

CONSTRUCTION and MITIGATION PLAN

Badger Coulee 345 kV Transmission Line Project – Segment 8-North

American Transmission Company LLC, by its corporate manager, ATC Management Inc. (ATC); Dairyland Power Cooperative (DPC); Northern States Power Company, a Wisconsin corporation (NSPW); SMMPA Wisconsin, LLC (SMMPA Wisconsin), and WPPI Energy (WPPI) (the Applicants) were granted a Ch. 30.025 utility permit by the Wisconsin Department of Natural Resources (WDNR) for work in and adjacent to wetlands and waterways for the Badger Coulee 345 kV Transmission Line Project (Permit #IP-WC/SC-2015-N20001 through N20273)(Attachment 3). This permit requires the Applicants prepare a Construction and Mitigation Plan (CMP) for work in wetlands and waterways for WDNR approval prior to beginning work in these features (General Conditions #9 and 11). As the Project Construction Manager, ATC has prepared this CMP for Segment 8-North (extending from structure W3103-236 north to the Tremval Substation), which outlines construction methods and procedures that will be followed to reduce impacts to these features. Segment 8 was split into two CMP submittals (Segment 8-North and Segment 8-South) so that tree clearing associated with the southern portion can begin in March 2017. Segment 8-North is located in La Crosse and Trempealeau Counties and is approximately 17.4 miles long. The Segment 8-South CMP (from the Briggs Road Substation north to Structure W3103-236) was submitted in early January 2017.

The components of this CMP follow those outlined in General Condition #11 of the WDNR utility permit.

A. Environmental Access Plan

An Environmental Access Plan (EAP) for Segment 8-North is provided in Appendix A. This EAP shows the location of wetlands and waterways, pole locations, temporary clear span bridge (TCSB) crossings, construction access, and other pertinent information. The proposed structure foundation type is also included on the EAP. This includes an “alternate foundation” type (e.g., micropile foundation) which typically occurs in areas of steeper terrain. The structure foundation type in these areas is still being evaluated and may change; however, because they occur in uplands it will not affect wetland fill amounts.

Field work was conducted in 2013 to delineate wetlands and characterize other natural resource features along Segment 8-North; however, access to the entire corridor width was not available. The project corridor was re-evaluated during field visits in 2016 after additional access was gained.

The following three new wetlands were identified in 2016:

- N-W1 – near structure 136869
- N-W8a – near structure 136912
- N-W12a – near structure 136923.

Two of these newly identified features (N-W1 and N-W8a) were previously mapped as waterways but these swales were determined to be wetland in 2016 based on the dominance of hydrophytic vegetation and lack of defined bed/banks. The other wetland (N-W12a) was added along waterway N-R9.

The boundaries of several wetlands were also adjusted during the 2016 field work. The adjusted wetland boundaries are shown on the EAP and a description summarizing the rationale for the boundary adjustments are provided in Appendix B.

As shown on the EAP, two new structures will be placed in wetlands along Segment 8-North, requiring 0.007 acre of wetland fill. The wetlands where these structures occur and their associated EAP map pages are included in Appendix B. New structure placement in these wetlands was approved in the Joint Application. The placement of five structures in wetlands along Segment 8-North, requiring 0.011 acre of wetland fill, was approved in the utility permit. This reduction in number of structures in wetlands is due to one wetland now considered to be upland (P-W4) and because structures occurring within 50 feet of a wetland were conservatively included in wetland fill calculations in the Joint Application.

Up to four temporary poles will be placed in wetlands to protect road crossings during construction (refer to the EAP for temporary pole locations). These temporary poles are needed from a public safety perspective in case the wires fall during stringing. These poles will be directly embedded into the ground surface which will result in approximately 0.01 acre of temporary wetland fill. The poles will be removed and the area restored to existing grade with topsoil replacement when complete. Revegetation of the disturbed areas will follow the Revegetation and Monitoring Plan (Attachment 2). Attempts to reduce the number of temporary poles in wetlands will be made; however complete avoidance is unlikely due to the position of the wetlands in the transmission line ROW at proposed road crossing locations.

Numerous existing poles will be removed from wetlands (e.g., EAP map pages 15, 19 and 28). Pole removal and restoration of the area will be the same as described above for temporary pole removal.

Up to nine TCSBs will be required along Segment 8-North (Appendix A), which includes one TCSB for off-ROW access (N-R5c). The TCSBs are required over the following waterways:

- N-R2
- N-R4
- N-R5c (for off-ROW access)
- N-R6
- N-R9a
- N-R9b
- N-R10
- N-R11a
- N-R11b.

In coordination with the WDNR, a TCSB was installed over waterway N-R11a in the fall of 2016 to allow access for a soil boring rig and was removed within several weeks. As noted above, a TCSB over this waterway will also be needed during construction. Except for waterway N-R4 and N-R5c, these TCSBs were approved in the WDNR utility permit. The applicants will attempt to gain alternate access from private property owners to eliminate the need for some of these TCSBs; however, at this point it is assumed all the TCSBs will be required.

Approximately 0.40 acre of permanent forested wetland clearing will be required along Segment 8-North (this excludes clearing required within the existing transmission line easement). This amount of clearing along Segment 8-North is less than the 1.7 acres provided in the Joint Application. This decrease is due to the determination that some previously considered wetlands are now upland (e.g., P-W4) and the adjustment of wetland boundaries during the 2016 field evaluations.

Construction access along Segment 8-North is presented on the EAP (Appendix A). Access through wetlands has been avoided where feasible (e.g., P-W5, P-W5a, N-W1, N-W2, N-W9 and N-W12a), or reduced by crossing only portions of wetlands (e.g., N-W4a and N-W6). However, access through other wetlands along this segment is necessary due to equipment access constraints, project alignment and the configuration of these wetlands. *(Note: While most construction equipment will be limited in wetlands where access is not shown, lighter-duty vehicles may still be used for clearing or to pull the conductor through these portions of wetlands).*

Construction matting may be used to facilitate access and reduce impacts in wetlands. The table below identifies the anticipated approximate area of matting in each wetland along the proposed ROW.

Wetland Identifier	Acreage of mats	Wetland Identifier	Acreage of mats	Wetland Identifier	Acreage of mats	Wetland Identifier	Acreage of mats
N-W3	0.14	N-W7	0.23	N-W15a	0.02	N-W21	0.08
N-W4	0.12	N-W11	0.04	N-W15b	0.02	N-W22	0.07
N-W5	0.36	N-W12	0.13	N-W16	0.05		
N-W6a	0.15	N-W15	0.11	N-W18	2.77		

Off-ROW access paths will be required at several locations due to difficult terrain. Most off-ROW access paths occur in upland areas; however, several paths cross wetlands (refer to the EAP for these locations). Wetland boundaries in off-ROW areas were determined from aerial photographs, Wisconsin Wetland Inventory, and NRCS soil mapping, although a couple were also viewed during site walk downs. About 0.10 acre of wetland matting may be required for these off-ROW access paths. Forested wetland or shrub-carr clearing is not required along these off-ROW access paths. These off-ROW access paths are being utilized to avoid waterway crossings (EAP map pages 10 and 23) and to cross a waterway in a more suitable location for construction (EAP map page 17). In coordination with the WDNR, approximately 0.14 acre of off-ROW matting was installed in the wetland extending west from the ROW to CTH I near structure 136935 (EAP map page 28). This matting was installed in the fall of 2016 to allow access for a soil boring rig and removed within several weeks. Matting in this area will not be required during construction.

In addition, the following off-ROW access paths not identified in the Joint Application will require upland forest clearing to access structure locations. These off-ROW paths are required as access for larger construction vehicles (e.g. concrete trucks) within the ROW is not practicable in the hilly terrain. These

paths typically occur along existing pathways and require widening to accommodate construction vehicles.

