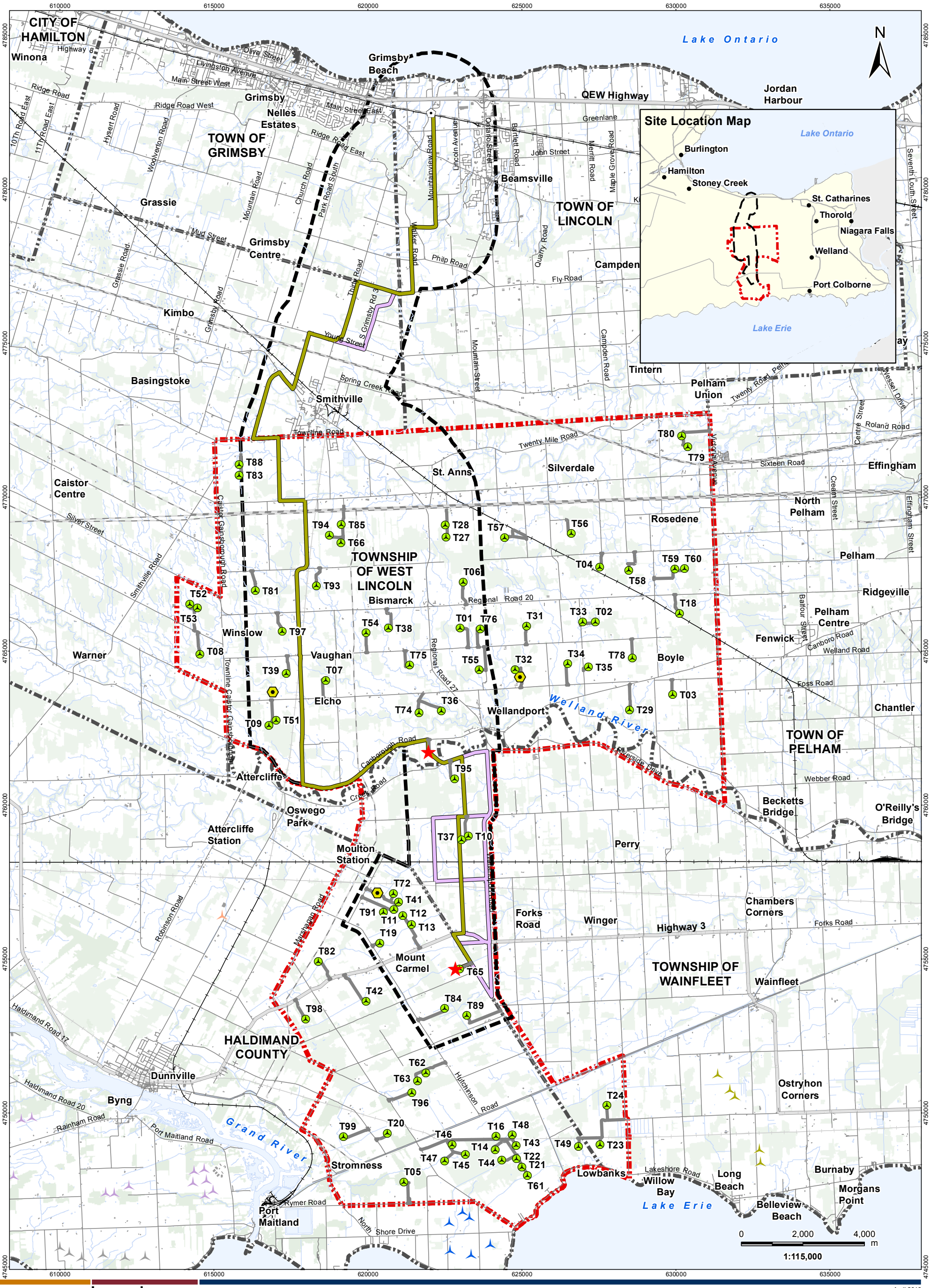
Appendix A

Figures



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_01_Site_Plan_Overview.mxd
Revised: 2013-04-18 By: bcowper

Legend

- Project Study Area
- Interconnector Study Area
- Proposed Turbine Location
- Potential Acesss Road
- Transformer Substation
- Tap-in Location
- Existing Met Tower
- Preferred Transmission Route
- Alternate Tranmission Route
- Road
- Expressway / Highway
- Active Railway
- Abandoned Railway
- Existing Structures
- Existing Transmission Line
- Watercourse
- Waterbody
- Wooded Area
- Municipality Lower Tier

Other Wind Turbines

- Mohawk Wind Farm (Existing)
- Rosa Flora Turbine (Existing)
- Wainfleet Wind Energy Project (Proposed)
- HAF Wind Energy Project (Proposed)
- Grand Renewable Energy Project
- Other Wind Farm Projects

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

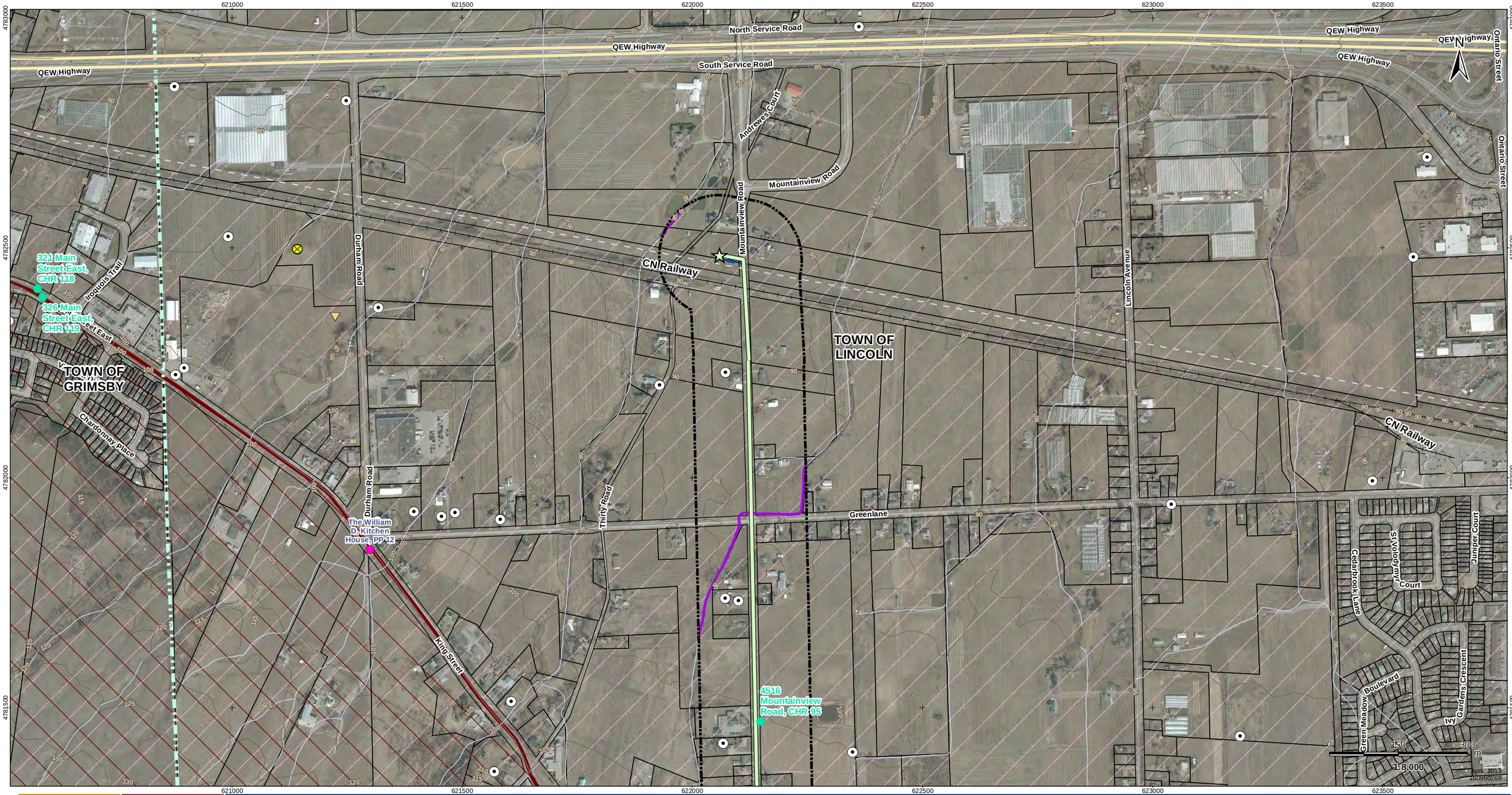
Stantec

April 2013
160950269

Client/Project
Niagara Region Wind Corporation
Niagara Region Wind Farm

Figure No.
1

Title
Overview Site Plan



V:\101609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

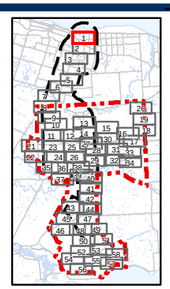
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

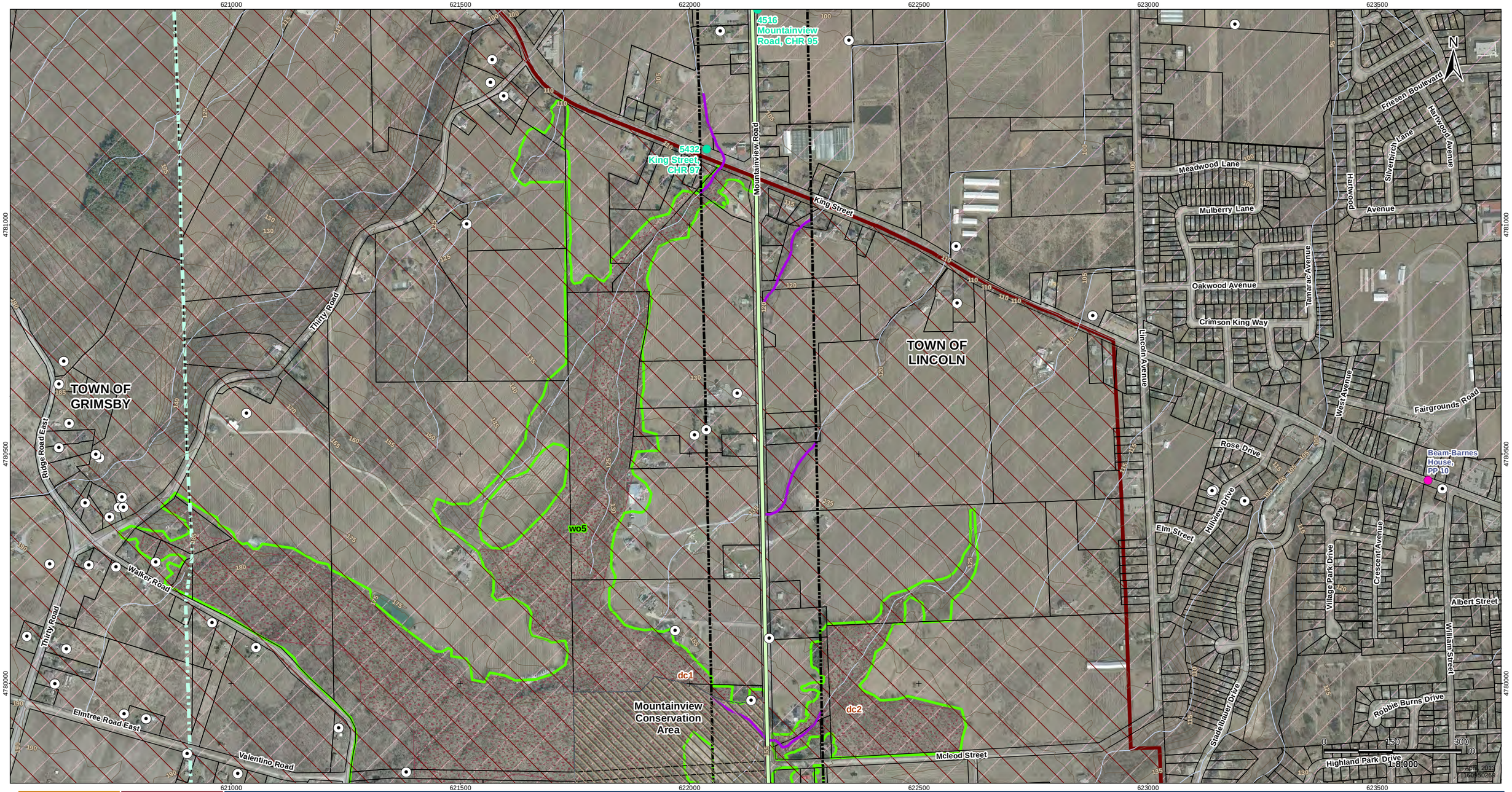
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.1

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.1



V:\0\0169\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Report\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

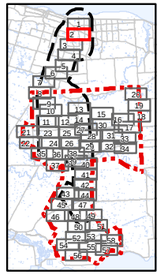
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.2

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.2

V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

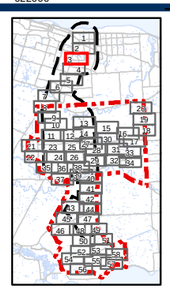
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

