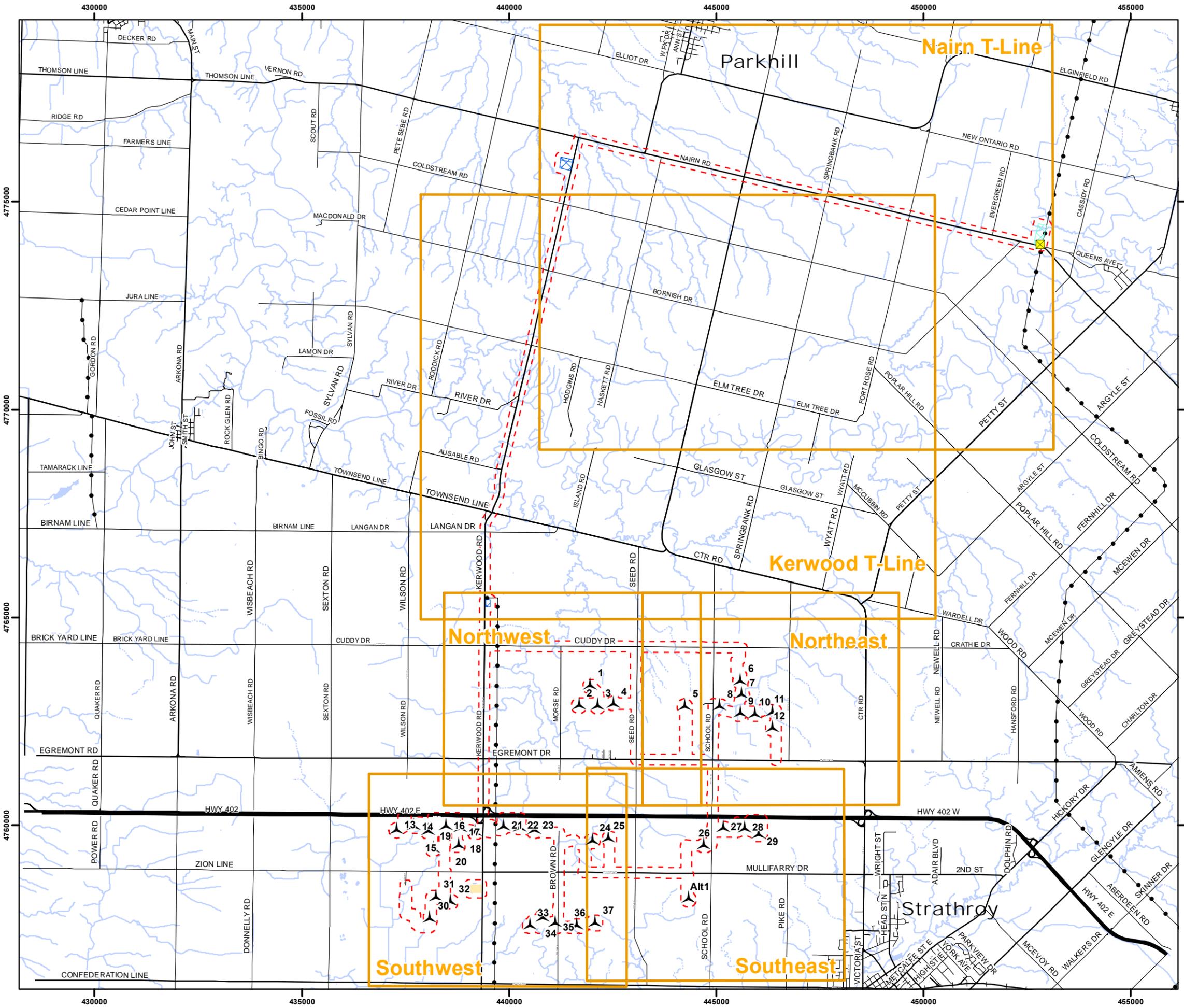


Figure 3

Adelaide Wind Energy Centre Key Map



Legend

- Map Extent
- Project Area (120m Buffer)
- Turbine
- Point of Common Coupling (PCC)
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody

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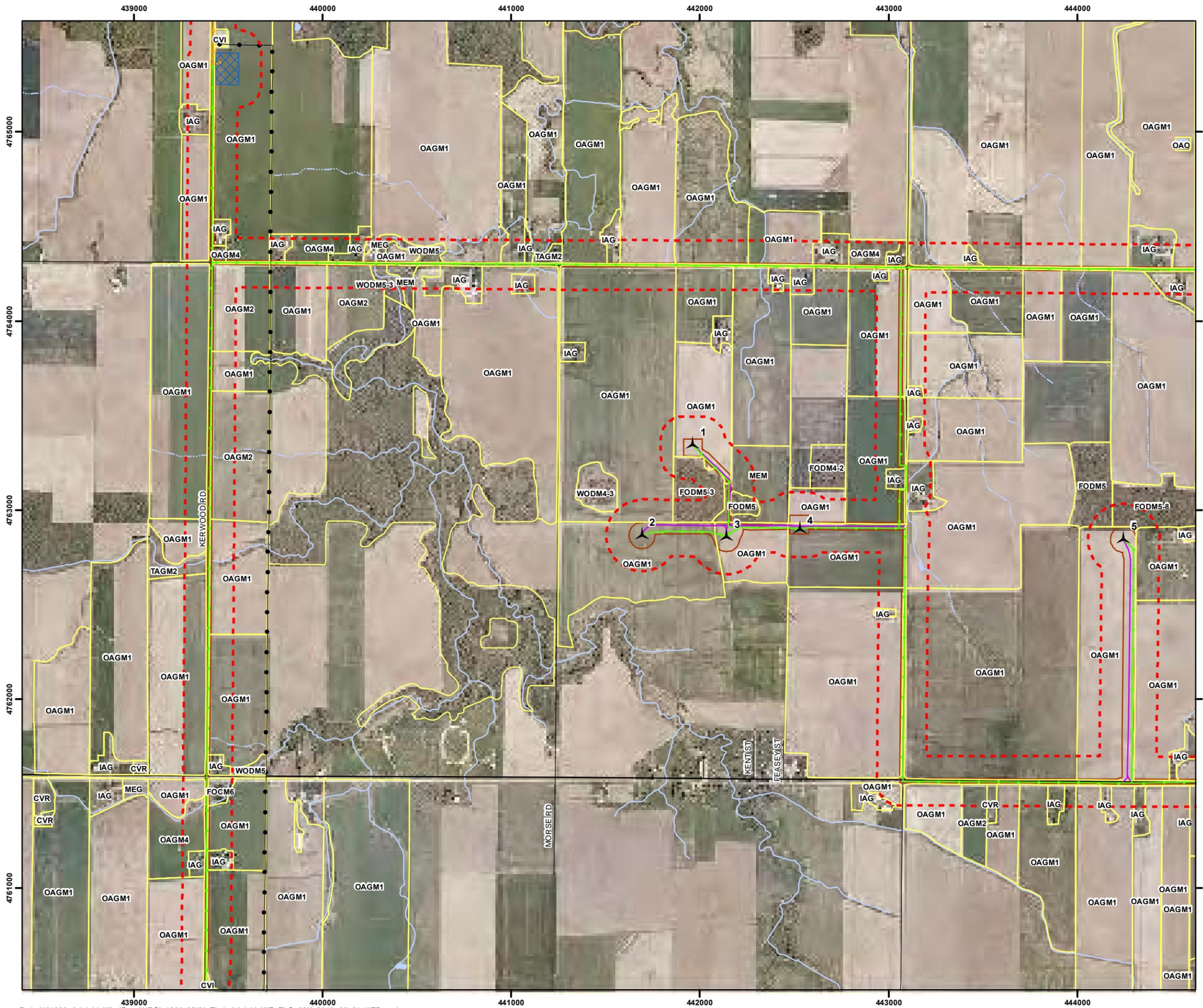
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Project: 1230 Date: April 2, 2012	NAD83 - UTM Zone 17 Scale: 1:90,000 (11x17")
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0 1 2 3 4 5 Kilometers

