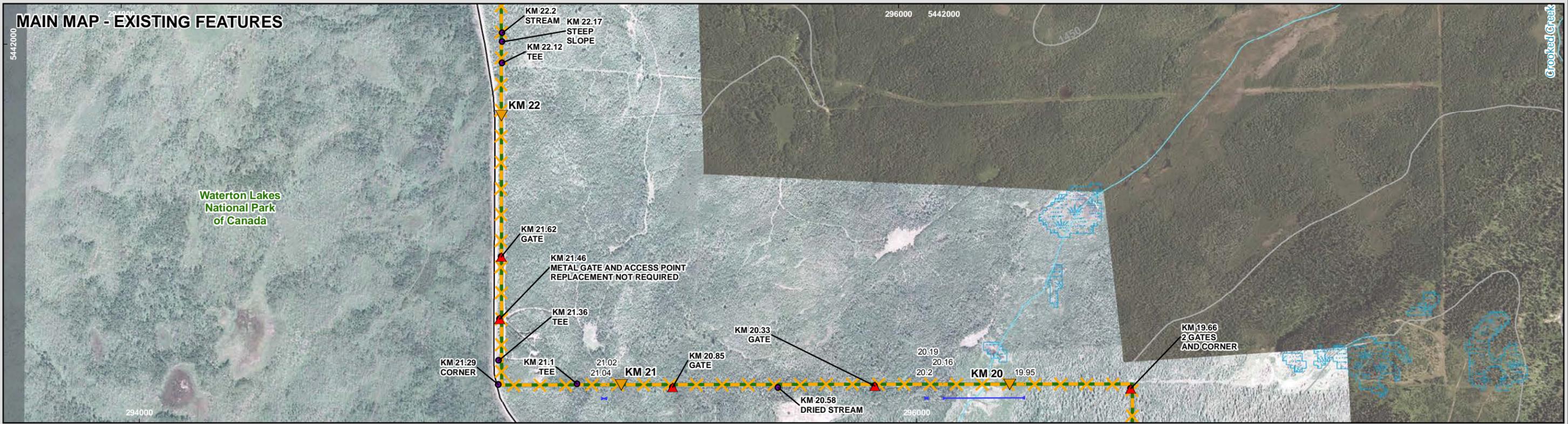
Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet
 07 July 2016

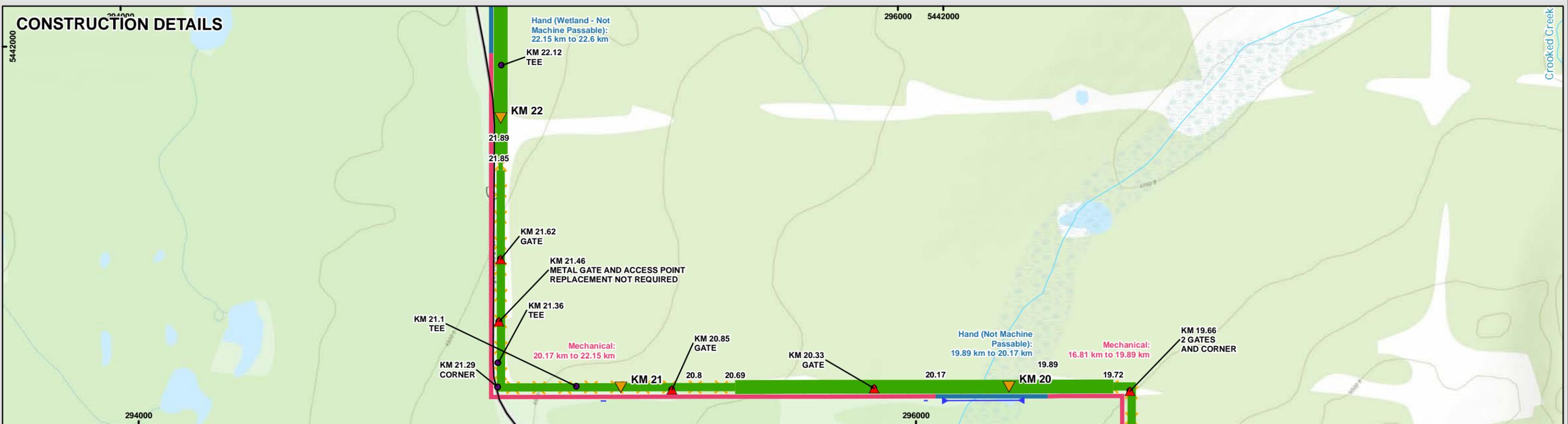
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 Date Revised: July 07, 2016
 Prepared By: leeds1
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MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Legend

- ▲ Gate Location
- GPS Field Observation
- ▼ KM Markers
- ✂ Fence Replacement
- ▭ Parks and Protected Area
- Main Road
- Watercourse (GIS)
- ▭ Wetland (GIS)
- Contour (100m Index)
- Hand Brushing Area
- Mechanical Area
- ▭ Moderate
- ▭ Light
- ▭ Wetland (Observed)

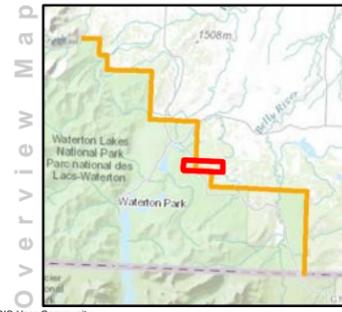
Brushing Condition

- ▭ Heavy

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing

- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest
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Boundary Fence Rehabilitation Project
Location: Waterton Lakes National Park, AB

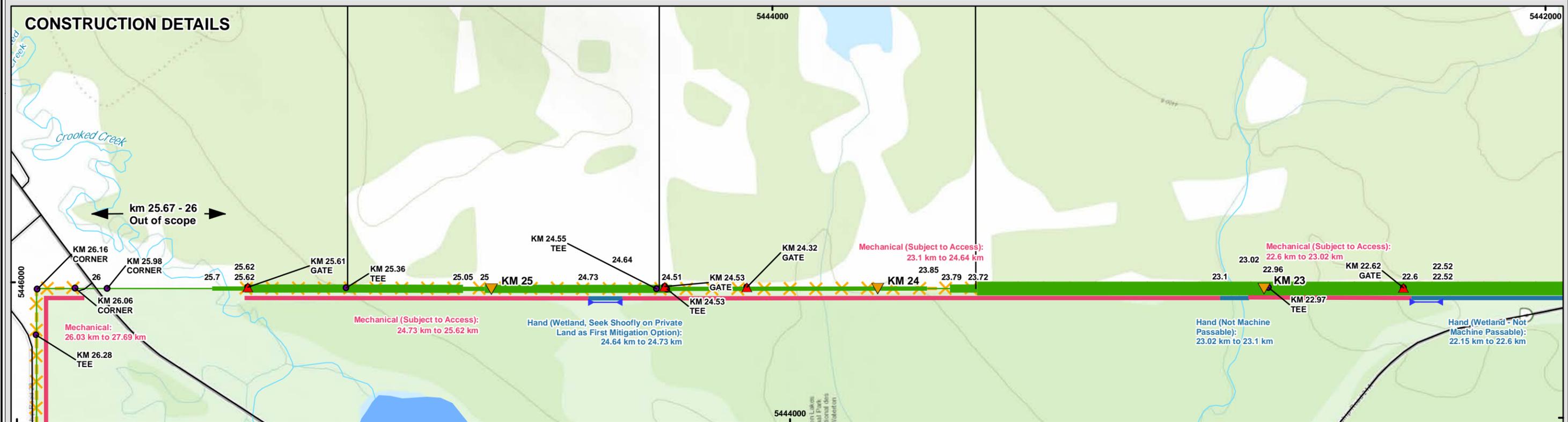
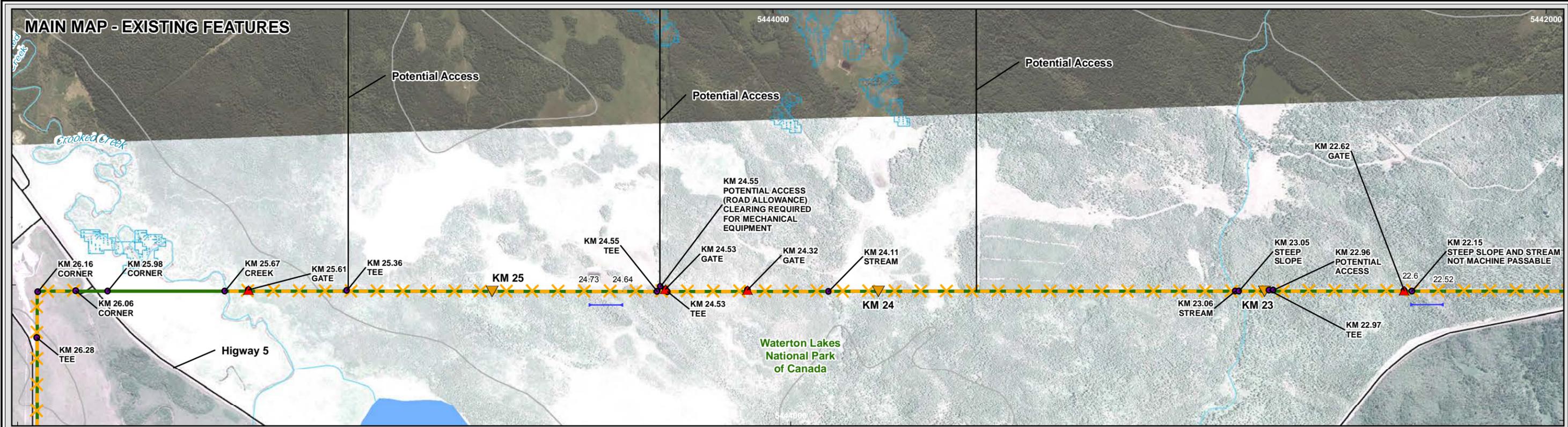
Environmental Alignment Sheet

