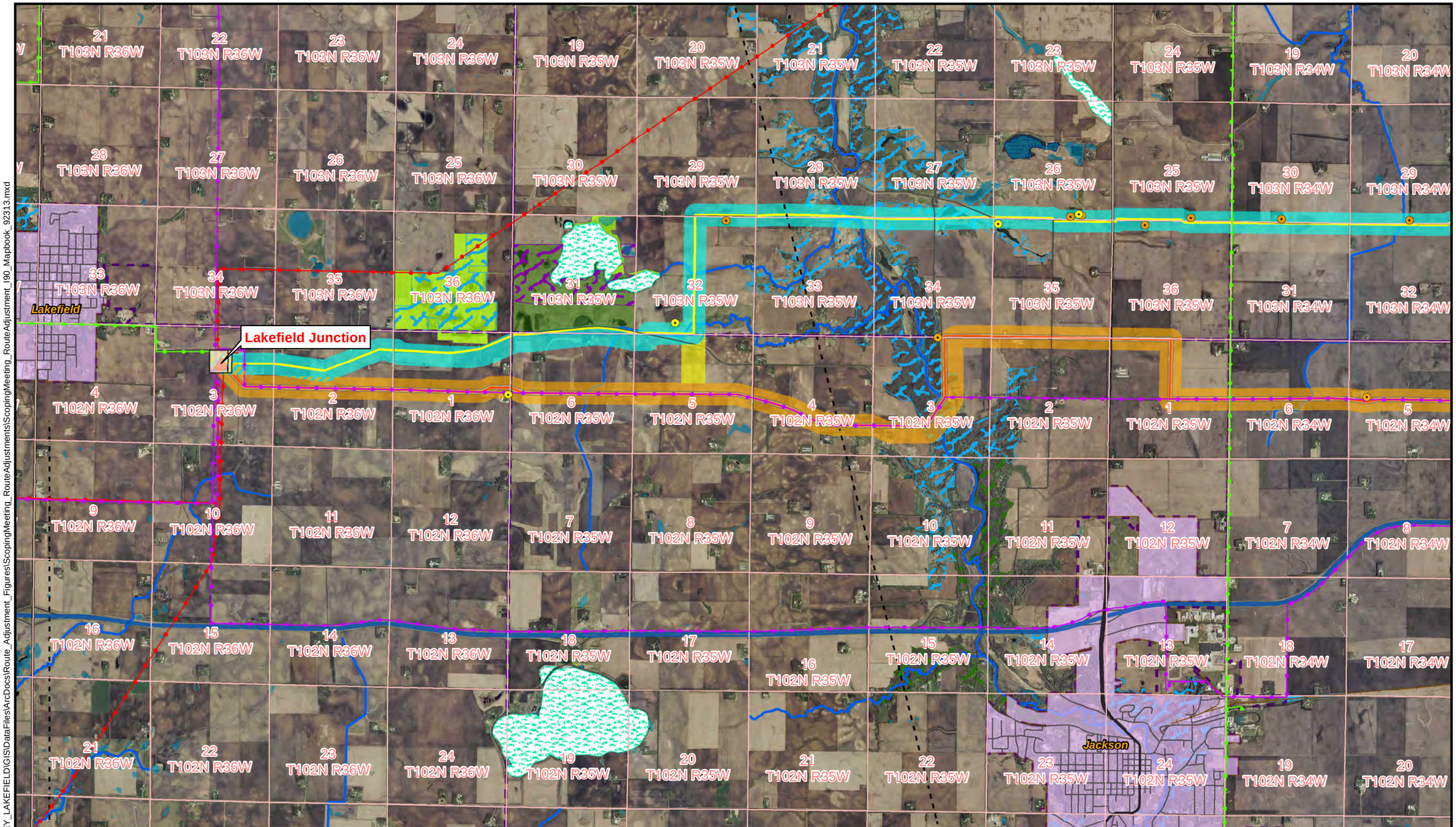


NORTH

4,000 2,000 0 4,000

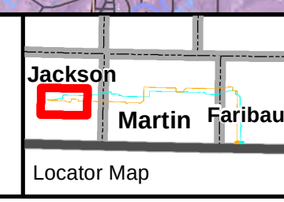
Scale in Feet

- Alternative I-90-R
- Alternative M15-R
- Existing Substation
- Substation Boundaries
- Line to be Removed
- Applicant Proposed Route A
- Applicant Proposed Route B
- Route A - Application Alignment
- Route B - Application Alignment
- Connector Segment
- Existing 69 kV Lines
- Existing 161 kV Lines
- City
- Civil Township
- Township Sections
- State Park or WMA
- State Game Refuge
- PWI Water Basin
- PWI Water Wetland
- Existing Pipeline