Figure 4

Adelaide Wind Energy Centre Vegetation Communities - Northwest



Legend

- Project Area (120m)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody

- NRSI_1230_ELC_2012_02_21
- Ecological Land Classification (ELC)**
- (CVI) Transportation and Utilities
 - (CVR) Residential
 - (FOCM6) Naturalized Coniferous Plantation
 - (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
 - (FODM5) Dry - Fresh Sugar Maple Deciduous Forest Ecosite
 - (FODM5-3) Dry - Fresh Sugar Maple - Oak Deciduous Forest Type
 - (FODM5-8) Dry - Fresh Sugar Maple - White Ash Deciduous Forest Type
 - (IAG) Agricultural Infrastructure
 - (MEG) Graminoid Meadow
 - (MEM) Mixed Meadow
 - (OAGM1) Annual Row Crops
 - (OAGM2) Perennial Cover Crops
 - (OAGM4) Open Pasture
 - (OAO) Open Aquatic
 - (TAGM2) Mixed Plantation
 - (WODM4-3) Sugar Maple Deciduous Woodland Type
 - (WODM5) Fresh - Moist Deciduous Woodland Ecosite
 - (WODM5-3) Fresh - Moist Manitoba Maple Deciduous Woodland Type

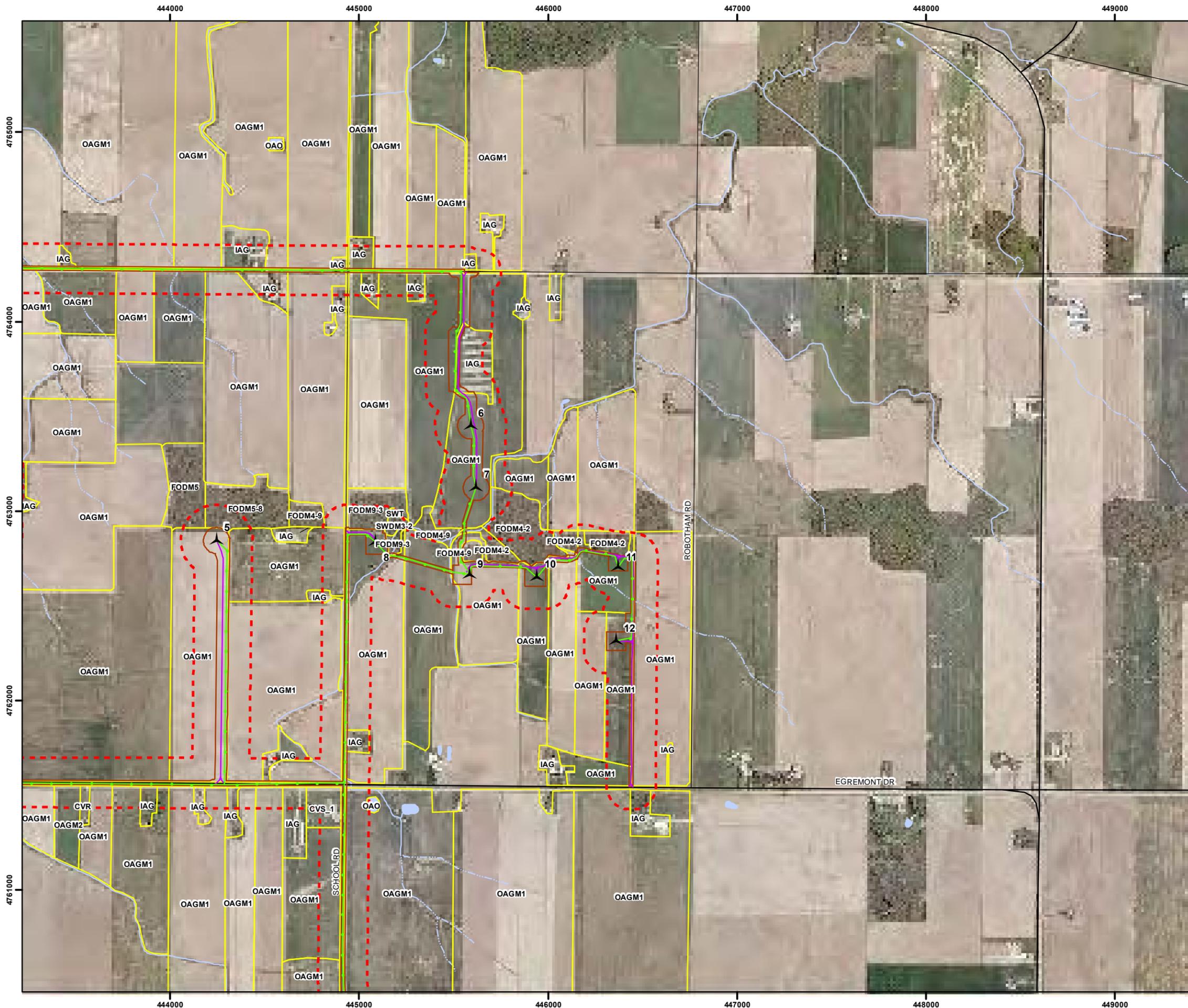


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Project: 1230 Date: February 21, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")

Figure 5

Adelaide Wind Energy Centre Vegetation Communities - Northeast



- Legend**
- Project Area (120m)
 - Project Location
 - ▲ Turbine
 - Point of Common Coupling (PCC)
 - Access Road
 - Collector System
 - Transmission Line
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Ecological Land Classification (ELC)
 - Existing Transmission Line
 - Railroad
 - Highway
 - Primary Road
 - Secondary Road
 - Permanent Watercourse
 - Intermittent Watercourse
 - Waterbody
- (CVI) Transportation and Utilities
 (CVS_1) Education
 (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
 (FODM4-9) Dry - Fresh Basswood Deciduous Forest Type
 (FODM5) Dry - Fresh Sugar Maple Deciduous Forest Ecosite
 (FODM5-8) Dry - Fresh Sugar Maple - White Ash Deciduous Forest Type
 (FODM9-3) Fresh - Moist Bur Oak Deciduous Forest Type
 (IAG) Agricultural Infrastructure
 (OAGM1) Annual Row Crops
 (OAGM2) Perennial Cover Crops
 (OAO) Open Aquatic
 (SWDM3-2) Silver Maple Mineral Deciduous Swamp Type
 (SWT) Thicket Swamp



