



- Kilometre Post (KP)
 - Grand Rapids Footprint
 - MacKay Lateral Kilometre Post (KP)
 - MacKay Lateral Footprint
 - Road
 - Caribou Range
 - Grand Rapids Facility
- Habitat Restoration Measures**
- ⊗ Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
 - HDD drill path - no clearing
 - Minimal Disturbance Construction (MSD)
 - Planting

APPENDIX A
SPREAD 2
SHEET 21 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

ch2m

UTM Zone 12N
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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
Although there is no reason to believe that there are any errors associated with the data used to generate
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Grand Rapids
Pipeline Project

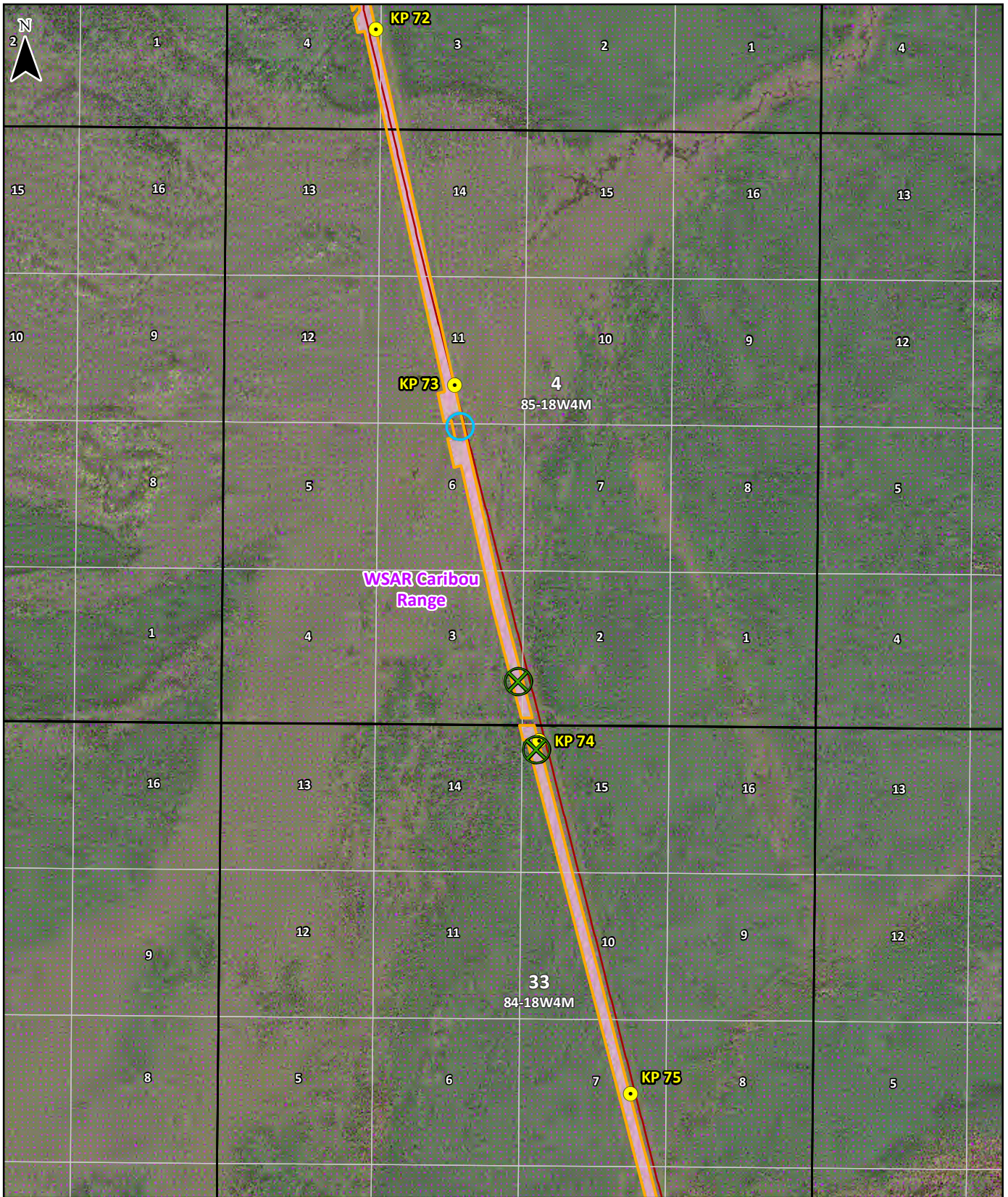
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(All Locations Approximate)

November 2016

496826

Mapped By: SL

Checked By: JB



- Kilometre Post (KP)
 - Grand Rapids Footprint
 - MacKay Lateral
 - MacKay Lateral Footprint
 - Road
 - Caribou Range
 - Grand Rapids Facility
- Habitat Restoration Measures**
- X Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
 - HDD drill path - no clearing
 - Minimal Disturbance Construction (MSD)
 - Planting

APPENDIX A
SPREAD 2
SHEET 22 OF 52
**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

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UTM Zone 12N
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Grand Rapids KP, Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.
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**Grand Rapids
Pipeline Project**

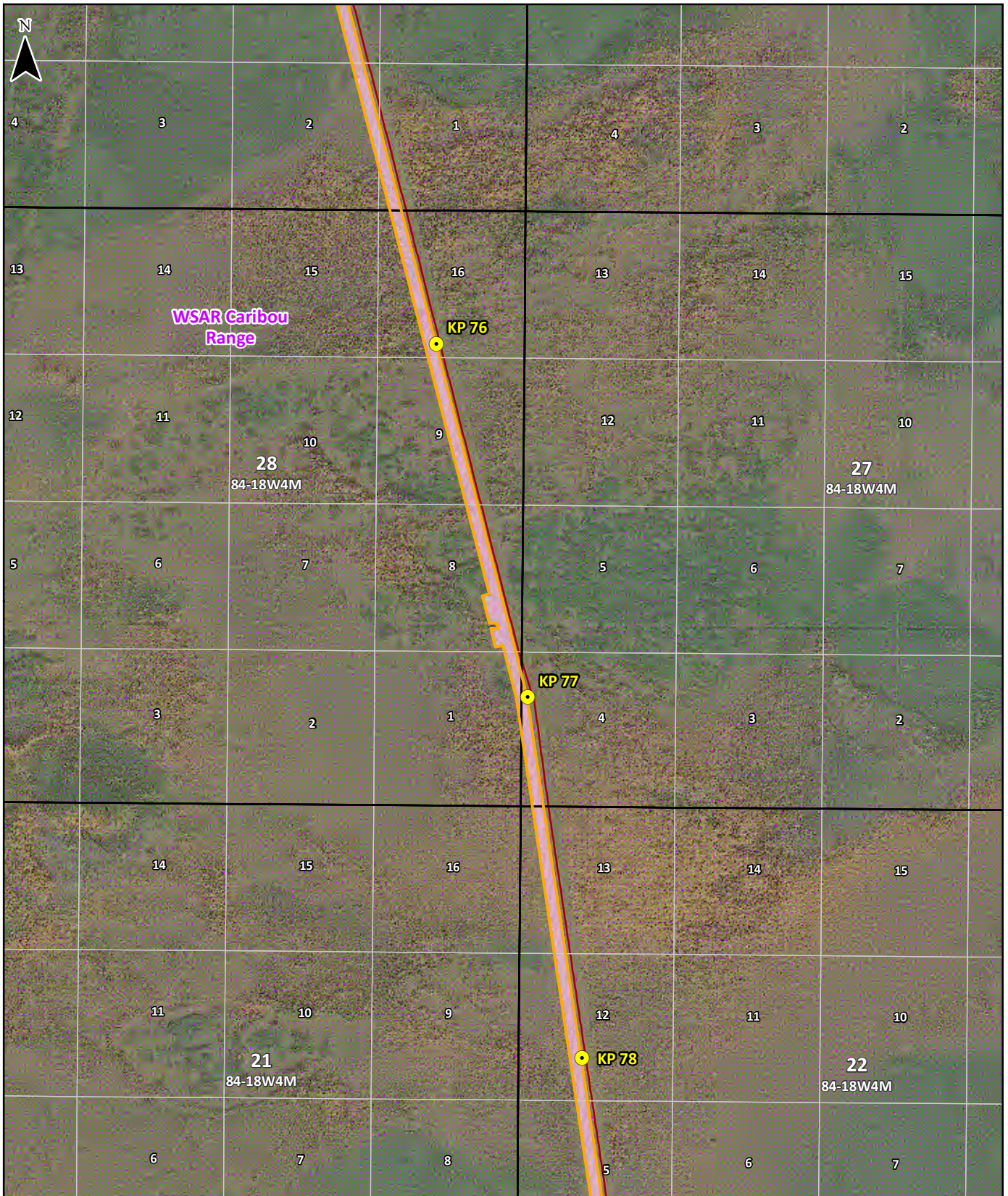
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0 100 200 300 m
(All Locations Approximate)

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- Kilometre Post (KP)
- MacKay Lateral Kilometre Post (KP)
- Road
- Caribou Range
- Grand Rapids Footprint
- MacKay Lateral Footprint
- Grand Rapids Facility
- Habitat Restoration Measures**
- X Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

APPENDIX A
SPREAD 2
SHEET 23 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

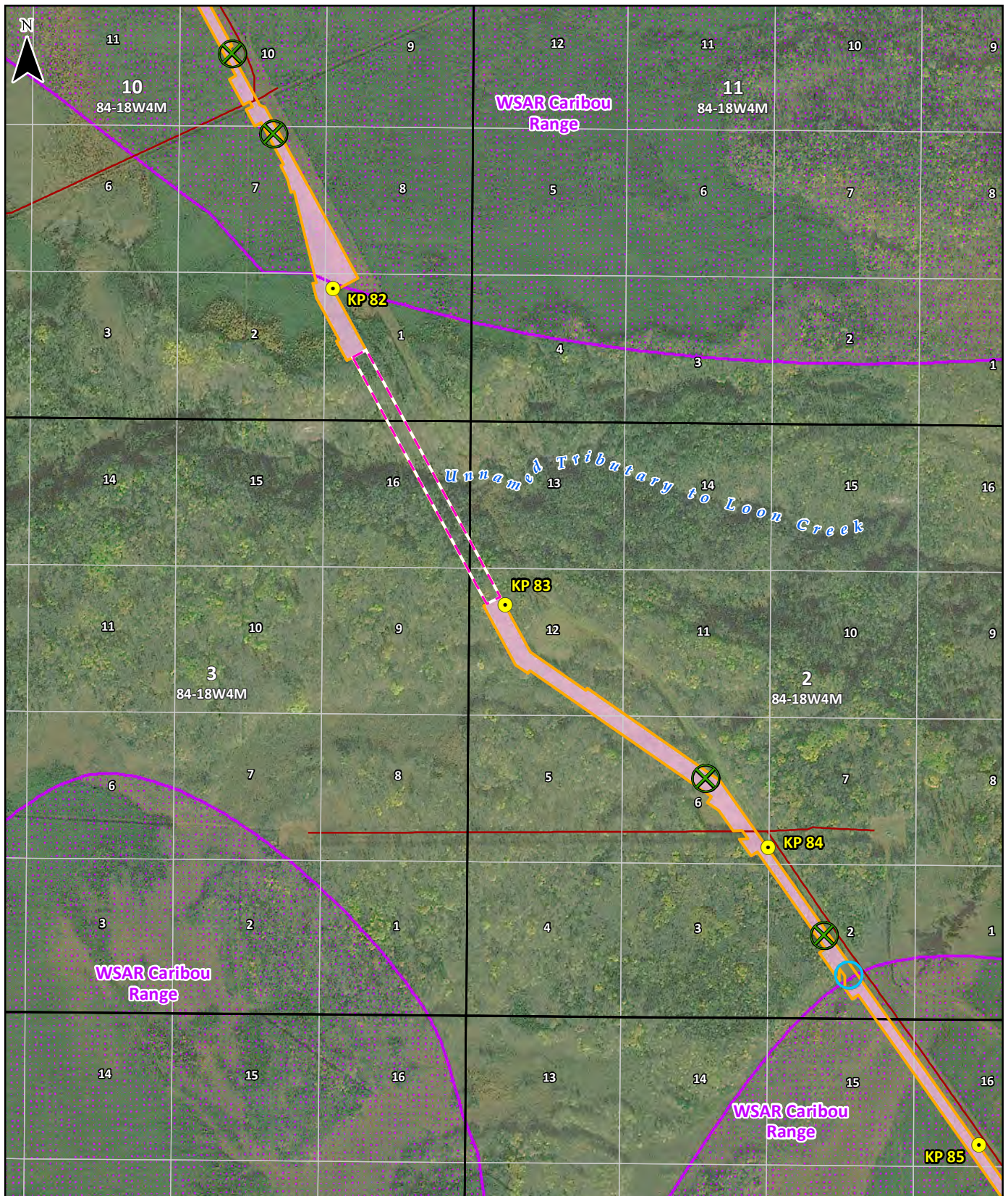


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 Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.
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 0 100 200 300 m
 (All Locations Approximate)