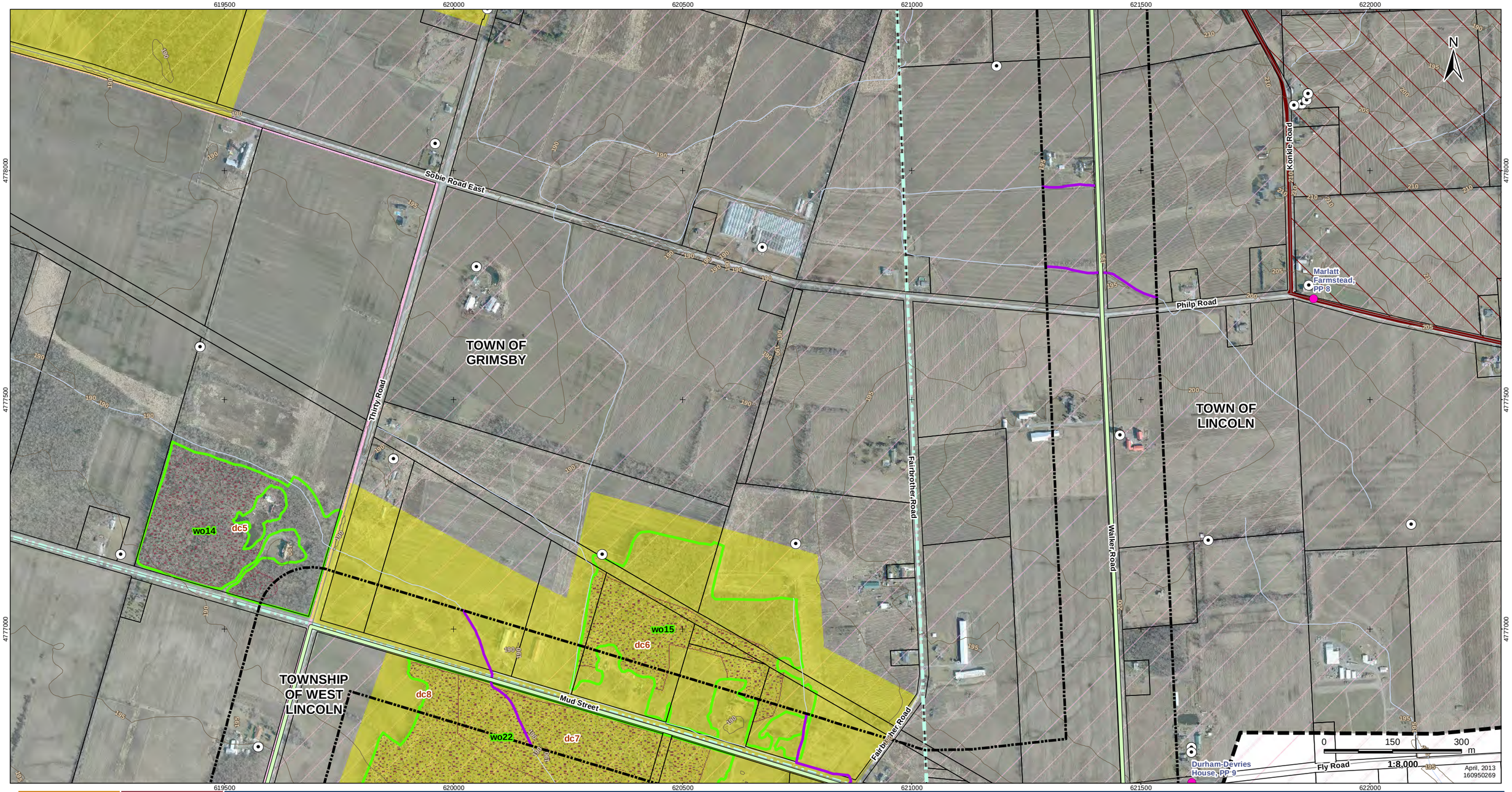
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.3

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.3



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_2_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

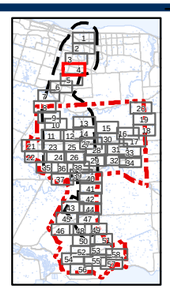
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

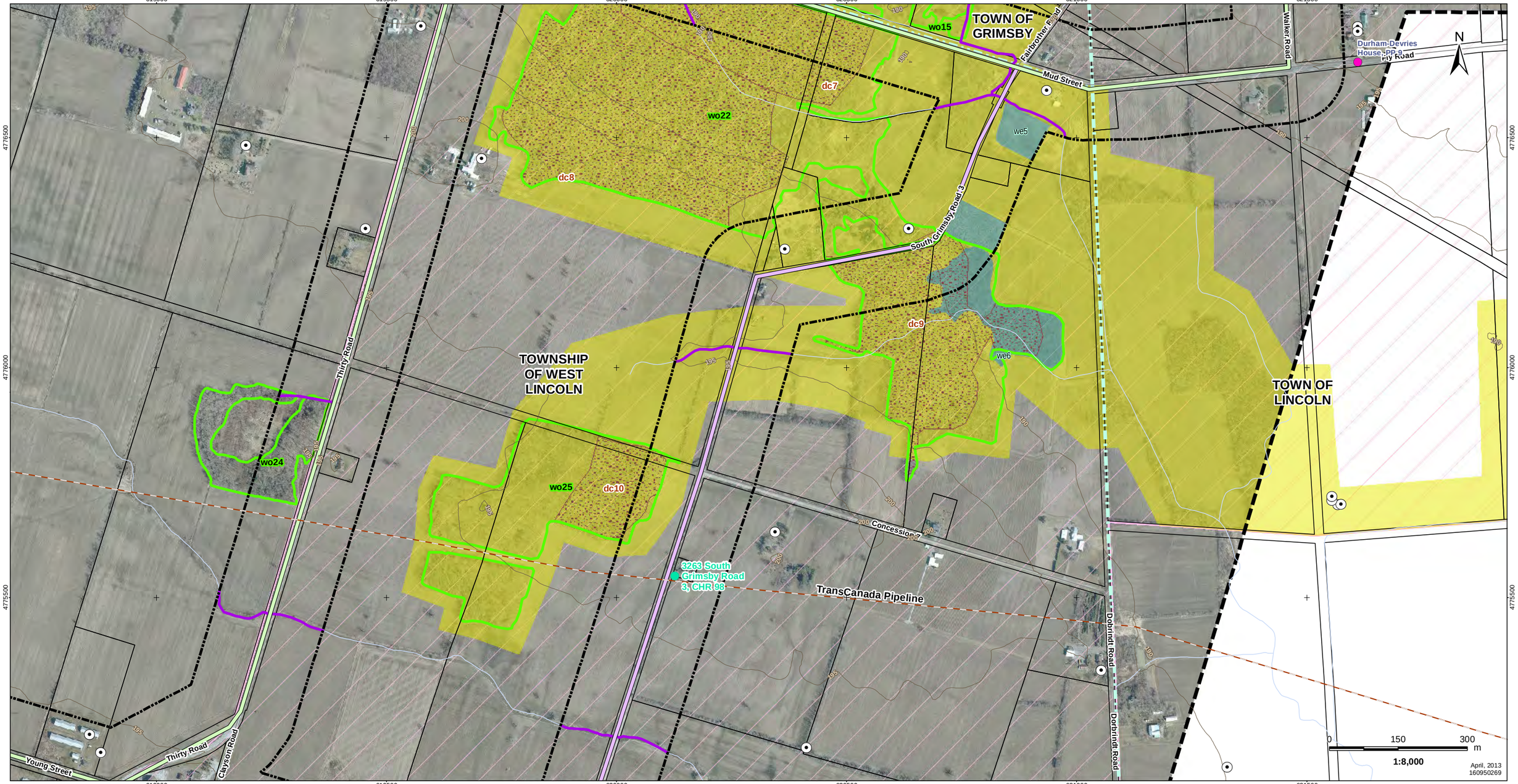
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.4

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.4



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

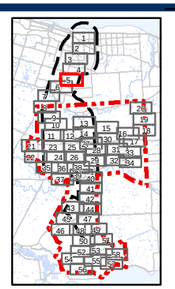
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

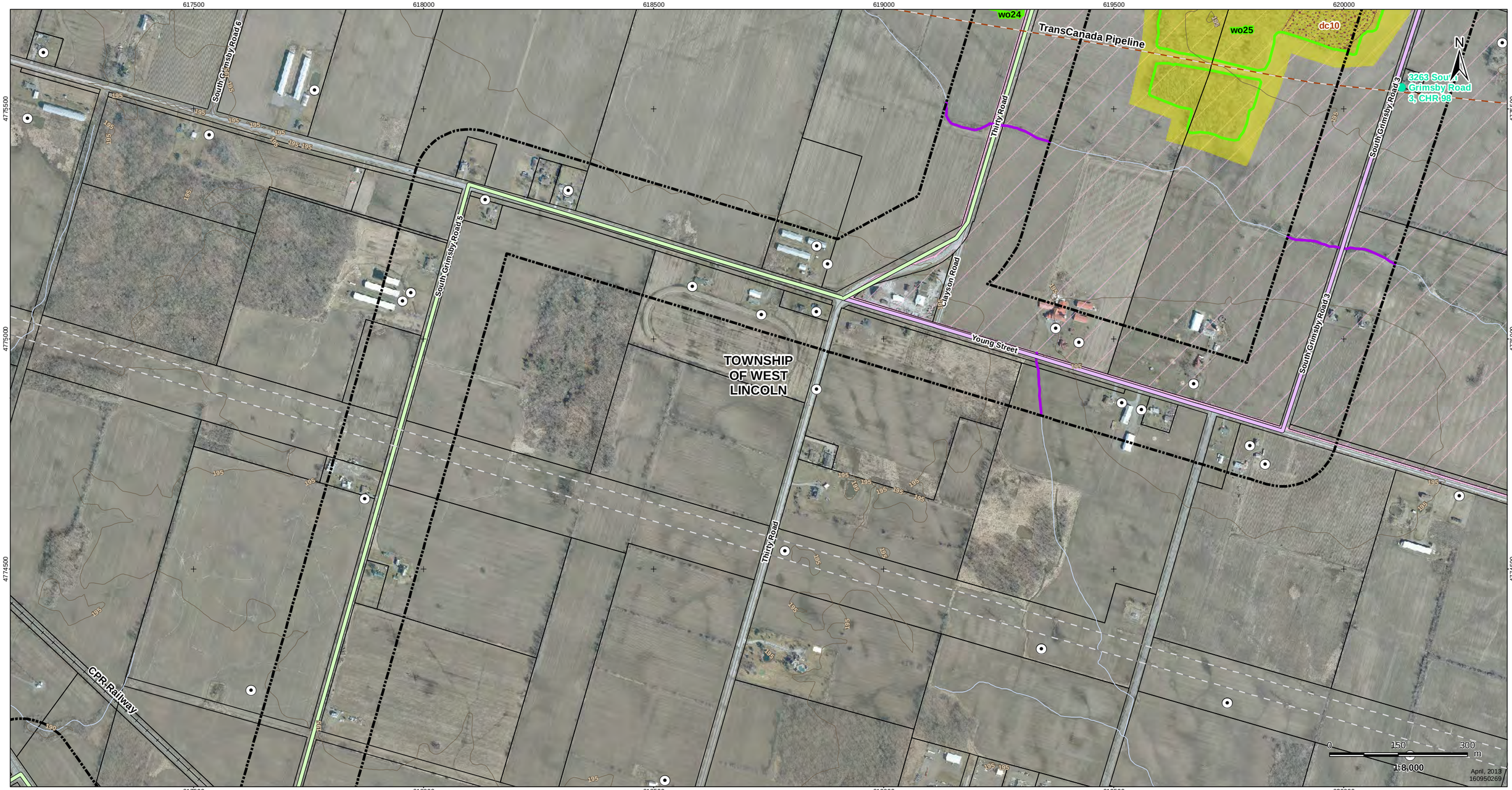
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.5

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.5



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

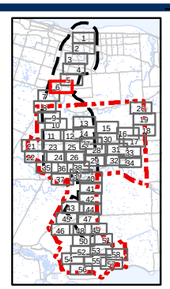
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

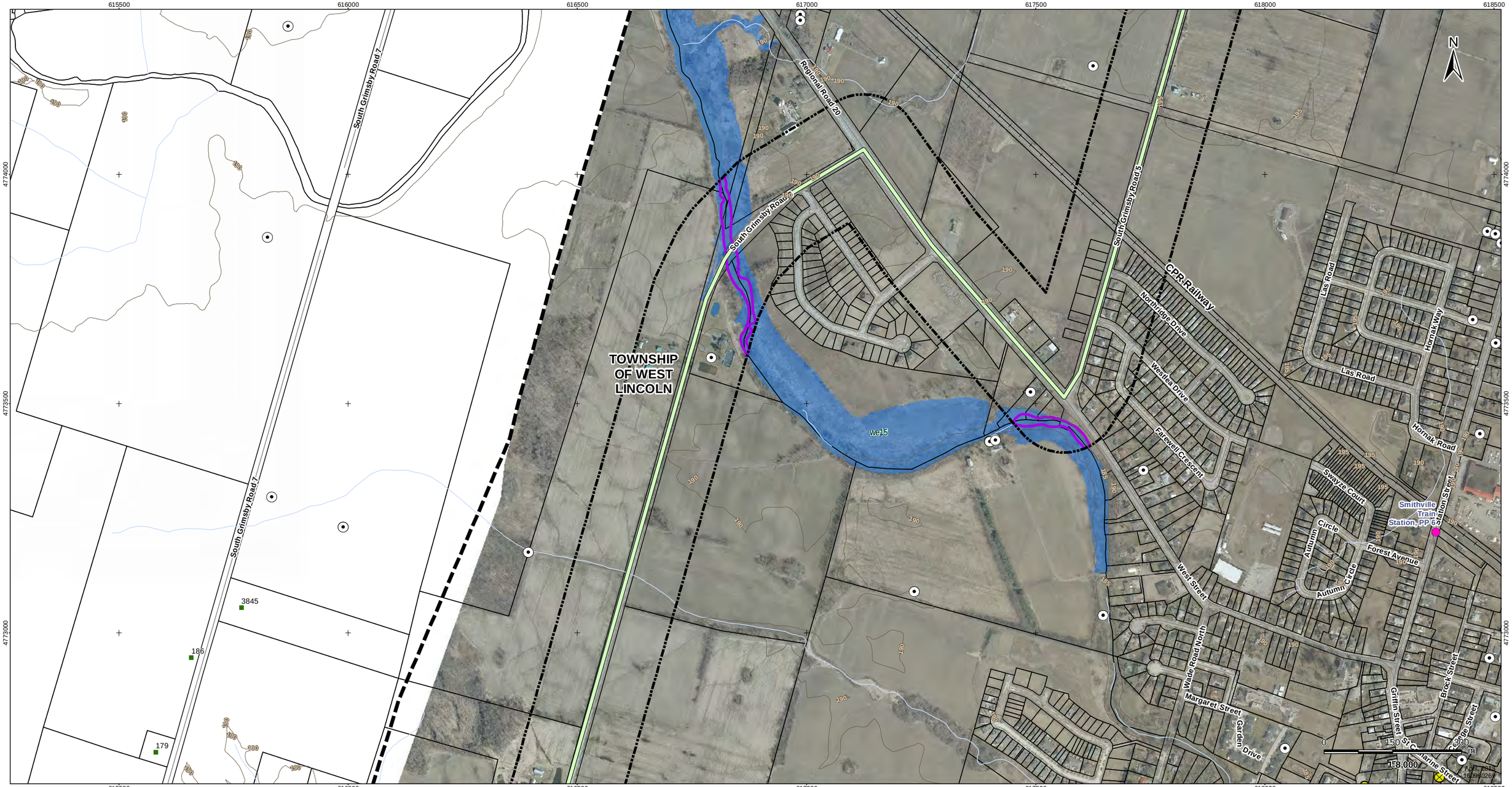
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.6

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.6



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

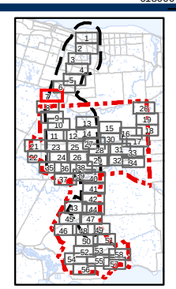
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