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Project: 1230 Date: February 21, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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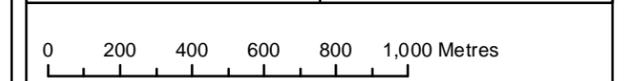
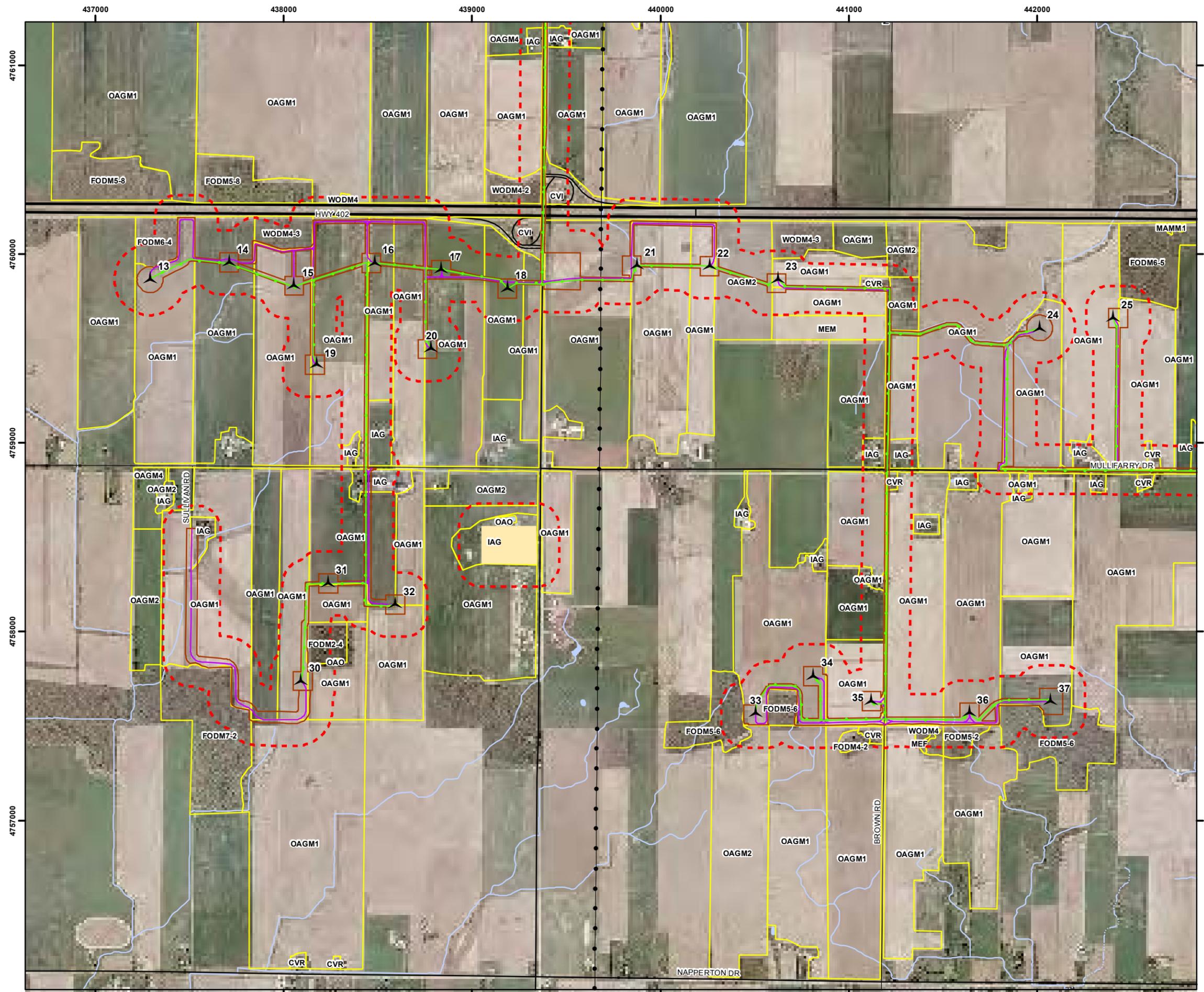


Figure 6

Adelaide Wind Energy Centre Vegetation Communities - Southwest



- Legend**
- Project Area (120m Buffer)
 - Project Location
 - Turbine
 - Point of Common Coupling (PCC)
 - Access Road
 - Collector System
 - Transmission Line
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Ecological Land Classification (ELC)
 - Existing Transmission Line
 - Railroad
 - Highway
 - Primary Road
 - Secondary Road
 - Permanent Watercourse
 - Intermittent Watercourse
 - Waterbody

(CVI) Transportation and Utilities
 (CVR) Residential
 (FODM2-4) Dry - Fresh Oak - Hardwood Deciduous Forest Type
 (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
 (FODM5-2) Dry - Fresh Sugar Maple - Beech Deciduous Forest Type
 (FODM5-6) Dry - Fresh Sugar Maple - Basswood Deciduous Forest Type
 (FODM5-8) Dry - Fresh Sugar Maple - White Ash Deciduous Forest Type
 (FODM6-4) Fresh - Moist Sugar Maple - White Elm Deciduous Forest Type
 (FODM6-5) Fresh - Moist Sugar Maple - Hardwood Deciduous Forest Type
 (FODM7-2) Fresh - Moist Green Ash - Hardwood Lowland Deciduous Forest Type
 (IAG) Agricultural Infrastructure
 (MAMM1) Graminoid Mineral Meadow Marsh Ecosite
 (MEF) Forb Meadow
 (MEM) Mixed Meadow
 (OAGM1) Annual Row Crops
 (OAGM2) Perennial Cover Crops
 (OAGM4) Open Pasture
 (OAO) Open Aquatic
 (WODM4) Dry - Fresh Deciduous Woodland Ecosite
 (WODM4-2) White Ash Deciduous Woodland Type
 (WODM4-3) Sugar Maple Deciduous Woodland Type



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Project: 1230 Date: February 29, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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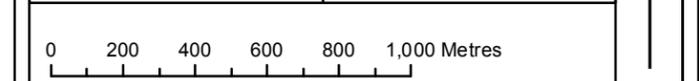
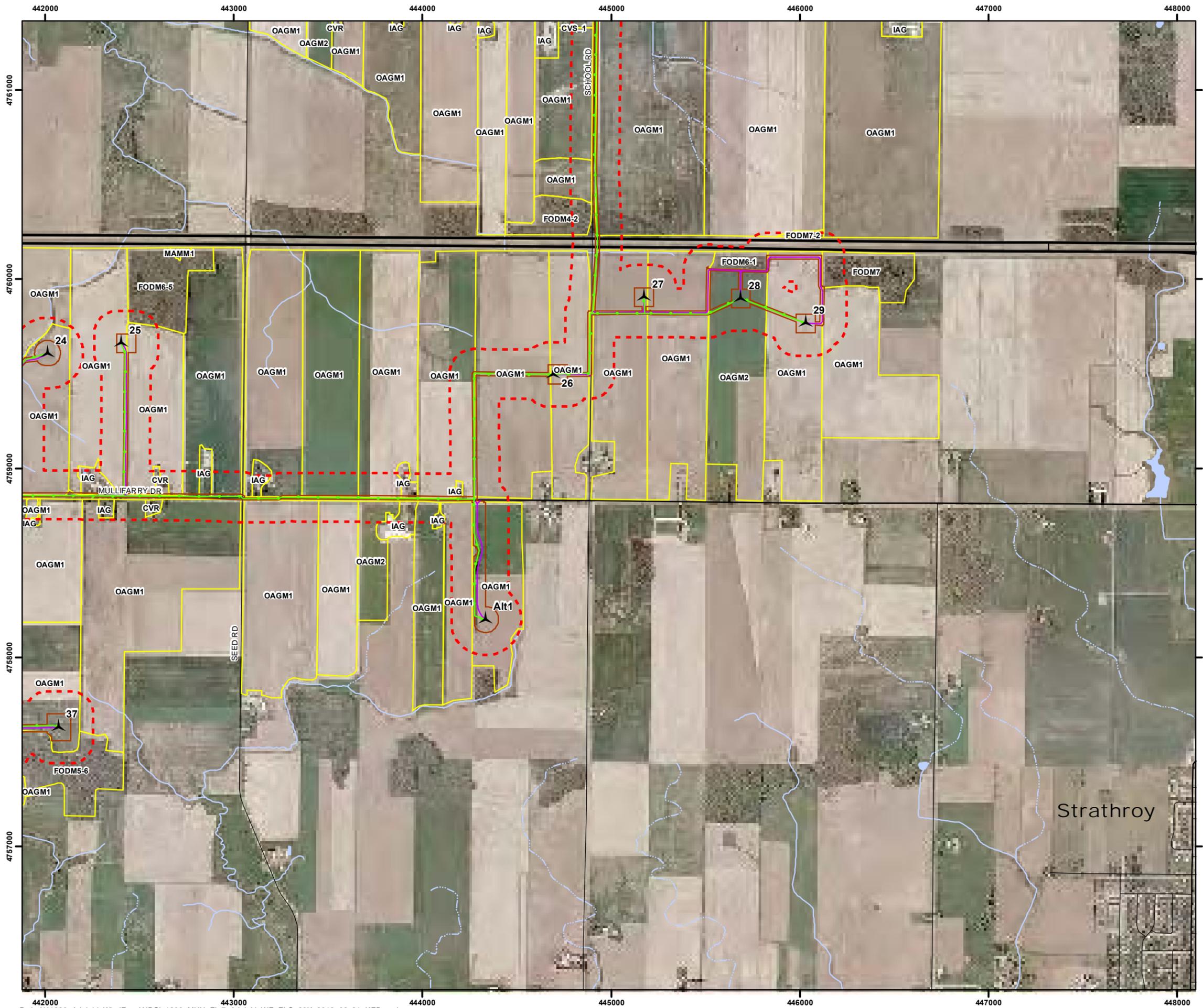