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|---|---|--|--|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback ○ Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|---|---|--|--|

APPENDIX A

SPREAD 2

SHEET 25 OF 52

**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

SCALE: 1:15,000

(All Locations Approximate)

November 2016

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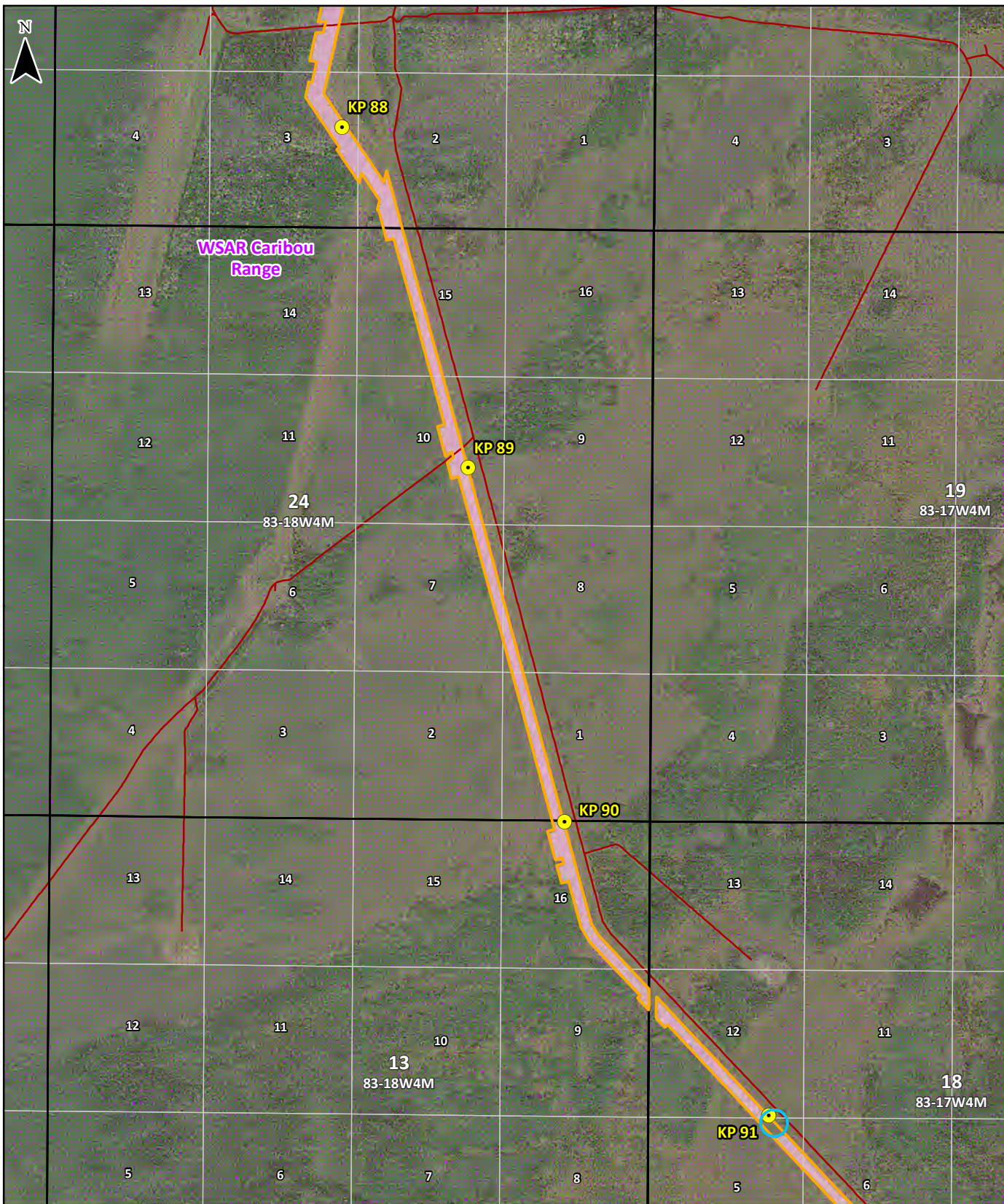
18395_WILDLIFE_CHRP_Spread11of14_Figures_Rev2.mxd



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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.

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- Kilometre Post (KP)
- Mackay Lateral Kilometre Post (KP)
- Road
- Caribou Range

- Grand Rapids Footprint
- Mackay Lateral Footprint
- Grand Rapids Facility

- Habitat Restoration Measures**
- ⊗ Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

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SHEET 27 OF 52

**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**



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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.
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this product or in the product itself, users of these data are advised that errors in the data may be present.



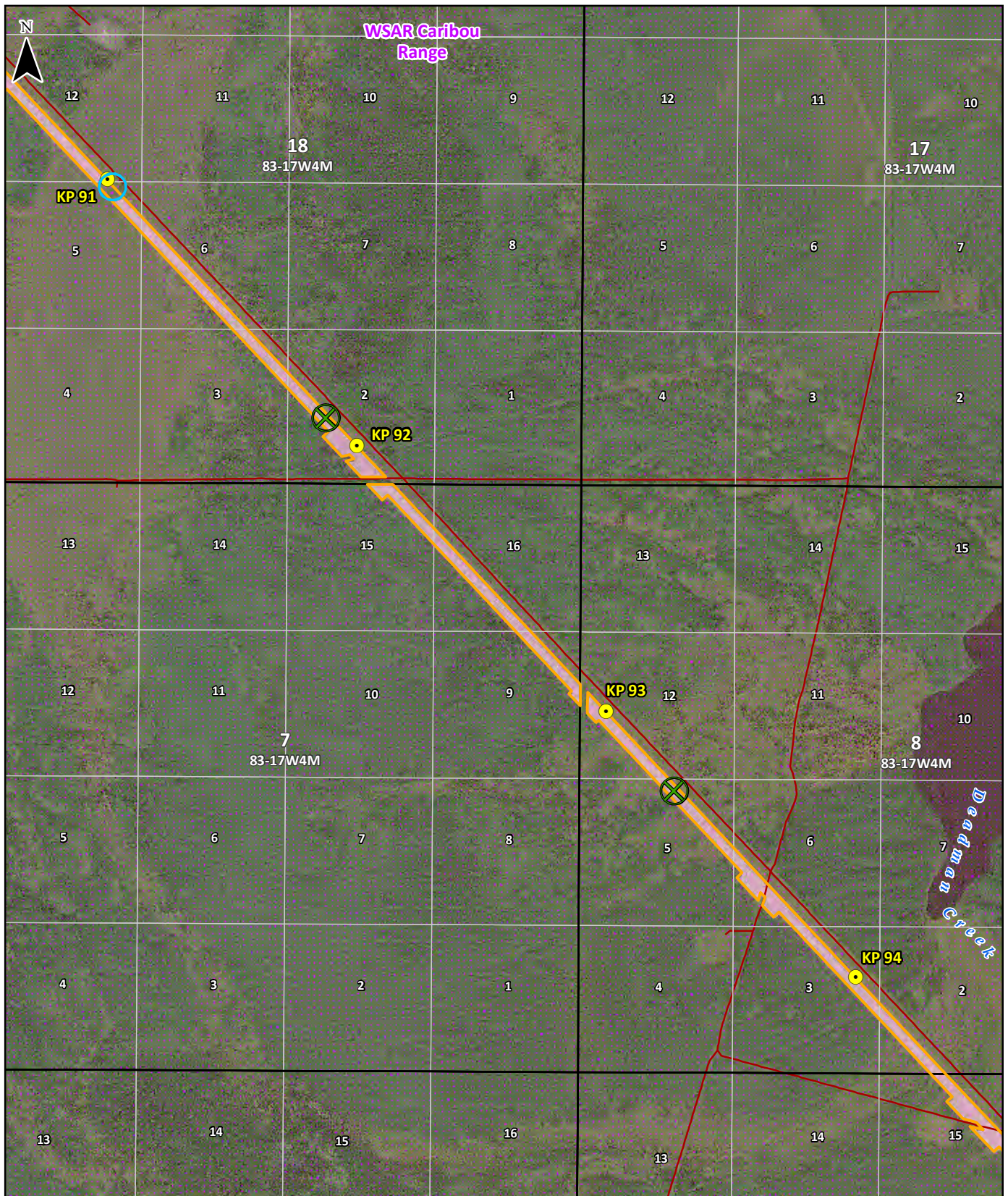
SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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Mapped By: SL

Checked By: JB



- | | | | |
|---|--|--|---|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road --- Caribou Range | <ul style="list-style-type: none"> — Grand Rapids Footprint — MacKay Lateral Footprint — Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback ○ Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> --- HDD drill path - no clearing --- Minimal Disturbance Construction (MSD) ■ Planting |
|---|--|--|---|

APPENDIX A

SPREAD 2

SHEET 28 OF 52

**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**



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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CHW 2016; Hydrology: Atlas 2014.
Although there is no reason to believe that there are any errors associated with the data used to generate
this product or in the product itself, users of these data are advised that errors in the data may be present.



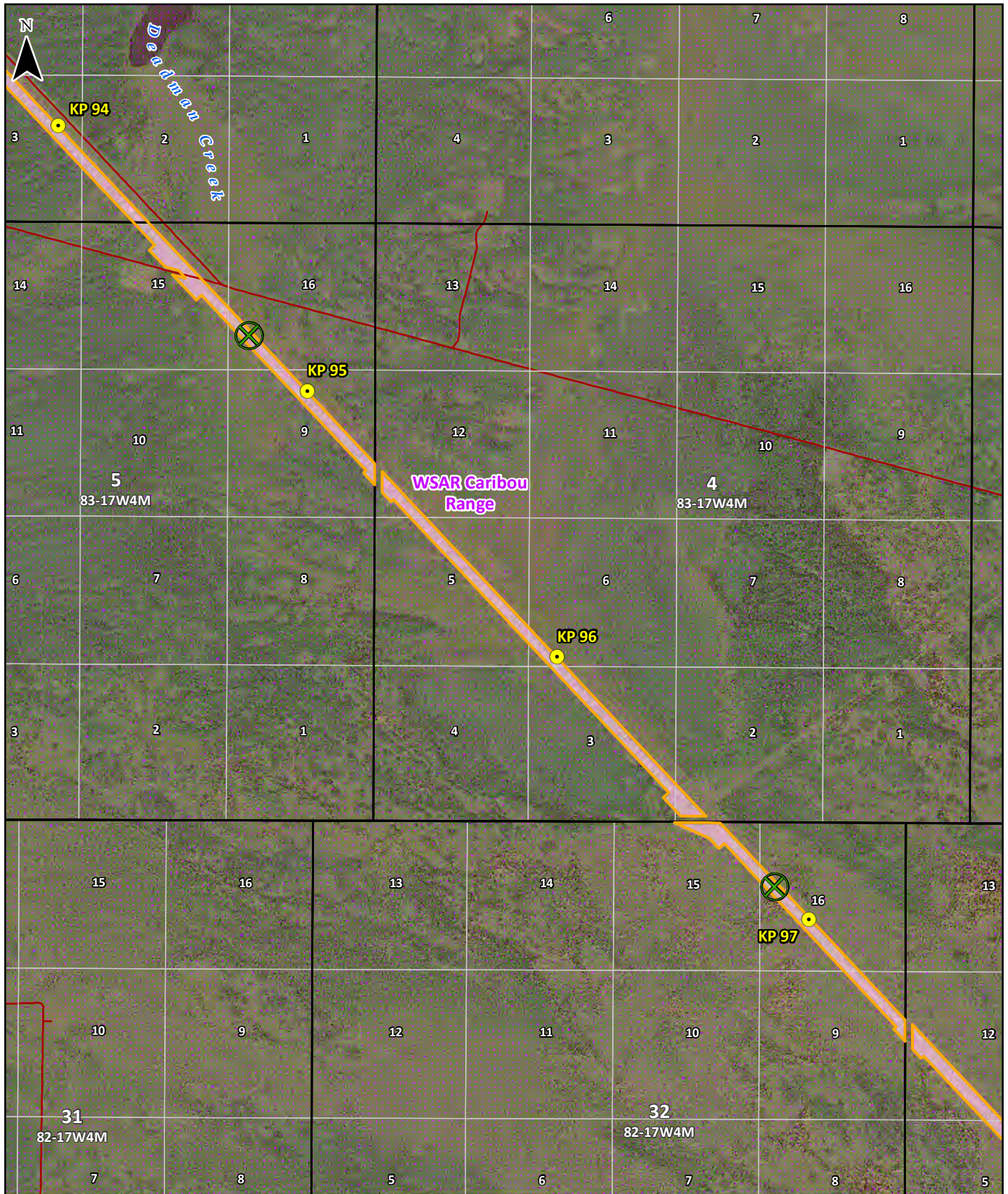
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0 100 200 300 m
(All Locations Approximate)