- Access to structure 136873 (EAP map page 7) – clearing approximately 0.13 acre;
- Access to structure 136882-883 (EAP map page 10)– clearing approximately 0.28 acre;
- Access to structure 136887 (EAP map pages 12)– clearing approximately 0.29 acre;
- Access to structure 136903 (EAP map page 17) – clearing approximately 0.09 acre;
- Access to structure 136905 (EAP map page 18) – clearing approximately 0.04 acre;
- Access to structure 136906 (EAP map page 18) – clearing approximately 0.05 acre;
- Access to structure 136910 (EAP map page 20) – clearing approximately 0.16 acre;
- Access to structure 136910 (EAP map page 20) – clearing approximately 0.12 acre;
- Access to structure 136913 (EAP map page 21) – clearing approximately 0.19 acre;
- Access to structure 136915 (EAP map page 21) – clearing approximately 0.13 acre;
- Access to structure 136917 (EAP map page 22) – clearing approximately 0.40 acre;
- Access to structure 136919 (EAP map page 22) – clearing approximately 0.07 acre;
- Access to structure 136923 (EAP map page 24) – clearing approximately 0.43 acre;
- Access to structure 136930-932 (EAP map page 27) – clearing approximately 0.15 acre; and
- Access to structure 136937 (EAP map page 29) – clearing approximately 0.05 acre.

Attempts have been made to find alternate access that does not impact wetlands or upland forest; however, at this point it is assumed these routes will be required.

Additional measures to reduce wetland and waterway impacts along Segment 8-North are outlined in other sections of this CMP (e.g. *Invasive Species Management Plan* and *Wetland Restoration and Revegetation Plan*).

B. Photographs of Pre-Construction Site Conditions (Wetlands and Waterways)

Pre-construction photographs of wetlands and waterways along the Segment 8-North ROW are provided in Appendix C.

C. Waterway Impacts

As discussed above, up to nine TCSB crossings will be required along Segment 8-North. Final plan and cross-sectional view drawings for each bridge crossing are provided in Appendix D. As required in General Condition #51 of the utility permit, the TCSBs will incorporate measures to reduce soil reaching the waterways.

The approved route and off-ROW access along Segment 8-North cross 17 waterways identified in the WDNR 24K hydrology layer and/or in the Joint Application that do not have defined bed and banks based on 2016 field observations. These features are identified on the EAP with a label “non-regulated-WDNR confirmed (pending)”, and a recent photo is presented in Appendix E. A brief field description of each feature follows:

- Feature south of structure 136869 – deep, excavated agricultural ditch receiving discharge from numerous drain tiles; bottom of ditch vegetated with shallow marsh vegetation; mapped waterway in WDNR 24K hydrology layer; identified in Joint Application as N-R1 but now considered wetland (N-W1).
- Feature north of structure 136877 – fully vegetated natural swale with no defined bed/banks; mapped waterway in WDNR 24K hydrology layer.
- Feature north of structure 136884 – natural drainage/gully across steep slope; no defined bed/banks and fully vegetated; identified in Joint Application as N-R3a but not mapped in the WDNR 24K hydrology layer.
- Feature north of structure 136889 – natural drainage/gully across slope; fully vegetated with no defined bed/banks; identified in Joint Application as N-R3b but not mapped in the WDNR 24K hydrology layer, now considered an extension of N-W4a.
- Feature south of structure 136890 – natural low swale surrounded by steep topography with no defined bed/banks; identified in Joint Application as N-R3c but not mapped in the WDNR 24K hydrology layer.
- Feature north of structure 136890 – natural low swale surrounded by steep topography with no defined bed/banks; identified in Joint Application as N-R3d but not mapped in the WDNR 24K hydrology layer.
- Feature north of structure 136894 – fully vegetated wet meadow with no defined bed/banks; mapped waterway in WDNR 24K hydrology layer.
- Feature west of structure 136898 –swale within maintained lawn; no defined bed/banks; mapped waterway in WDNR 24K hydrology layer.
- Feature north of structure 136907 – fully vegetated wet meadow; culvert present under driveway to the west, but no defined channel west or east of driveway; mapped waterway in WDNR 24K hydrology layer.

- Feature south of structure 136912 – fully vegetated wet meadow swale between agricultural fields; no defined bed/banks; identified in Joint Application as N-R6a, mapped waterway in WDNR 24K hydrology layer.
- Feature north of structure 136912 - natural low swale surrounded by steep topography with no defined bed/banks; identified in Joint Application as N-R6b but not mapped in the WDNR 24K hydrology layer, now considered wetland N-W8a.
- Feature north of structure 136918 – fully vegetated natural swale within pasture; no defined bed/banks; identified in Joint Application as N-R7a, mapped waterway in WDNR 24K hydrology layer.
- Feature north of structure 136927 – fully vegetated natural swale surrounded by steeper topography with no defined bed/banks; mapped waterway in WDNR 24K hydrology layer.
- Feature south of structure 136942 – fully vegetated natural drainage/gully across steep slope; no defined bed/banks; identified in Joint Application as N-R11d but not mapped in the WDNR 24K hydrology layer.
- Feature south of structure 136943 - fully vegetated wet meadow swale between agricultural fields; no defined bed/banks; identified in Joint Application as N-R11e, mapped waterway in WDNR 24K hydrology layer.
- Feature south of structure 136945 - fully vegetated wet meadow swale between agricultural fields; no defined bed/banks; mapped waterway in WDNR 24K hydrology layer; identified in Joint Application as N-R11f.
- Feature north of structure 136946 – topographically lower area within cropped agricultural field; no defined bed/banks; mapped waterway in WDNR 24K hydrology layer.

We are requesting WDNR concurrence that these 17 features would not be considered navigable and therefore not subject to provisions of Chapter 30 (Wis. Stats.).

In addition, there are two other crossings of mapped waterways that were not observed to have defined bed and banks during 2016 field investigations. These features occur between structures 136875-136876 and extend west along an off-ROW access path, and along an off-ROW access path west of the ROW between structures 136885-136886. A navigability request was previously sent to the WDNR and they concurred that Chapter 30 (Wis. Stats.) permit coverage is not required at these resources (February 21, 2017 correspondence from Ben Callan).

During construction of concrete foundations, water is often pumped into the borehole to maintain the integrity of the excavation. Suitable surface waters adjacent to the ROW may be used as a source of this water. Several waterways along this segment may be utilized for withdrawals; however, a final determination has not been made at this time. If surface water withdrawals are required, they will meet the following conditions outlined in the Utility Structure, Bridge and Wetland General Permit (WDNR-GP3-2013):

- Pump intakes and discharges shall be placed to prevent impacts to fisheries, wildlife, and their habitat; and
- Pump intakes and discharges shall be placed to prevent the disturbance, removal and scour of bed material.

In addition, water withdrawals from public waterways must avoid placement of a structure on the bed of the waterway unless prior authorization under ch. 30.12 (Wis. Stats.) is granted from the WDNR. The WDNR will be notified if surface water withdrawals occur along Segment 8-North.

Clearance Waiver

General Condition #46 of the WDNR utility permit indicates: *All bridges across navigable waterways shall either maintain a clearance of not less than 5 feet, or comply with requirements of s. NR 320.04 (Wis. Admin. Code).* Wisconsin Admin. Code Chapter NR 320.04(3) indicates the department may allow less than 5 feet of navigation clearance when all of the following apply:

- The waterway is known to have little or no navigation or snowmobile use;
- The waterway is not anticipated to have navigational use by other than lightweight craft;
- The owner provides a portage over or around the bridge or culvert; and
- The reduced clearance would not be detrimental to the public interest.

The Applicants would allow a portage over or around a TCSB if necessary; however, given the waterway dimensions (i.e. narrow widths and shallow depths) at all TCSB crossings except N-R4, these waterways likely have infrequent or no watercraft use in the project area. Although waterway N-R4 is about 25 feet wide in the project area, it still likely has infrequent watercraft use. The Applicants believe the other conditions specified in Wis. Admin. Code Chapter NR 320.04(3) are met at each waterway crossing and therefore, a five-foot clearance is not required at any of the nine TCSB locations.