Figure 7

Adelaide Wind Energy Centre Vegetation Communities - Southeast



Legend

Project Area (120m)	Existing Transmission Line
Project Location	Railroad
Turbine	Highway
Point of Common Coupling (PCC)	Primary Road
Access Road	Secondary Road
Collector System	Permanent Watercourse
Transmission Line	Intermittent Watercourse
Staging Area	Waterbody
Interconnection Facilities	
Substation	
Ecological Land Classification (ELC)	

(CVR) Residential
 (CVS_1) Education
 (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
 (FODM5-6) Dry - Fresh Sugar Maple - Basswood Deciduous Forest Type
 (FODM6-1) Fresh - Moist Sugar Maple - Lowland Ash Deciduous Forest Type
 (FODM6-5) Fresh - Moist Sugar Maple - Hardwood Deciduous Forest Type
 (FODM7) Fresh - Moist Lowland Deciduous Forest Ecosite
 (FODM7-2) Fresh - Moist Green Ash - Hardwood Lowland Deciduous Forest Type
 (IAG) Agricultural Infrastructure
 (MAMM1) Graminoid Mineral Meadow Marsh Ecosite
 (OAGM1) Annual Row Crops
 (OAGM2) Perennial Cover Crops

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Project: 1230 Date: February 21, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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0 200 400 600 800 1,000 Metres

Figure 8

Adelaide Wind Energy Centre Vegetation Communities - Kerwood T-Line



Legend

- Project Area (120m)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Ecological Land Classification (ELC)**
- Existing Transmission Line
- Railroad
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody

(CVC_4) Extraction (pits, quarries, oil and gas)
(CVR) Residential
(FOCM6) Dry - Fresh White Pine Naturalized Coniferous Plantation Type
(FOCM6-1) Dry - Fresh White Pine Naturalized Coniferous Plantation Type
(FODM5) Dry - Fresh Sugar Maple - Oak Deciduous Forest Type
(FODM5-3) Dry - Fresh Sugar Maple - Oak Deciduous Forest Type
(FODM5-6) Dry - Fresh Sugar Maple - Basswood Deciduous Forest Type
(FODM7-4) Fresh - Moist Black Walnut Lowland Deciduous Forest Type
(FODM7) Fresh - Moist Lowland Deciduous Forest Ecosite
(FOM) Mixed Forest
(IAG) Agricultural Infrastructure
(MEGM3) Dry - Fresh Graminoid Meadow
(OAGM1) Annual Row Crops
(OAGM2) Perennial Cover Crops
(OAGM4) Open Pasture
(WOCM1) Dry - Fresh Coniferous Woodland Ecosite

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Project: 1230 Date: April 2, 2012	NAD83 - UTM Zone 17 Scale: 1:40,000 (11x17")
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0 500 1,000 1,500 2,000 Metres

Figure 9

Adelaide Wind Energy Centre Vegetation Communities - Nairn T-Line



Legend

- Project Area (120m)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody

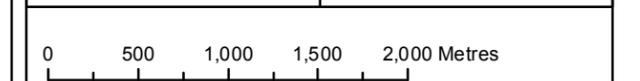
Ecological Land Classification (ELC)

- (CVR) Residential
- (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
- (FOCM6) Naturalized Coniferous Plantation
- (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type
- (FODM5) Dry - Fresh Sugar Maple Deciduous Forest Ecosite
- (FODM5-6) Dry - Fresh Sugar Maple - Basswood Deciduous Forest Type
- (IAG) Agricultural Infrastructure
- (MEGM3) Dry - Fresh Graminoid Meadow Ecosite
- (OAGM1) Annual Row Crops
- (OAGM2) Perennial Cover Crops
- (OAGM4) Open Pasture
- (WODM3) Dry - Fresh Oak Deciduous Woodland Ecosite
- (WODM5) Fresh - Moist Deciduous Woodland Ecosite



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6.0 Woodlands

Site investigations within 120m of the Adelaide Wind Energy Centre have identified a total of 52 woodlands. These features range in size from 0.2ha to 137.2ha and are primarily dominated by deciduous tree associations. Ecological Land Classification mapping of these features can be found in Figures 4 to 9, while detailed mapping of woodlands within the project area can be found in Figures 10 to 15. Each of these woodlands have been described in more detail and summarized in Table 8.

WOD-001 Fresh-Moist Bur Oak Deciduous Forest (FODM9-3)

This 6.9ha woodland, classified as a fresh-moist bur oak deciduous forest, has riverine and tableland topographic features. WOD-001 is located 4m from a proposed access road and underground cabling. Dominant canopy species for this woodland are bur oak (*Quercus macrocarpa*), red oak (*Quercus rubra*), white elm (*Ulmus americana*) and American basswood (*Tilia americana*). The most prevalent sub-canopy species are American basswood, hawthorn (*Crataegus* sp.), and silver maple (*Acer saccharinum*). Dominant understorey species are American basswood, white ash (*Fraxinus americana*), and white elm. The groundcover consisted mostly of poison ivy (*Toxicodendron radicans* ssp. *negundo*), riverbank grape (*Vitis riparia*) as well as goldenrod (*Solidago* sp.) and aster (*Symphotrichum* sp.) species. This woodland community also contained two small inclusions, a silver maple mineral deciduous swamp (SWDM3-2) and a thicket swamp (SWT). These communities are further discussed in the wetlands section of this report.

WOD-002 Dry-Fresh Basswood Deciduous Forest (FODM4-9)

This woodland is 1.4ha in size with a drainage channel extending from the west to east ends of the area, providing riverine topographic features along with its tableland forested areas. WOD-002 is proposed to be crossed by underground cabling through the use of horizontal directional drilling, with no direct disturbance to natural vegetation. The closest entry pit is located more than 30m from the edge of this woodland. This woodland has been identified as a dry-fresh basswood deciduous forest with a canopy dominated by American basswood, bur oak, and white ash. The sub-canopy is dominated by American basswood, hawthorn, white ash and bur oak. The understorey is composed mostly of common buckthorn (*Rhamnus cathartica*) with fewer hawthorn species and occasional gray dogwood (*Cornus racemosa*). The groundcover of this woodland consists largely of poison ivy with some goldenrod and aster species.