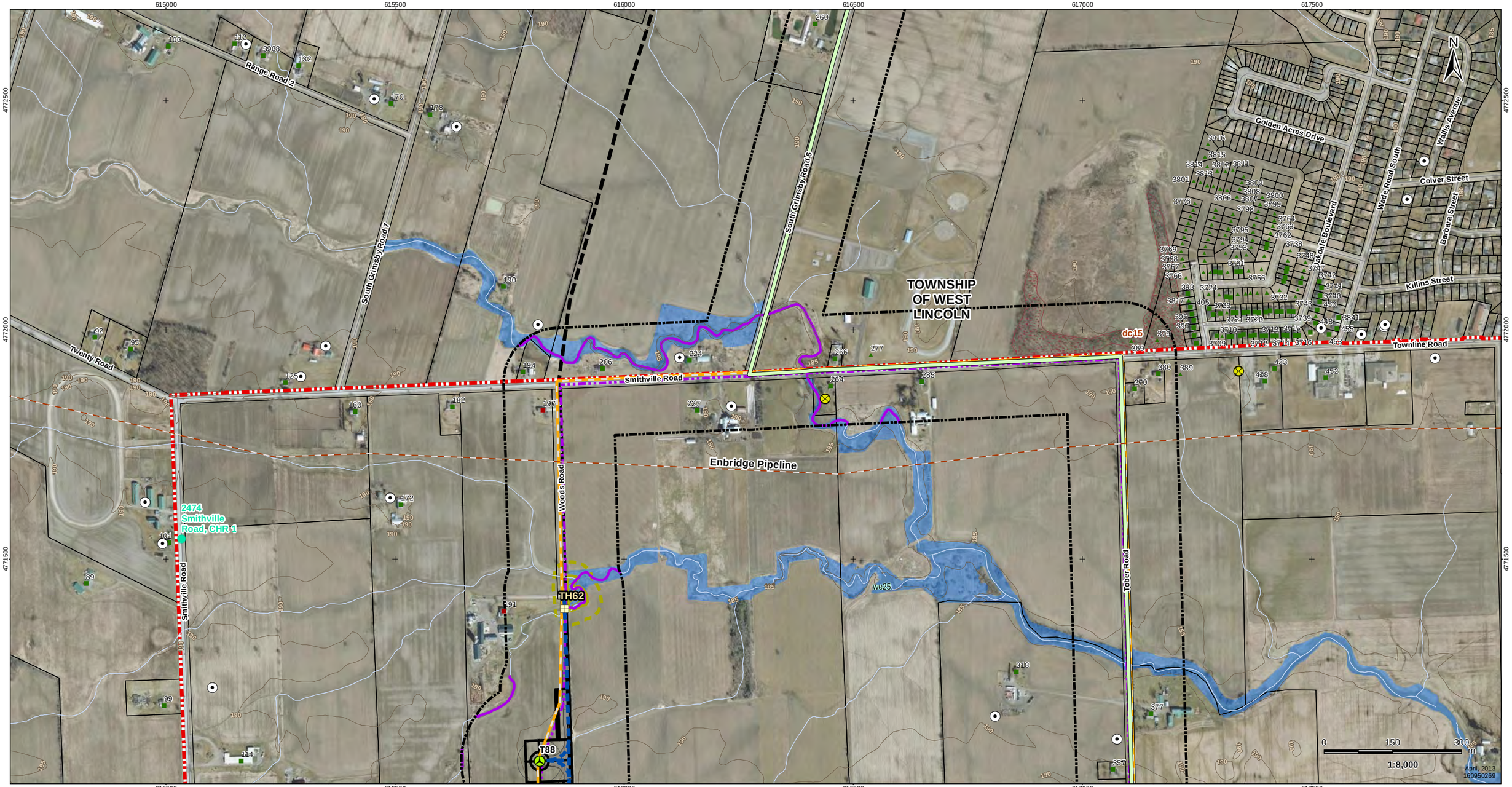
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.7

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.7



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

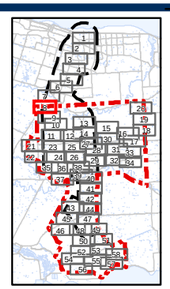
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

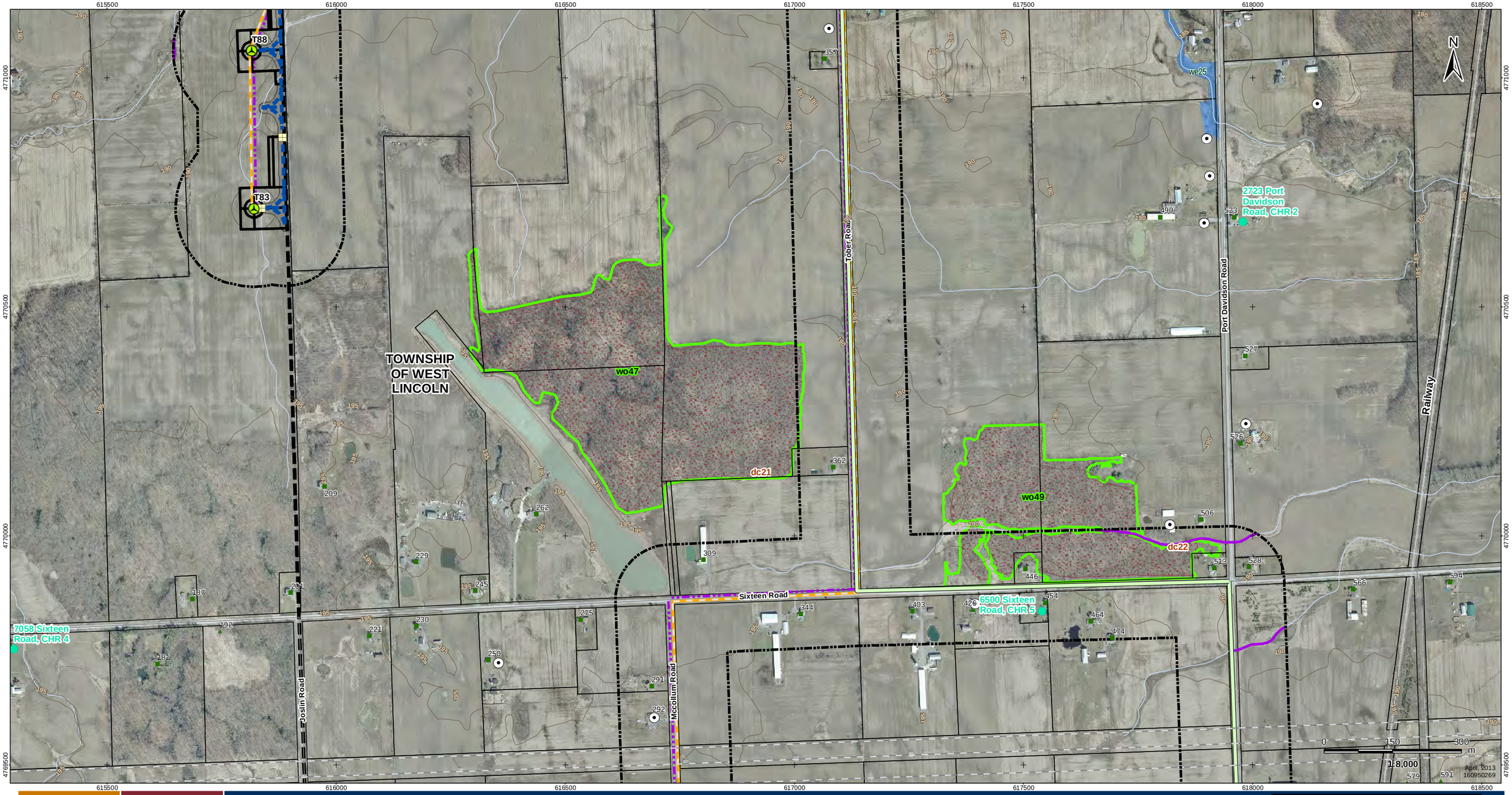
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.8

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.8



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

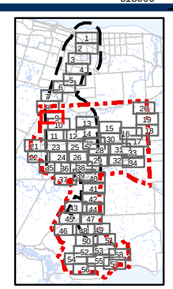
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

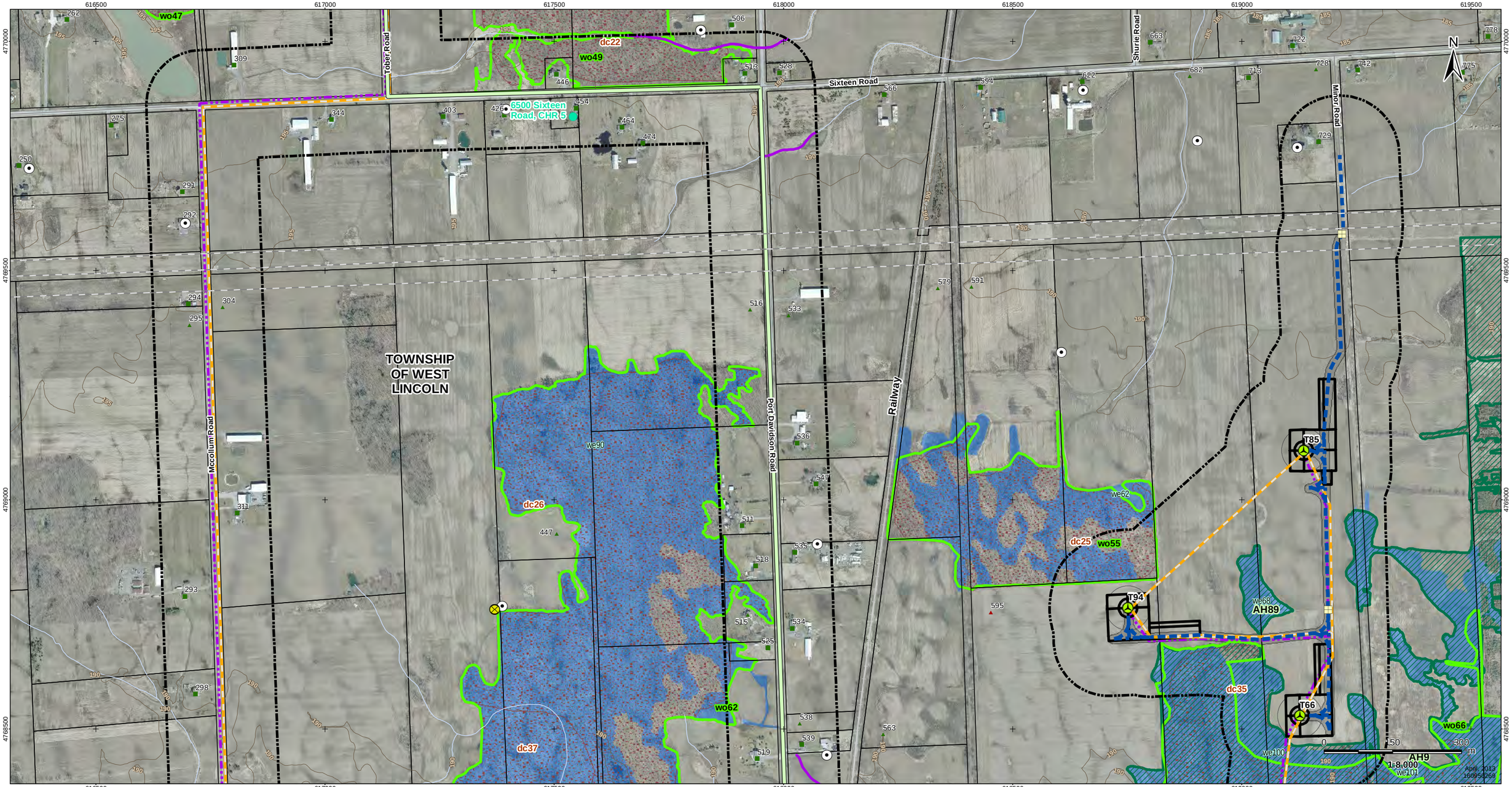
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.9

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.9



V:\001609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

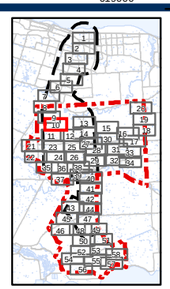
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

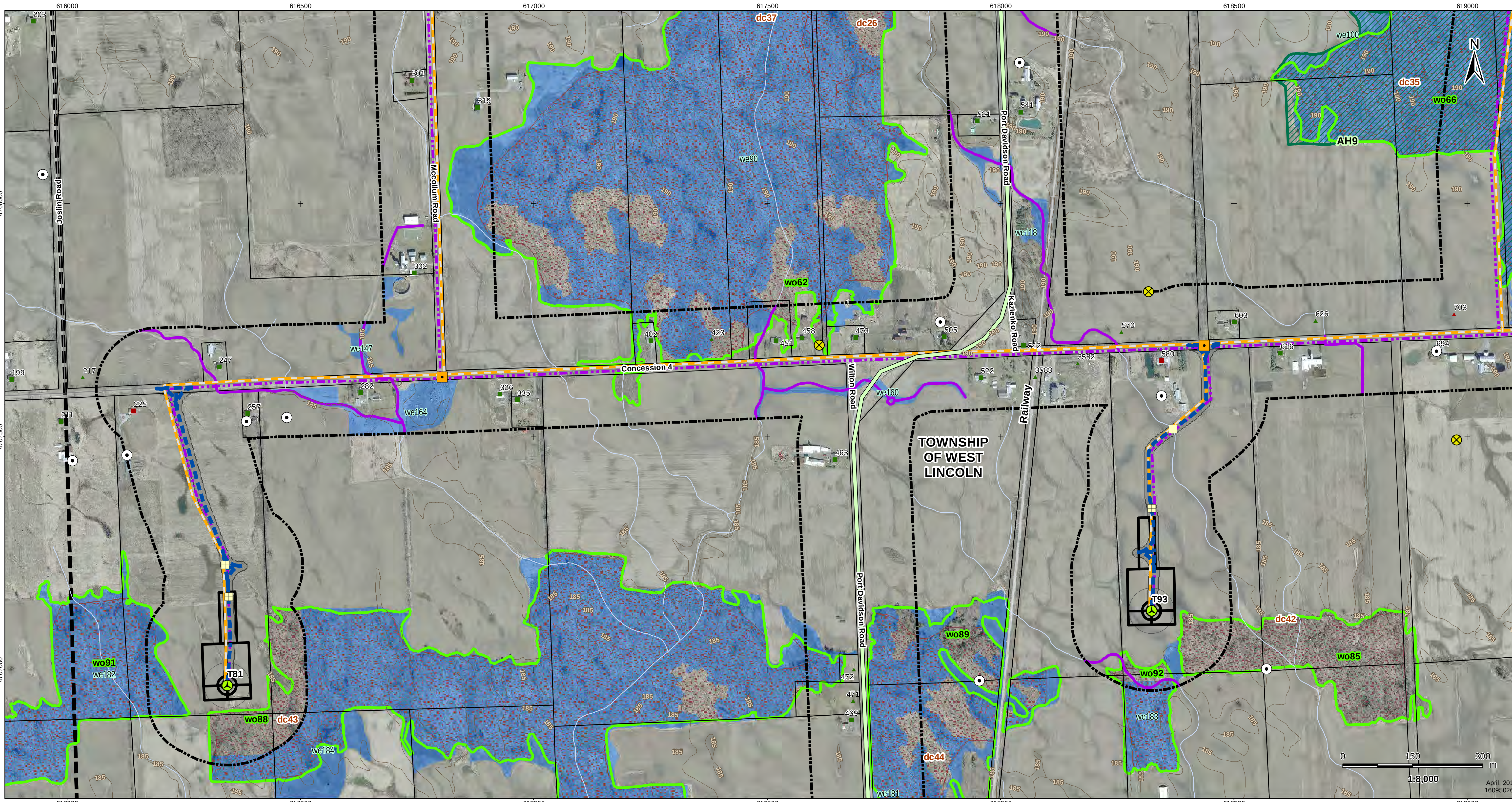
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.10