07 July 2016

AECOM

E0006

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 Prepared By: leeds1
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Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from Aerial, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Legend

▲ Gate Location	Main Road	Heavy
● GPS Field Observation	Watercourse (GIS)	Moderate
KM Markers	Wetland (GIS)	Light
Access Road	Waterbody (GIS)	Negligible
Fence Replacement	Contour (100m Index)	Hand Brushing Area
Parks and Protected Area	Hand (Wetland - Not Machine Passable)	Wetland (Observed)
	Mechanical Area	

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing
- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
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Overview Map

Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

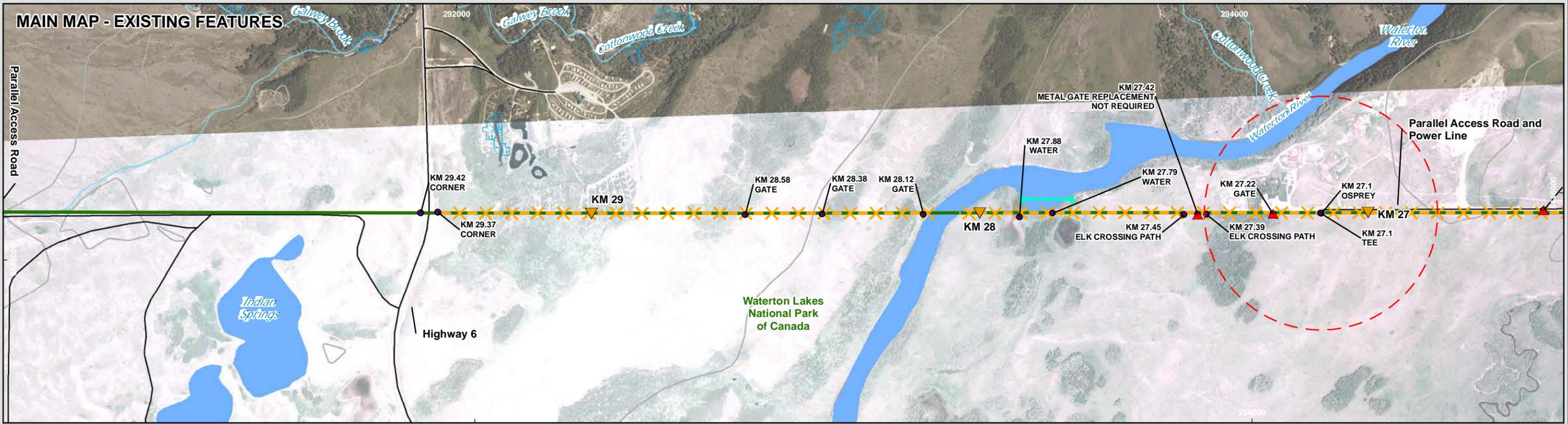
Environmental Alignment Sheet

07 July 2016

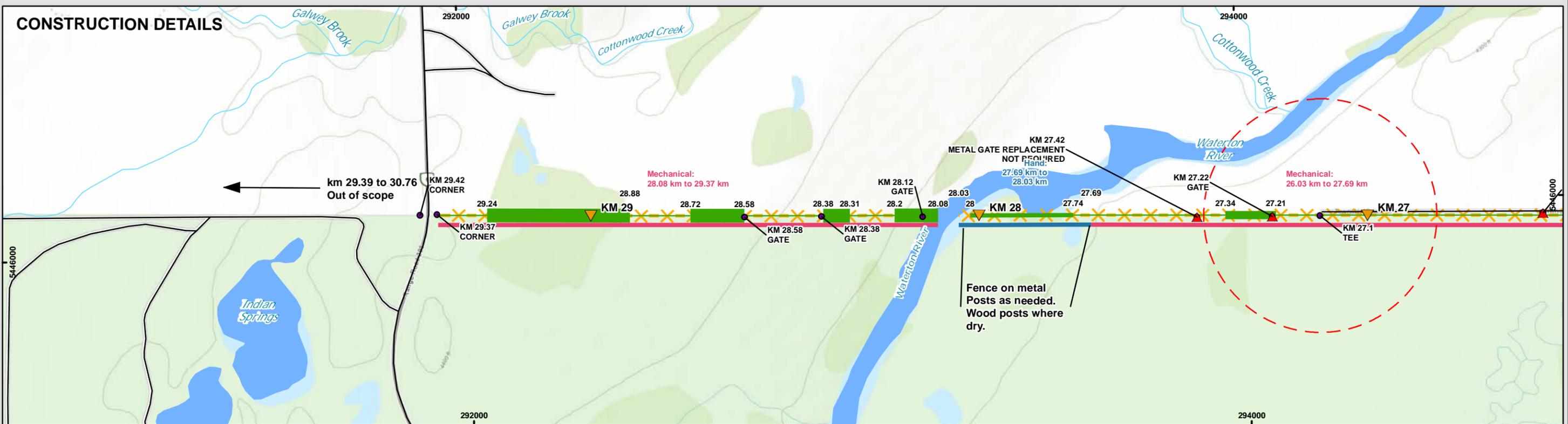
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MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

Scale: 1:10,000
 NAD 1983 UTM Zone 12N

Legend

Gate Location	Main Road	Heavy
GPS Field Observation	Watercourse (GIS)	Moderate
Osprey 300 m buffer	Wetland (GIS)	Light
KM Markers	Waterbody (GIS)	Negligible
Fence Replacement	Contour (100m Index)	Seasonally Underwater
Parks and Protected Area	Hand Brushing Area	Mechanical Area

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
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-No brushing or construction within 300 metres of the osprey nest during the migratory bird restricted activity period. Do not remove or alter nest.



Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet

07 July 2016

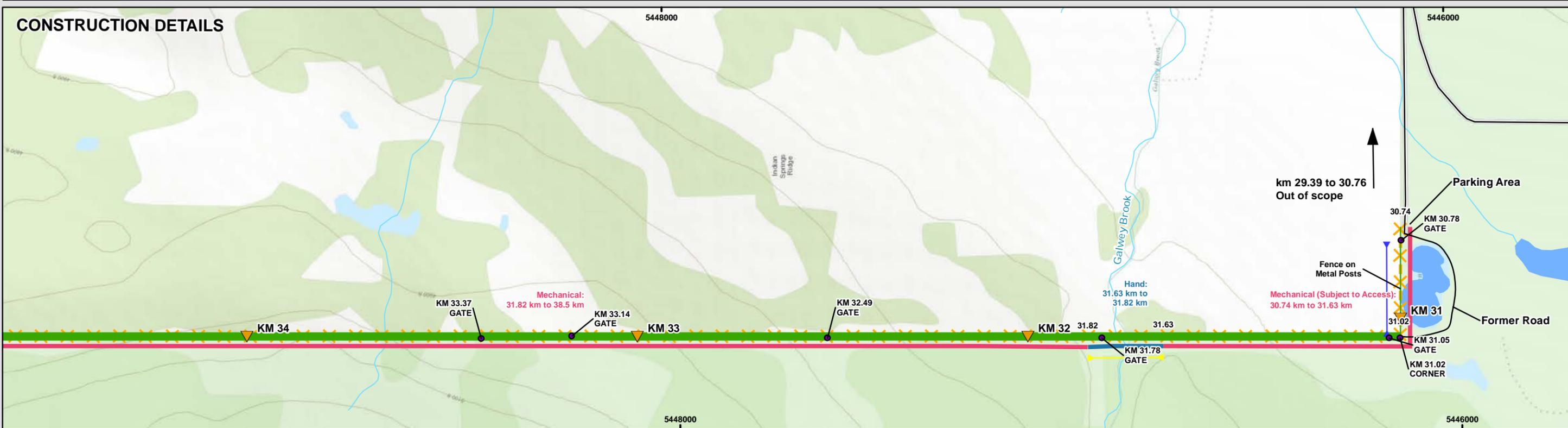
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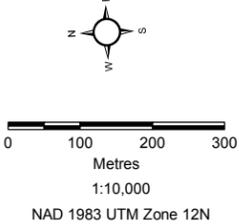
MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



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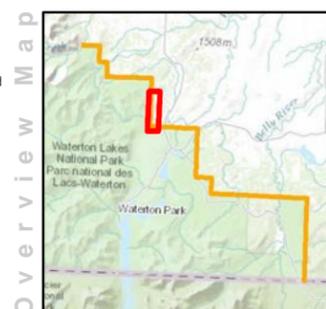
Legend

- | | | |
|----------------------------|------------------------|-----------------------------|
| ● GPS Field Observation | — Main Road | ■ Mechanical Area |
| ▼ KM Markers | — Watercourse (GIS) | ■ Brushing Condition |
| — Access Road | ■ Wetland (GIS) | ■ Moderate |
| ✕ Fence Replacement | ■ Waterbody (GIS) | ■ Negligible |
| ■ Parks and Protected Area | — Contour (100m Index) | ■ Existing Shoofly (Detour) |
| | ■ Hand Brushing Area | |

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- Information is for guidance only and work is to be done in accordance with the Best Management Practices.
- km 29.4 to 38 runs parallel to a road and trail. Keep road/trails passable, and provide construction warning signs in vicinity of active work.

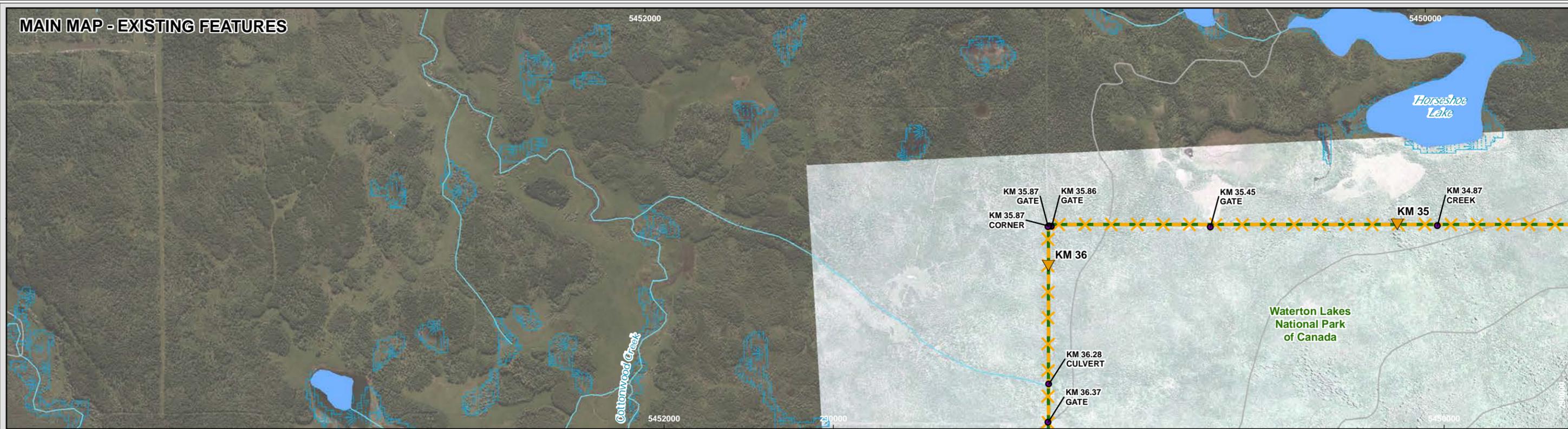



 Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB
Environmental Alignment Sheet
 07 July 2016

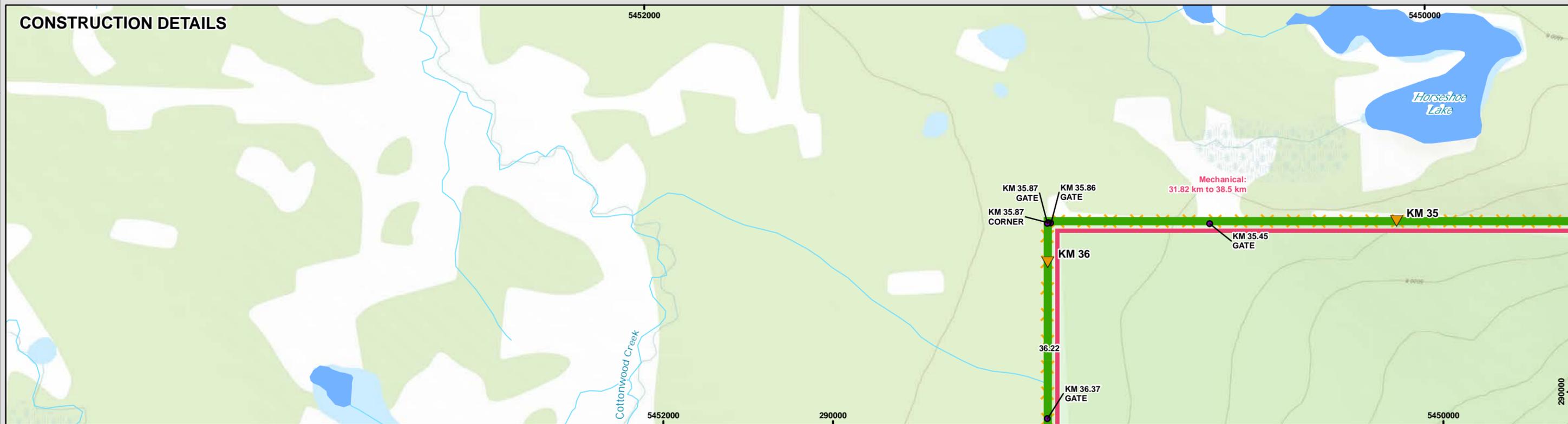

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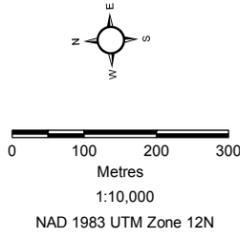
MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada



Legend

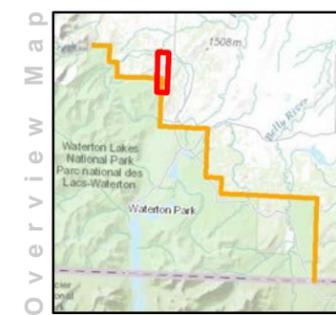
- GPS Field Observation
- ▼ KM Markers
- - - Fence Replacement
- Parks and Protected Area
- Watercourse (GIS)
- Wetland (GIS)
- Waterbody (GIS)
- Contour (100m Index)
- Mechanical Area
- Brushing Condition
- Moderate

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Boundary Fence Rehabilitation Project
Location: Waterton Lakes National Park, AB