WOD-003 Dry-Fresh Basswood Deciduous Forest (FODM4-9)

This woodland is 1ha in size and is an upland forested community with a canopy dominated by American basswood and bur oak with fewer white elm and white ash. The sub-canopy is also dominated by American basswood with several white elm, white ash, and bur oak. The understorey for this woodland is composed mostly of American basswood and white ash with fewer white elms and chokecherry (*Prunus virginiana* ssp. *virginiana*). Groundcover for the woodland is dominated by poison ivy, wild strawberry (*Fragaria virginiana*), and enchanter's nightshade (*Circaea lutetiana* ssp. *canadensis*). WOD-003 is located 4m from a proposed access road and underground cabling.

WOD-004 Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

This woodland is an upland natural feature 1.6ha in size. WOD-04 is located 4m from a proposed access road. The canopy of this woodland is dominated by white ash with fewer bur oak and Freeman's maple (*Acer X freemanii*). The sub-canopy consists largely of American basswood with less white ash, bur oak and red oak. Dominant understorey plants for this woodland are American basswood, Freeman's maple, white elm, and black maple (*Acer saccharum* ssp. *nigrum*). The groundcover consists of poison ivy, white ash saplings, goldenrod species, and aster species.

WOD-005 Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

This upland natural feature is 8.7ha in size and is located in close proximity to woodlands WOD-004 and WOD-006. WOD-005 is located 4m from a proposed access road. This woodland was classified as a dry-fresh white ash – hardwood deciduous forest with a canopy dominated by white ash, bur oak, red oak and American basswood. The sub-canopy consists mostly of white ash with fewer black maple, hop hornbeam (*Ostrya virginiana*), red oak, bur oak, and American basswood. Dominant understorey plants in this woodland are American basswood, black maple and hop hornbeam. The dominant groundcover was poison ivy, wild geranium (*Geranium maculatum*), and running strawberry-bush (*Euonymus obovata*).

WOD-006 Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

This woodland is a tableland community that is 1ha in size. WOD-006 is located 4m from a proposed access road. Classified as a dry-fresh white ash – hardwood deciduous forest, this woodland's canopy is dominated by bur oak and white ash. The sub-canopy consists of white elm, American basswood, and white ash whereas the understorey is dominated by a mix of shagbark hickory (*Carya ovata* var. *ovata*), white elm, American basswood and hop hornbeam. The groundcover for this woodland is dominated by white ash seedlings.

WOD-007 Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

This natural feature is a 2.3ha woodland bordered by agricultural fields. This community is classified as a dry-fresh white ash - hardwood deciduous forest with a canopy dominated by white ash, bur oak, and to a lesser degree, white elm. The sub-canopy consists of mostly white ash, hop hornbeam, white elm, and less so, American basswood. Dominant understorey species include black maple, sugar maple (*Acer saccharum* ssp. *saccharum*), American basswood, and hop hornbeam. Groundcover in this woodland is dominated by Virginia creeper (*Parthenocissus quinquefolia*), poison ivy, and wild geranium. WOD-007 is located 4m from a proposed access road and underground cabling.

WOD-008 Dry-Fresh Sugar Maple – Oak Deciduous Forest (FODM5-3)

This woodland is 7.1ha and is located 10m from proposed underground cabling. Classified as a dry-fresh sugar maple – oak deciduous forest, this woodland's canopy is dominated by sugar maple, white ash, bur oak and red oak with a sub-canopy composition consisting of sugar maple, American basswood, and American beech (*Fagus grandifolia*). The understorey is also dominated by sugar maple along with white ash, basswood, and to a lesser extent, American beech and hop hornbeam. Groundcover in this woodland consists mostly of white ash and American basswood seedlings with some wild geranium. This woodland has evidence of forest management with cut trees throughout and authorized trails.

WOD-009 Dry-Fresh Oak – Hardwood Deciduous Forest (FODM2-4)

Classified as a dry-fresh oak – hardwood deciduous forest, this 4.1ha woodland is dominated by bur oak, white ash, white elm, and shagbark hickory in the canopy. The sub-canopy consists namely of white ash bur oak, and shagbark hickory, whereas the dominant understorey species are shagbark hickory, hop hornbeam, and American beech. The groundcover in this woodland is composed of wild geranium and white ash, as well as goldenrod and aster species. This woodland contains an open aquatic pond (OAO), which will be further discussed in relation to relevant wildlife habitat. WOD-009 is located 4m from proposed underground cabling.

WOD-010 Fresh-Moist Sugar Maple – White Elm Deciduous Forest (FODM6-4)

This woodland is 4.7ha in size and is located 4m from proposed access roads associated with this project. This natural area has been identified as a fresh-moist sugar maple – white elm deciduous forest with a canopy and sub-canopy dominated by sugar maple, white elm, and white ash. The understorey consists largely of white ash, white elm, wild red raspberry (*Rubus idaeus* ssp. *melanolasius*) and Canada goldenrod (*Solidago canadensis*). The groundcover for this woodland is mainly composed of poison ivy with some wild geranium and woodland strawberry (*Fragaria vesca* ssp. *americana*).

WOD-011 Dry-Fresh Sugar Maple Deciduous Woodland (WODM4-3)

This woodland is 4.4ha in size and has been classified as dry-fresh sugar maple deciduous woodland. WOD-011 is located 4m from a proposed access road. This woodland's canopy and sub-canopy are dominated by sugar maple, American basswood, and white ash. The understorey is also dominated by sugar maple, white ash, basswood, along with wild red raspberry. Groundcover in this natural feature consists largely of poison ivy and sugar maple saplings with some wild geranium and herb-Robert (*Geranium robertianum*).

WOD-012 Dry-Fresh Sugar Maple Deciduous Woodland (WODM4-3)

This woodland is a dry-fresh sugar maple deciduous woodland that is 5.1ha in size. WOD-012 is located 65m away from proposed wind turbine T23. The canopy of this woodland is dominated by sugar maple, basswood, white ash and hop hornbeam. The sub-canopy mostly consists of sugar maple with some white ash, American beech, and blue beech (*Carpinus caroliniana* ssp. *virginiana*). The understorey is also dominated by sugar maple along with American basswood, white ash and pignut hickory (*Carya glabra*). Groundcover for this woodland is mostly poison ivy with some Virginia creeper, goldenrod species, and wild geranium.

WOD-013/028 Dry-Fresh Sugar Maple – White Ash Deciduous Forest (FODM5-8)

This tableland natural feature has been identified as a dry-fresh basswood deciduous forest that is 19.9ha in size and is located 23m from proposed turbine T5. The dominant canopy species of this woodland are sugar maple, white ash, and bur oak. The sub-canopy consists of sugar maple and blue beech, while the dominant understorey species are sugar maple, hop hornbeam, and blue beech. The groundcover in this woodland consists of sugar maple seedlings, black raspberry (*Rubus occidentalis*), and goldenrods. This natural area also contains a dry-fresh basswood deciduous forest (FODM4-9) inclusion. Due to changes of right-of-entry for the private properties this woodland spans, different areas were surveyed on different dates and will be referred to as WOD-013 from here on.