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.10



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

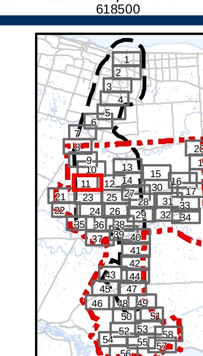
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

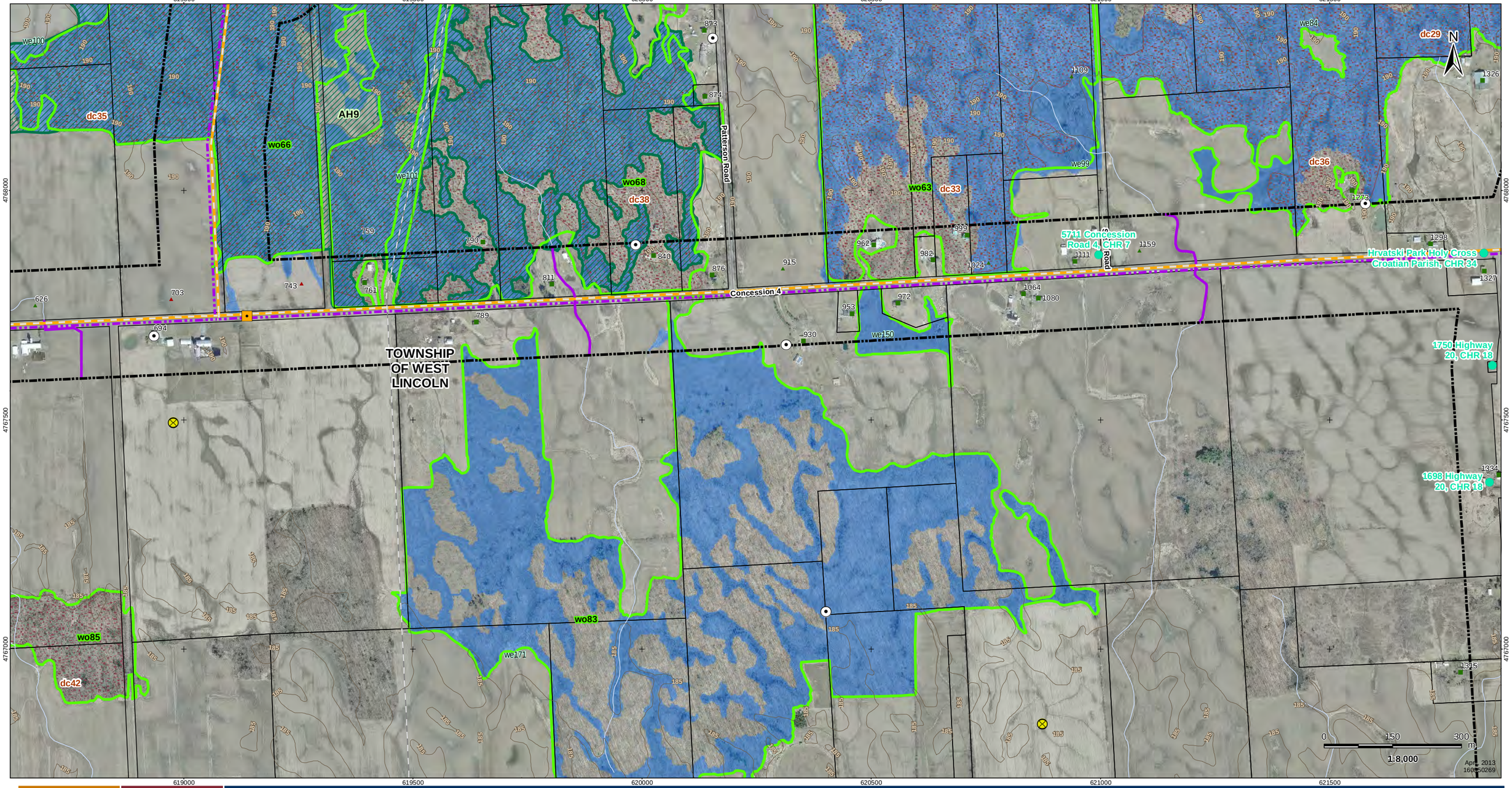
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.11

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.11



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bowpper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

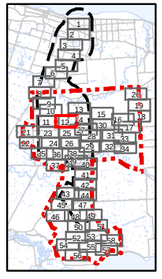
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.12

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.12

621000 621500 622000 622500 623000 623500

4770000 4769500 4769000

Sixteen Road
Shaw Road
Regional Road 569
Regional Road 20
Comfort Road
Dengo Road
CPR Railway

TOWNSHIP OF WEST LINCOLN

TH28
TH29
WP47
T28
T27
RV3
dc28
dc29
dc33
wo63
wo69
we84
we99
we124
AH64
dc39

South St. Anns Slough Forest, ANSI, Life Science, Provincially Significant

N

0 150 300 m
1:8,000

April, 2013
160950269

V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bowpier

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

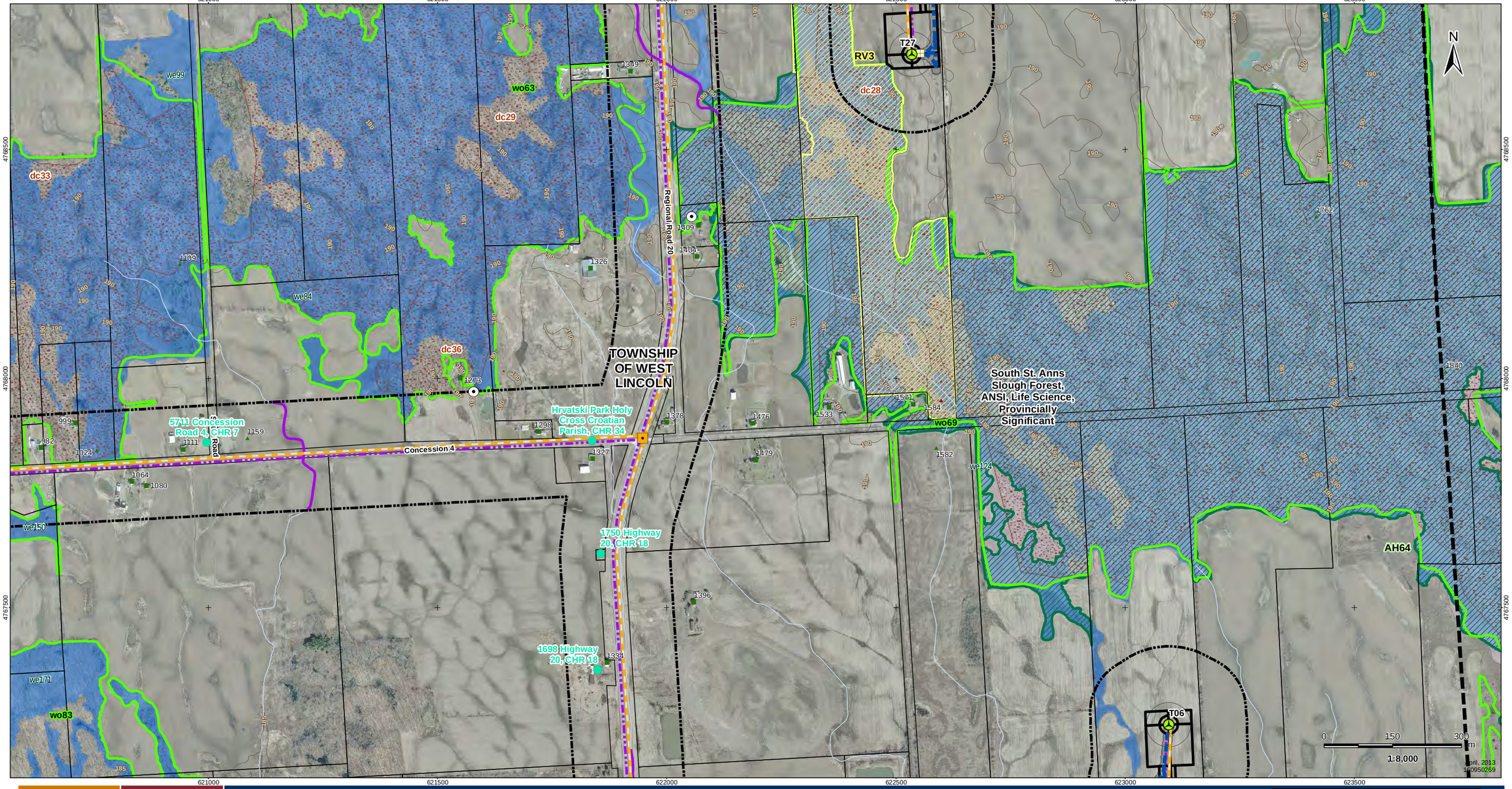
Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.

Client/Project
Niagara Region Wind Corporation

Figure No.
2.13

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.13



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

April, 2013
160950269

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

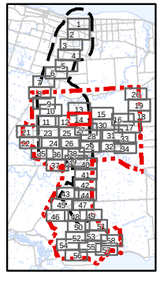
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

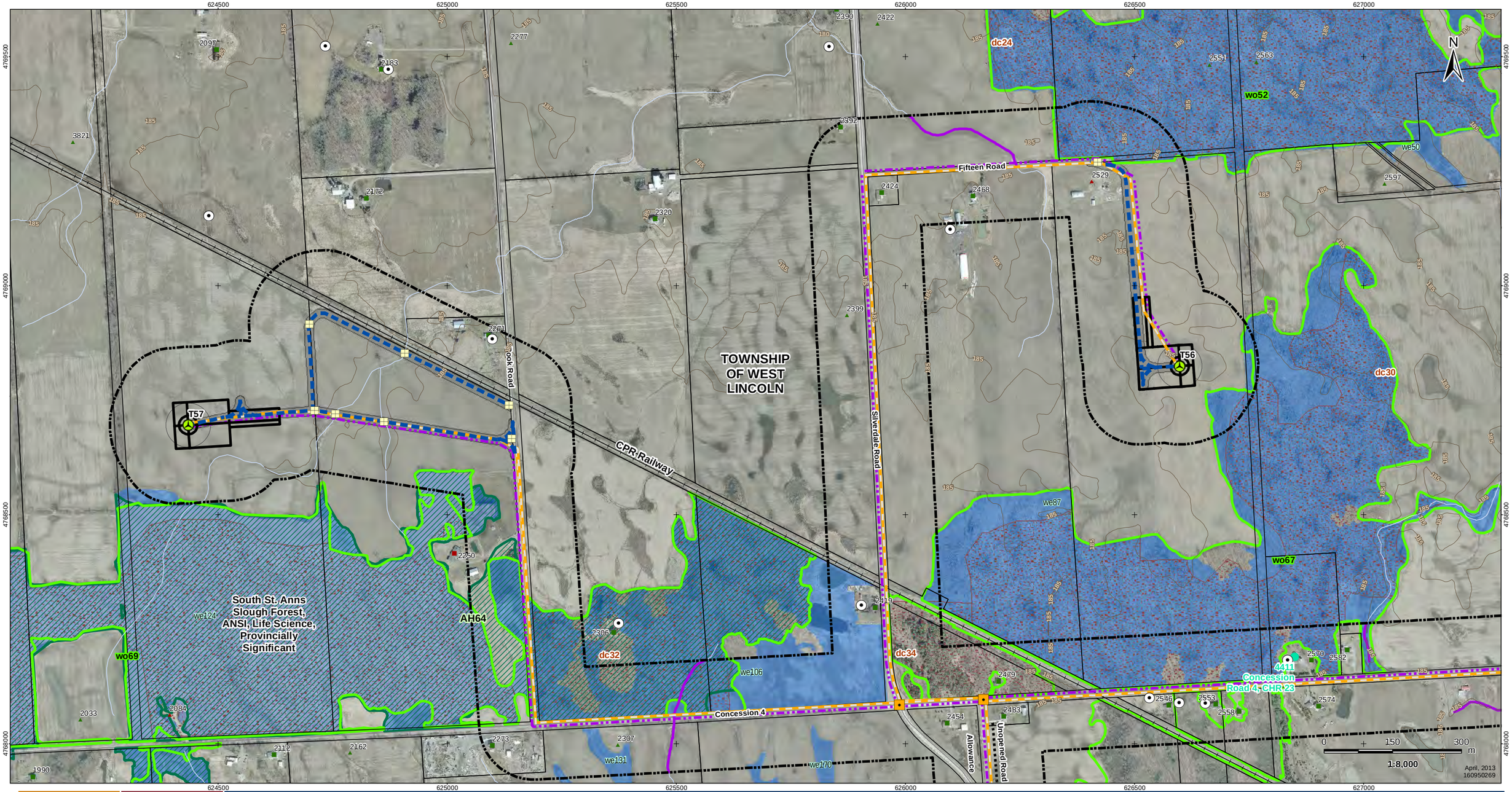
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.14

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.14



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

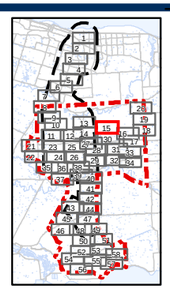
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.15

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.15

627500 628000 628500 629000 629500 630000

4768500 4768000 4767500

N

Hodgkins Road
Crown Road
Rosedene Road
Concession 4
CPR Railway
TOWNSHIP OF WEST LINCOLN
TH38
TH21
WR4
RV2
AH65
T04
T58
T59
T60
Comfort Barn, PP 2
we87 we86 we91 we95 we152 we155 we166 we167 we174 we176
wo61 wo67 wo80 wo74 wo86
dc31 dc40
2687 2705 2754 2763 2768 2753 2779 2817 2805 2808 2807 2813 2809 2811 2812 2814 2816 2819 2818 2830 2885 2910 2914 2964 2971 2994 2998 3014 3146 3166 3171 3130 3117 3090 3012 3027 3019 3030 3028 3016 3032 3897 2629