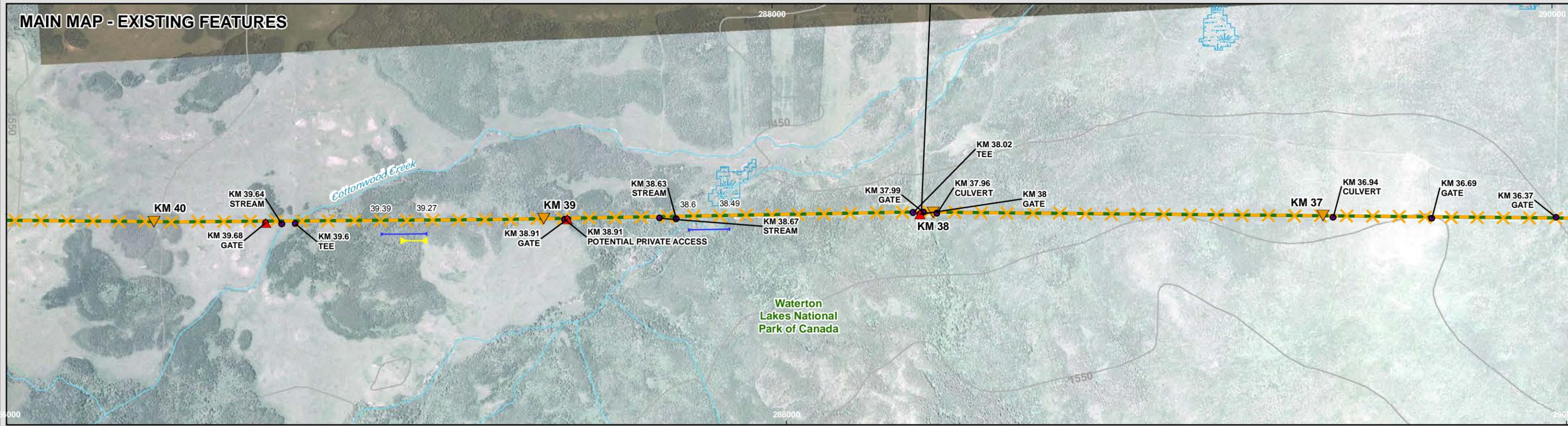
Environmental Alignment Sheet

07 July 2016

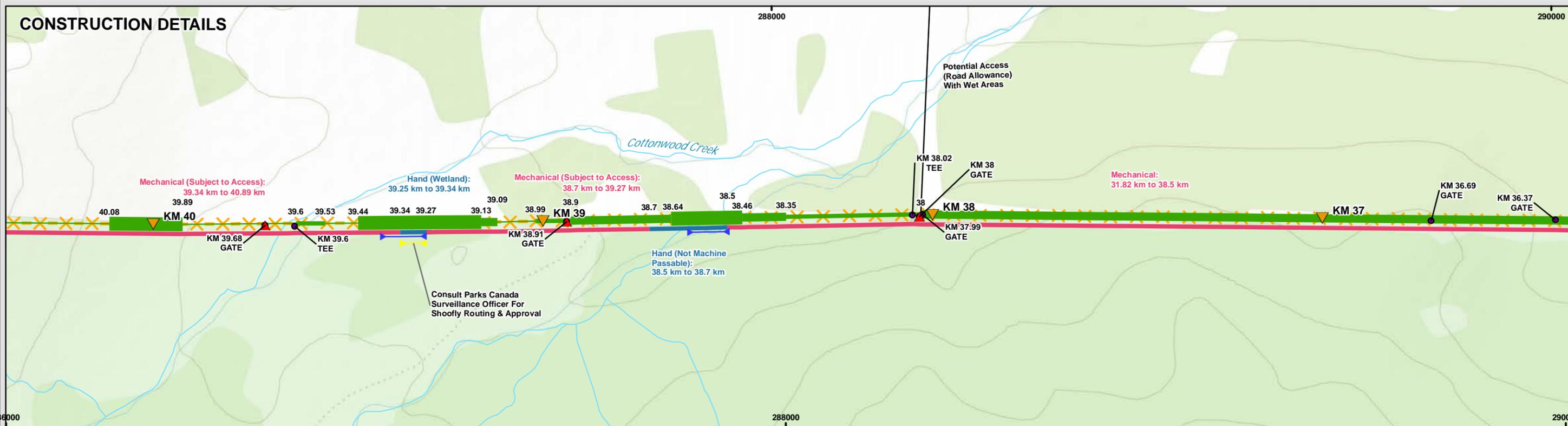

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MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



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Scale is referenced to the specified paper size.
 1:10,000
 NAD 1983 UTM Zone 12N

Gate Location	Watercourse (GIS)	Moderate
GPS Field Observation	Wetland (GIS)	Light
KM Markers	Contour (100m Index)	Negligible
Access Road	Hand Brushing Area	Existing Shoofly (Detour)
Fence Replacement	Mechanical Area	Wetland (Observed)
Parks and Protected Area	Brushing Condition	
	Heavy	

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 - Aug 31) No Brushing
- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest

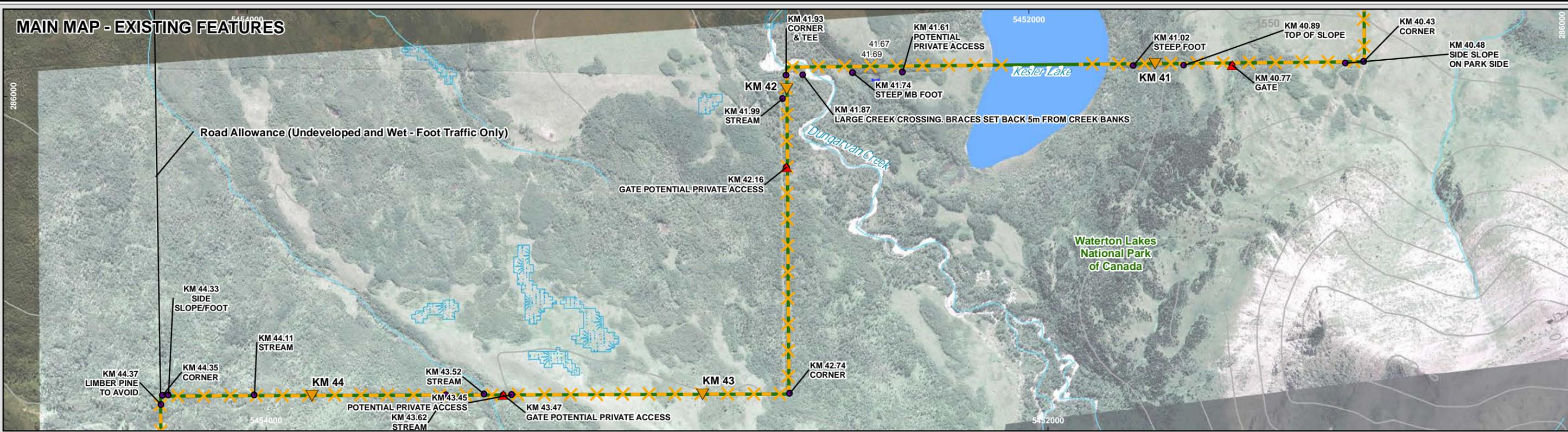
-Information is for guidance only and work is to be done in accordance with the Best Management Practices.
 -km 29.4 to 38 runs parallel to a road and trail. Keep road/trails passable, and provide construction warning signs in vicinity of active work.