Fishery Waiver

General Condition #44 of the WDNR utility permit indicates that: *All bridges must be placed and removed in compliance with timing restrictions, unless authorized by the local DNR fisheries biologist. For trout streams and navigable tributaries to those trout streams, placement and removal is prohibited from September 15 through May 15, annually. On all other waterways, placement and removal of the bridges is prohibited from March 1 through June 15, annually.* As discussed above, TCSBs will be required over nine waterways. Three of the waterways (N-R2 [UNT to Dutch Creek], N-R4 [Beaver Creek] and N-R10 [UNT to Bear Creek]) are classified as trout streams while the remaining six waterways (N-R5c, N-R6, N-R9a, N-R9b, N-R11a and N-R11b) are classified as warm water streams. The Applicants requested a waiver of the September 15 through May 15 timing restriction for the three trout streams, and the March 1 through June 15 timing restriction for the other waterways from Mr. Dan Hatleli (Trempealeau County Fisheries Manager). His response will be provided to the Office of Energy when received and will be included in Appendix F.

D. Endangered Resources Plan

ATC worked with the WDNR to develop a Certified Endangered Resources (ER) Review as part of the Joint Application. The Certified ER Review identified and summarized endangered resources known to occur along each proposed segment. Upon receiving the ordered route, the Certified ER has been amended in coordination with WDNR as construction details have been developed. The amendment table identified which state-listed species have required follow-up actions and the specific areas along Segment 8-North where measures are needed to avoid and minimize direct or indirect impacts to state-listed species. Furthermore, the amendment table identified voluntary measures recommended to avoid and minimize impacts to other sensitive state-listed species or resources (e.g. natural communities). The amendment table serves as a communication and coordination tool to be used among the Applicants, WDNR, and construction contractor(s). For federally listed species, the Applicants prepared a Biological Evaluation/Assessment in coordination with the US Fish and Wildlife Service (USFWS) that outlines a determination of affects for federally listed species that may occur along Segment 8-North, as well as the necessary conservation measures to protect them. Where necessary, specific areas and protection measures will be documented on the EAP for state- and federally listed species known or assumed to be present along the segment.

E. Invasive Species Management Plan

Plant communities and dominant vegetation within the ROW of Segment 8-North were documented during field evaluations in 2013, and additional field visits in 2016. The presence (i.e. general location and density) of Restricted and Prohibited species defined in *Wis. Admin Code* Ch. NR 40 within the ROW were identified during these assessments.

Segment 8-North begins just south of the Black River in the Town of Holland and extends cross-country to the north along an existing transmission line corridor to the Tremval Substation on U.S. Highway 53 in the Town of Preston. Along the existing transmission line, this segment crosses steep and rolling topography through primarily agricultural lands, woodlands, and wetlands. This segment also crosses the Black River and several smaller waterways.

The following summarizes invasive species observed along the Segment 8-North project corridor. All species identified below in this section are classified as Restricted unless noted otherwise.

In general, where not under agricultural production, the ROW along Segment 8-North is maintained for the existing transmission line. Eurasian cool season grasses such as smooth brome (*Bromus inermis*) and Kentucky bluegrass (*Poa pratensis*), not included in NR 40, are common along roadsides and within old field areas crossed by the ROW. A variety of other invasive species included in NR 40 that are also present within the Project ROW within these areas include wild parsnip (*Pastinaca sativa*), Canada thistle (*Cirsium arvense*), and crown vetch (*Coronilla varia*). Invasive/non-native species not included in NR 40 are also present including reed canary grass (*Phalaris arundinacea*) and Queen Anne's-lace (*Daucus carota*).

Large woodlands are common along the Project ROW, generally along areas of steeper topography. Woody invasive species principally consisting of common buckthorn (*Rhamnus cathartica*) and invasive

honeysuckle shrubs (*Lonicera* spp.) were typically observed at the woodland edges along the maintained transmission ROW with their abundance ranging from scattered to common. Garlic mustard (*Alliaria petiolata*), was also observed along woodland edges.

Agricultural lands consist primarily of corn and soybean row crops, and pasture or hay fields. Invasive species observed along agricultural lands are similar to those observed within the maintained transmission line ROW, including species such as wild parsnip, Canada thistle, Queen Anne's-lace, smooth brome, and Kentucky bluegrass.

Wetland communities observed along Segment 8-North include degraded wet meadow, sedge meadow, degraded sedge meadow, shallow marsh, hardwood swamp, shrub-carr, alder thicket, and farmed wetland. Most of the degraded wet meadows along this segment are dominated by reed canary grass with inclusions of higher quality species. Reed canary grass was also scattered to common within many of the other wetland communities along the Project ROW. Canada thistle and garlic mustard were also observed in scattered locations, and moneywort (*Lysimachia nummularia*) was observed within wetland P-W5a.

Location-Specific BMP's

Location-specific BMP's should be applied at the following locations:

- Crown vetch is common within the DOT ROW along Segment 8-North immediately north and south of the Black River. To reduce the potential for spreading this species into adjacent wooded areas, all vehicles should be inspected and brushed off prior to clearing upland wooded areas outside the DOT ROW, and before conducting other work within these areas. In addition, a layer of wood chips may be left on the ground after clearing activities which will act as a barrier between vehicles and the ground surface to reduce the spread of this species.
- Moneywort was observed within wetland P-W5a. If this area cannot be avoided, the vehicles should be inspected and brushed off before leaving the area.
- Garlic mustard was observed within wetland N-W4a and at the cleared woodland edge on the west side of the existing transmission line ROW between structures 136889 and 136891. Vehicles should be inspected and brushed off before leaving this area. In addition, a layer of wood chips may be left on the ground after clearing activities in this area which will act as a barrier between vehicles and the ground surface to reduce the spread of this species.

In addition, common buckthorn and honeysuckle shrubs are scattered to common along cleared woodland edges in Segment 8-North (individual locations not identified on the EAP due to their abundance). When cleared, these shrubs should be left in the ROW or transported to an approved location.

Location-specific BMPs may be implemented elsewhere within Segment 8-North if ATC encounters a localized population of an invasive species other than those discussed above during future field visits.

General BMP's

The following general BMPs will be utilized during construction along Segment 8-North to comply with *Wis. Admin Code Ch. NR 40*. The intent of these practices is to limit the spread of invasive species.

- Construction equipment and material
 - Minimize soil disturbance and utilize gravel roads or established equipment access paths to the extent practicable.
 - To the extent practicable, avoid localized populations of invasive species through construction timing and alternate access.
 - When working in areas infested with invasive species, clean mud and plant material from construction matting and equipment.
- Managing soil and vegetative material
 - Avoid movement of invasive material to non-infested areas. If possible, invasive material should be left within the ROW. For example, when clearing areas dominated by honeysuckle or buckthorn shrubs, cut material should be left in generally the same place and not spread off-site or to uninfested areas.
 - If infested soil or vegetative material must be transported from the ROW, transport to a designated area for appropriate disposal. Prior to transporting material, manage the load to limit potential spread to uninfested areas.
 - Manage stockpiles onsite to prevent the spread to adjacent areas.
 - In areas requiring clearing, a layer of wood chips should be left on the ground (if approved by the landowner) to act as a barrier between vehicles and the ground surface.
- Restoration and landscaping
 - Seed mixes have been developed for the Project and will be installed in accordance with the Revegetation and Monitoring plan (Attachment 2).
 - Revegetate disturbed soils as soon as possible with an appropriate temporary cover crop to minimize invasive species establishment. As appropriate, a perennial seed mix shall be installed during the appropriate seeding window.
- Aquatic invasive species
 - Water may be withdrawn from waterways for foundation construction along this segment. All equipment used for withdrawing water (i.e. pumps, hoses, boats, machinery, etc.) will be adequately decontaminated/disinfected for aquatic invasives. Decontamination / disinfection can be accomplished by allowing equipment to dry thoroughly for at least 5 days or by utilizing another appropriate method identified in NR 329.04, prior to being used in non-infested waters of the state.

F. Wetland Compensatory Mitigation Plan

As compensation for impacts to wetlands associated with the Project, the applicants propose wetland compensatory mitigation. Temporary and permanent impacts to wetlands occur within Segment 8-North, which is located within the Upper Mississippi – Black – Root (UMBR) Bank Service Area (BSA). The total wetland impacts and proposed compensatory mitigation acres for Segment 8-North are identified in the Mitigation Summary Table (Appendix G).