November 2016

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Mapped By: SL

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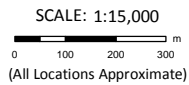


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|--|---|--|---|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|--|---|

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SPREAD 2
SHEET 29 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

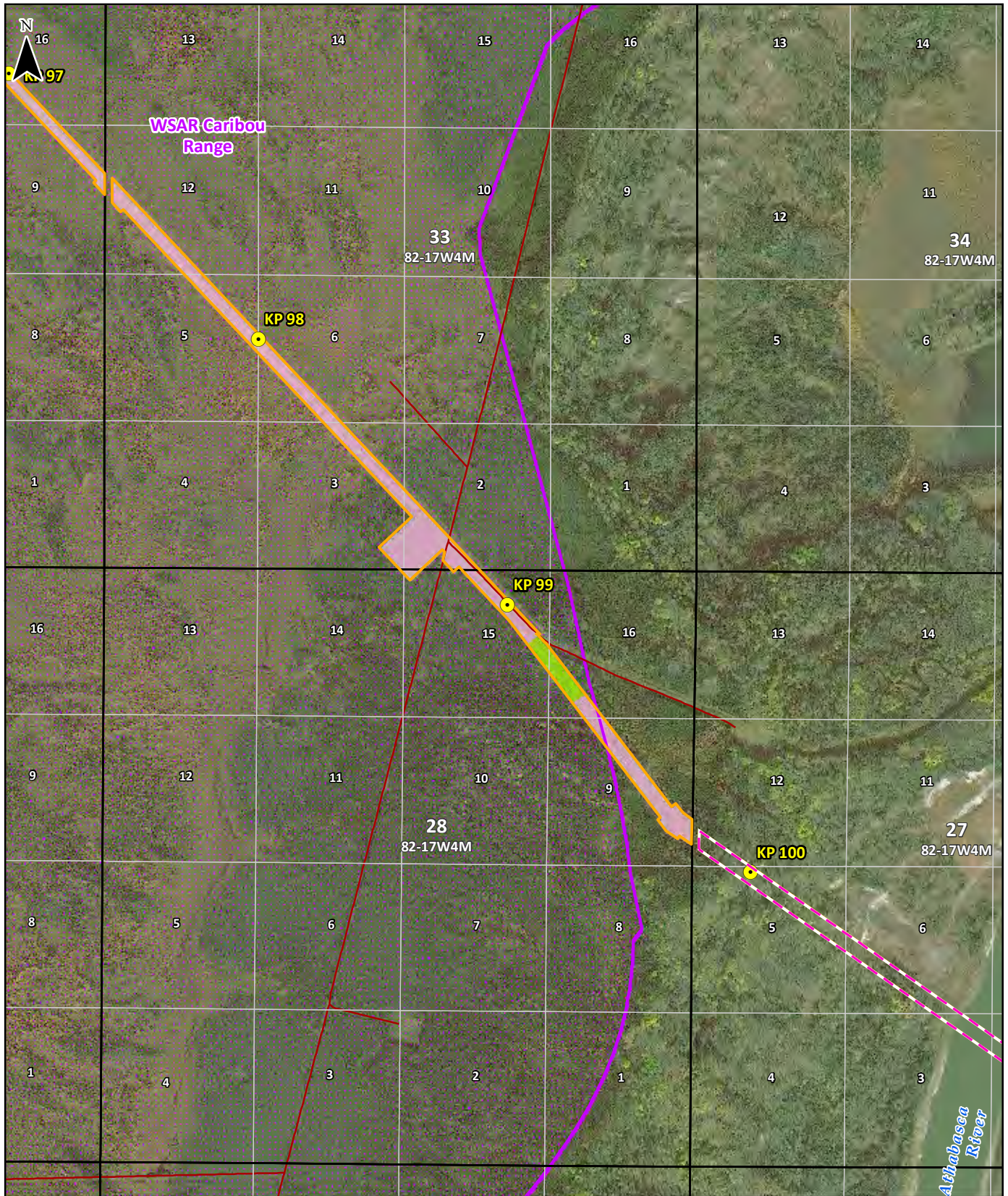


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 Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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- Kilometre Post (KP)
- Grand Rapids Footprint
- MacKay Lateral Kilometre Post (KP)
- MacKay Lateral Footprint
- Road
- Caribou Range
- Grand Rapids Facility
- Habitat Restoration Measures**
- ⊗ Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

APPENDIX A

SPREAD 2

SHEET 30 OF 52

CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

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Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.

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Grand Rapids
Pipeline Project

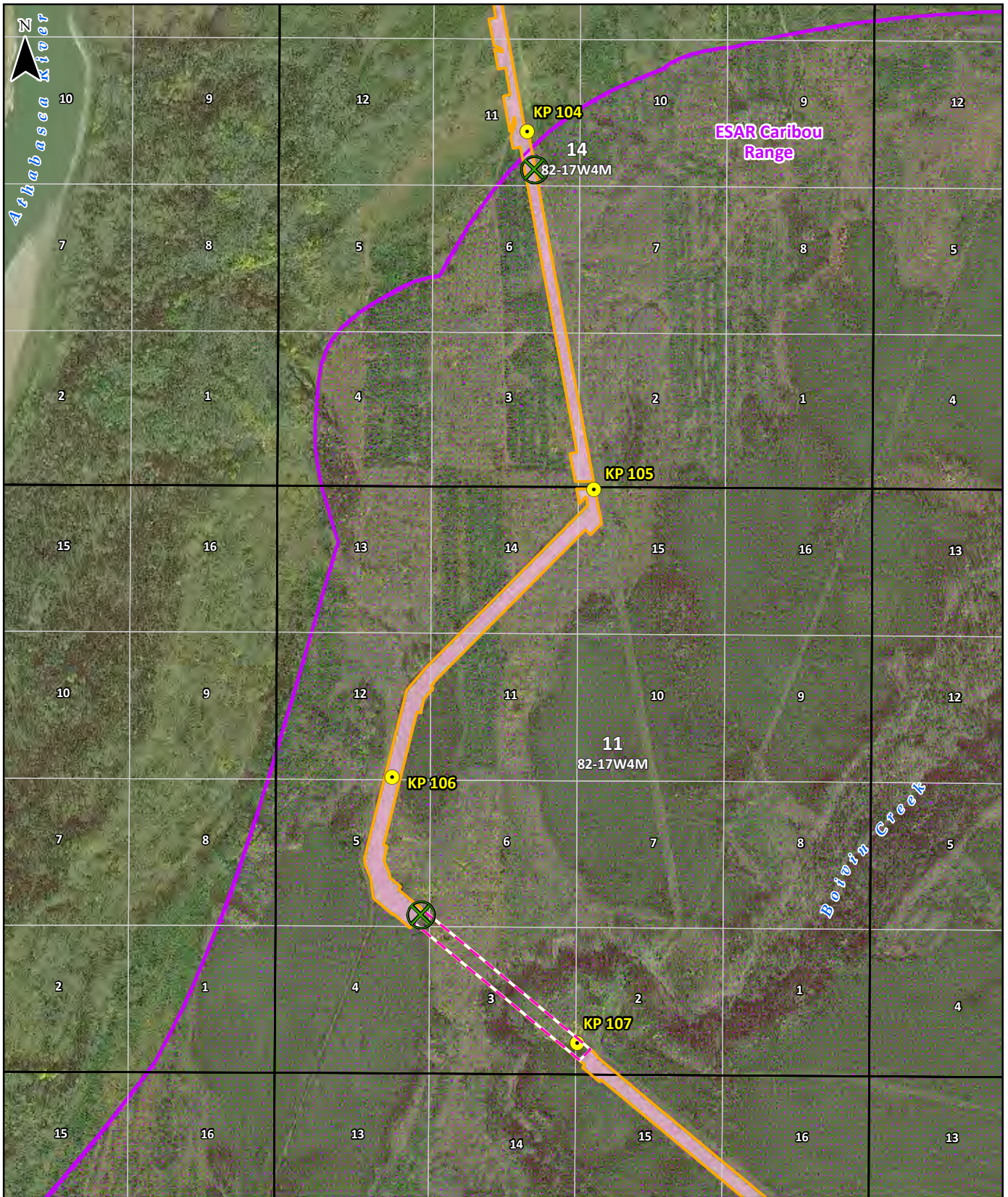
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0 100 200 300 m
(All Locations Approximate)

November 2016

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Checked By: JB



- Kilometre Post (KP)
- Grand Rapids Footprint
- MacKay Lateral
- MacKay Lateral Footprint
- Road
- Caribou Range
- Grand Rapids Facility
- X Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

APPENDIX A
SPREAD 2
SHEET 31 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT



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 Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.
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SCALE: 1:15,000
 0 100 200 300 m
 (All Locations Approximate)

November 2016	496826
Mapped By: SL	Checked By: JB



- | | | | |
|---|--|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) MackKay Lateral Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MackKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
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APPENDIX A

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SHEET 32 OF 52

CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

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Grand Rapids KP, Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.
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Grand Rapids
Pipeline Project

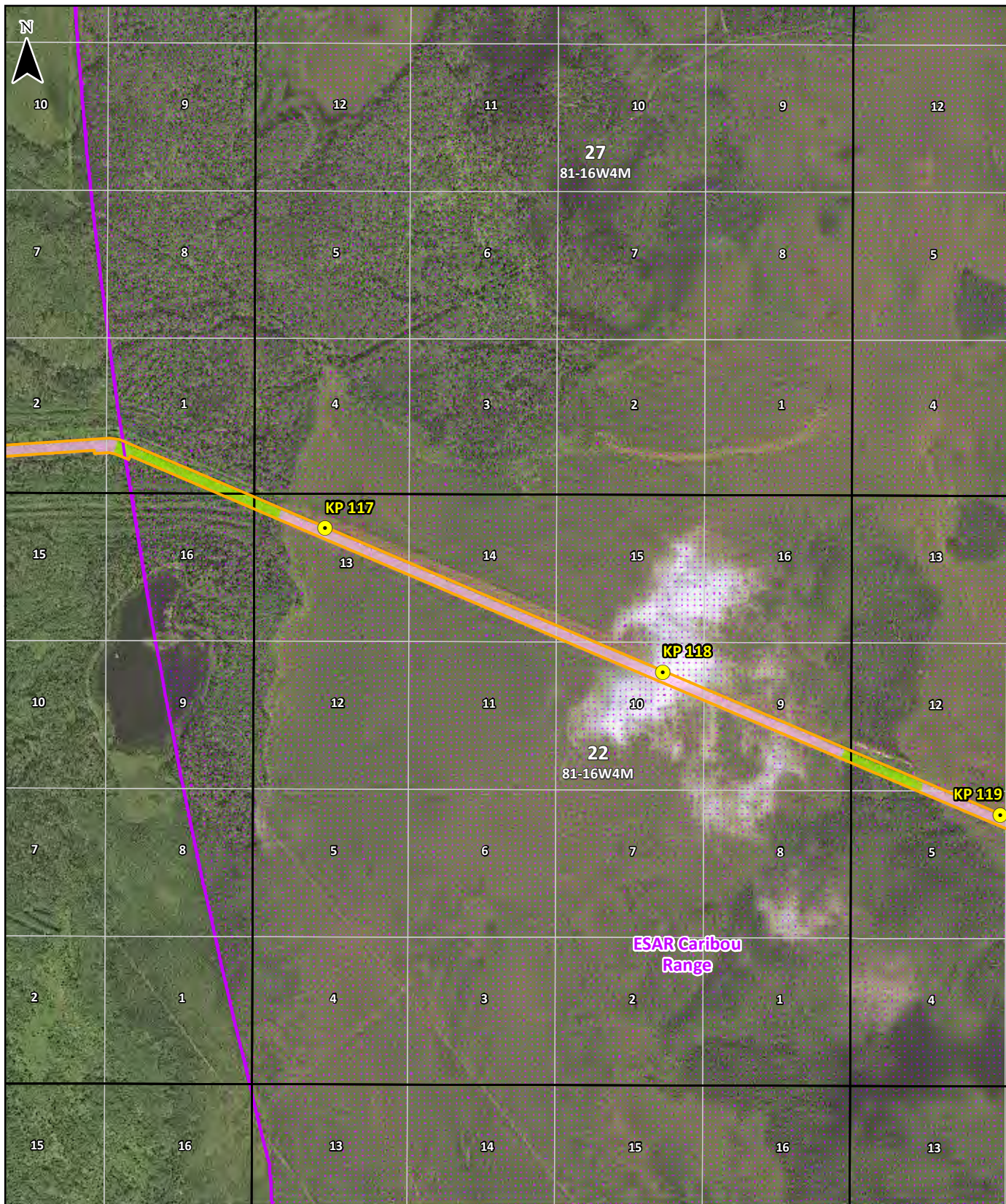
SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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Mapped By: SL