WOD-014 Dry-Fresh Sugar Maple – Basswood Deciduous Forest (FODM5-6)

This mid-age 15.1ha woodland has been classified as a dry-fresh sugar maple – basswood deciduous forest. The canopy and sub-canopy are largely dominated by sugar maple with fewer American basswood and white elm. The understorey consists of sugar maple, an unidentified shrub species, basswood, and wild red raspberry. The dominant groundcover species are sugar maple, Virginia creeper, grass species, and Canada goldenrod. WOD-014 is located 4m away from a proposed access road. Due to restricted right-of-entry, only 5.7ha of this woodland could be specifically accessed during the site investigation. The remainder of the woodland has been classified through the use of aerial photography interpretation.

WOD-015 Dry-Fresh Sugar Maple – Basswood Deciduous Forest (FODM5-6)

This natural feature is a rolling upland that is 2.7ha in size. Identified as a dry-fresh sugar maple – basswood deciduous forest, this woodland's canopy is dominated largely by sugar maple with some American basswood, and to a lesser degree, white elm and white ash. The sub-canopy is also largely dominated by sugar maple with some basswood but it also has some shagbark hickory and white elm. The understorey consists of sugar maple with white ash, shagbark hickory and tall goldenrod (*Solidago altissima* var. *altissima*). WOD-015 is located 4m away from a proposed access road.

WOD-016 Dry-Fresh Sugar Maple – Basswood Deciduous Forest (FODM5-6)

This mid-age woodland is 12.9ha in size and is located 21m away from proposed wind turbine T33. Identified to be a dry-fresh sugar maple – basswood deciduous forest, this woodland canopy is dominated by sugar maple, American basswood, and white elm whereas dominant sub-canopy species are sugar maple, American basswood, and hop hornbeam. The understorey is dominated by sugar maple, white elm and white ash, while the groundcover in this woodland is largely made up of poison ivy, Virginia creeper, and sugar maple seedlings. Due to restricted right-of-entry, only 8.9ha of this woodland was accessed during site investigation.

WOD-017 Fresh-Moist Sugar Maple – hardwood Deciduous Forest (FODM6-5)

This 14.1ha woodland has been classified as a fresh-moist sugar maple – hardwood deciduous forest. WOD-017 is located 77m away from proposed wind turbine T25. The dominant species in the canopy of this woodland are sugar maple, American basswood, and bur oak. The sub-canopy has similar composition with the dominant species being sugar maple basswood and hop hornbeam. Understorey species consist namely of sugar maple, American beech, and basswood whereas spotted jewelweed (*Impatiens capensis*), poison ivy, zig-zag goldenrod (*Solidago flexicaulis*) and garlic mustard (*Allaria petiolata*) comprise the dominant groundcover. This woodland also contains a cultural open aquatic pond (OAO) that is fed by a drainage channel as well as a graminoid mineral meadow marsh (MAMM1) inclusion, which will be further discussed in the wetland section of this report.

WOD-018 Fresh-Moist Sugar Maple – Lowland Ash Deciduous Forest (FODM6-1)

This natural feature is a bottomland forest and has been classified as a fresh-moist sugar maple – lowland ash deciduous forest. The canopy, sub-canopy and understorey are all dominated by green ash (*Fraxinus pennsylvanica*) and sugar maple with occasional American basswood. The groundcover for this woodland is dominated by grass species, wild cucumber (*Echinocystis lobata*), and to a lesser extent, spotted

jewelweed and poison ivy. This woodland is 2.1ha in size and is located 4m away from a proposed access road.

WOD-019 Dry-Fresh Sugar Maple – White Ash Deciduous Forest (FODM5-8)

This woodland is 9.8ha in size and is located 105m away from a proposed access road. This woodland has been classified as a dry-fresh sugar maple – white ash deciduous forest. The canopy and sub-canopy of this woodland are dominated by sugar maple, white ash, American basswood, with some American beech and white elm. The understorey largely consists of sugar maple, American beech, and white elm. Groundcover for this natural feature is dominated by Virginia creeper and sugar maple seedlings along with false Solomon's seal (*Maianthemum racemosum* ssp. *racemosum*). Due to property access restrictions for this woodland, only 3.5ha could be specifically accessed during the site investigation.

WOD-020 Fresh-Moist Manitoba Maple Deciduous Woodland (WODM5-3)

Classified as a fresh-moist Manitoba maple deciduous woodland, this natural feature has valley slope topography with a watercourse extending north-south through the woodland and has patches of forb meadow in upland areas. The canopy of the woodland is dominated by Manitoba maple (*Acer negundo*), white ash, and some willow species (*Populus* sp.) and silver maple. The sub-canopy is also dominated by Manitoba maple and willow species with some crabapple species (*Malus* sp.) and silver maple. Dominant understorey plants in this woodland are Canada goldenrod and other goldenrod species as well as New England aster (*Symphotrichum novae-angliae*) and other aster species. The dominant groundcover in this community is riverbank grape. This woodland is 106.5ha in size and is located 4m away from proposed overhead cabling. This woodland was examined from a roadside location on Cuddy Drive due to restricted site access.

WOD-021 Fresh-Moist Deciduous Woodland (WODM5)

Due to restricted site access, this woodland was classified through the use of roadside surveys as a fresh-moist deciduous woodland. The canopy is dominated largely by willow species with some silver maple whereas the sub-canopy is dominated by willow and crabapple species. The understorey is dominated by grasses and gray dogwood, while the groundcover consists of grass and goldenrod species. This natural feature is a bottomland that is 1.8ha in size, and is located 7m away from proposed overhead cabling. This woodland was examined from a roadside location on Cuddy Drive due to restricted site access.

WOD-022 Naturalized Coniferous Plantation (FOCM6)

This 0.5ha woodland is located on a rolling upland and has been identified as a naturalized coniferous plantation containing mostly white spruce (*Picea glauca*). The super-canopy contains a few individuals of white ash and tamarack (*Larix laricina*) whereas the dominant species in the canopy are white spruce, and to a much lesser degree, black walnut (*Juglans nigra*), white pine (*Pinus strobes*), and white ash. The sub-canopy consists of white spruce, black walnut, white pine, white ash, and American basswood. The dominant understorey species include white spruce, white pine, willow species, sumac, and snowberry. The groundcover consists of asters, goldenrods, wild teasel (*Dipsacus fullonum* ssp. *Sylvestris*), and graminoids. WOD-022 is located 4m away from proposed overhead cabling. This woodland was examined from a roadside location on Kerwood Road due to restricted site access.

WOD-023 Dry-Fresh White Ash – Deciduous Woodland (WODM4-2)

This mid-age woodland is 3.3ha in size, located 32m away from proposed overhead cabling. Classified as a dry-fresh white ash – deciduous woodland, this natural area's canopy is dominated by white ash, American beech, and sugar maple. Dominant sub-canopy species include hop hornbeam and blue beech. The understorey consists of goldenrods and New England aster with graminoids being the prominent groundcover. This woodland was examined from a roadside location on Kerwood Road due to restricted site access.

WOD-024 Mixed Plantation (TAGM2)

This woodland is 3.2ha in size and is located adjacent to proposed overhead cabling. This community is a white spruce and black walnut cultural plantation, with white spruce being more dominant in both the canopy and sub-canopy. The understorey is dominated by goldenrod and aster species including Canada goldenrod and New England aster. The groundcover is strongly dominated by grass species. This woodland was examined from a roadside location on Kerwood Road due to restricted site access.

WOD-025 Dry-Fresh White Ash Hardwood Deciduous Forest (FODM4-2)

This 1.4ha woodland has been classified as a dry-fresh white ash hardwood deciduous forest. WOD-025 is located 4m away from a proposed access road. The dominant species in the canopy of this woodland are white ash and American basswood. The sub-canopy is dominated by white ash, American basswood, and sugar maple. The dominant species in the understorey is gray dogwood and the groundcover mostly consists of goldenrods and New England aster. This woodland was examined from a roadside location on Brown Road due to restricted site access.