MBS Sites

- Below
- Moderate
- High
- Outstanding

- Private Landing Strip
- Home 0-75ft
- Home 75-150ft
- Home 150-300ft
- Home 300-500ft



Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Map Sheet 8 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustments\ScopingMeeting_RouteAdjustment_I90_Mapbook_92313.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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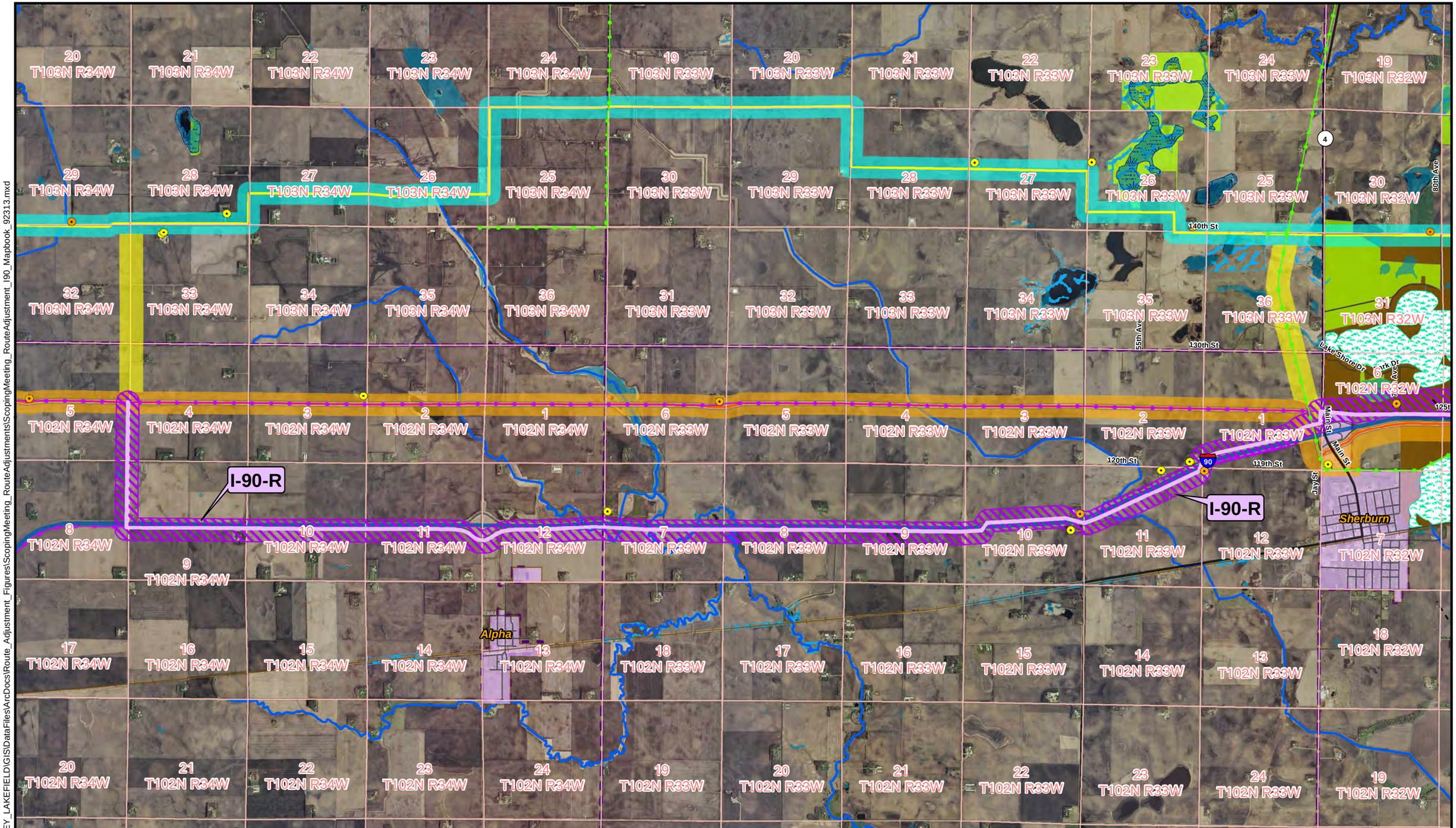