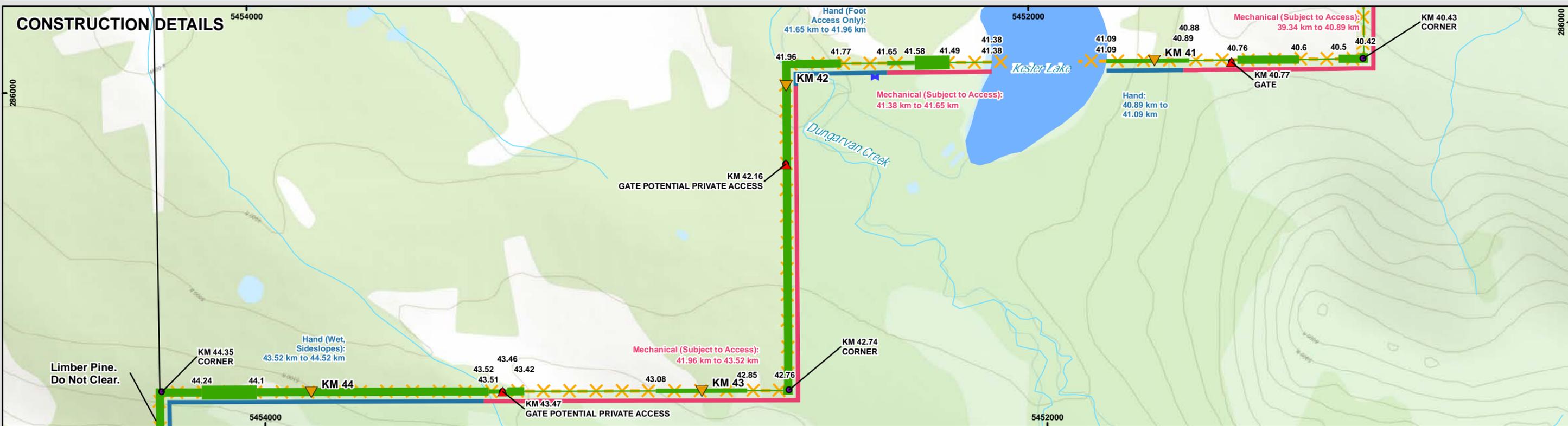
Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB
Environmental Alignment Sheet
 07 July 2016

File Location: E:\GIS\GIS_projects\2016\Waterton Environmental Alignment\Sheet\Arch-60485867-010.mxd
 Date Revised: July 07, 2016
 Prepared By: leeds1
 Reviewed By: MM
 Paper Size: 11"x17"
 Scale is referenced to the specified paper size.

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



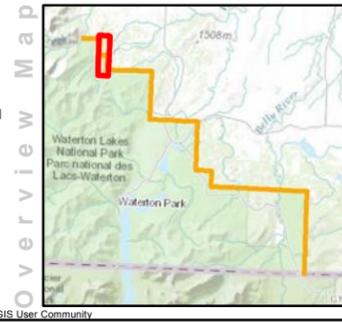
Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

<ul style="list-style-type: none"> ▲ Gate Location ● GPS Field Observation ▼ KM Markers — Access Road X Fence Replacement 	<ul style="list-style-type: none"> Parks and Protected Area Watercourse (GIS) Wetland (GIS) Waterbody (GIS) Contour (100m Index) 	<ul style="list-style-type: none"> Hand Brushing Area Mechanical Area <p>Brushing Condition</p> <ul style="list-style-type: none"> Heavy Moderate Light 	<ul style="list-style-type: none"> Negligible ▶ Wetland (Observed) <p>Notes</p> <ul style="list-style-type: none"> -Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only. -Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing
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- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest
- Information is for guidance only and work is to be done in accordance with the Best Management Practices.
- No mechanical equipment below high water level.



Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

Environmental Alignment Sheet

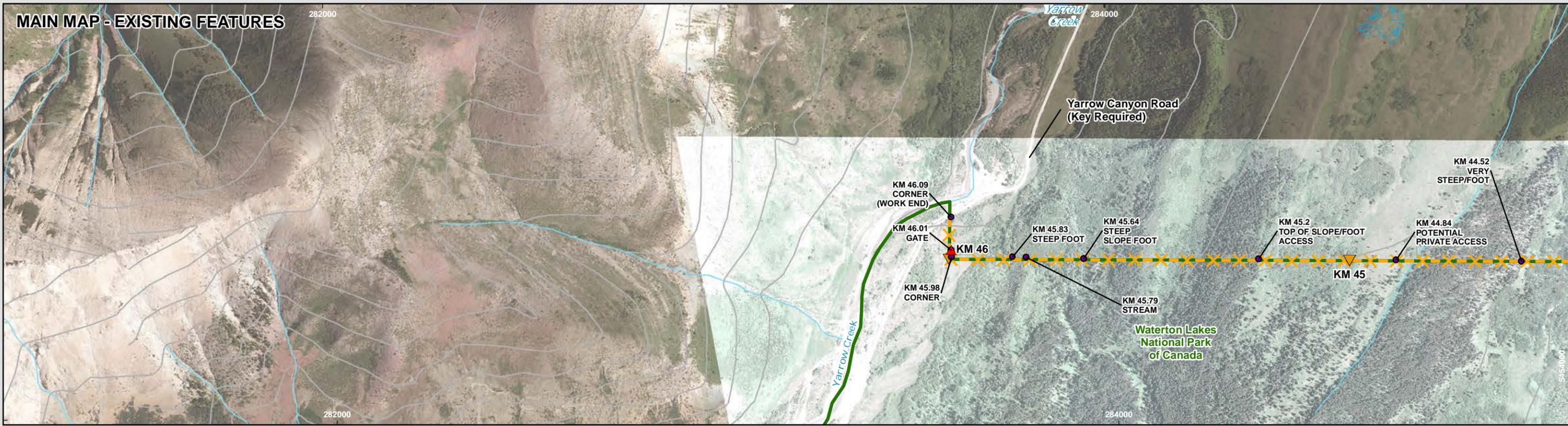
07 July 2016

AECOM

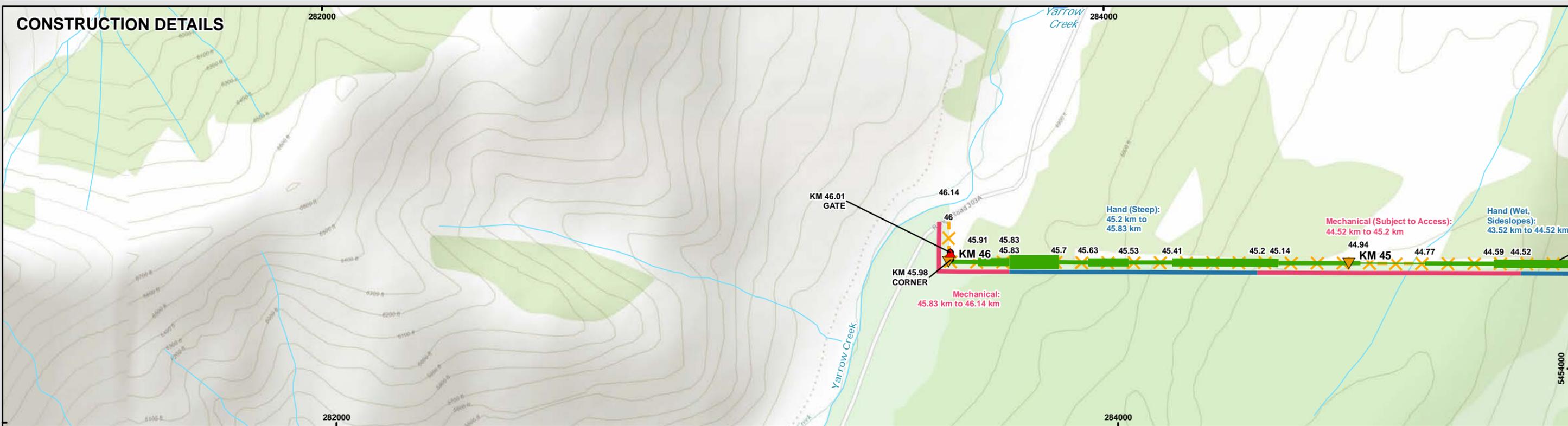
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 Date Revised: July 07, 2016
 Prepared By: leeds1
 Reviewed By: MM
 Paper Size: 11"x17"
 Scale is referenced to the specified paper size.