0 150 300 m
1:8,000

April, 2013
160950269

V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

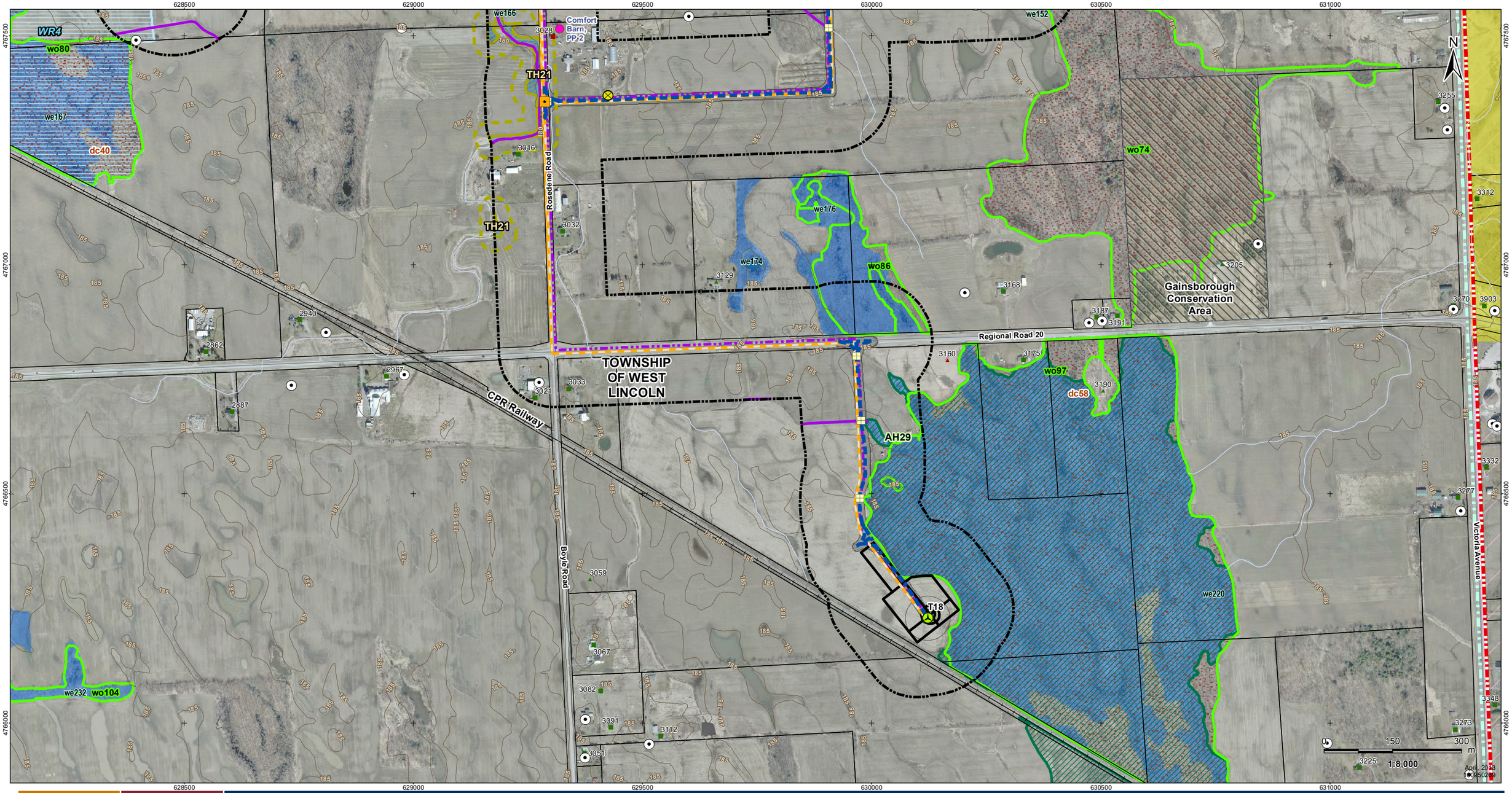
Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.

Client/Project
Niagara Region Wind Corporation

Figure No.
2.16

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.16



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-18 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Protected_Property_point

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

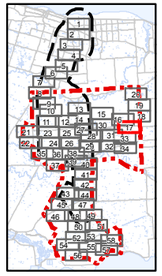
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

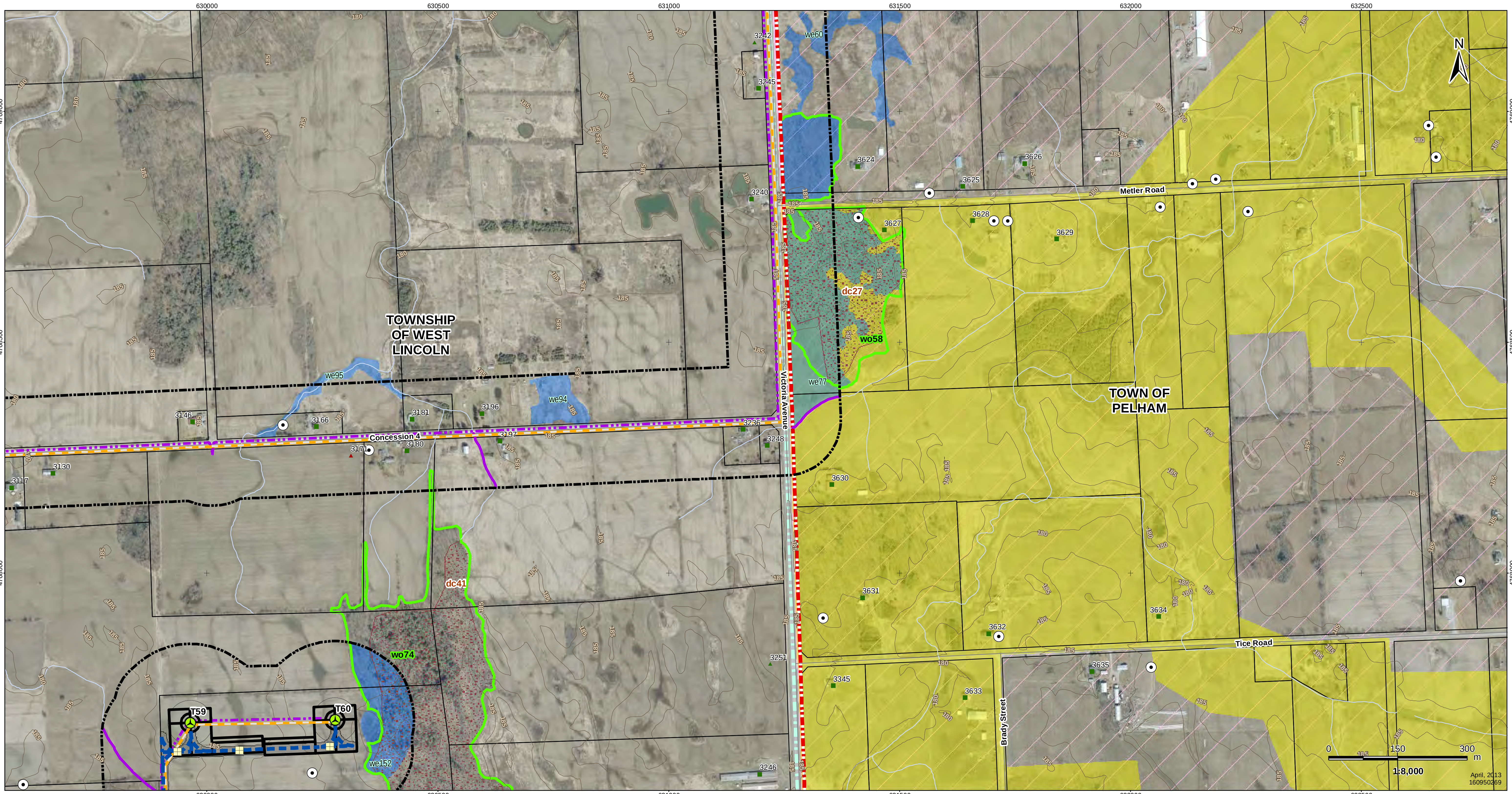
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.17

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.17



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

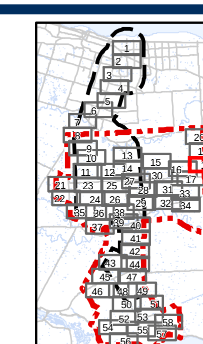
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

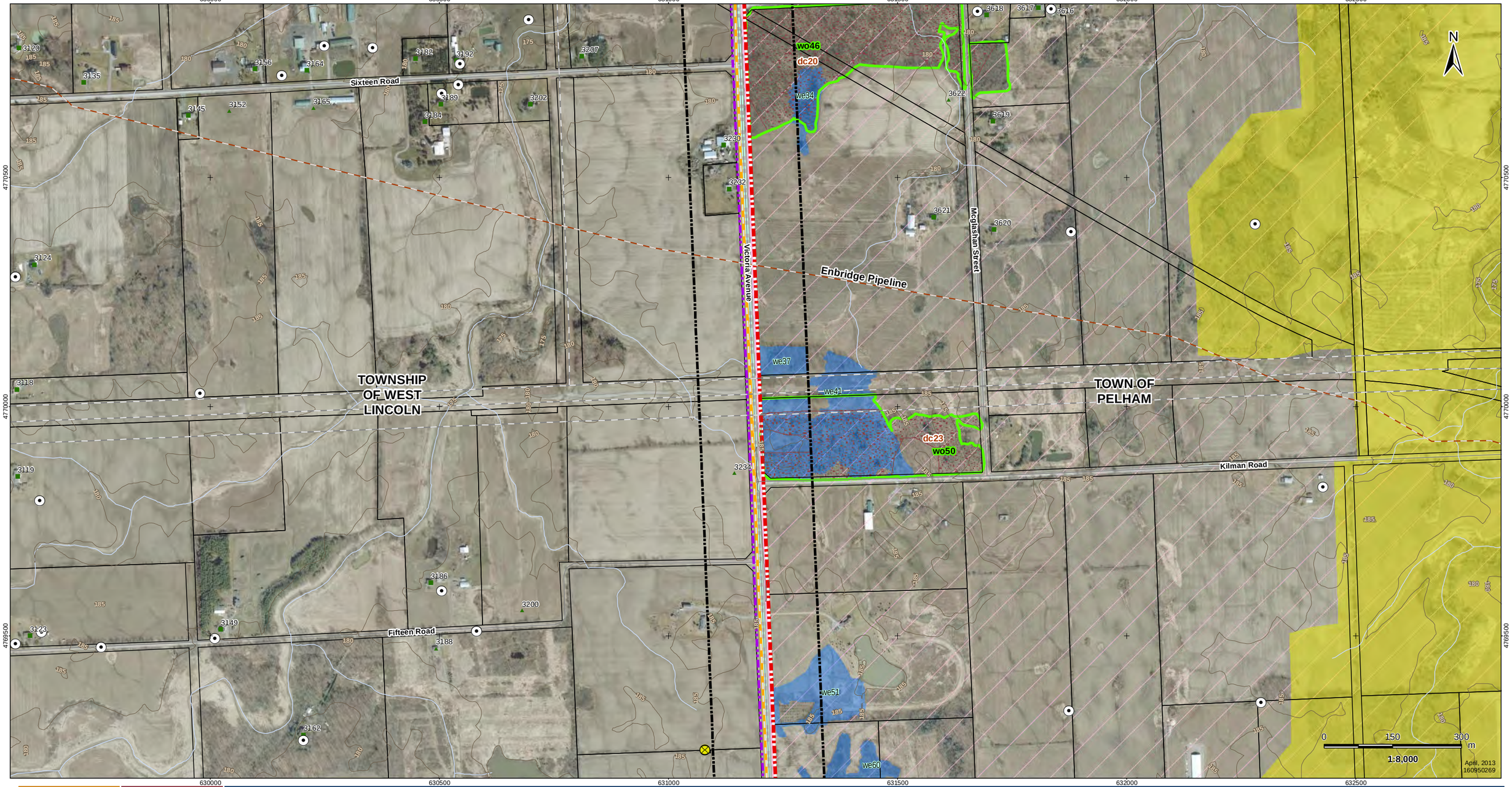
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.18

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.18



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

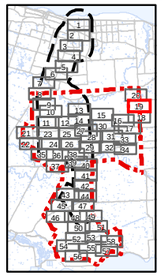
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

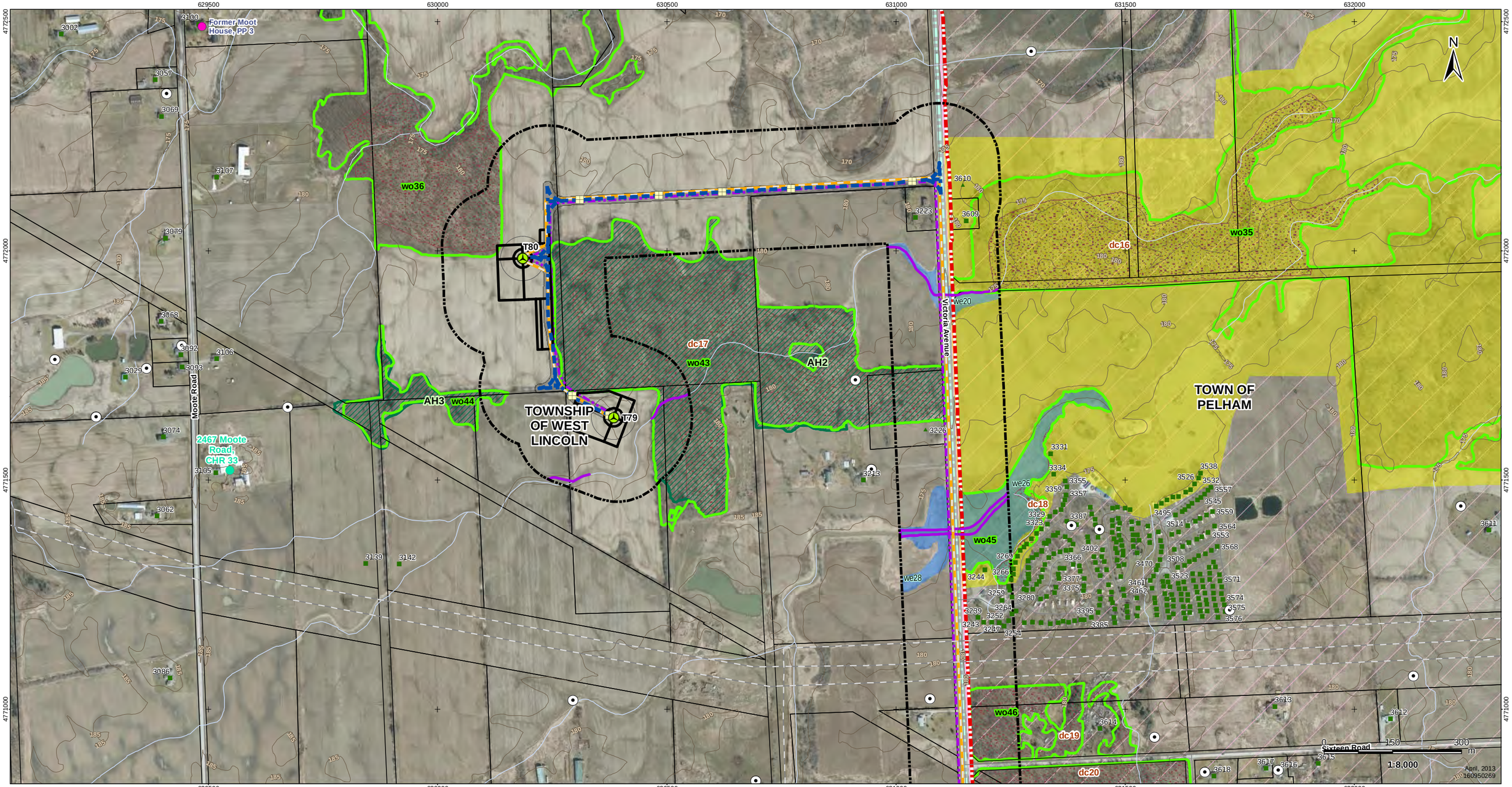
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.19