NORTH

4,000 2,000 0 4,000

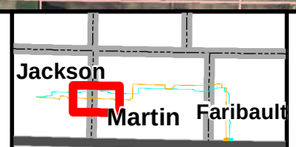
Scale in Feet

- Alternative I-90-R
- Alternative M15-R
- Existing Substation
- Substation Boundaries
- Line to be Removed
- Applicant Proposed Route A
- Applicant Proposed Route B
- Route A - Application Alignment
- Route B - Application Alignment
- Connector Segment
- Existing 69 kV Lines
- Existing 161 kV Lines
- City
- Civil Township
- Township Sections
- State Park or WMA
- State Game Refuge
- PWI Water Basin
- PWI Water Wetland
- Existing Pipeline

MBS Sites

- Below
- Moderate
- High
- Outstanding

- Private Landing Strip
- Home 0-75ft
- Home 75-150ft
- Home 150-300ft
- Home 300-500ft



Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Map Sheet 9 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustments\ScopingMeeting_RouteAdjustment_I90_Mapbook_92313.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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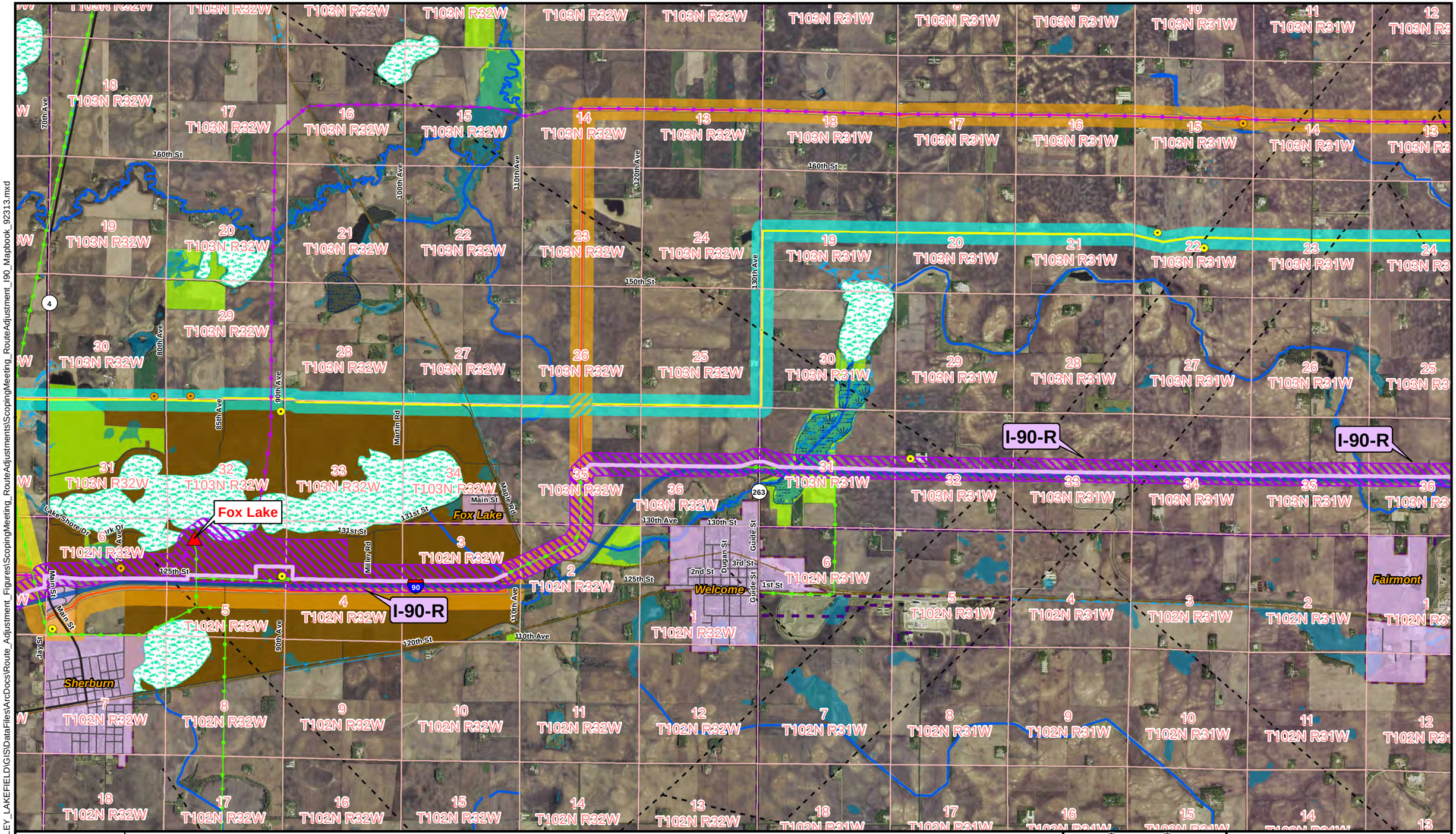