MAIN MAP - EXISTING FEATURES



CONSTRUCTION DETAILS



Basemapping from ESRI Online Topographic, Ortho Imagery from ESRI Online Imagery, Spatial Data from AtlaLIS, AECOM 2016, and Parks Canada

NAD 1983 UTM Zone 12N

Legend

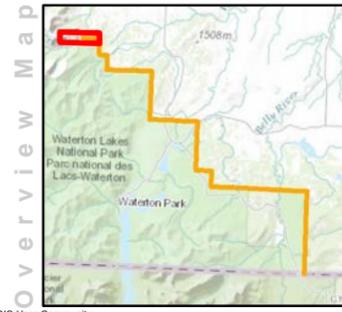
- ▲ Gate Location
- GPS Field Observation
- ▼ KM Markers
- X Fence Replacement
- Parks and Protected Area
- Watercourse (GIS)
- Wetland (GIS)
- Waterbody (GIS)
- Contour (100m Index)
- Hand Brushing Area
- Mechanical Area
- Heavy
- Moderate
- Light
- Negligible

Brushing Condition

Notes

- Archaeological sites and buffers are not indicated. Locations of the 3 known areas along the fence alignment will be provided to the successful contractor only.
- Migratory Bird Restricted Activity Period (Apr 01 – Aug 31) No Brushing

- Minimize traffic in areas of archaeological significance to avoid rutting of ground surface
- Follow and re-establish existing shoofly routes only (ATV-width). Moderate brushing and minor earthwork may be required where slumping has occurred. Do not disturb previously untouched ground or forest
- Information is for guidance only and work is to be done in accordance with the Best Management Practices.



Boundary Fence Rehabilitation Project
 Location: Waterton Lakes National Park, AB

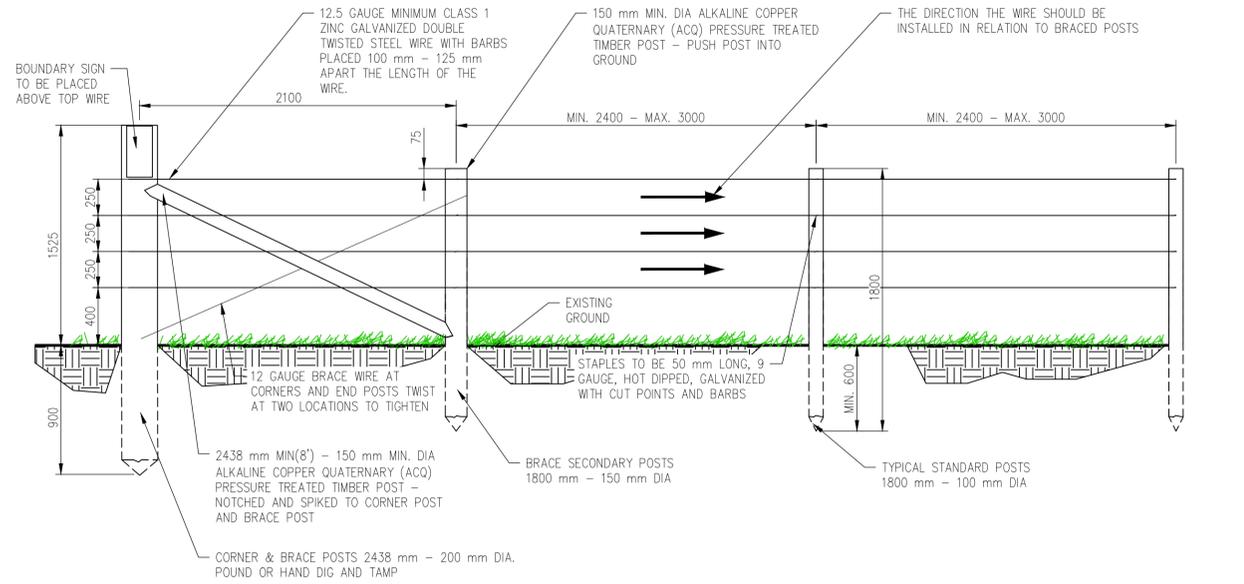
Environmental Alignment Sheet

07 July 2016

AECOM

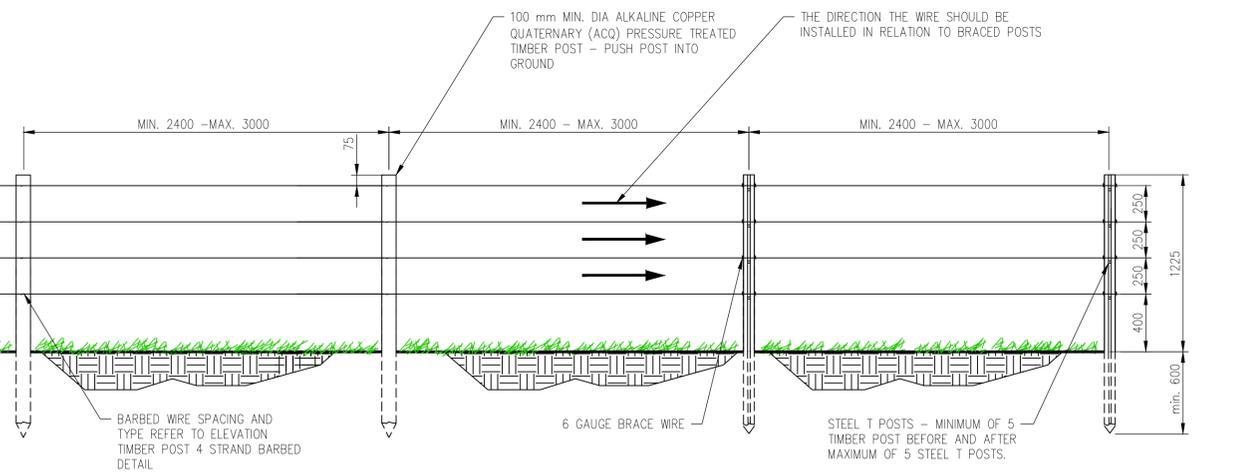
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 PLOT: 6/14/2016 3:14:00 PM BY: WIGGLESWORTH, DEREK
 D SIZE: 22 x 34" (559.8mm x 863.6mm)



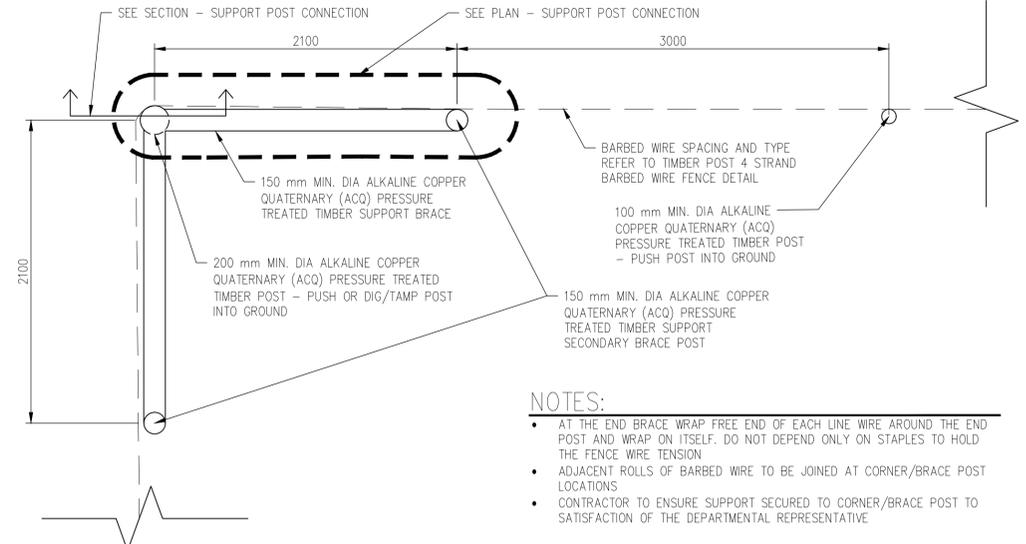
- NOTES:**
- START WIRE AT A CORNER POST WITH BRACING
 - CONTRACTOR TO ENSURE SUPPORT SECURED TO CORNER POST TO SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE
 - EVERY 100 L.M. USE AN 2438 mm (8') POST, KEEPING 375 mm ABOVE TOP WIRE FOR INSTALLATION OF A PARK BOUNDARY SIGN
 - EXISTING POSTS TO REMAIN IN PLACE IF SUITABLE. REPOUND AND REALIGN IF LEANING AND REAPPLY WIRE. CONTRACTOR RESPONSIBLE FOR DISPOSAL OF EXISTING FENCING MATERIALS OFF SITE, EXCLUDING SOUND POSTS.