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.19



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

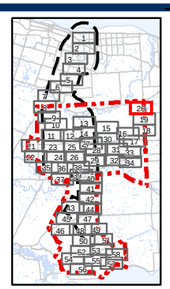
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

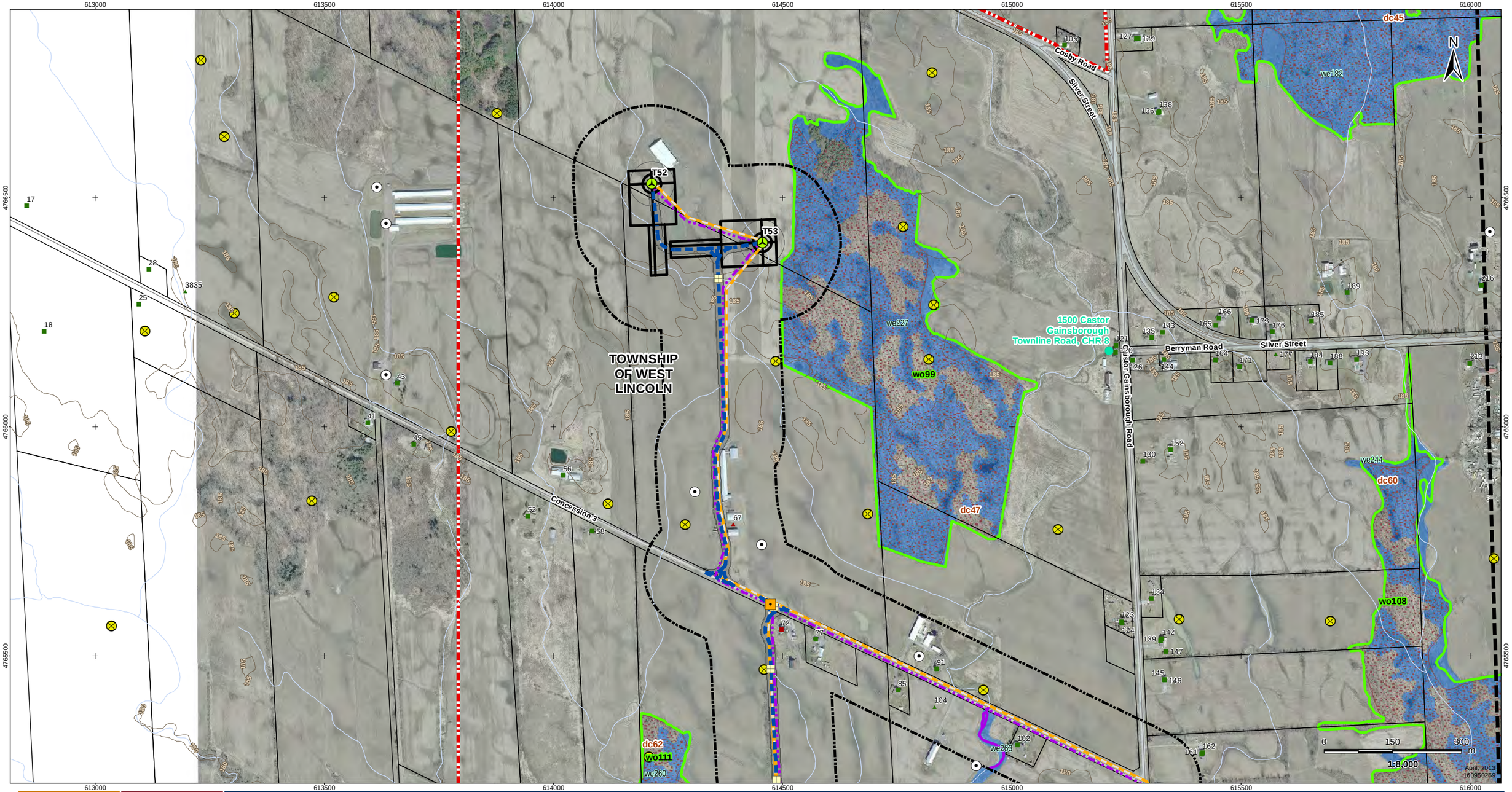
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.20

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.20



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

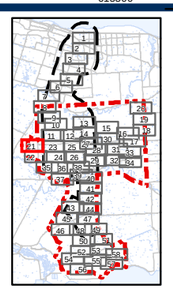
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

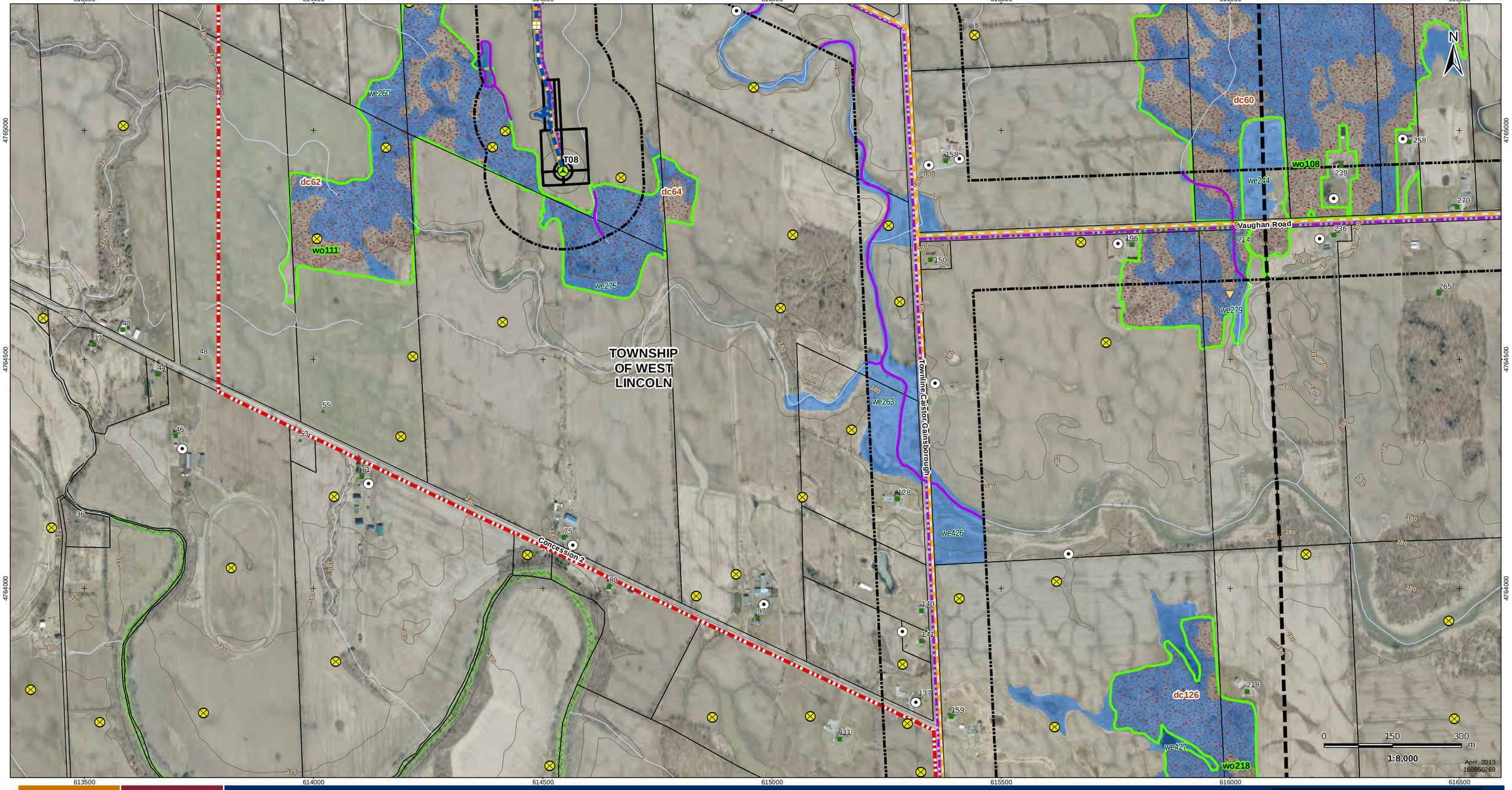
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.21

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.21



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

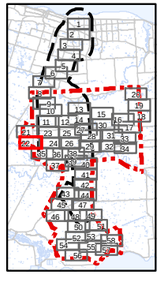
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

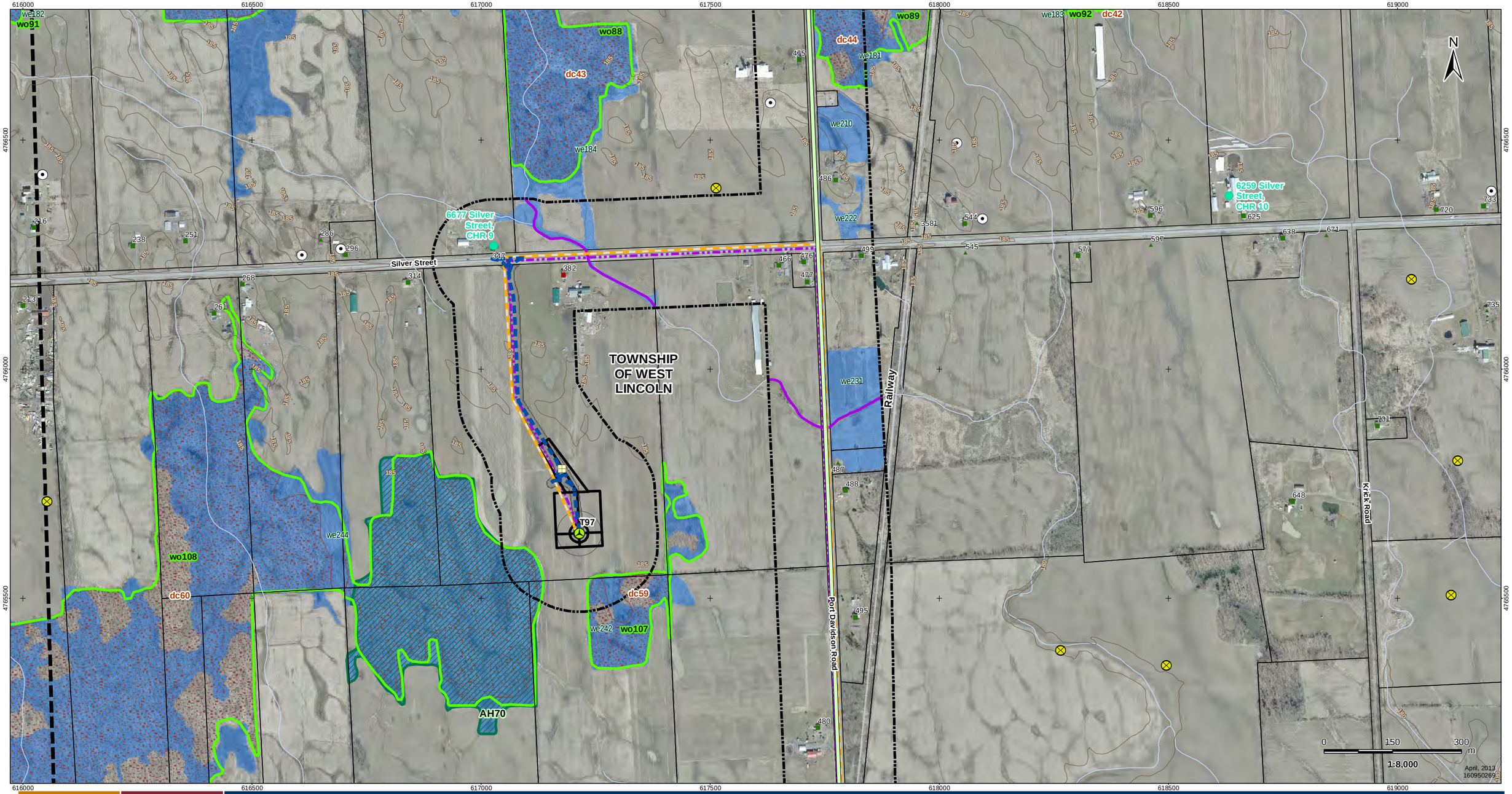
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.22

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.22



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource

- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

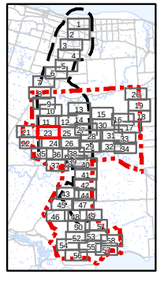
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.