Temporary Impacts

The only temporary wetland impact along Segment 8-North is matting of sedge meadow, which is identified as a difficult to replace (DTR) wetland community. Temporary matting will impact 0.24 acre of sedge meadow within the ROW.

Permanent Impacts

Permanent impacts due to structure placement in wetlands have been reduced to a total of 0.007 acre. There are only two structures that will be placed within wetlands. Structure placement will impact 0.003 acre of degraded wet meadow and 0.004 acre of farmed wetland (seasonally flooded basin).

Permanent conversion of shrub and forested wetland within the project corridor of Segment 8-North totals approximately 0.95 acre. Specifically, permanent conversion within the UMBR BSA consists of 0.26 acres of shrub-carr, 0.29 acre of alder thicket, and 0.40 acre of hardwood swamp.

Mitigation Credits

The applicants are coordinating with the WDNR Mitigation Coordinator and the US Army Corps of Engineers (USACE) to determine the most appropriate option for wetland mitigation; a combination of Wisconsin Wetland Conservation Trust (in-lieu fee program) and wetland banking credits are anticipated to be used for Segment 8-North. Mitigation credits are based on mitigation ratios agreed upon by the WDNR and the USACE and are as follows: 1.45:1 for permanent impacts related to structure placement; 0.5:1 for permanent conversion of shrub-carr, alder thicket, and hardwood swamp; and 0.25:1 for temporary matting of sedge meadow. At these ratios, a total of 0.55 credits are required to compensate for the unavoidable wetland impacts to Segment 8-North within the UMBR BSA.

G. Wetland Restoration and Revegetation Plan

A general summary of wetland community characteristics within the ROW of Segment 8-North is presented in Appendix B. This characterization is based on field observations from 2013 and 2016. In summary, wetland communities present within this segment include wet meadow, sedge meadow, shallow marsh, hardwood swamp, shrub-carr, alder thicket, and farmed wetland. Many wetland communities are degraded to a certain degree with typically one or more invasive species present. Construction within wetlands shall comply with the segment-specific Erosion Control Plan (ECP). Revegetation of wetlands is presented in the project-specific Revegetation and Monitoring Plan (Attachment 2). A summary of wetland restoration and revegetation guidelines for Segment 8-North is provided below.

Restoration / Revegetation

- Restoration within wetland areas will include removal of all construction-related materials (e.g. timber matting) and the restoration of significant ruts and depressions.
- The ROW will be restored to pre-existing topography as much as practicable.
- Areas with significant rutting in wetlands will be repaired using hand tools, back dragging, or other appropriate means to restore topography while minimizing additional disturbance.
- Wetland areas where disturbance is minimal, as anticipated along matted access routes, will generally be allowed to revegetate naturally. These locations will be monitored to determine if supplemental seeding is necessary.
- A temporary cover crop may be installed over disturbed soils following ground disturbance. A project-specific permanent native wetland seed mix may be installed within disturbed wetland areas that have a native component but are not high-quality wetlands (see Revegetation and Monitoring Plan for seed mixes and installation specifications, Attachment 2).
- Farmed wetlands will not be re-seeded due to their current land use.

Other /Miscellaneous

- Fertilizers will not be used within 100 feet of wetlands, streams and rivers.
- Cover such as erosion blankets or other weed-free devices may be applied after seeding and final restoration has occurred in wetland areas disturbed by the construction activities. All erosion control measures utilized will conform to WDNR Technical Standards.
- Installed soil erosion and sedimentation control measures will be maintained until the disturbed areas are permanently stabilized.

H. Wooded Riparian and Wetland Management Plan

Approximately 0.40 acre of hardwood swamp will be permanently impacted by construction along Segment 8-North. These wooded wetlands are typically adjacent to smaller waterways. In addition, an upland wooded riparian corridor occurs along the Black River (P-R3 on EAP map page 2).

In general, the entire ROW width will be cleared for safe construction equipment access in wooded areas. In riparian areas, efforts will be made to retain low-growing vegetation on/near stream banks for erosion control, where it currently exists. In areas where a TCSB will be installed, the amount of clearing will be kept to a minimum, which will reduce the impacts to riparian corridors.

Trees cut in wetland areas will generally be removed from the wetland and windrowed or chipped in upland areas. Some of the woody vegetation that is cleared may remain in the wetland areas. This includes lop and scatter of tree limbs, and thin scatter of wood chips and vegetation fragments resulting from mowing the shrub and sapling layer. Wood left in the wetland will be scattered in a manner that does not impede vegetation growth, water flow, or alter the bottom elevation of the wetland.

Areas disturbed by construction will be restored as described in the *Wetland Restoration and Re-Vegetation Plan* section.

I. Final Sequencing and Scheduling Plan

Clearing along Segment 8-North is anticipated to begin in May 2017. The following summarizes the anticipated timing of construction along Segment 8-North:

- ROW Clearing – May 2017 – July 2017
- Structure Foundations – June 2017 – Nov. 2017
- Install Structures – July 2017 – Dec. 2017
- Install Conductor – Nov. 2017 – Jan. 2018

ROW cleanup and restoration is scheduled to occur in the spring/summer following completion of construction, although actual dates for restoration will be weather dependent. Permanent restoration within any given area will be properly implemented within 30 days of final construction; however, if restoration is delayed due to weather or soil conditions, the area will be protected until permanent restoration can be completed.

J. Post-Construction Monitoring Plan

Wetland and waterway monitoring will be required for this project. Weekly monitoring will occur during and after construction until disturbed areas are stabilized and annual post-construction monitoring will be conducted as discussed below.

In accordance with Condition #38 of the WDNR utility permit, ATC will conduct frequent monitoring (e.g., weekly and after a significant rainfall event) of erosion and sediment controls during and after construction, which may include areas within and adjacent to wetlands and waterways. This monitoring will occur until the areas are stabilized as defined in Condition #38 of the utility permit.

ATC will also conduct annual post-construction monitoring of the portions of wetlands and waterways impacted by construction, as outlined in Condition #70 of the utility permit. This monitoring shall continue for a minimum of 5 years after construction unless compliance is achieved and documented earlier. Refer to the Revegetation and Monitoring Plan (Attachment 2) for more detail regarding wetland and waterway monitoring, and the associated reporting.