NORTH

4,000 2,000 0 4,000

Scale in Feet

- Alternative I-90-R
- Alternative M15-R
- Existing Substation
- Substation Boundaries
- Line to be Removed
- Applicant Proposed Route A
- Applicant Proposed Route B
- Route A - Application Alignment
- Route B - Application Alignment
- Connector Segment
- Existing 69 kV Lines
- Existing 161 kV Lines
- City
- Civil Township
- Township Sections
- State Park or WMA
- State Game Refuge
- PWI Water Basin
- PWI Water Wetland
- Existing Pipeline

MBS Sites

- Below
- Moderate
- High
- Outstanding

- Private Landing Strip
- Home 0-75ft
- Home 75-150ft
- Home 150-300ft
- Home 300-500ft

Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Map Sheet 10 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustment_I90_Mapbook_92313.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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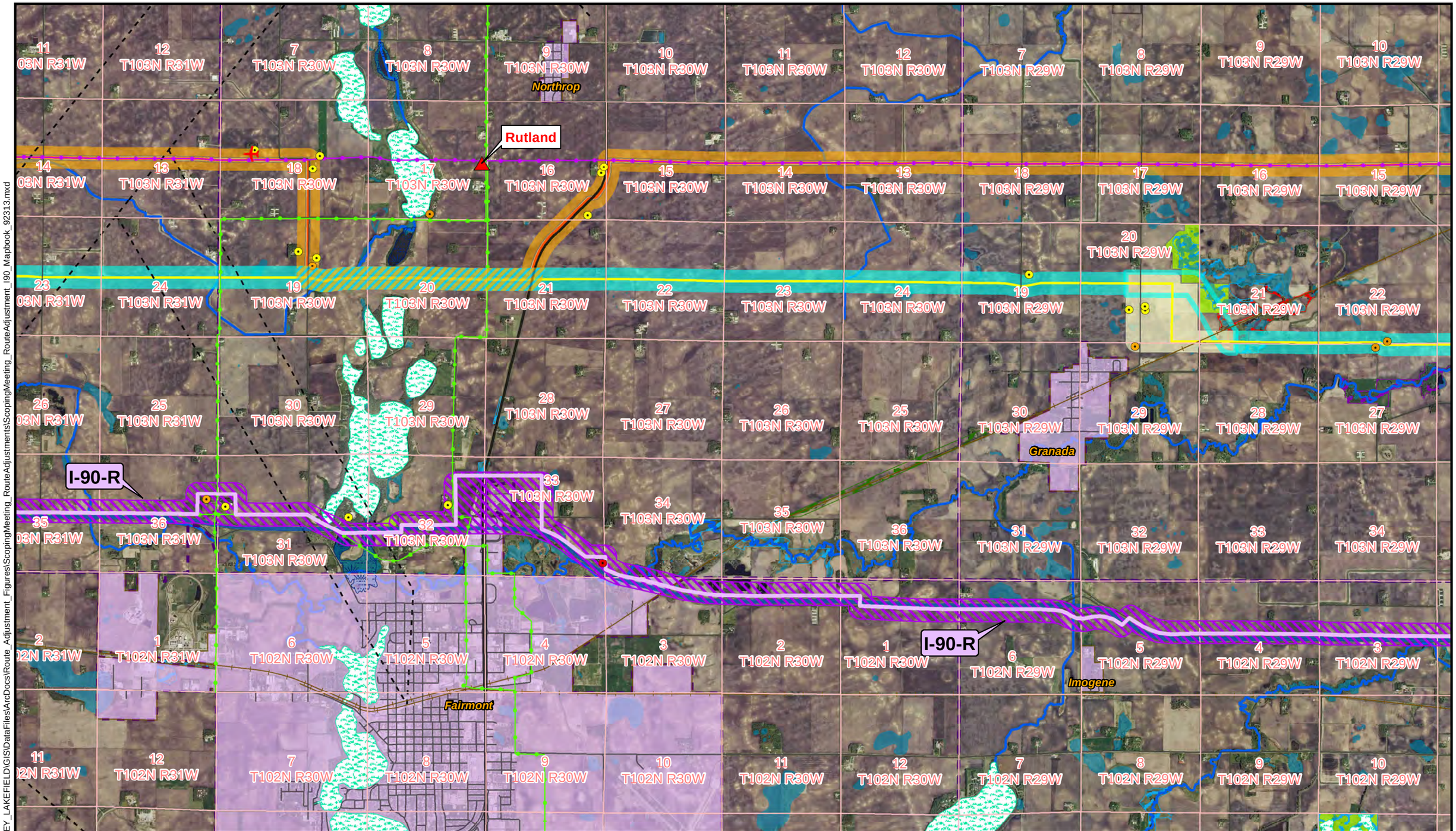