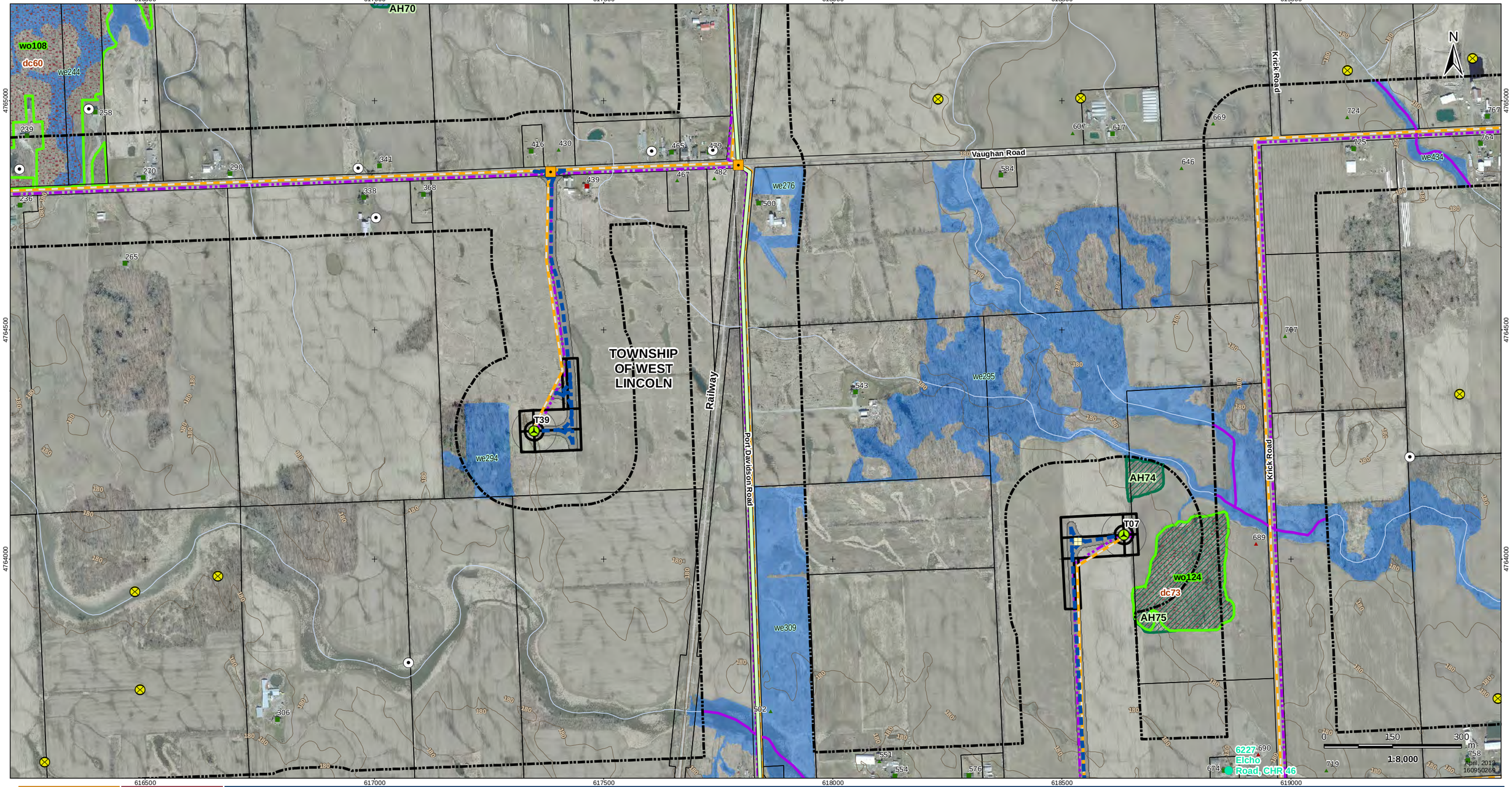


Client/Project
Niagara Region Wind Corporation

Figure No.
2.23

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.23

V:\101609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper



Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

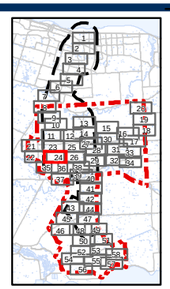
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

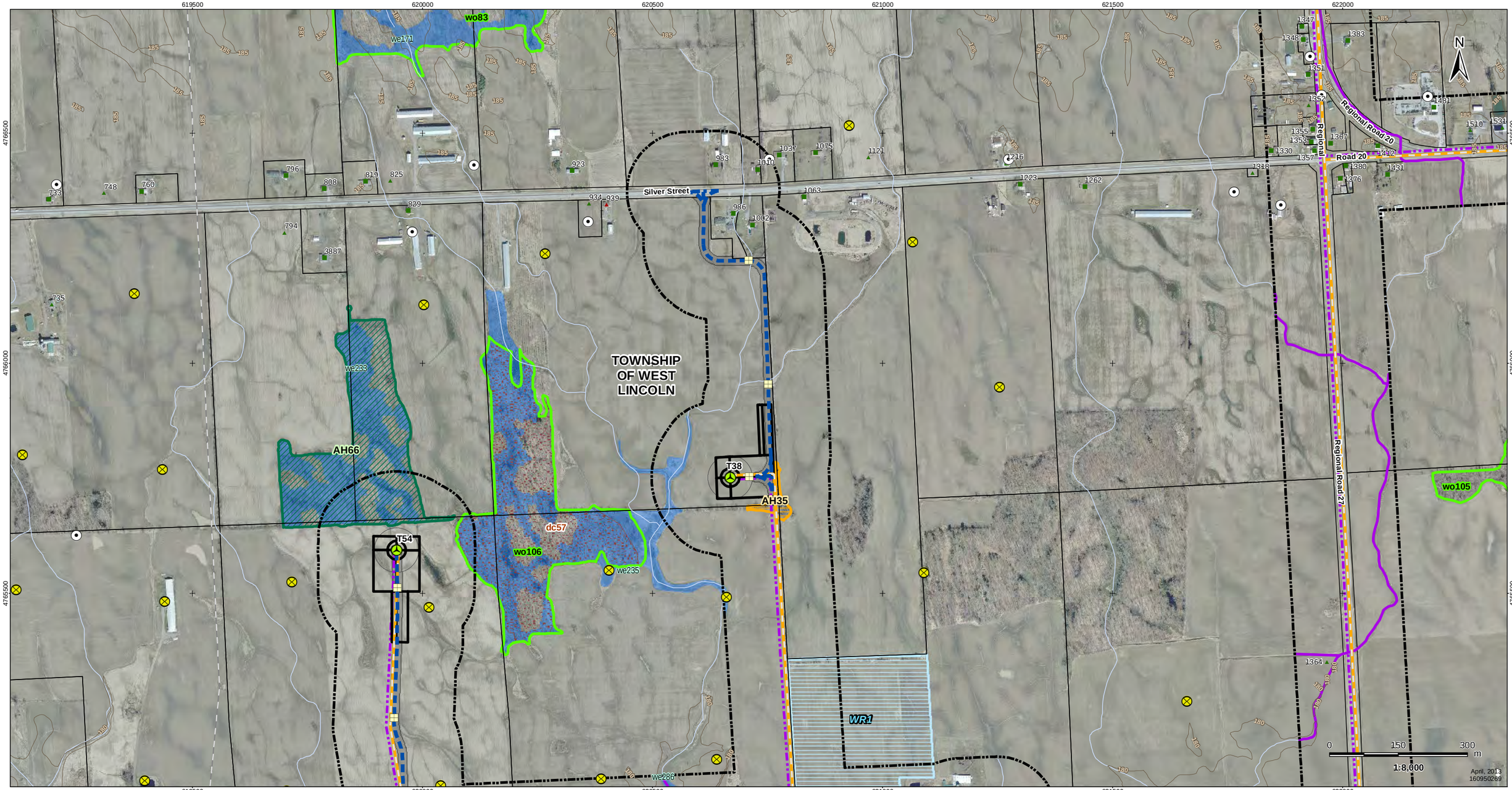
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.24

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.24



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

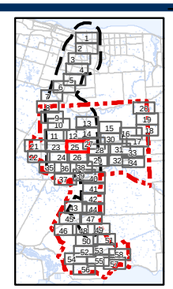
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

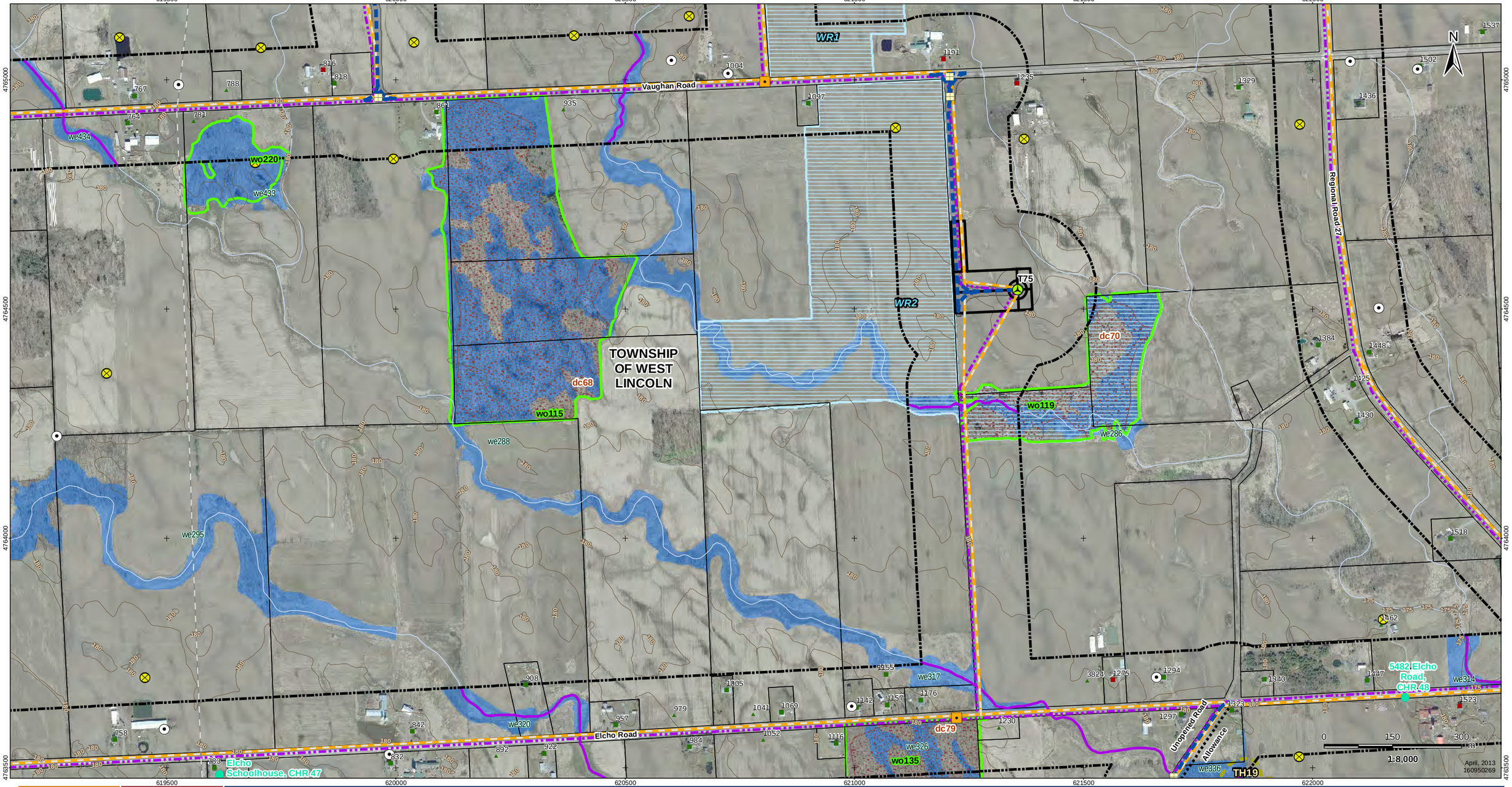
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.25

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.25



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

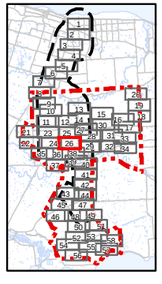
Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

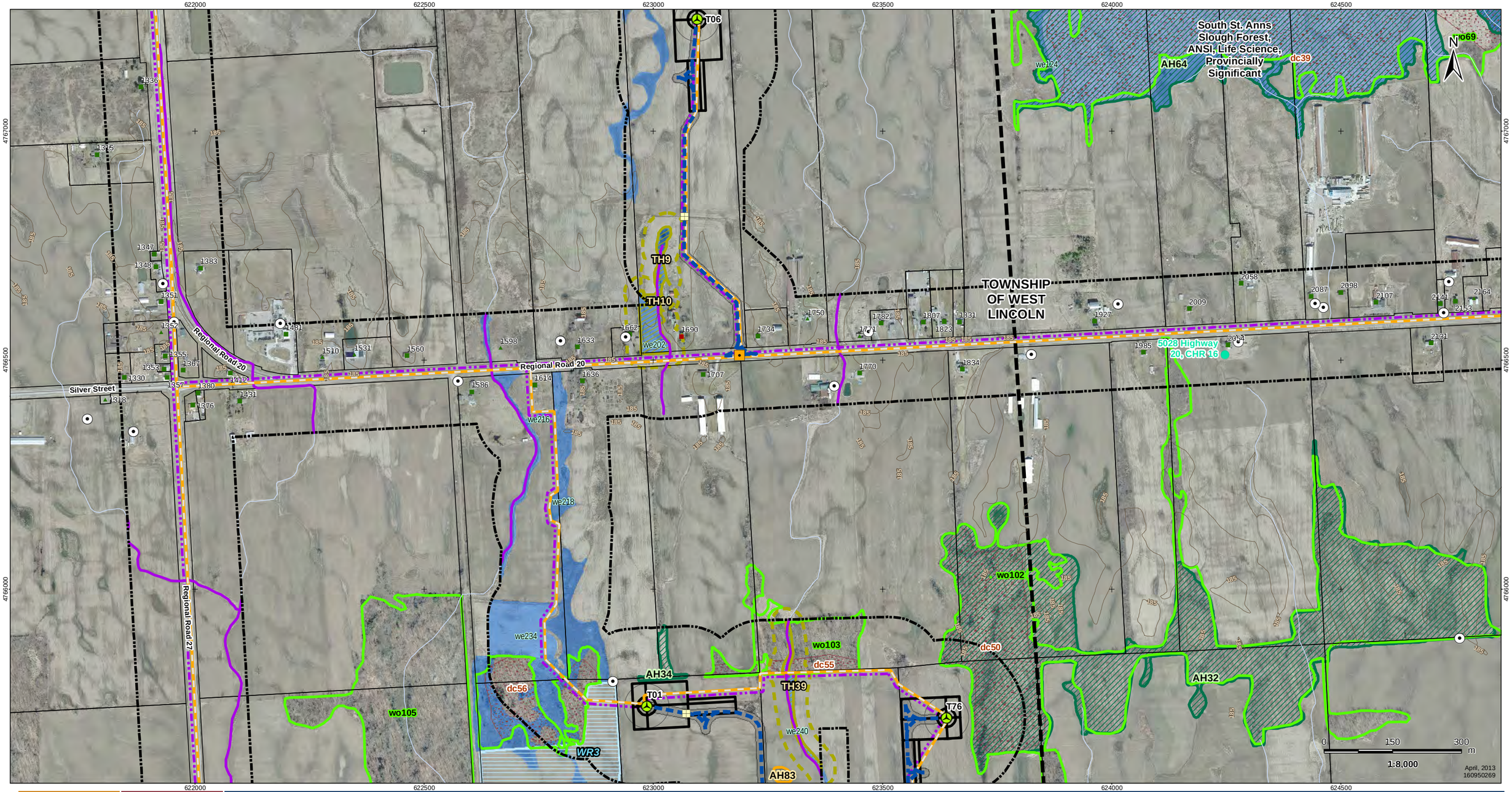
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.26