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix A

Environmental Access Plan

Environmental Access Plan –
Segment 8-North

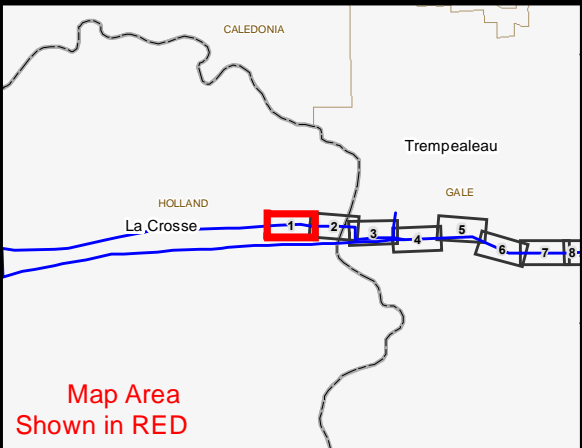
Graphic Index
for Badger Coulee Project

SEGMENT HIGHLIGHTS

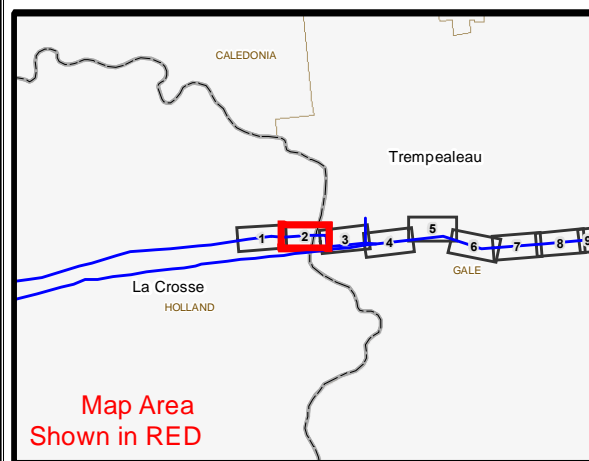
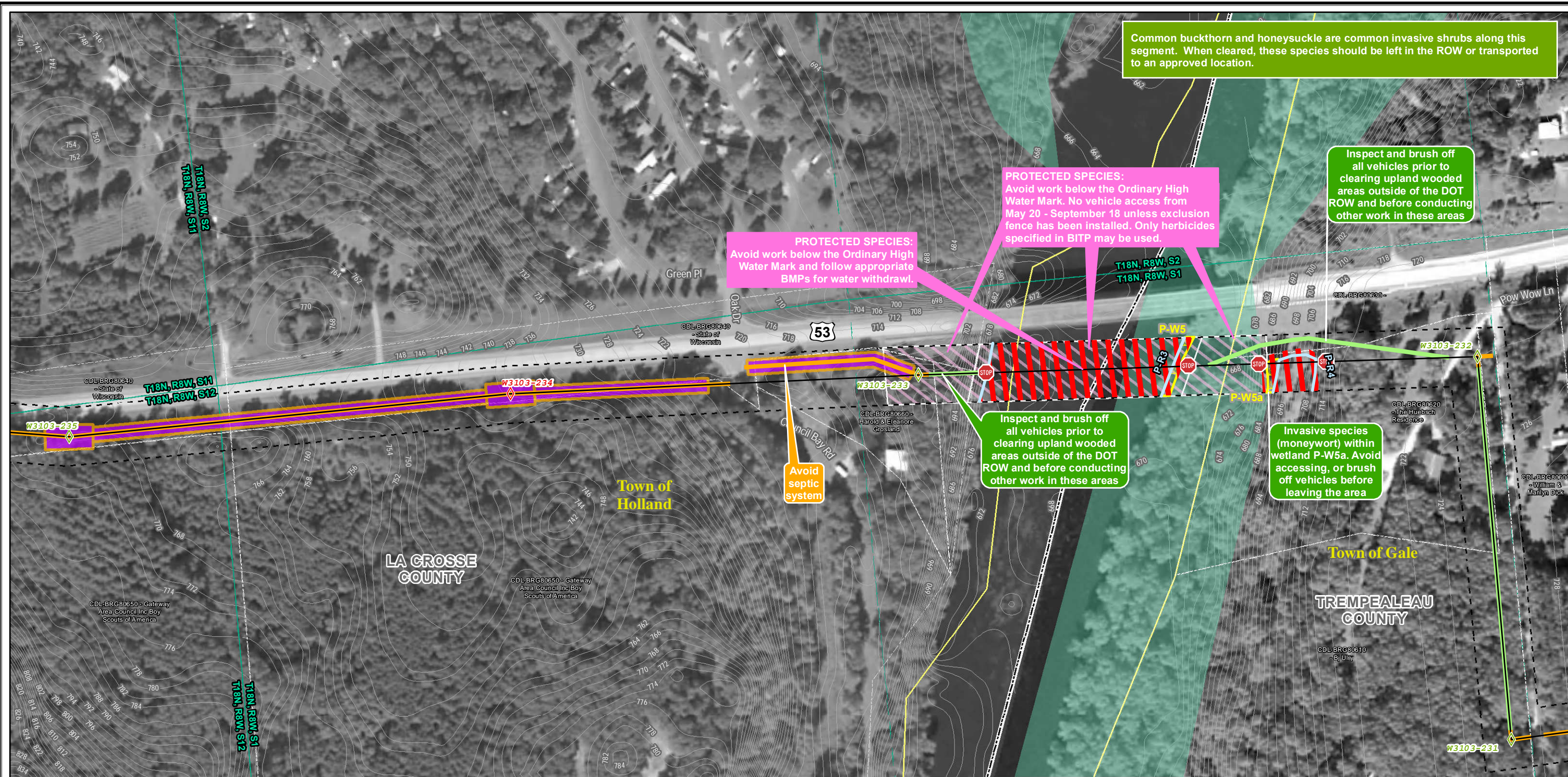
- 9 Temporary Clear Span Bridges will be required over waterways
- A total of 2 poles will be constructed in the following wetlands (parenthetic value refers to number of structures within the feature):
 - N-W5(1) and N-W18(1)
- A total of 4 temporary poles will be placed in the following wetlands (2 poles in each wetland):
 - N-W3 and N-W4
- Invasive Species Caution: Invasive species locations are identified on pages 2 and 13, and general notes are presented on all pages. Refer to these pages for instructions on how to proceed in these areas.
- Rare Species Caution: Rare species locations are identified on page 2. Refer to this page for instructions on how to proceed in these areas.

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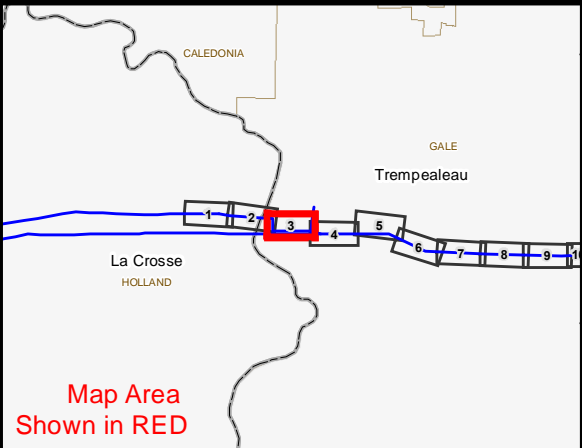


Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary	BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH	
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	Delineated Wetland	Snowmobile Trails	Orthophotography: NAIP 2010
Vehicle Construction Access	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	Field Located Waterway			
Clearing Access Only	Approximate wire set up area (Dimensions: Approximately 200' X 400')	WDNR Perennial Stream	WDNR Intermittent Stream		 0 100 200 Feet 3/9/2017
Approximate Graded Construction Access and Work Pads	Topographic Line Elevation	DATCP Identified Soils - Difficult to Decompile			
Existing Pole to be Removed	Protected or Sensitive Resource - Construction Technique Protocol Needed	Property Line <small>Shown with: Parcel Number and Owner Name</small>			Page 1 of 32
Existing Pole	Existing Substation				
Existing ATC Transmission Line	Invasive Species - Construction Technique Protocol Needed	The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.			
Existing Non-ATC Transmission Line					