Checked By: JB



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|--|---|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) Mackay Lateral Kilometre Post (KP) Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint Mackay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|---|--|

APPENDIX A

SPREAD 2

SHEET 34 OF 52

CARIBOU HABITAT RESTORATION PLAN FOR THE GRAND RAPIDS PIPELINE GP LTD. GRAND RAPIDS PIPELINE PROJECT

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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.

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Grand Rapids
Pipeline Project

SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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|--|---|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) Mackay Lateral Kilometre Post (KP) Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint Mackay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|---|--|

APPENDIX A

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SHEET 35 OF 52

CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

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Grand Rapids KP, Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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Grand Rapids
Pipeline Project

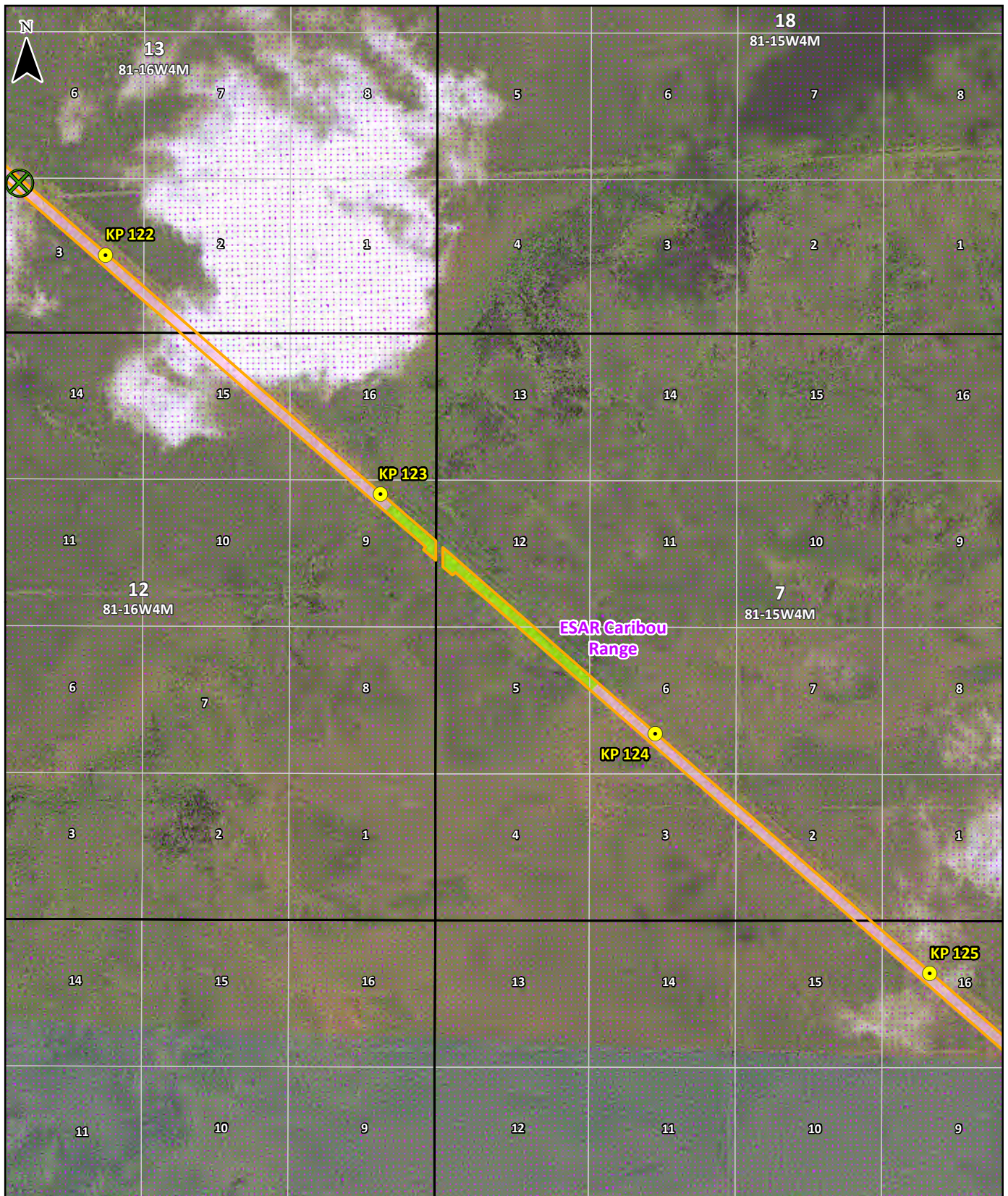
SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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Checked By: JB



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|---|---|--|--|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral ● Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|---|---|--|--|

APPENDIX A
SPREAD 2
SHEET 36 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

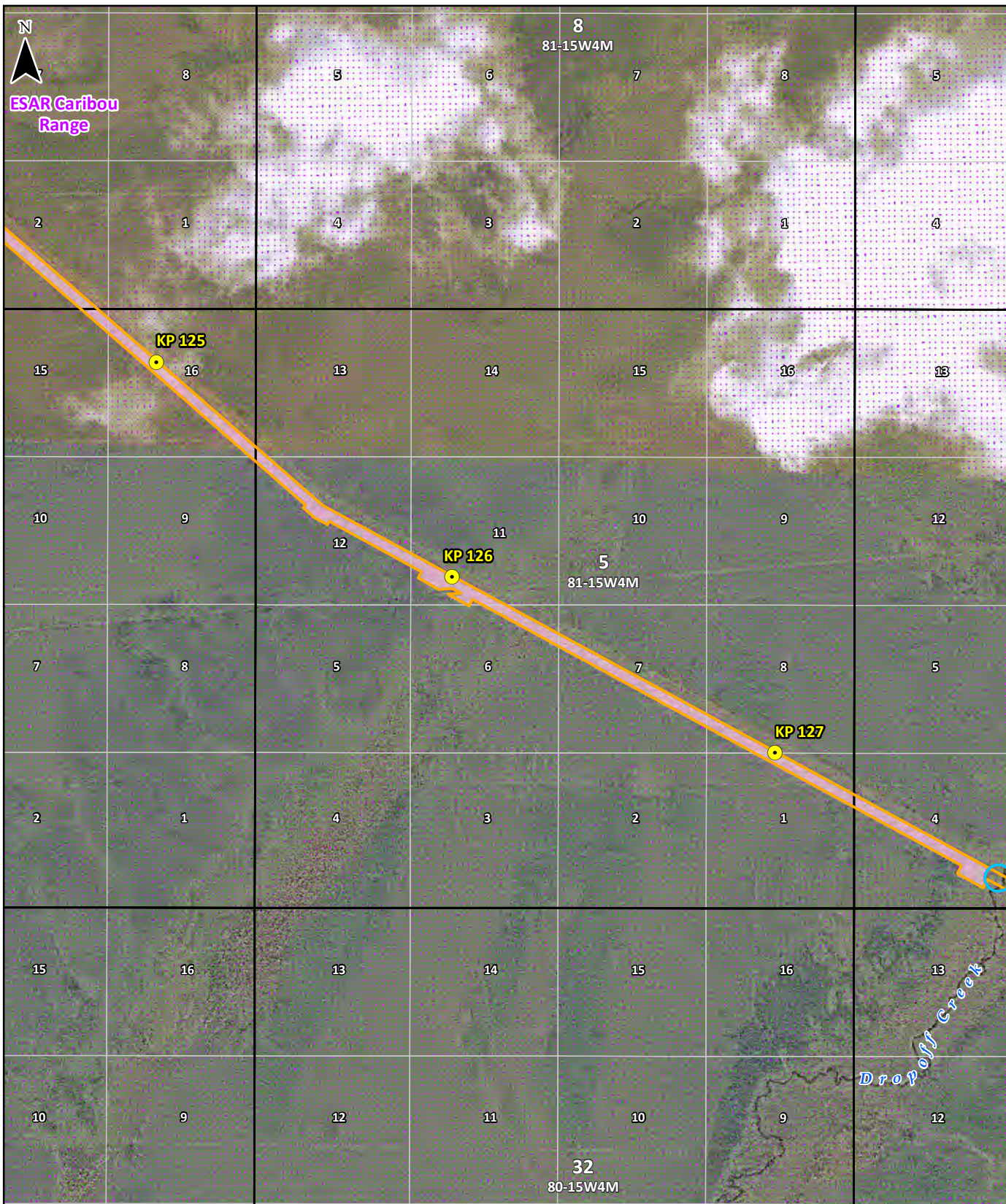


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 Grand Rapids KP Routing, Footprint, TCPL 2014-2015; Road: IHS Inc. 2016;
 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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SCALE: 1:15,000
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 (All Locations Approximate)

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|--|---|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) Mackay Lateral Kilometre Post (KP) Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint Mackay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|---|--|

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SHEET 37 OF 52

CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.

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Grand Rapids
Pipeline Project

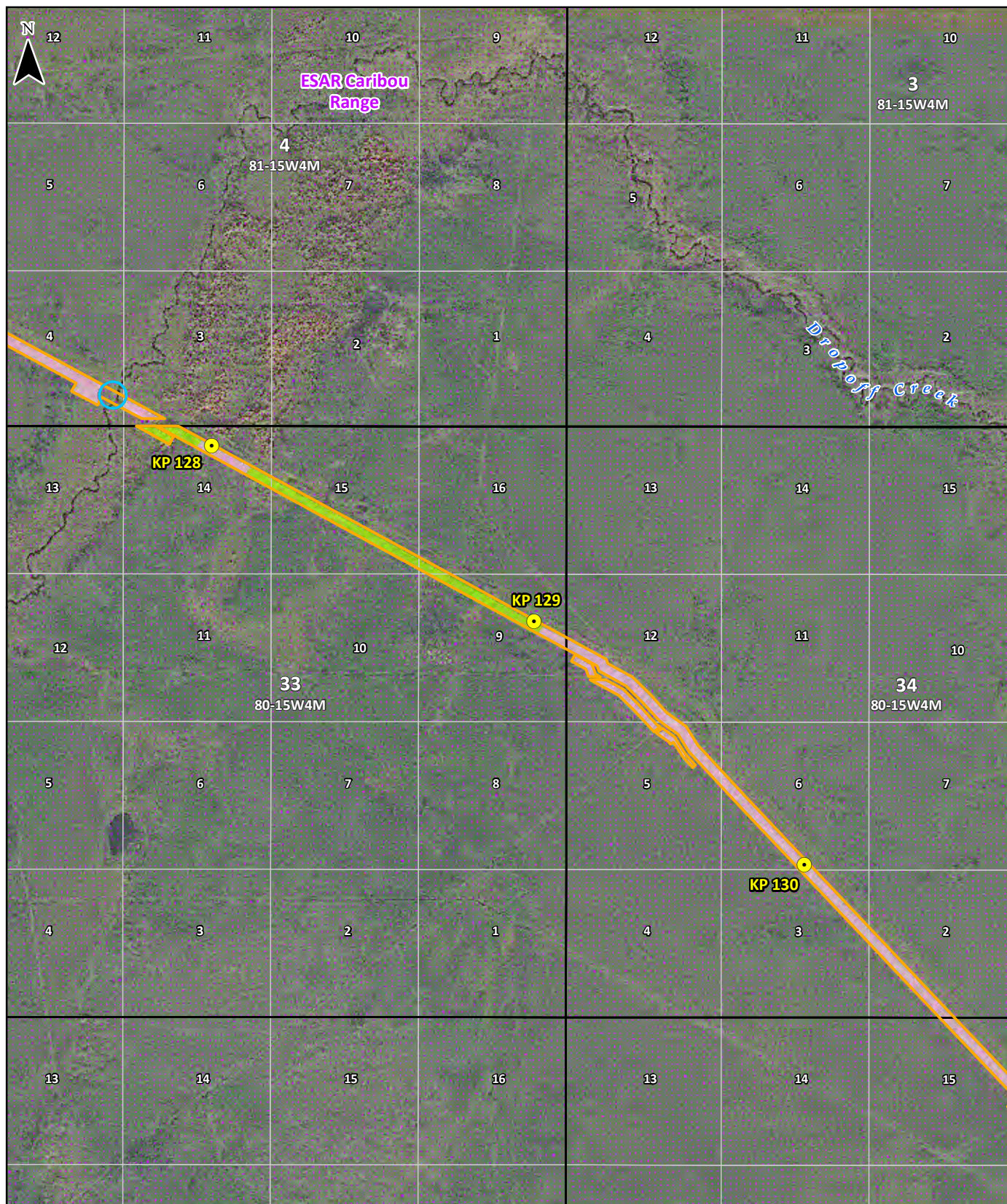
SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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Mapped By: SL