ELEVATION – TIMBER POST 4 STRAND BARBED WIRE FENCE
SCALE : 1:25



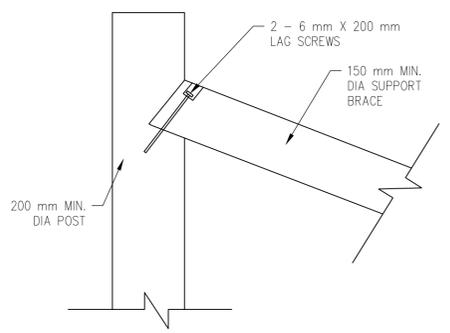
- NOTES:**
- STEEL POSTS SHOULD ONLY BE USED IN SECTIONS WHERE WOOD POSTS ARE NOT ABLE TO BE PUSHED INTO THE GROUND OR UNLESS OTHERWISE SPECIFIED.

ELEVATION – TIMBER POST TO STEEL T-POSTS TRANSITION 4 STRAND BARBED WIRE FENCE
SCALE : 1:25

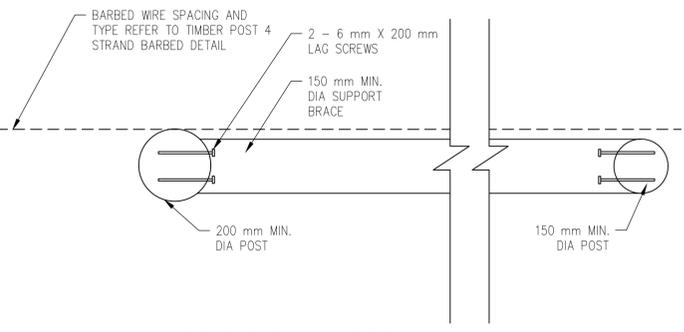


- NOTES:**
- AT THE END BRACE WRAP FREE END OF EACH LINE WIRE AROUND THE END POST AND WRAP ON ITSELF. DO NOT DEPEND ONLY ON STAPLES TO HOLD THE FENCE WIRE TENSION
 - ADJACENT ROLLS OF BARBED WIRE TO BE JOINED AT CORNER/BRACE POST LOCATIONS
 - CONTRACTOR TO ENSURE SUPPORT SECURED TO CORNER/BRACE POST TO SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE

PLAN – TIMBER POST 4 STRAND BARBED FENCE CORNER
SCALE : 1:25



SECTION – SUPPORT POST CONNECTION
SCALE : 1:10



PLAN – SUPPORT POST CONNECTION
SCALE : 1:10

- GENERAL NOTES:**
- CUT BRUSH MECHANICALLY AND BY HAND APPROXIMATELY 3000 mm INSIDE THE FENCE LINE AND 1000 mm ON THE OUTER PERIMETER OF THE FENCE LINE. REMOVAL OF CUT VEGETATION BY DISTRIBUTING INTO SURROUNDING AREA INSIDE THE PARK. ACCESS ROUTES & SHOOFLYS ARE TO BE CLEARED TO 3000 mm WIDTH, AND MADE DRIVABLE BY AN ATV OR EQUIVALENT.
 - POSTS AND BRACES THAT DO NOT MEET QUALITY STANDARD WILL BE REFUSED AND THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF REJECTED MATERIAL FROM WATERTON NP
 - ALLOWABLE TAPER FROM END TO END OF POSTS SHALL NOT EXCEED 13 mm
 - FIELD TREAT ALL CUT ENDS AND DRILLED HOLES WITH 2 COATS OF CLEAR ALKALINE COPPER QUATERNARY (ACQ)
 - ALL HARDWARE TO BE HOT DIPPED GALVANIZED
 - DO NOT TIGHTEN THE FENCE STAPLES OR WIRE TIES IN ORDER TO ACHIEVE A UNIFORM TENSION ON THE WIRES WHEN STRETCHING THE FENCE
 - SUPPORT POST/BRACE REQUIRED AT THE BEGINNING OF EACH NEW WIRE ROLL
 - WRAP EACH END OF ALL SEGMENTS OF WIRE.
 - 50 mm BARBED STAPLES SHOULD BE DRIVEN OBLIQUELY AT A SLIGHT DOWNWARD ANGLE, ALLOWING THE BARB TO SLIDE THROUGH THE STAPLE
 - FOR WET AREAS, WORK TO BE DONE DURING DRY OR FROZEN CONDITIONS WHERE PRACTICAL – REFER TO ALIGNMENT SHEETS FOR WET AREA LOCATIONS AND LENGTHS
 - POST HEIGHT TO BE MEASURED FROM THE BOTTOM OF POND IN WET AREAS OR WATER, WIRE SHOULD NOT TOUCH WATER
 - GROUND IN SOME OF THE PROJECT AREA IS COMPRISED OF GLACIAL TILL CONTAINING ROCKS GRAVEL AND CLAY. PARKS CANADA HAS NOT DONE SPECIFIC GEOTECHNICAL INVESTIGATION OF THE PROJECT SITE. FENCING CONTRACTORS WILL NEED TO FACTOR IN THE POTENTIAL FOR POST INSTALLATION TAKING LONGER THAN ANTICIPATED DUE TO ROCKY SUBSURFACE GROUND CONDITIONS.
 - CONTRACTORS NEED TO BE CAUTIOUS OF WILD LIFE IN THE AREA AND NOT ALLOW CATTLE TO TRESPASS INTO PARK. SECTIONS OF FENCE SHOULD ONLY BE TAKEN DOWN IF IT CAN BE REPLACE WITHIN SAME WORK DAY.
 - SALLOW SOIL AND ROCKY AREAS WILL REQUIRE T-POSTS AND TO A MAXIMUM OF 5 T-POST BETWEEN WOODEN POSTS.



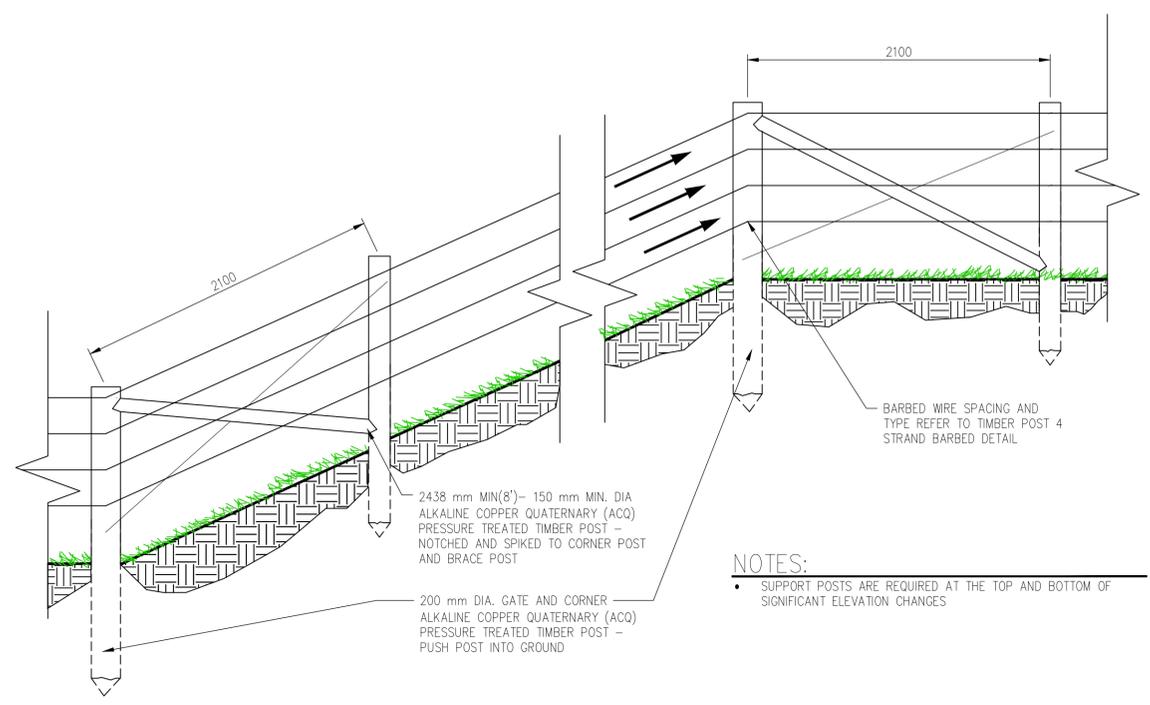
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DW	JG	TW		A	05/14/16