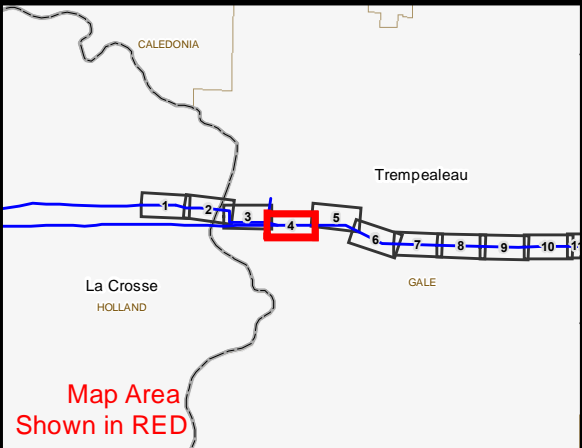


<p>— Proposed Centerline</p> <p> Proposed Pole DIRECT EMBED Proposed Pole CONCRETE FOUNDATION Proposed Pole ALT. FOUNDATION </p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p> Approximate Graded Construction Access and Work Pads </p> <p> Existing Pole to be Removed Existing Pole Existing Substation </p> <p> Existing ATC Transmission Line Existing Non-ATC Transmission Line </p>	<p> Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small> </p> <p> TCSB Temporary Clear Span Bridge </p> <p> STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY </p> <p> Approximate wire set up area (Dimensions: Approximately 200' X 400') </p> <p> Topographic Line <small>Elevation</small> </p> <p> Protected or Sensitive Resource - Construction Technique Protocol Needed </p> <p> Invasive Species - Construction Technique Protocol Needed </p>	<p>Possible Wetland (WDNR Wetland)</p> <p> Delineated Wetland </p> <p> Field Located Waterway </p> <p> WDNR Perennial Stream WDNR Intermittent Stream </p> <p> DATCP Identified Soils - Difficult to Decomact </p> <p> Property Line <small>Shown with: Parcel Number and Owner Name</small> </p>	<p>City/Village/Town Boundary</p> <p> Snowmobile Trails </p>	<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p> Xcel Energy</p> <p> ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p> <p>Page 2 of 32</p>
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Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Delineated Wetland	Snowmobile Trails
Proposed Pole ALT. FOUNDATION	TCSB Temporary Clear Span Bridge	Field Located Waterway	
Vehicle Construction Access	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	WDNR Perennial Stream	
Clearing Access Only	Approximate wire set up area (Dimensions: Approximately 200' X 400')	WDNR Intermittent Stream	
Approximate Graded Construction Access and Work Pads	Topographic Line	DATCP Identified Soils - Difficult to Decompect	
Existing Pole to be Removed	Protected or Sensitive Resource - Construction Technique Protocol Needed	Property Line <small>Shown with: Parcel Number and Owner Name</small>	
Existing Pole	Invasive Species - Construction Technique Protocol Needed	The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LIOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.	
Existing ATC Transmission Line			
Existing Non-ATC Transmission Line			

**BADGER COULEE 345 kV
TRANSMISSION LINE PROJECT**

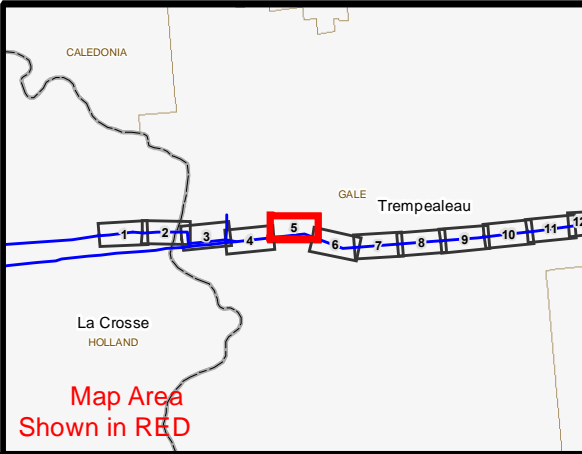
**ENVIRONMENTAL ACCESS PLAN
SEGMENT 8-NORTH**

Orthophotography: NAIP 2010

0 100 200
Feet

3/9/2017

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	Proposed Centerline		Transmission Right-of-Way*
	Proposed Pole DIRECT EMBED		Proposed Pole CONCRETE FOUNDATION
	Proposed Pole ALT FOUNDATION		TCSB Temporary Clear Span Bridge
	Vehicle Construction Access		STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY
	Clearing Access Only		Approximate wire set up area (Dimensions: Approximately 200' X 400')
	Approximate Graded Construction Access and Work Pads		Topographic Line
	Existing Pole to be Removed		Protected or Sensitive Resource - Construction Technique Protocol Needed
	Existing Pole		Invasive Species - Construction Technique Protocol Needed
	Existing ATC Transmission Line		Property Line
	Existing Non-ATC Transmission Line		Possible Wetland (WDNR Wetland)
			Delineated Wetland
			Field Located Waterway
			WDNR Perennial Stream
			WDNR Intermittent Stream
			DATCP Identified Soils - Difficult to Decomact
			Snowmobile Trails

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

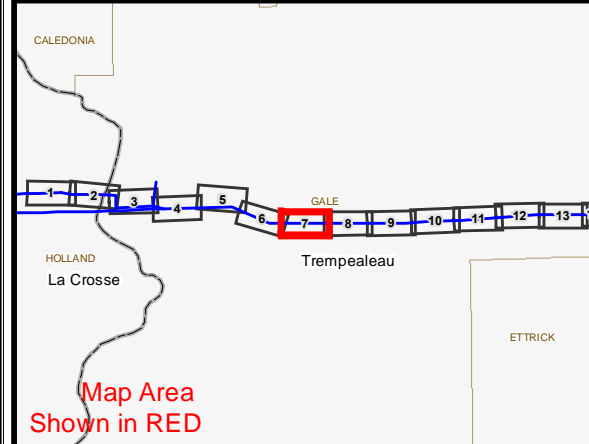
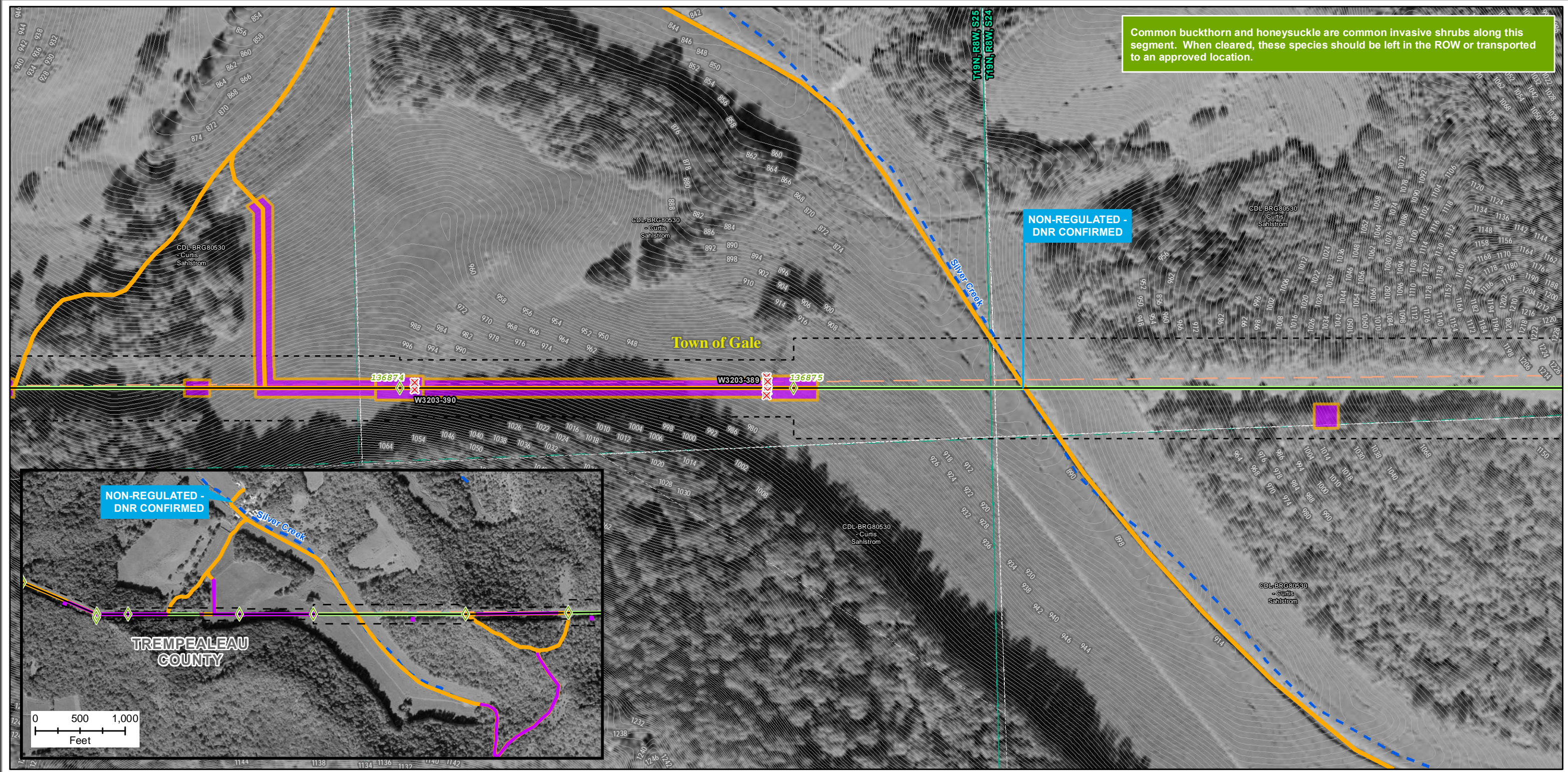
SEGMENT 8-NORTH