NORTH

4,000 2,000 0 4,000

Scale in Feet

- Alternative I-90-R
- Alternative M15-R
- Existing Substation
- Substation Boundaries
- Line to be Removed
- Applicant Proposed Route A
- Applicant Proposed Route B
- Route A - Application Alignment
- Route B - Application Alignment
- Connector Segment
- Existing 69 kV Lines
- Existing 161 kV Lines
- City
- Civil Township
- Township Sections
- State Park or WMA
- State Game Refuge
- PWI Water Basin
- PWI Water Wetland
- Existing Pipeline

MBS Sites

- Below
- Moderate
- High
- Outstanding
- Private Landing Strip
- Home 0-75ft
- Home 75-150ft
- Home 150-300ft
- Home 300-500ft

Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Map Sheet 11 of 16

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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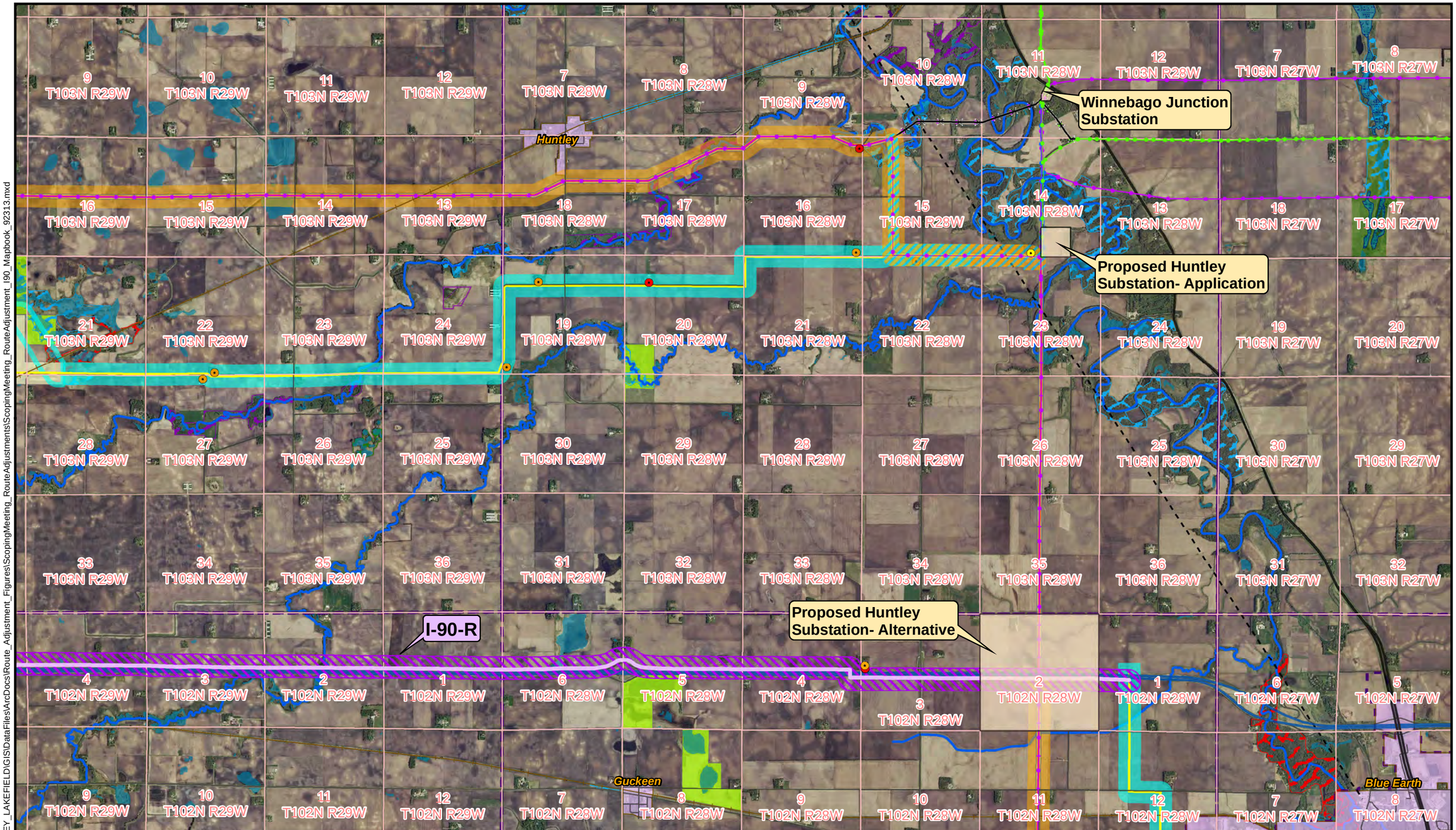


NORTH

4,000 2,000 0 4,000

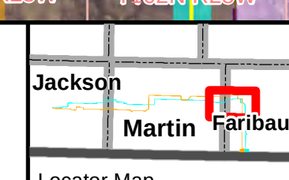
Scale in Feet

- Alternative I-90-R
- Alternative M15-R
- Existing Substation
- Substation Boundaries
- Line to be Removed
- Applicant Proposed Route A
- Applicant Proposed Route B
- Route A - Application Alignment
- Route B - Application Alignment
- Connector Segment
- Existing 69 kV Lines
- Existing 161 kV Lines
- City
- Civil Township
- Township Sections
- State Park or WMA