Checked By: JB







APPENDIX A

SPREAD 2



SHEET 38 OF 52

**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

 Kilometre Post (KP)
 MacKay Lateral
 Kilometre Post (KP)
 Road
 Caribou Range

 Grand Rapids Footprint
 Mackay Lateral Footprint
 Grand Rapids Facility

Habitat Restoration Measures

-  Rollback
-  Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

SCALE: 1:15,000

100 200 300 m

All Locations Approximate

November 2016

496826

Mapped By: SL

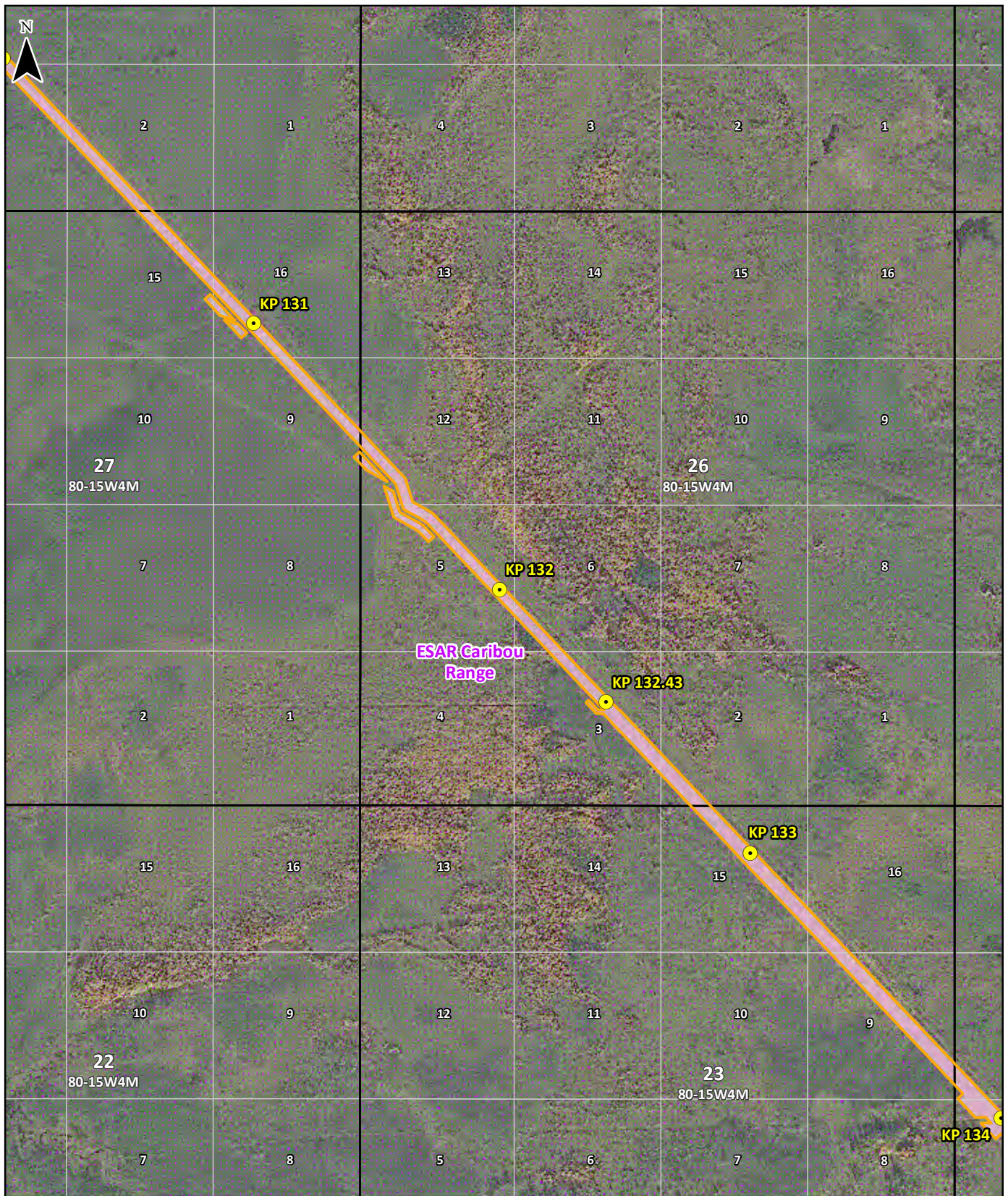
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Grand Rapids KP, Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Altalis 2014.

Grand Rapids Pipeline Project

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|--|---|--|--|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|--|--|

APPENDIX A

SPREAD 2

SHEET 39 OF 52

**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

SCALE: 1:15,000

(All Locations Approximate)

November 2016

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 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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- Kilometre Post (KP)
- MacKay Lateral Kilometre Post (KP)
- Road
- Caribou Range

- Grand Rapids Footprint
- MacKay Lateral Footprint
- Grand Rapids Facility

- Habitat Restoration Measures**
- ⊗ Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

APPENDIX A

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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**Grand Rapids
Pipeline Project**

SCALE: 1:15,000
0 100 200 300 m
(All Locations Approximate)

November 2016

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- Kilometre Post (KP)
- Grand Rapids Footprint
- MacKay Lateral Kilometre Post (KP)
- MacKay Lateral Footprint
- Road
- Caribou Range
- Grand Rapids Facility
- Habitat Restoration Measures**
- X Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

APPENDIX A
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SHEET 41 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT



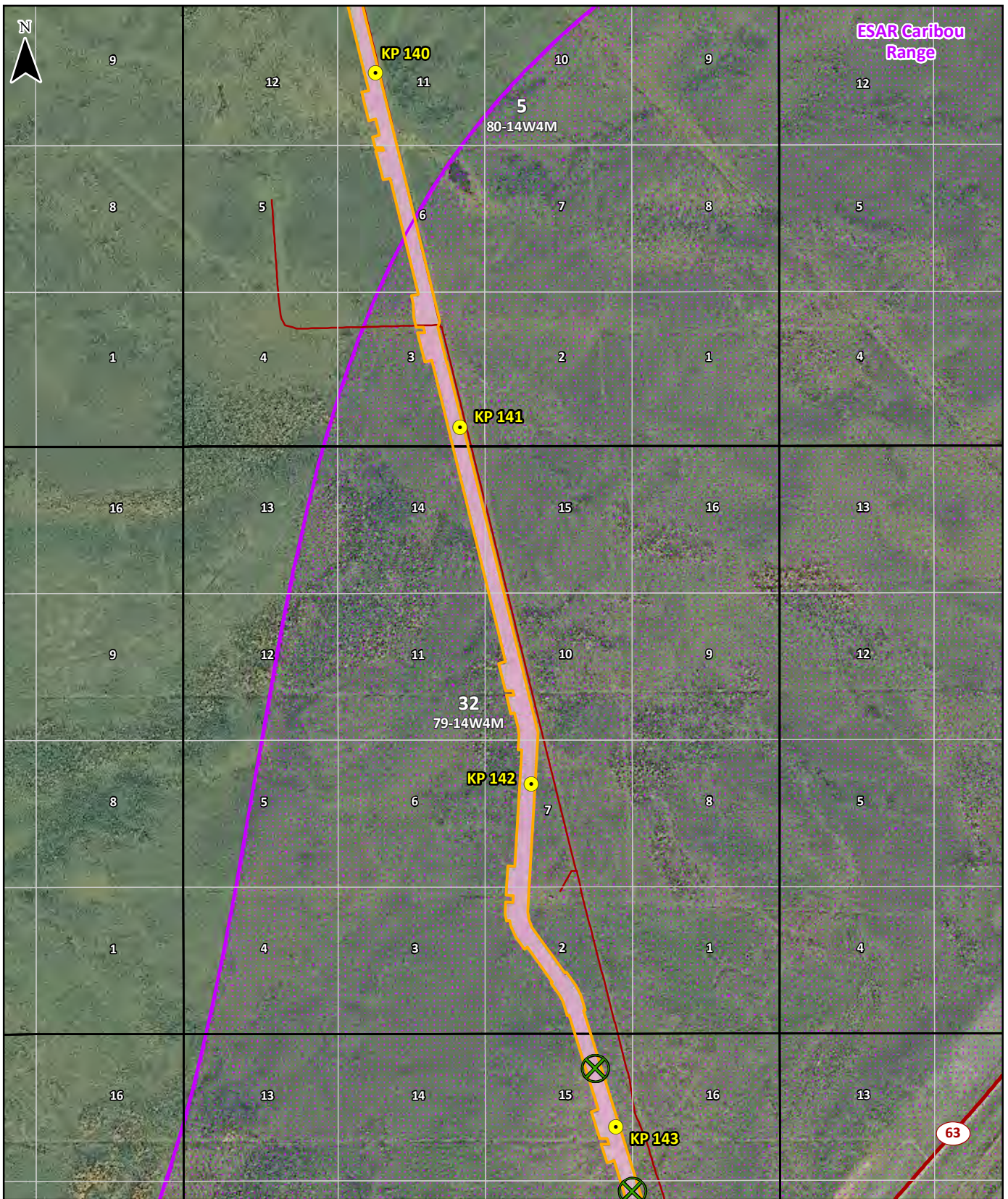
UTM Zone 12N
 2013 SPOT6 ©2016 CNES, Licensed by BlackBridge Geomatics Corp, www.blackbridge.com,
 Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
 Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
 Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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 this product or in the product itself, users of these data are advised that errors in the data may be present.