Orthophotography: NAIP 2010

0 100 200 Feet

3/9/2017

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	Proposed Centerline
	Proposed Pole DIRECT EMBED
	Proposed Pole CONCRETE FOUNDATION
	Proposed Pole ALT FOUNDATION
	Vehicle Construction Access
	Clearing Access Only
	Approximate Graded Construction Access and Work Pads
	Existing Pole to be Removed
	Existing Pole
	Existing Substation
	Existing ATC Transmission Line
	Existing Non-ATC Transmission Line

	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>
	TCSB Temporary Clear Span Bridge
	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY
	Approximate wire set up area (Dimensions: Approximately 200' X 400')
	Topographic Line Elevation
	Protected or Sensitive Resource - Construction Technique Protocol Needed
	Invasive Species - Construction Technique Protocol Needed

	Possible Wetland (WDNR Wetland)
	Delineated Wetland
	Field Located Waterway
	WDNR Perennial Stream
	WDNR Intermittent Stream
	DATCP Identified Soils - Difficult to Decomact
	Property Line <small>Shown with: Parcel Number and Owner Name</small>

	City/Village/Town Boundary
	Snowmobile Trails

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

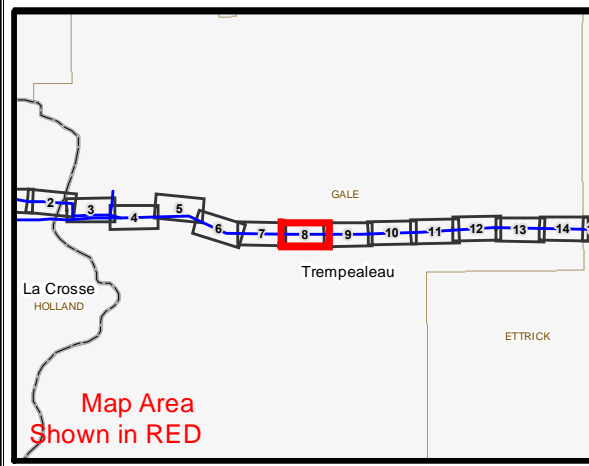
SEGMENT 8-NORTH

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0 100 200 Feet

3/9/2017

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	Proposed Pole DIRECT EMBED		Proposed Pole CONCRETE FOUNDATION		Proposed Pole ALT FOUNDATION
	Vehicle Construction Access		TCSB Temporary Clear Span Bridge		Delineated Wetland
	Clearing Access Only		STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY		Field Located Waterway
	Approximate Graded Construction Access and Work Pads		Approximate wire set up area (Dimensions: Approximately 200' X 400')		WDNR Perennial Stream
	Existing Pole to be Removed		Topographic Line Elevation		WDNR Intermittent Stream
	Existing Pole		Protected or Sensitive Resource - Construction Technique Protocol Needed		DATCP Identified Soils - Difficult to Decomact
	Existing Substation		Property Line <small>Shown with: Parcel Number and Owner Name</small>		
	Existing ATC Transmission Line		Invasive Species - Construction Technique Protocol Needed		
	Existing Non-ATC Transmission Line				

**BADGER COULEE 345 kV
TRANSMISSION LINE PROJECT**

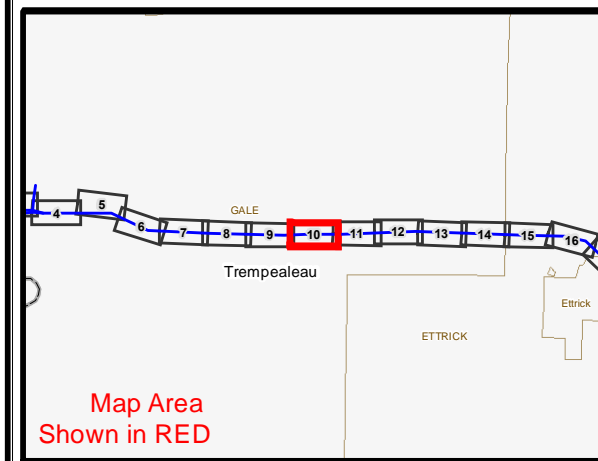
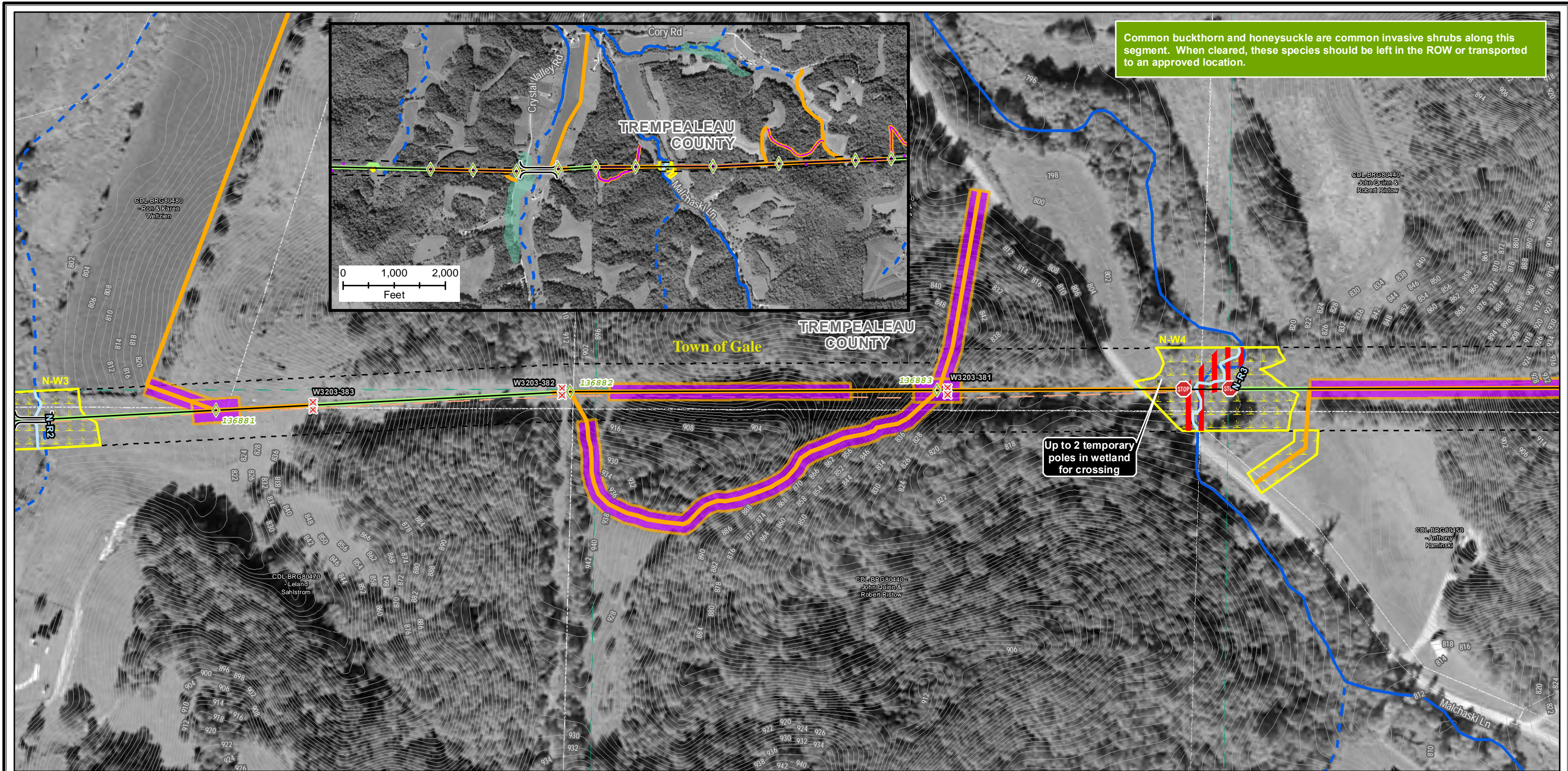
**ENVIRONMENTAL ACCESS PLAN
SEGMENT 8-NORTH**