- State Game Refuge
- PWI Water Basin
- PWI Water Wetland
- Existing Pipeline

MBS Sites

- Below
- Moderate
- High
- Outstanding

- Private Landing Strip
- Home 0-75ft
- Home 75-150ft
- Home 150-300ft
- Home 300-500ft



Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Map Sheet 12 of 16

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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Winnebago Junction Substation

Huntley

500 ft Route Width
150 ft ROW
161 kV Single Circuit

500 ft Route Width
300 ft Shared ROW
Double Circuit 69/161 kV
69 kV Built to 161 kV Standards

500 ft Route Width
150 ft ROW
161 kV Single Circuit

1000 ft Route Width
150 ft ROW
Double Circuit 69/161 kV

I-90-R

Proposed Huntley Substation- Alternative

Blue Earth

NORTH

3,500 1,750 0 3,500
Scale in Feet

Substation
69 kV Built to 161 kV
Double Circuit 69/161 kV
New 161 kV
ROW- 150ft
ROW- 300ft
I-90-R Huntley- Route Width
Alternative I-90-R
Alternative I-90-A
Applicant Proposed Route A
Applicant Proposed Route B
Existing 69 kV Lines
Existing 161 kV Lines
City
Civil Township
Township Sections
State Park or WMA
PWI Stream
PWI Water Basin
PWI Water Wetland
MBS Sites
Below
Moderate
High
Impaired Stream
Existing Pipeline
Home 0-75ft
Home 75-150ft
Home 150-300ft
Home 300-500ft