SCALE: 1:15,000
 0 100 200 300 m
 (All Locations Approximate)

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18395_WILDLIFE_CHRP_Spread11of4_Figures_Rev2.mxd



- Kilometre Post (KP)
 - Grand Rapids Footprint
 - MacKay Lateral
 - MacKay Lateral Footprint
 - Road
 - Caribou Range
 - Grand Rapids Facility
- Habitat Restoration Measures**
- ⊗ Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
 - HDD drill path - no clearing
 - Minimal Disturbance Construction (MSD)
 - Planting

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CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT



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Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
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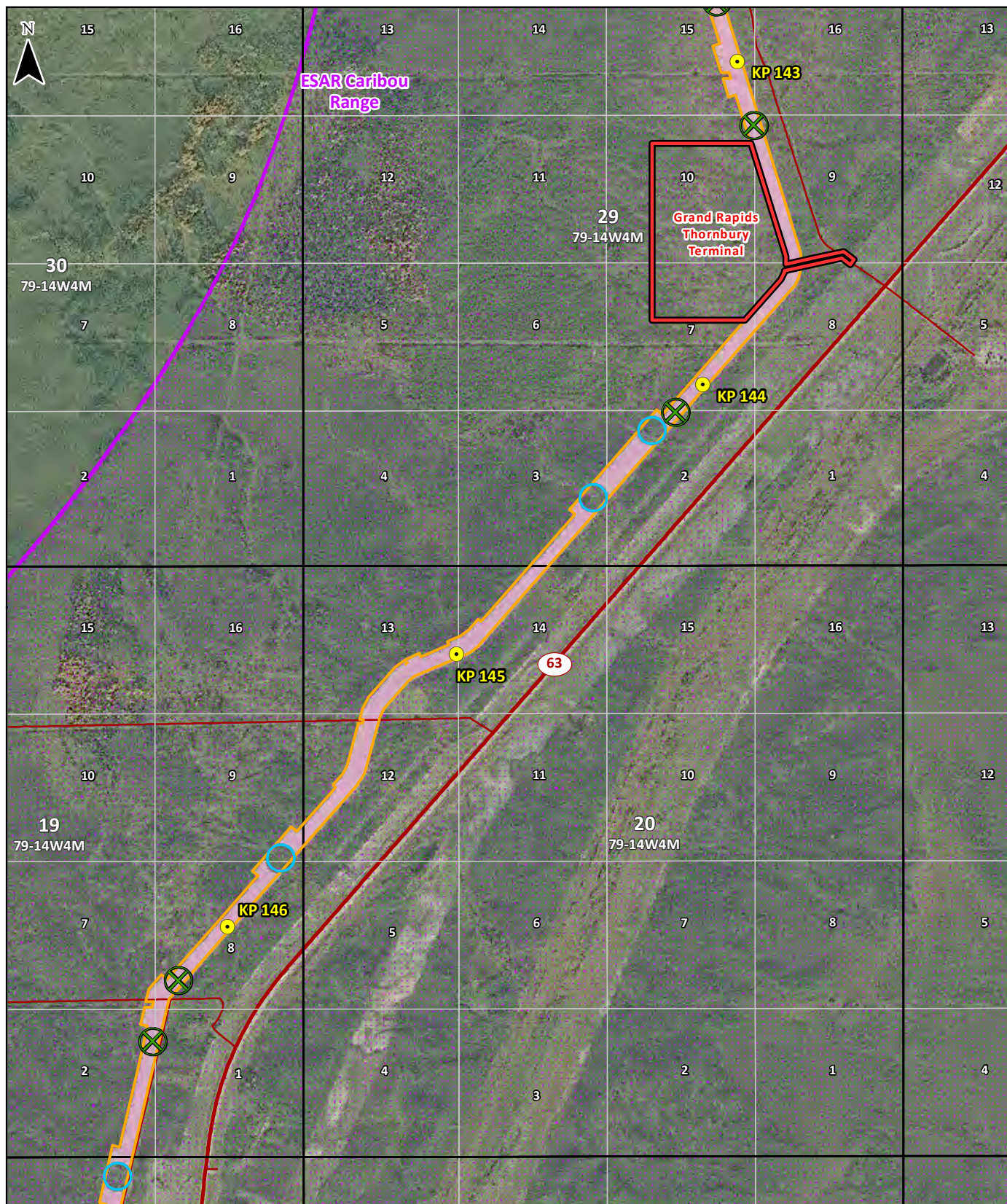
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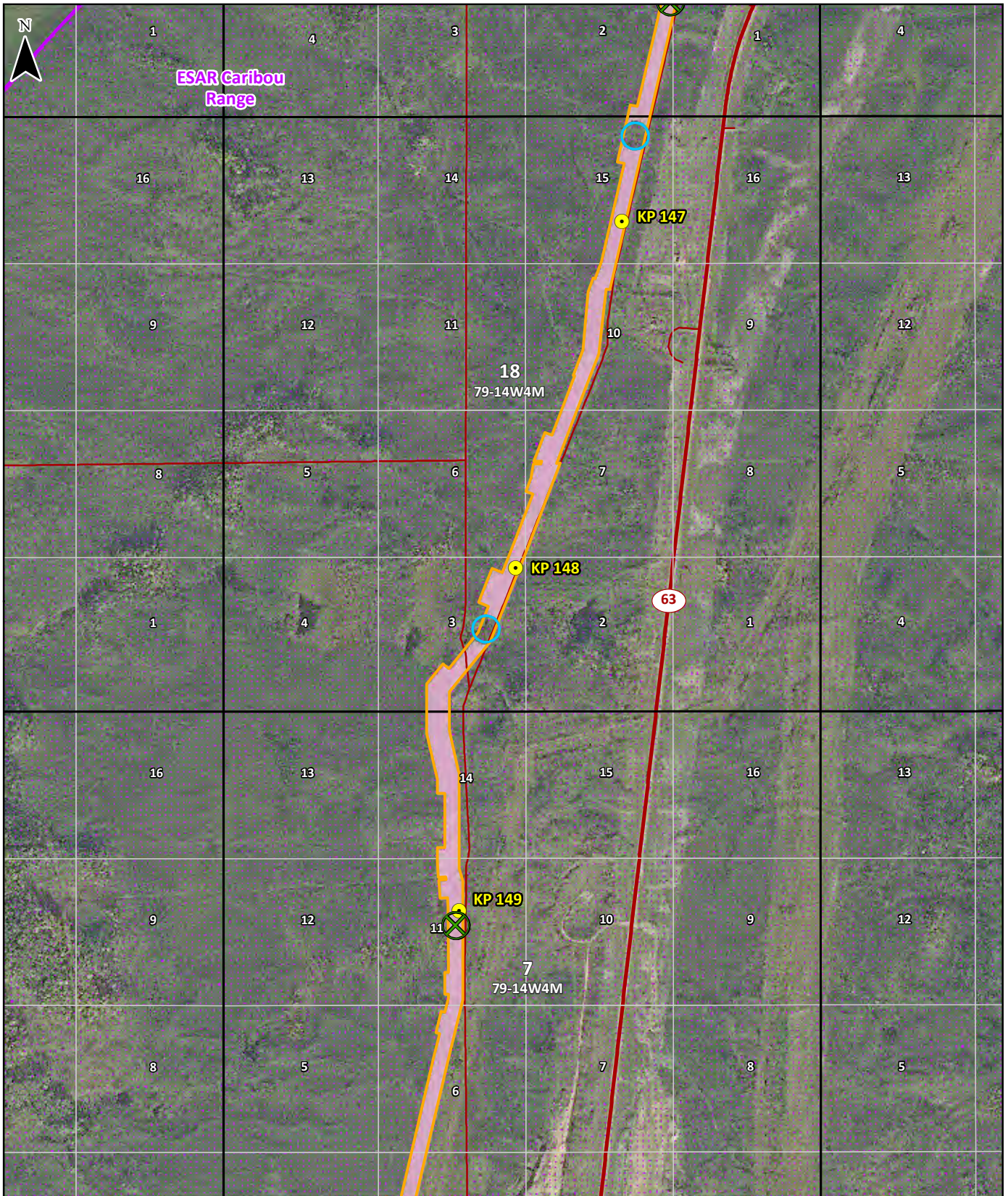
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Checked By: JB





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|--|---|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) Mackay Lateral Kilometre Post (KP) Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint Mackay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|---|--|

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SHEET 44 OF 52
CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT

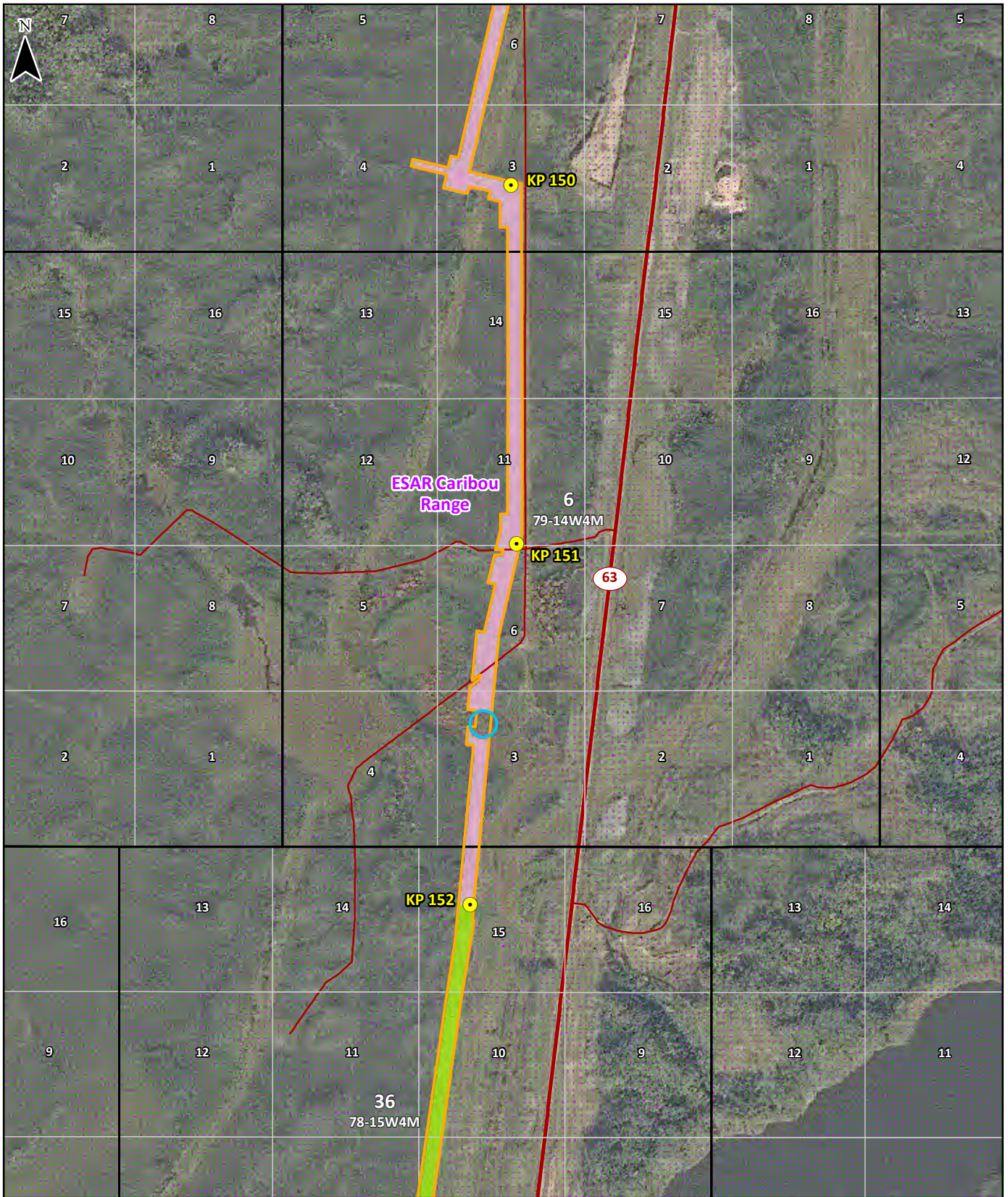


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Grand Rapids KP, Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
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0 100 200 300 m
(All Locations Approximate)

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- Kilometre Post (KP)
- Grand Rapids Footprint
- MacKay Lateral Kilometre Post (KP)
- MacKay Lateral Footprint
- Road
- Caribou Range
- Grand Rapids Facility

Habitat Restoration Measures

- X Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**



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0 100 200 300 m
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- Kilometre Post (KP)
- Grand Rapids Footprint
- MacKay Lateral Kilometre Post (KP)
- MacKay Lateral Footprint
- Road
- Caribou Range
- Grand Rapids Facility
- Habitat Restoration Measures**
- X Rollback
- Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering
- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

ch2m

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Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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**Grand Rapids
Pipeline Project**