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.26



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

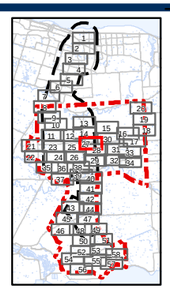
- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

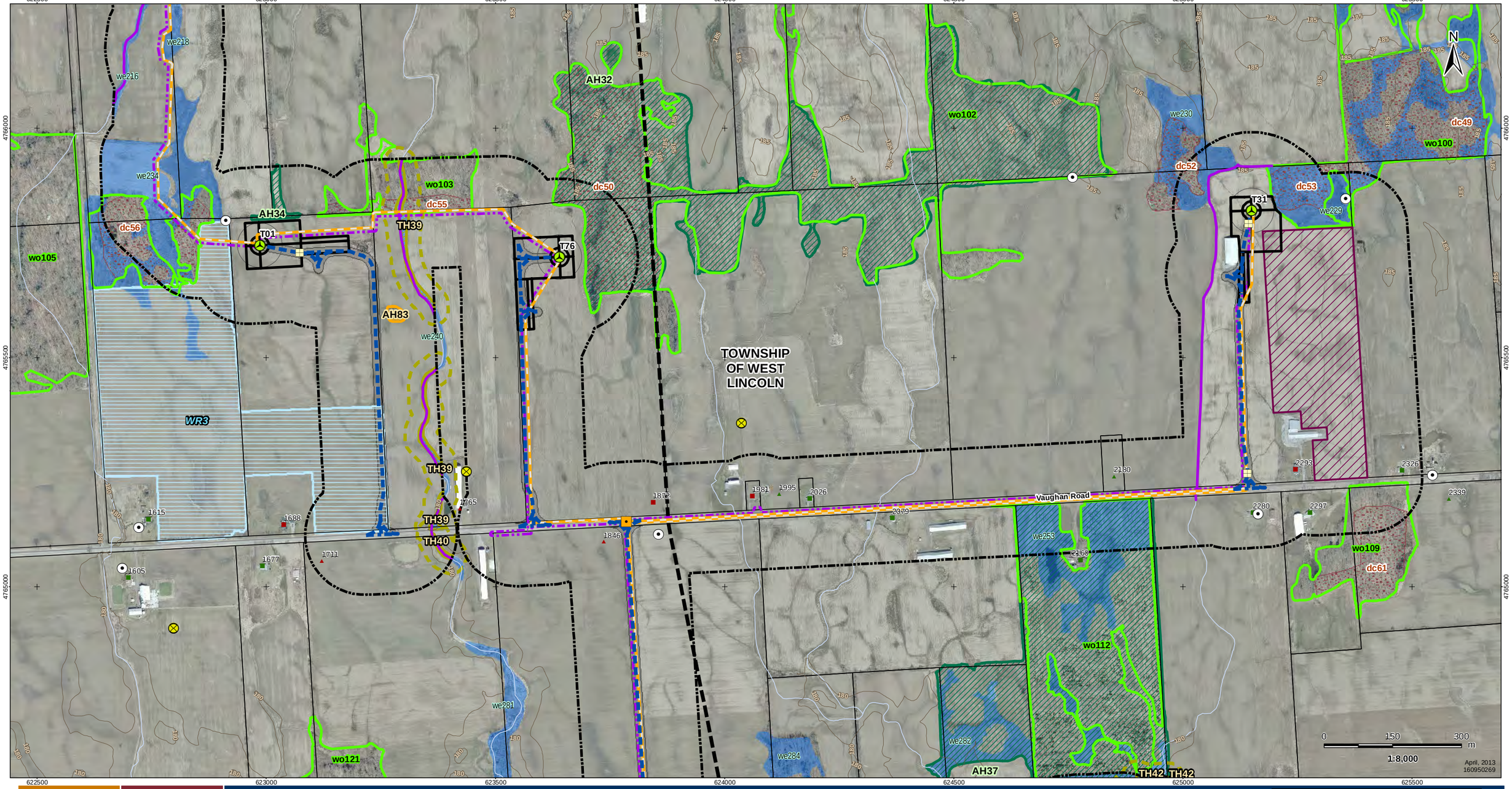
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.27

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.27



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

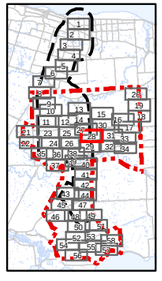
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

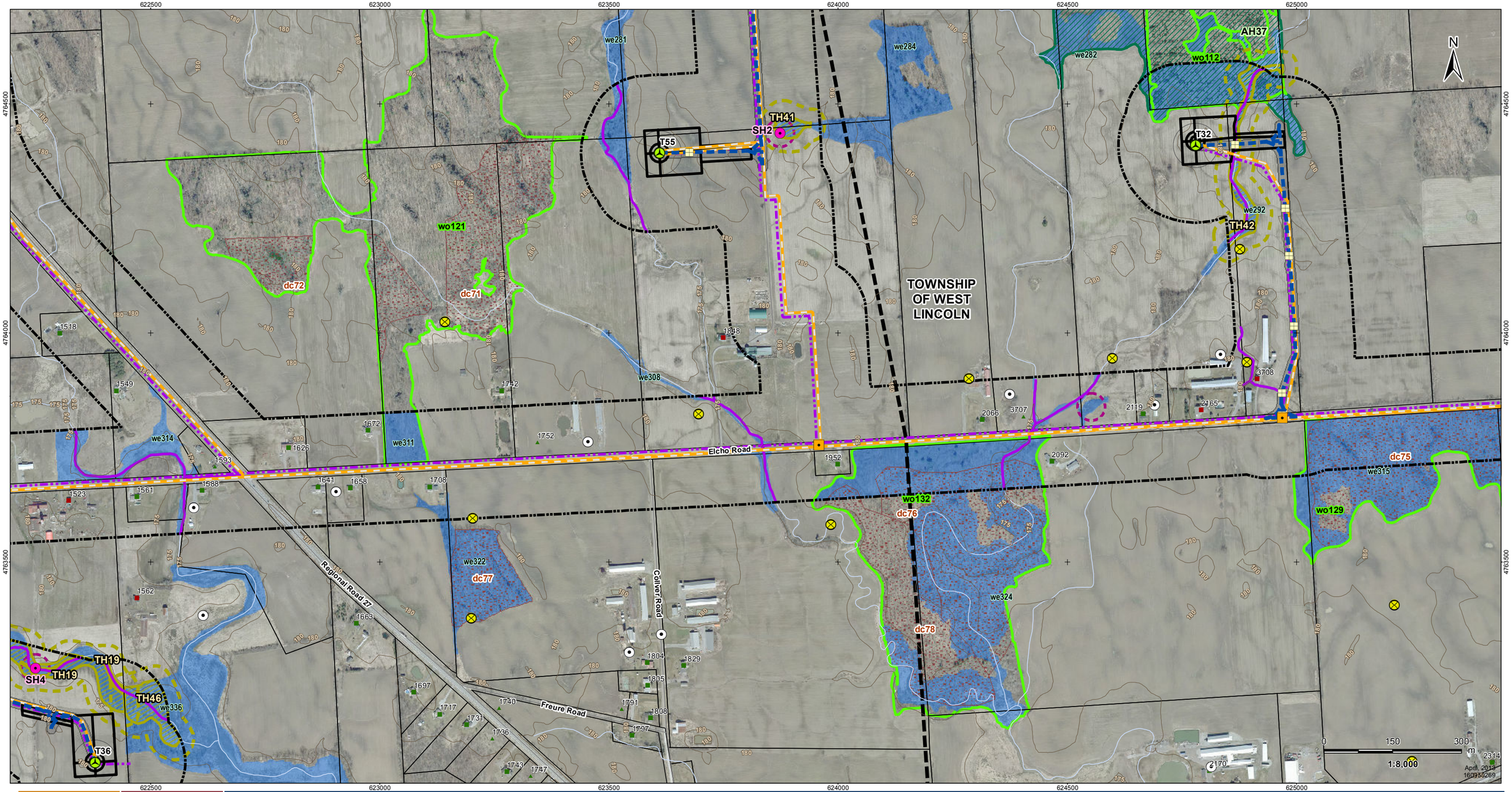
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.28

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.28



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-18 By: bcowper

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components

- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features

- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat

- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features

- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Protected_Property_point

- Protected Property
- Cultural Heritage Resource
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]

- Occupied
- Vacant

Participating Noise Receptors [5]

- Occupied
- Vacant

Notes

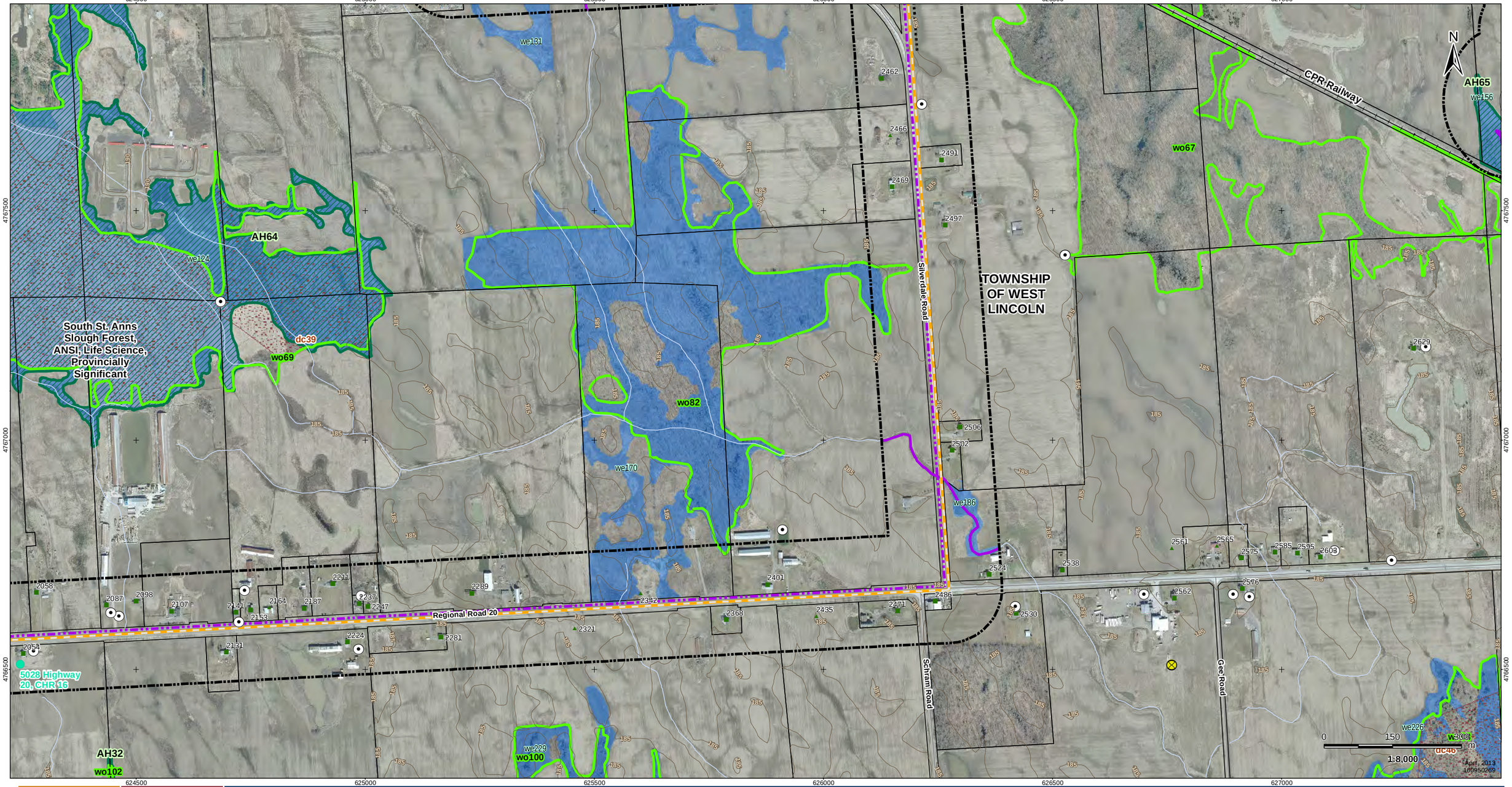
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.

Stantec

Client/Project
Niagara Region Wind Corporation

Figure No.
2.29

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.29



V:\01609\Active\160950269\planning\drawing\mxd\20130212_REA_Technical_Reports\160950269_Fig_02_Site_Plan_With_Socio_Eco_Natural_Features_Mapbook.mxd
Revised: 2013-04-02 By: bcowper

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- 120m Zone of Investigation

Proposed Project Components
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Transformer Substation Location
- Junction Box
- Proposed Culvert
- Preferred Transmission Line Route
- Alternate Transmission Line Route
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Access Road 20m Construction Area
- Potential Construction Laydown Area
- Transformer Substation

Existing Features
- Road
- Expressway / Highway
- Unopened Road Allowance
- Active Railway
- Abandoned Railway
- Existing Transmission Line
- Pipeline
- Topographic Contour (mAMSL)
- Watercourse (MNR)
- Waterbody (Stantec)
- Property Boundary
- Municipality Lower Tier
- Niagara Escarpment Plan Area (NEC)
- Greenbelt Natural Heritage System
- Conservation Areas (NPCA)
- Greenbelt Plan Area (MMAH)

Significant Wildlife Habitat
- Snake Hibernacula
- Snake Hibernacula 30m Buffer
- Raptor Wintering Areas
- Deer Congregation Areas (MNR) (Generalized)
- Wetland Amphibian Breeding Habitat
- Woodland Amphibian Breeding Habitat
- Other Rare Vegetation Community
- Landbird Migratory Stopover
- Turtle Nesting Habitat/ Snapping Turtle Habitat
- Turtle Habitat 30m Buffer
- Turtle Wintering Area

Significant Natural Features
- Woodland Communities
- Wetland Communities
- ANSI, Earth Science, Provincially Significant (MNR)
- ANSI, Life Science, Provincially Significant (MNR)

Cultural Heritage Features
- Protected Property
- Cultural Heritage Resource

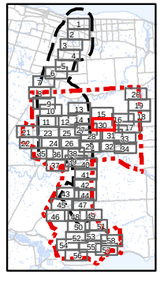
- Landfill - Active (MOE)
- Landfill - Closed (MOE)
- Petroleum Well (OGSR) [4]
- Water Well (MOE) [5]

Non-participating Receptors [5]
- Occupied
- Vacant

Participating Noise Receptors [5]
- Occupied
- Vacant

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.
4. Petroleum Well source: © Ontario Oil, Gas and Salt Resource Library, 2010.
5. MOE Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2012.
6. Noise receptors are identified within 1500m of any wind turbine.



Client/Project
Niagara Region Wind Corporation

Figure No.
2.30

Title
Site Plan with Socio-Economic Features, Significant Natural Heritage Features and Water Bodies Figure 2.30