WOD-026 Dry-Fresh Deciduous Woodland (WODM4)

Classified to be a dry-fresh hickory deciduous forest, this 2.2ha woodland is 4m from a proposed access road and underground collection. The canopy of this woodland is dominated by bitternut hickory (*Carya cordiformis*), American basswood, and white ash. The sub-canopy mostly consists of bitternut hickory, sugar maple and white ash. The understorey is dominated by sugar maple and wild red raspberry whereas the groundcover is dominated by wild strawberry, poison ivy and herb-robert. This woodland contains an open aquatic pond (OAO) with few submerged grasses and duckweed (*Lemna turionifera*). This open pond inclusion is surrounded by a forb meadow (MEF) dominated by goldenrods, asters, and some grasses.

WOD-027 Dry-Fresh Sugar Maple-Beech Forest (FODM5-2)

This 2.6ha natural feature has been classified as a dry-fresh sugar maple – American beech forest and it is located 4m from a proposed access road. The dominant species in the canopy of this woodland are sugar maple, American beech, and American basswood. The sub-canopy is dominated by American beech and sugar whereas the dominant understorey species is bitternut hickory. The groundcover for this woodland consists of garlic mustard, herb-Robert, and poison ivy.

WOD-033 Fresh-Moist Green Ash Hardwood Lowland Deciduous Forest (FODM7-2)

Classified to be a fresh-moist green ash hardwood lowland deciduous forest, this 86.9ha woodland is dominated by green and white ash as well as Freeman's maple, American basswood and shagbark hickory. The predominant species in the sub-canopy are green

ash, white elm, sugar maple and basswood whereas the understorey is dominated by green ash, hop hornbeam, white elm and basswood. Groundcover in this woodland consists of woodland strawberry, avens species, and calico aster (*Symphotrichum lateriflorum* var. *hirsuticaule*). WOD-033 is located 2m from a proposed access road. This woodland is part of Kerwood Bluff environmentally significant natural area. Due to property access restrictions for this woodland, only 6.4ha could be specifically accessed during the site investigation.

Information provided by the St. Clair Region Conservation Authority (Hilts and Cook, 1982) indicates this natural feature is topographically flat except for a hill caused by the bluff. Due to the topographic features, upland vegetation communities are present except for wetter areas along the creek. The topographic and upland features were confirmed during the field investigation in the portion of the woodland in which NRSI had right-of-entry. A few wet pockets were observed in lower lying areas; however, due to the information provided by the St. Clair Region Conservation Authority and field confirmation of upland communities with small, isolated, pockets of wetter species associations, it was determined unnecessary to collect detailed soils information for this site.

WOD-034 Fresh-Moist Green Ash – Hardwood Lowland Deciduous Forest (FODM7-2)

This 0.5ha mid-age woodland was identified as a fresh-moist green ash – hardwood lowland deciduous forest and is located 97m from a proposed access road. The dominant species in the canopy of this woodland are green ash and shagbark hickory. The sub-canopy is dominated by green ash, Freeman’s maple, and shagbark hickory, while the groundcover was not visible from the survey location. This woodland was surveyed roadside on highway 402 due to restricted site access. This natural feature is further discussed in the wetlands section.

WOD-035 Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

Classified to by a dry-fresh white ash – hardwood deciduous forest, this 6ha woodland is located 22m from proposed overhead cabling associated with this project. The canopy of this woodland is dominated by white ash, and to a lesser extent, sugar maple and American beech. The dominant species in the sub-canopy are also white ash, sugar maple and American beech. The understorey species consist largely of white ash and sugar maple and the groundcover is dominated by goldenrods and asters. This woodland was examined from a roadside location on School Road due to restricted site access.

WOD-036 Dry-Fresh Sugar Maple – White Ash Deciduous Forest (FODM5-8)

Classified to be a dry-fresh sugar maple – white ash deciduous forest, this 16ha woodland is located 104m from a proposed access road. This woodland has a canopy and sub-canopy dominated by sugar maple and white ash. The dominant understorey species are also sugar maple and white ash, whereas the groundcover consists of asters, goldenrods, and grasses. This woodland was examined from a roadside location on highway 402 due to restricted site access.

WOD-037 Fresh-Moist Lowland Deciduous Forest (FODM7)

This 8.1ha woodland was identified as a fresh-moist lowland deciduous forest with a canopy dominated by Freeman’s maple, green ash, and white elm. The sub-canopy and understorey are also dominated by Freeman’s maple, green ash, and white elm. The

dominant groundcover species in this woodland are asters, goldenrods, and common reed grass (*Calamagrostis deschampsoides*). This woodland is located 4m from proposed access roads associated with this project. This woodland was examined from a roadside location on highway 402 due to restricted site access. Due to lack of right-of-entry, substrate sampling could not be conducted; therefore, this woodland is presumed to also be a wetland and will be further discussed in section 7.0 Wetlands.

WOD-038 – Dry-Fresh Sugar Maple – Oak Deciduous Forest (FODM5-3)

This 22.9 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 92m from overhead cabling associated with the project. The canopy and sub-canopy are dominated by sugar maple and oak species in addition to white elm and white ash. The understory was not visible whereas the only identified groundcover species were goldenrods.

WOD -039 – Fresh-Moist Black Walnut Deciduous Forest (FODM7-4)

This 1.2 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 31m from overhead cabling associated with the project.. The canopy is dominated by black walnut and also contains hickory species, while the sub-canopy contains black walnut, willow species (*Carex sp.*), American basswood and hickory species. The understory and groundcover were not discernible from the roadside location. This natural feature is further discussed in section 9.2 Rare Vegetation Communities and Specialized Wildlife Habitat.

WOD-040 – Dry-Fresh Sugar Maple – Basswood Deciduous Forest (FODM5-6)

This 16.8 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 14m from overhead cabling associated with the project. The canopy is dominated by sugar maple and contains American basswood, black walnut, black cherry, and white spruce. The sub-canopy consists of sugar maple, American basswood, black walnut, European buckthorn (*Rhamnus cathartica*) and eastern white pine (*Pinus strobes*), while the understory includes sugar maple, gray dogwood and red-osier dogwood (*Cornus stolonifera*). The groundcover was not identifiable from the roadside location.

WOD-041 – Mixed Forest (FOM)

This 137.2 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 21m from overhead cabling associated with the project. The canopy is dominated by white spruce, sugar maple, red pine (*Pinus resinosa*) and eastern white cedar (*Thuja occidentalis*), while the sub-canopy includes willow species, sugar maple and black walnut. The understory contains gray dogwood, goldenrods and asters. The groundcover was dominated by grasses. This woodland is part of the WILLW-4-D Environmentally Significant Area, as outlined by the Ausable-Bayfield Conservation Authority. It has been designated as such because of its large size and floodwater retention capabilities (Ausable-Bayfield Conservation Authority n.d.).

WOD-042 – Fresh-Moist Lowland Deciduous Forest (FODM7)

This 2.5 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 15m from overhead cabling associated with the project. The canopy is dominated by Manitoba maple (*Acer negundo*), sugar maple, black walnut as well as red pine, oak species, and eastern white pine. The sub-canopy includes Manitoba maple and sugar maple, while the understory consists of eastern red cedar

(*Juniperus virginiana*). The groundcover was not discernible from the roadside location. Since right-of-entry was not granted for this property, the substrate could not be sampled. Due to limited data on substrate characteristics, this woodland has been presumed to be a potential wetland and will be further discussed in section 7.0 Wetlands. Additionally, due to restricted site access, more detailed species composition information could not be collected. Consequently, this woodland has the potential to represent a rare vegetation community, and has been carried forward as a candidate rare forest type.