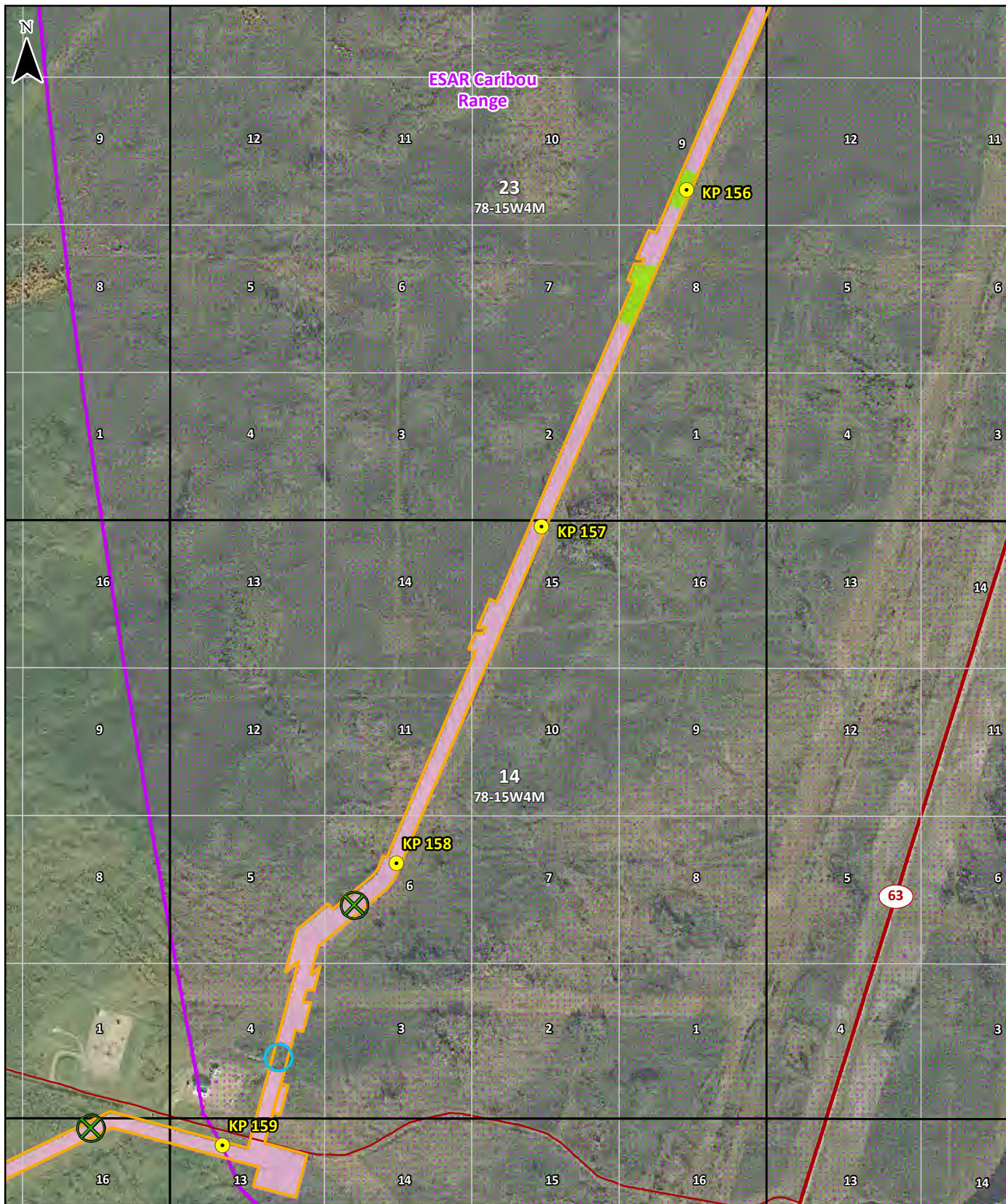
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(All Locations Approximate)

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- Kilometre Post (KP)
- MacKay Lateral Kilometre Post (KP)
- Road
- Caribou Range

- Grand Rapids Footprint
- MacKay Lateral Footprint
- Grand Rapids Facility

- Habitat Restoration Measures**
- X Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

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**CARIBOU HABITAT RESTORATION PLAN
 FOR THE GRAND RAPIDS PIPELINE GP LTD.
 GRAND RAPIDS PIPELINE PROJECT**



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 Grand Rapids KP Routing, Footprint, Facility: TCPL 2014-2015; Road: IHS Inc. 2016;
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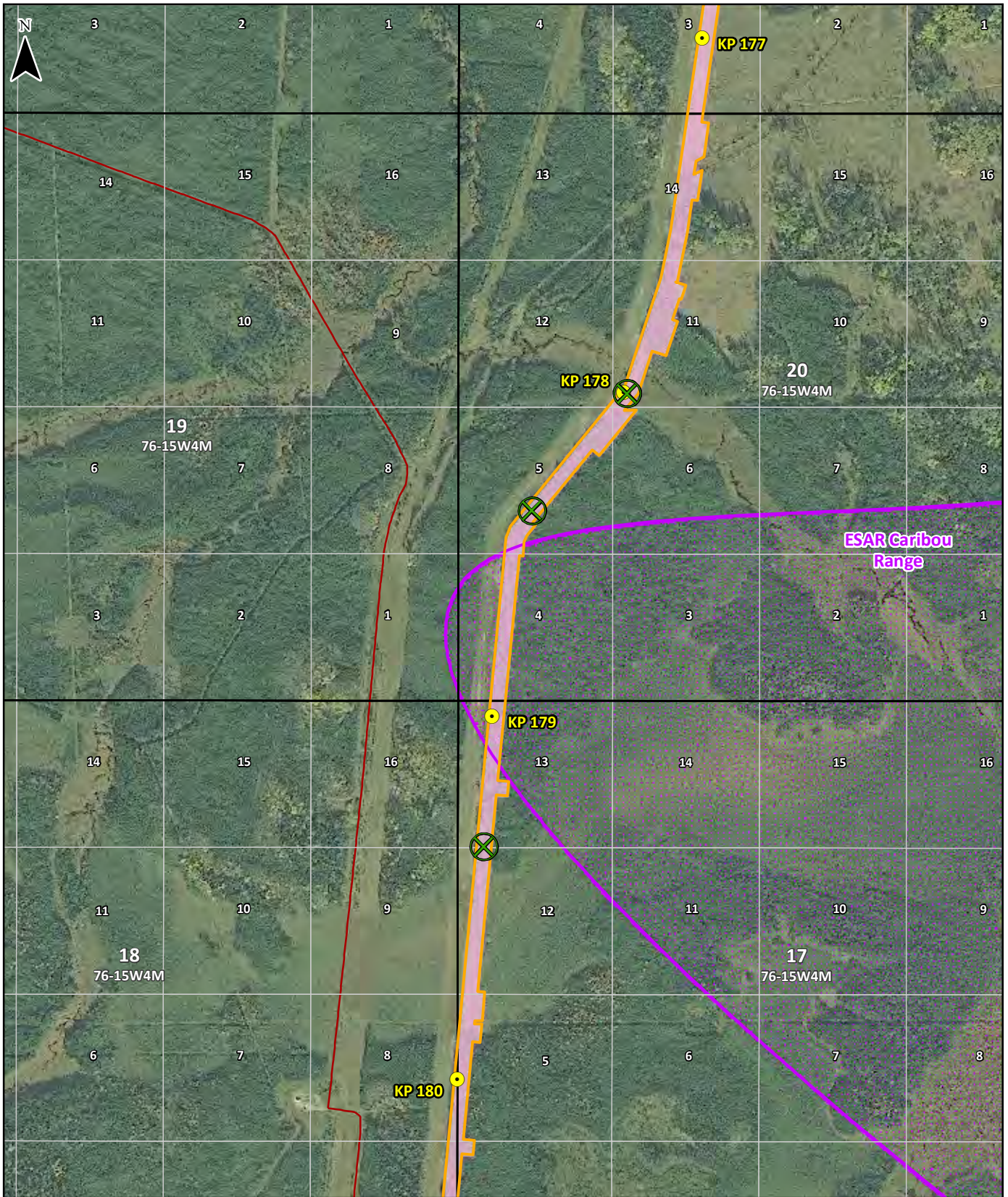
 (All Locations Approximate)

November 2016

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Checked By: JB



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|--|---|--|---|
| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|--|---|

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

ch2m

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Grand Rapids KP Routing, Footprint, TCPL 2014-2015; Road: IHS Inc. 2016;
Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GOA 2015;
Rollback and planting locations: CH2M 2016; Hydrology: Atlas 2014.
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**Grand Rapids
Pipeline Project**

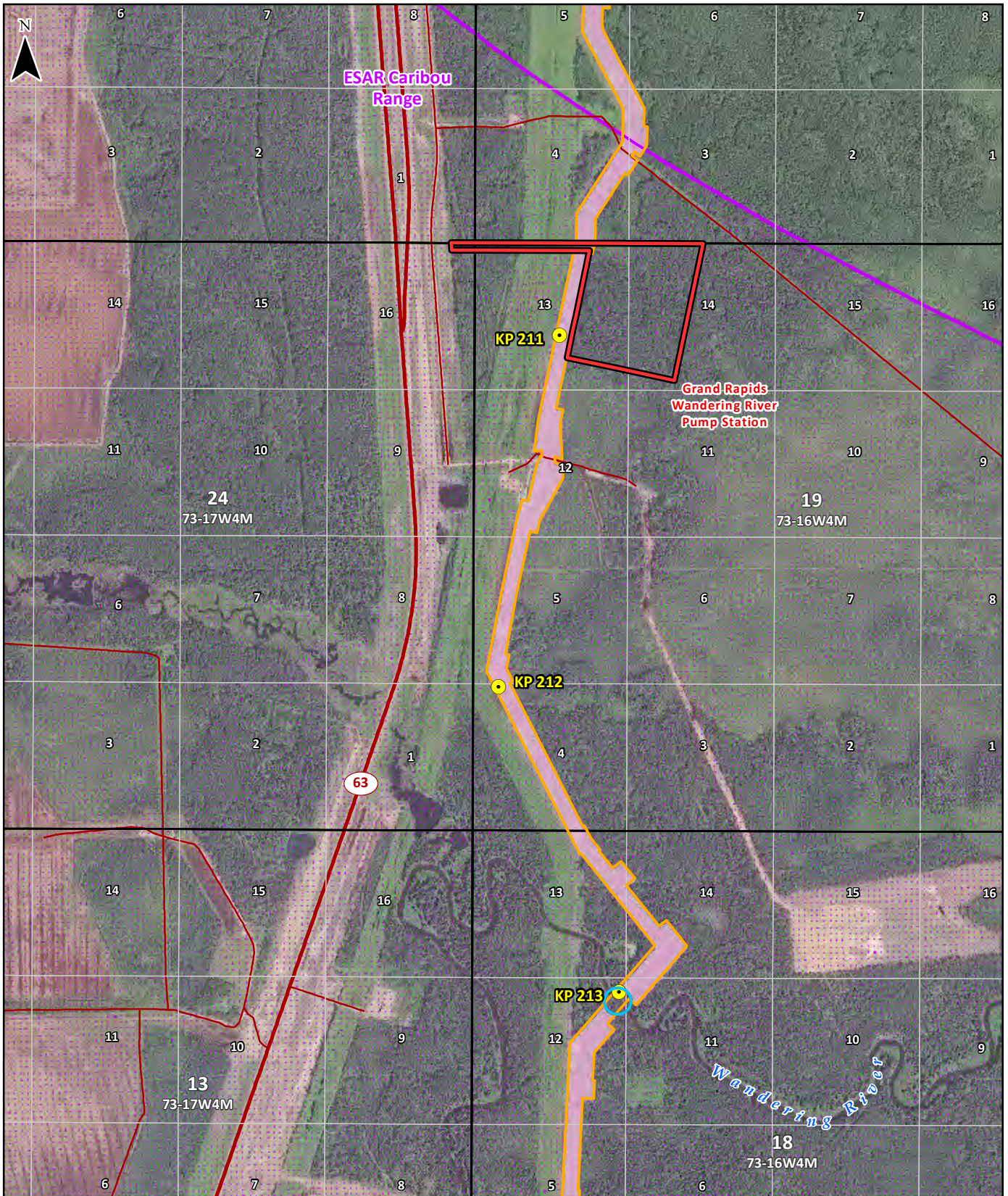
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(All Locations Approximate)

November 2016

496826

Mapped By: SL

Checked By: JB



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| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
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CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT



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Caribou Range, Key Wildlife and Biodiversity Zone: AEP, GDA 2015;
Rollback and planting locations: CHM 2016; Hydrology: Atlas 2014.