Martin
Faribault
Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision

Route & Alignment Alternatives: I-90-R
Huntley Substation Option 1
Map Sheet 13 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustments\ScopingMeeting_RouteAdjustment_AssociatedFacilities1.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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Winnebago Junction Substation

Huntley

1000 ft Route Width
450 ft Shared ROW
Two Double Circuit 69/161 kV
One 161 kV Single Circuit

500 ft Route Width
150 ft ROW
69 kV Built to 161 kV Standards

I-90-R

Proposed Huntley Substation- Alternative

Guckeen

Blue Earth

NORTH

3,500 1,750 0 3,500
Scale in Feet

69 kV Built to 161 kV
Double Circuit 69/161 kV
New 161 kV
ROW- 150ft
ROW- 450ft
I-90-R Huntley Route
Substation
Alternative I-90-R
Alternative I-90-A
Applicant Proposed Route A
Applicant Proposed Route B
Existing 69 kV Lines
Existing 161 kV Lines
City
Civil Township
Township Sections
State Park or WMA
State Game Refuge
WPA
PWI Stream
PWI Water Wetland
MBS Sites
Below
Moderate
Impaired Stream
Existing Pipeline
Home 0-75ft
Home 75-150ft
Home 150-300ft
Home 300-500ft

Martin
Faribault
Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision
Route & Alignment Alternatives: I-90-R
Huntley Substation Option 2
Map Sheet 14 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustments\ScopingMeeting_RouteAdjustment_AssociatedFacilities2.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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Winnebago Junction Substation

Proposed Huntley Substation- Application

500 ft Route Width
150 ft ROW
161 kV Single Circuit

1000 ft Route Width
200 ft ROW
345 kV Single Circuit

I-90-R

Huntley

Blue Earth

NORTH

3,500 1,750 0 3,500
Scale in Feet

Substation
Alternative I-90-R
Alternative I-90-A
ROW- 200ft
Associated Facilities
New 161 kV
Applicant Proposed Route A
Applicant Proposed Route B
Route A - Application Alignment
Route B - Application Alignment
Existing 69 kV Lines
Existing 161 kV Lines
City
Civil Township
Township Sections
State Park or WMA
State Game Refuge
WPA
WRP
PWI Stream
PWI Water Wetland
MBS Sites
Below
Moderate
Impaired Stream
Existing Pipeline
Home 0-75ft
Home 75-150ft
Home 150-300ft
Home 300-500ft

Locator Map
Martin
Faribault

ITC Midwest-Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision
Route & Alignment Alternatives: I-90-R
Huntley Substation Option 3
Map Sheet 15 of 16

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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Winnebago Junction Substation

Huntley

500 ft Route Width
150 ft ROW
161 kV Single Circuit

Proposed Huntley Substation- Application

1000 ft Route Width
400 ft Shared ROW
345 kV Single Circuit (North)
345/161 kV Double Circuit (South)
-or-
1000 ft Route Width
200 ft Shared ROW
345 kV Single Circuit (North)

I-90-R

Blue Earth

NORTH

3,500 1,750 0 3,500
Scale in Feet

Substation
Alternative I-90-R
Alternative I-90-A
ROW- 400ft
Associated Facilities
New 161 kV
Applicant Proposed Route A
Applicant Proposed Route B
Route A - Application Alignment
Route B - Application Alignment
Existing 69 kV Lines
Existing 161 kV Lines
City
Civil Township
Township Sections
State Park or WMA
State Game Refuge
WPA
WRP
PWI Stream
PWI Water Wetland
MBS Sites
Below
Moderate
Impaired Stream
Existing Pipeline
Home 0-75ft
Home 75-150ft
Home 150-300ft
Home 300-500ft

Martin
Faribault
Locator Map

ITC Midwest- Minnesota to Iowa
345 kV Transmission Line Project

Scoping Decision
Route & Alignment Alternatives: I-90-R
Huntley Substation Option 4
Map Sheet 16 of 16

Path: R:\ITC\66742_HUNTLEY_LAKEFIELD\GIS\DataFiles\ArcDocs\Route_Adjustment_Figures\ScopingMeeting_RouteAdjustments\ScopingMeeting_RouteAdjustment_AssociatedFacilities4.mxd

Source: MN Geo 2011 Aerials; USFWS NWI Wetlands; National Hydrography Dataset; National Flight Data Center; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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