Parks Canada Agency
763 - Waterton Boundary Fence Rehabilitation
Fence Details 1

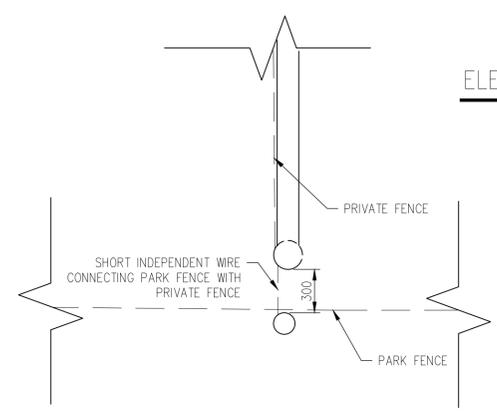
AECOM Project # 60485867

C0001

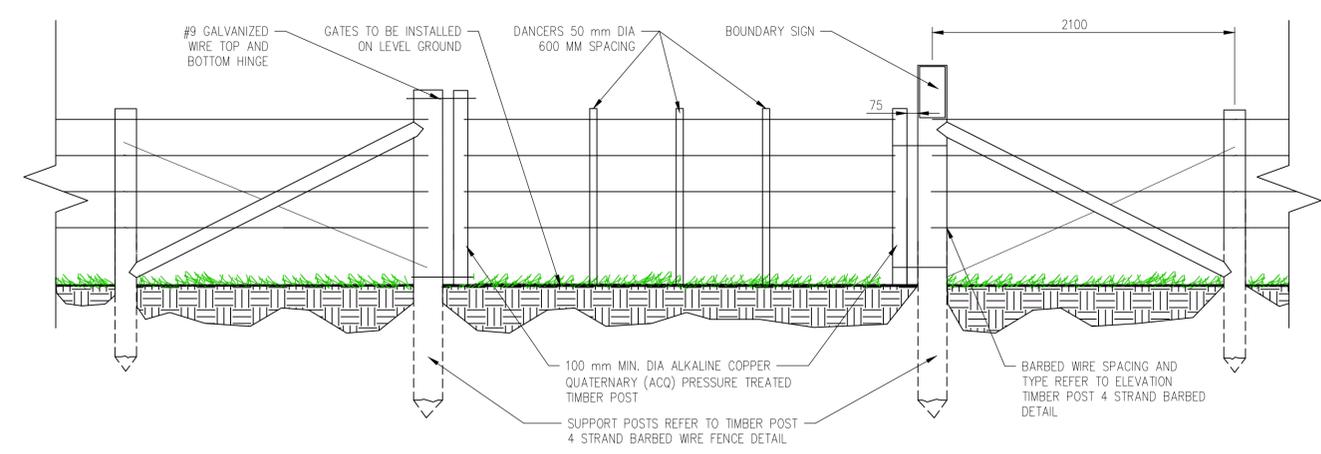
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 PLOT: 6/14/2016 3:13:24 PM BY: WIGLESWORTH, DEREK
 D SIZE: 22" x 34" (558.8mm x 863.6mm)



ELEVATION – TIMBER 4 STRAND BARBED WIRE – ELEVATION CHANGE CONSIDERATIONS
 SCALE : 1:25

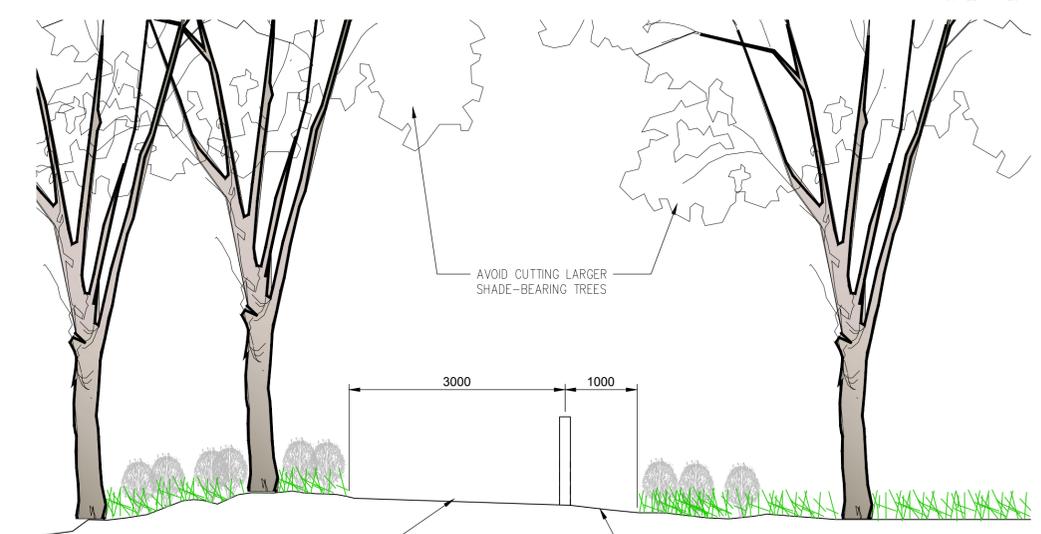


PLAN – PRIVATE/PARKS FENCE TEE JUNCTION
 SCALE : 1:25

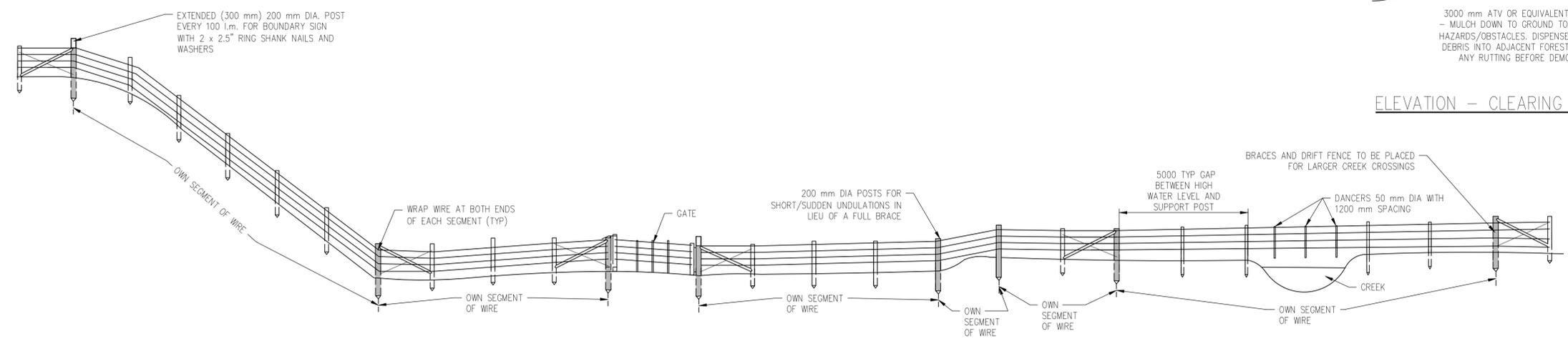


ELEVATION – TIMBER 4 STRAND BARBED WIRE GATE
 SCALE : 1:25

- NOTES:
- WIDTH OF GATE IS TYPICALLY BETWEEN 4 TO 5 m (MATCH EXISTING GATE WIDTH)
 - INSTALL A BOUNDARY SIGN AT EVERY GATE



ELEVATION – CLEARING WIDTHS
 SCALE : 1:50



ELEVATION – TYPICAL CONDITIONS AND HOW/WHERE TO USE BRACES
 SCALE : 1:100

- NOTES:
- THE BOUNDARY SIGN TO BE INSTALLED WITHOUT INTERFERING WITH THE TOP WIRE.



DRN	CHK	DES	ENG	ISSUE	DATE
DW	JG	TW		A	06/14/16

Parks Canada Agency
763 - Waterton Boundary Fence Rehabilitation
Fence Details 2

AECOM Project # 60485867
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