WOD-043 – Dry-Fresh Sugar Maple Deciduous Forest (FODM5)

This 7.7 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 83m from overhead cabling associated with the project. The canopy is dominated by sugar maple, white ash, and black walnut. The sub-canopy consists of white ash and black walnut whereas the understory and groundcover were not discernible from the roadside location.

WOD-044 – Dry-Fresh Sugar Maple Deciduous Forest (FODM5)

This 68.2 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 29m from overhead cabling associated with the project. Dominant species in the canopy are sugar maple and white ash, while the sub-canopy contains sugar maple, white ash, staghorn sumac (*Rhus hirta*), willow species (*Salix sp.*) and American basswood. The understory includes staghorn sumac with gray dogwood, whereas the groundcover consists of goldenrods and asters.

WOD-045 – Dry-Fresh Coniferous Woodland (WOCM1)

This 0.8 ha woodland was surveyed from Kerwood Road due to restricted site access. This woodland is located 18m from overhead cabling associated with the project. The canopy is dominated by red pine and contains white spruce, eastern white pine and American basswood. The sub-canopy includes red pine, white spruce and American basswood, while the understory was unidentifiable from the roadside location. Visible groundcover species include wild teasel and grasses.

WOD-046 – Naturalized Coniferous Plantation (FOCM6)

This 5.2 ha plantation was surveyed from Kerwood Road due to restricted site access. This woodland is located 21m from proposed overhead cabling. The canopy is dominated by white spruce, red pine and eastern white pine, where as dominant species in the sub-canopy are white spruce and white pine. The understory and groundcover were unidentifiable from the roadside location.

WOD-047 – Fresh-Moist Mixed Woodland (WOMM3)

This 119.5 ha woodland was surveyed from Elginfield Road due to restricted site access. This woodland is located 20m from overhead cabling associated with the project. The canopy is dominated by white ash and red pine, while the sub-canopy largely consists of red pine, common apple (*Malus domestica*) and eastern red cedar. The understory includes common apple and red cedar, while the groundcover contains goldenrods and grasses.

WOD-048 - Moist Deciduous Woodland (WODM5)

This woodland is a 15.6 ha community with a canopy dominated by green ash, white ash, sugar maple, red oak and willow species. The sub-canopy contains common

buckthorn, green ash, white ash, hawthorn species (*Crataegus sp.*), American beech and white elm. The understory is composed of common buckthorn, goldenrods, asters and white ash, while the groundcover consists of garlic mustard (*Alliaria officinalis*), asters, poison ivy and white ash. This woodland contains three complexes, including a buckthorn deciduous shrub thicket (THDM2-6), a dry-fresh sugar maple-white ash deciduous forest (FODM5-8) and a dry-fresh forb meadow (MEFM1) ecosite. This woodland is located 46m from proposed overhead cabling associated with this project.

WOD-049 – Fresh-Moist Deciduous Woodland (WODM5)

This 1.6 ha woodland was surveyed from Elginfield Road due to restricted site access. The canopy and sub-canopy are dominated by black locust (*Robinia pseudo-acacia*) and contains silver poplar (*Populus alba*) and red pine. The understory consists of red pine, eastern red cedar and common buckthorn, while the groundcover is dominated by cattail species (*Typha sp.*), goldenrods and grasses. This woodland is located 20m from overhead cabling associated with the project.

WOD-050 – Dry-Fresh Sugar Maple – Basswood Deciduous Forest (FODM5-6)

This 4.4 ha woodland was surveyed from Nairn Road due to restricted site access. The canopy is dominated by sugar maple and American basswood with some bur oak and silver maple. The sub-canopy largely consists of American basswood and sugar maple with fewer silver maple and shagbark hickory. The understory is composed of sugar maple, bur oak and shagbark hickory, while the groundcover contains goldenrods. This woodland is located 12m from overhead cabling associated with the project.

WOD-051 – Dry-Fresh White Ash Hardwood Deciduous Forest (FODM4-2)

This 21.0 ha woodland was surveyed from the property directly south of the western portion of this woodlot due to restricted site access. The canopy is dominated by white ash and sugar maple, while the sub-canopy consists of shagbark hickory, sugar maple and red oak. The understory contains wild red raspberry, common buckthorn and asters, whereas the groundcover dominated by wild strawberry and poison ivy. This woodland is located 7m away from overhead cabling associated with this project.

WOD-052 – Naturalized Coniferous Plantation (FOCM6)

This 10.6 ha plantation was surveyed from Nairn Road due to restricted site access. This woodland is located 17m from overhead cabling associated with the project. The canopy is dominated by white spruce, while the sub-canopy contains mainly eastern white cedar and low numbers of eastern red cedar. The understory is composed of gray dogwood and willow species, while the groundcover is dominated by goldenrods, grasses and riverbank grape.

WOD-053 – Dry-Fresh White Ash – Hardwood Deciduous Forest (FODM4-2)

This 36.7ha woodland was classified to be a dry-fresh white ash – hardwood deciduous forest. This woodland is located 11.5m from project supporting infrastructure (interconnection point). The dominant species in the canopy are white ash, sugar maple and white elm. The sub-canopy is dominated by sugar maple, white ash and white elm. The understory includes common buckthorn and silky dogwood (*Cornus amomum ssp. oblique*), while the groundcover mainly contains grasses, reed canary grass (*Phalaris arundinacea*) and goldenrods. This woodland contains an 11.7 ha European buckthorn thicket (THDM2-6), which is dominated by common buckthorn. WOD-053 is located 11.5m away from proposed supporting infrastructure (interconnection point).

WOD-054 – Naturalized Coniferous Plantation (FOCM6)

This 1.0 ha plantation contains only white spruce and eastern white cedar. This plantation does not contain a sub-canopy or understory, while the groundcover is dominated by grasses. This woodland overlaps with overhead cabling and is 16m from supporting infrastructure (interconnection point).

WOD-055 - Dry-Fresh Sugar Maple – Hickory Deciduous Forest (FODM5-5)

This 11.1 ha tableland forest has a canopy consisting of sugar maple, shagbark hickory and American beech, while the sub-canopy includes sugar maple, American beech and shagbark hickory. The understory is mainly dominated by goldenrod species and wild red raspberry, while the groundcover contains grass species (*Poaceae sp.*) and garlic mustard. This natural area is located 16 m from supporting infrastructure (substation).

WOD-056 - Dry-Fresh White Pine Naturalized Coniferous Plantation (FOCM6-1)

This 3.0 ha tableland plantation has a canopy and sub-canopy composed of Eastern white pine, while there is no understory present. The groundcover contains grass species, goldenrod species and wild red raspberry. This plantation also contains a naturalized deciduous plantation inclusion that solely consists of white ash. This plantation is located 116m from overhead cabling.

WOD-057 - Dry-Fresh Sugar Maple Deciduous Forest (FODM5)

This 1.2ha woodland was assessed to be a dry-fresh sugar maple deciduous forest that is located 4m from proposed access road and overhead collection. The canopy of this woodland is dominated by sugar maple and white ash whereas the sub-canopy is dominated by sugar maple and basswood. The understorey consists of sugar maple, white ash, and basswood with some American beech. The dominant groundcover species in this woodland is white ash. Due to restricted site access, this woodland was surveyed from an adjacent property.