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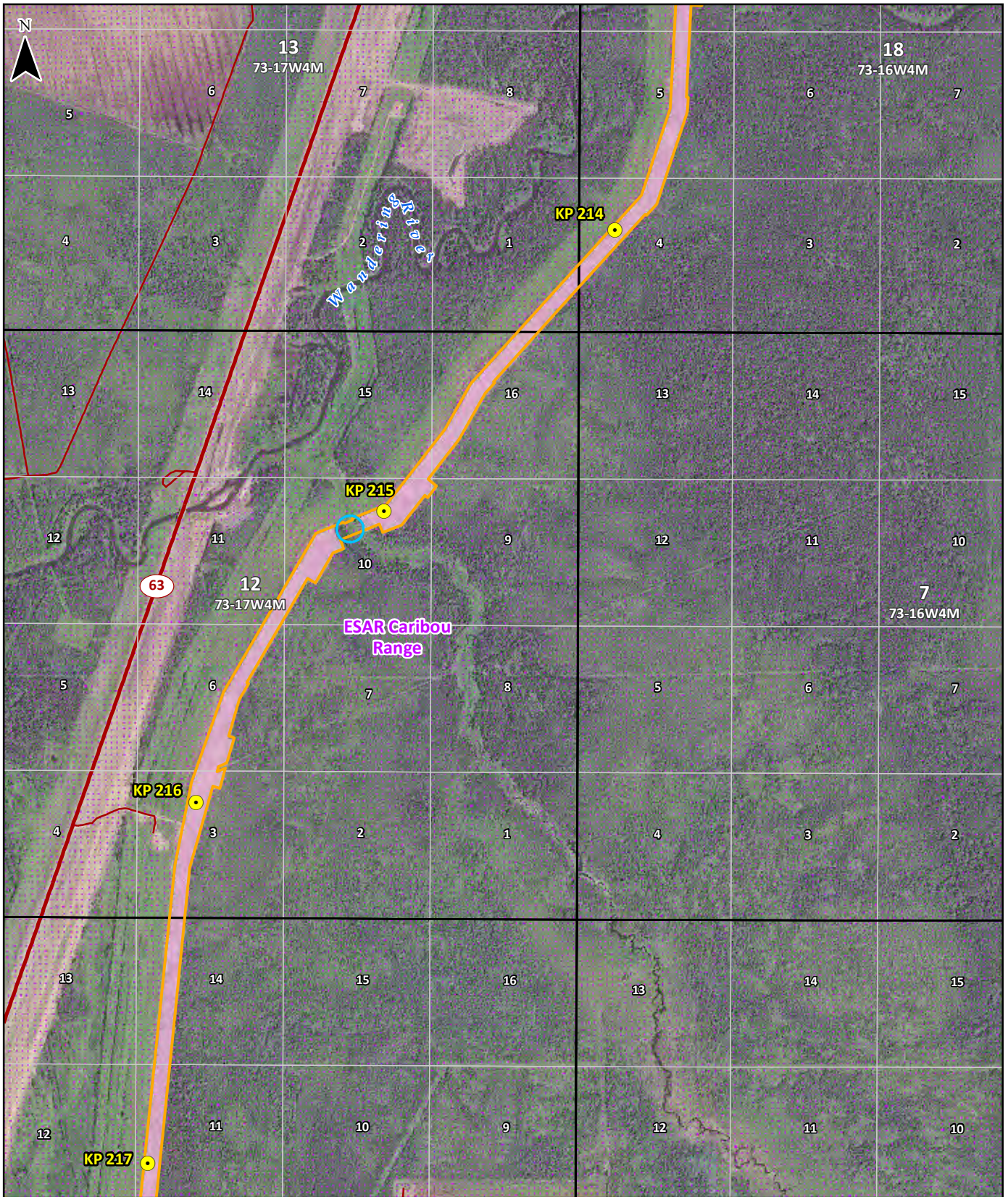
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(All Locations Approximate)

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Checked By: JB



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| <ul style="list-style-type: none"> ● Kilometre Post (KP) ● MacKay Lateral Kilometre Post (KP) — Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint MacKay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> X Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|---|---|--|---|

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CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT



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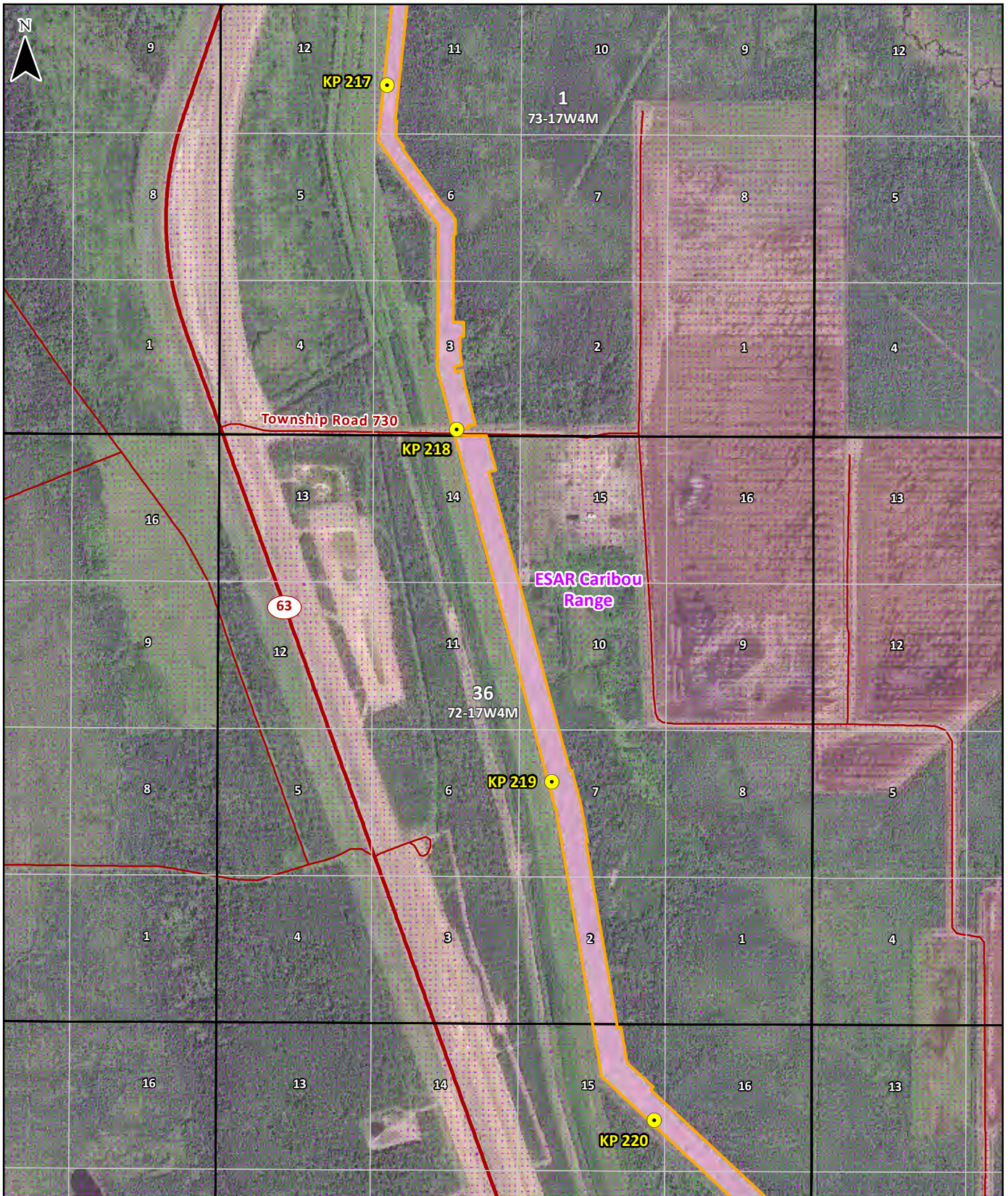
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 (All Locations Approximate)

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|--|---|---|--|
| <ul style="list-style-type: none"> Kilometre Post (KP) Mackay Lateral Kilometre Post (KP) Road Caribou Range | <ul style="list-style-type: none"> Grand Rapids Footprint Mackay Lateral Footprint Grand Rapids Facility | Habitat Restoration Measures <ul style="list-style-type: none"> Rollback Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering | <ul style="list-style-type: none"> HDD drill path - no clearing Minimal Disturbance Construction (MSD) Planting |
|--|---|---|--|

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**

ch2m

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**Grand Rapids
Pipeline Project**

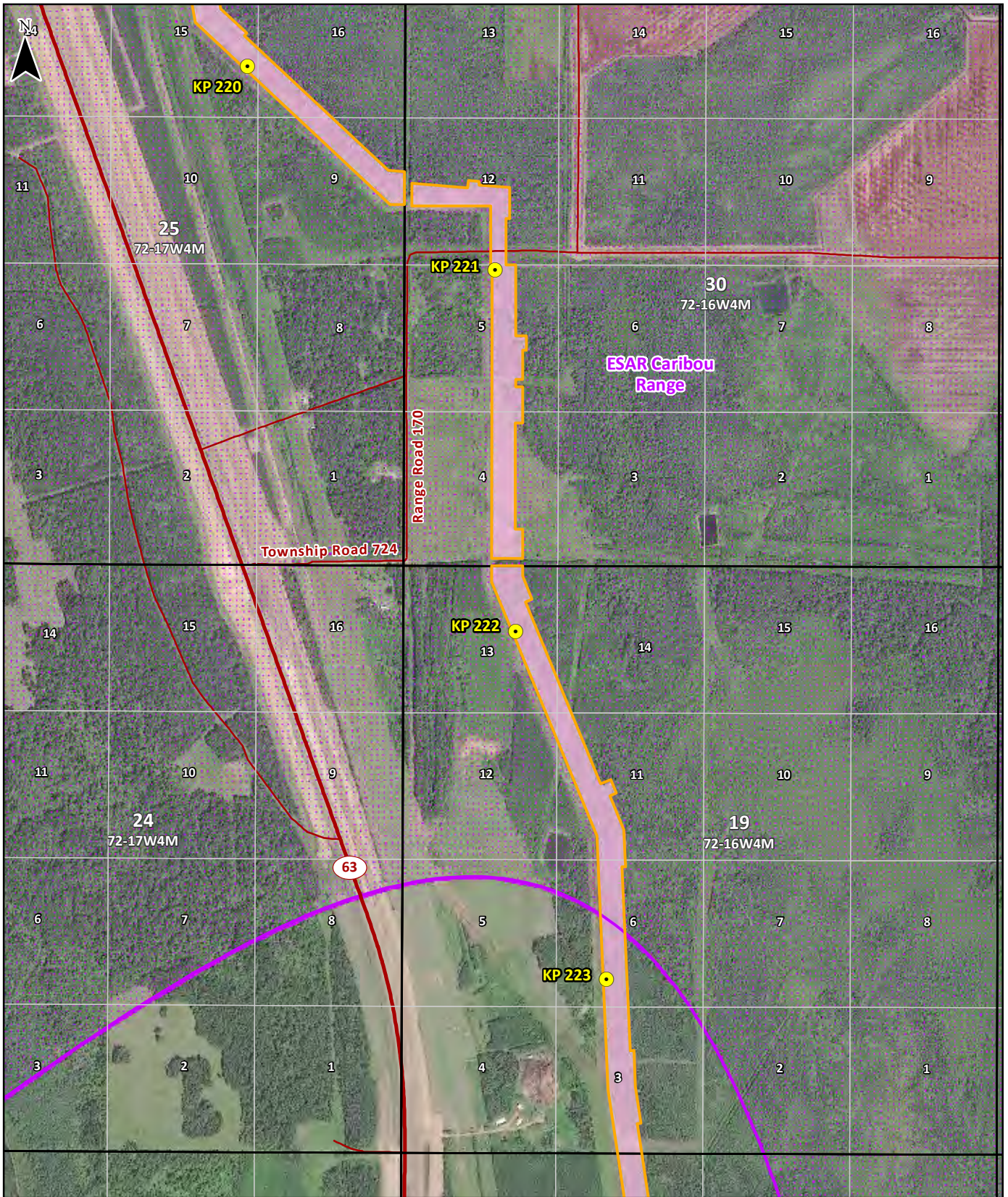
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- Kilometre Post (KP)
- MacKay Lateral Kilometre Post (KP)
- Road
- Caribou Range

- Grand Rapids Footprint
- MacKay Lateral Footprint
- Grand Rapids Facility

- Habitat Restoration Measures**
- ⊗ Rollback
 - Watercourse/Drainage: MSD, Snow Ramp, Bio-engineering

- HDD drill path - no clearing
- Minimal Disturbance Construction (MSD)
- Planting

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**CARIBOU HABITAT RESTORATION PLAN
FOR THE GRAND RAPIDS PIPELINE GP LTD.
GRAND RAPIDS PIPELINE PROJECT**



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