Orthophotography: NAIP 2010

0 100 200
Feet

3/9/2017

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Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Delineated Wetland	Snowmobile Trails
Proposed Pole ALT. FOUNDATION	Vehicle Construction Access	Field Located Waterway	
Clearing Access Only	TCSB Temporary Clear Span Bridge	WDNR Perennial Stream	
Approximate Graded Construction Access and Work Pads	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	WDNR Intermittent Stream	
Existing Pole to be Removed	Approximate wire set up area (Dimensions: Approximately 200' X 400')	DATCP Identified Soils - Difficult to Decompect	
Existing Pole	Topographic Line Elevation	Property Line <small>Shown with: Parcel Number and Owner Name</small>	
Existing Substation	Protected or Sensitive Resource - Construction Technique Protocol Needed		
Existing ATC Transmission Line	Invasive Species - Construction Technique Protocol Needed		
Existing Non-ATC Transmission Line			

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

SEGMENT 8-NORTH

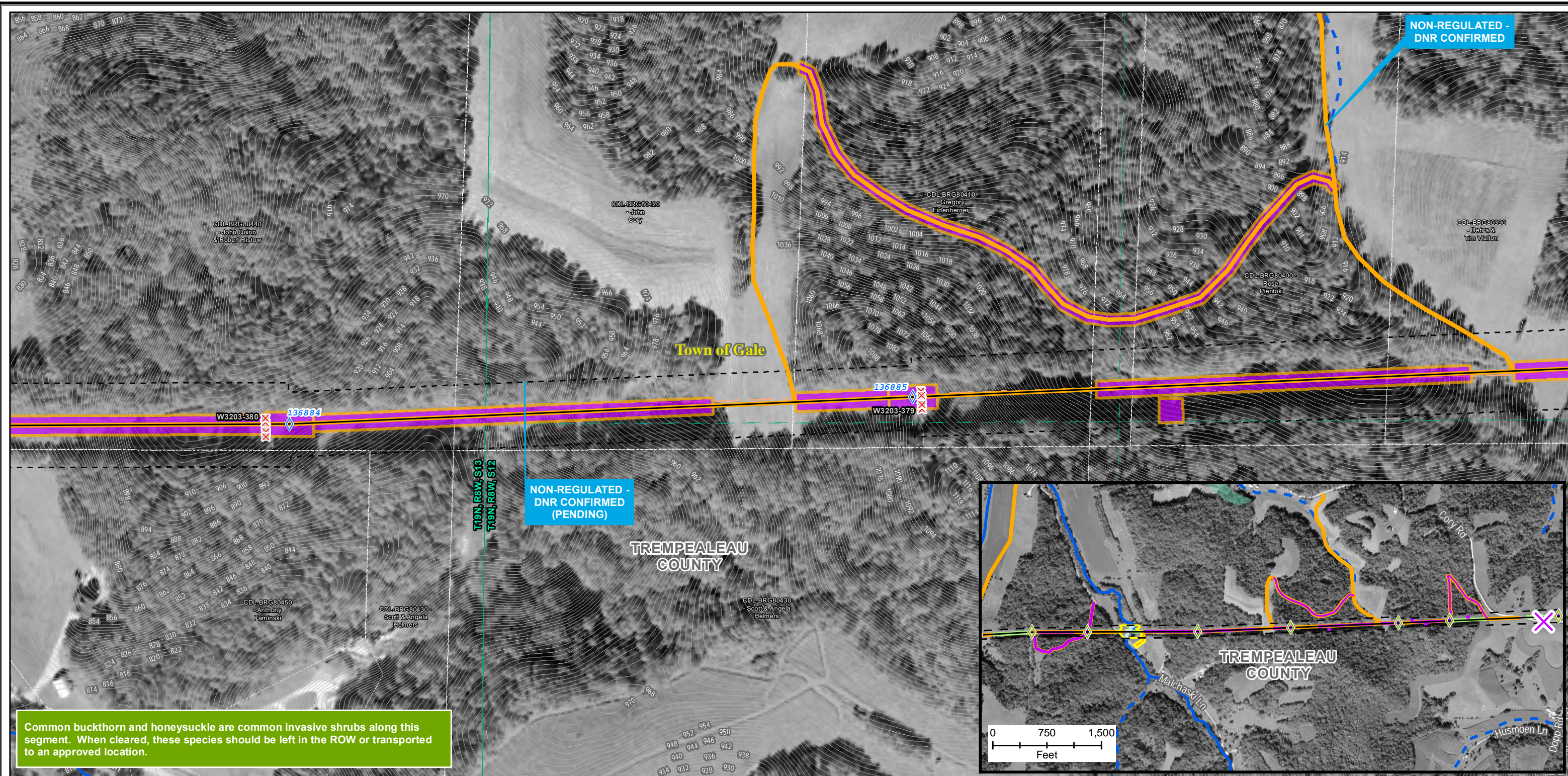
Orthophotography: NAIP 2010

0 100 200 Feet

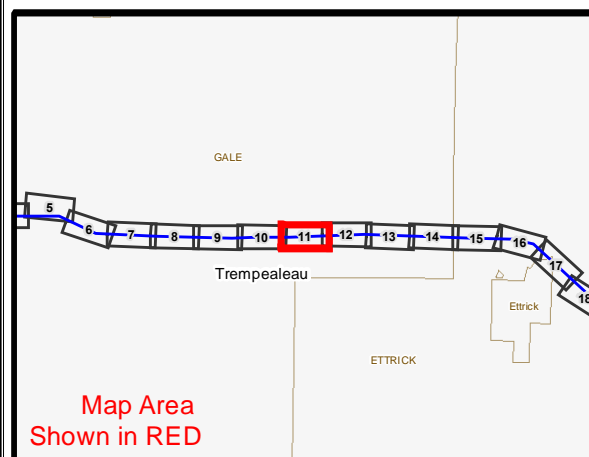
3/9/2017

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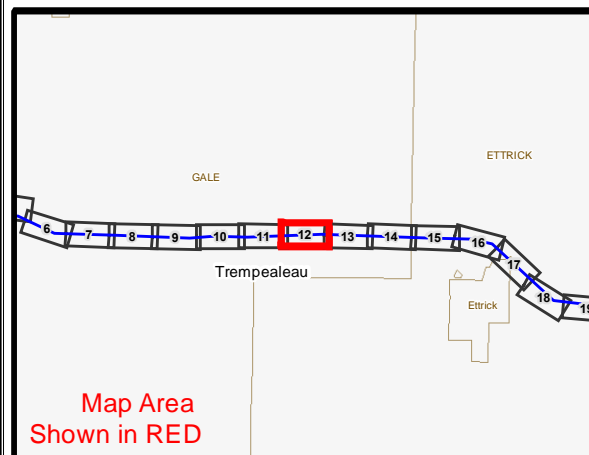
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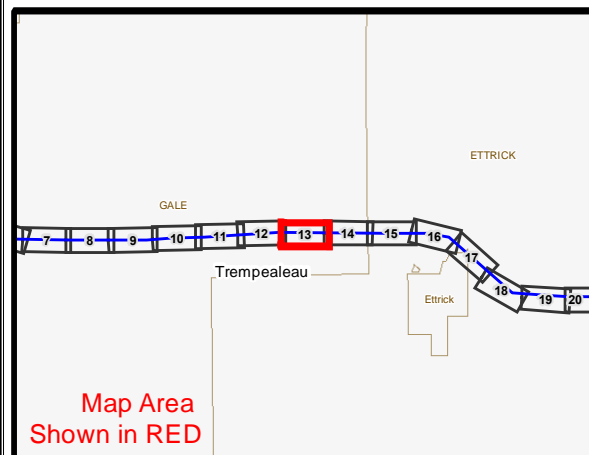
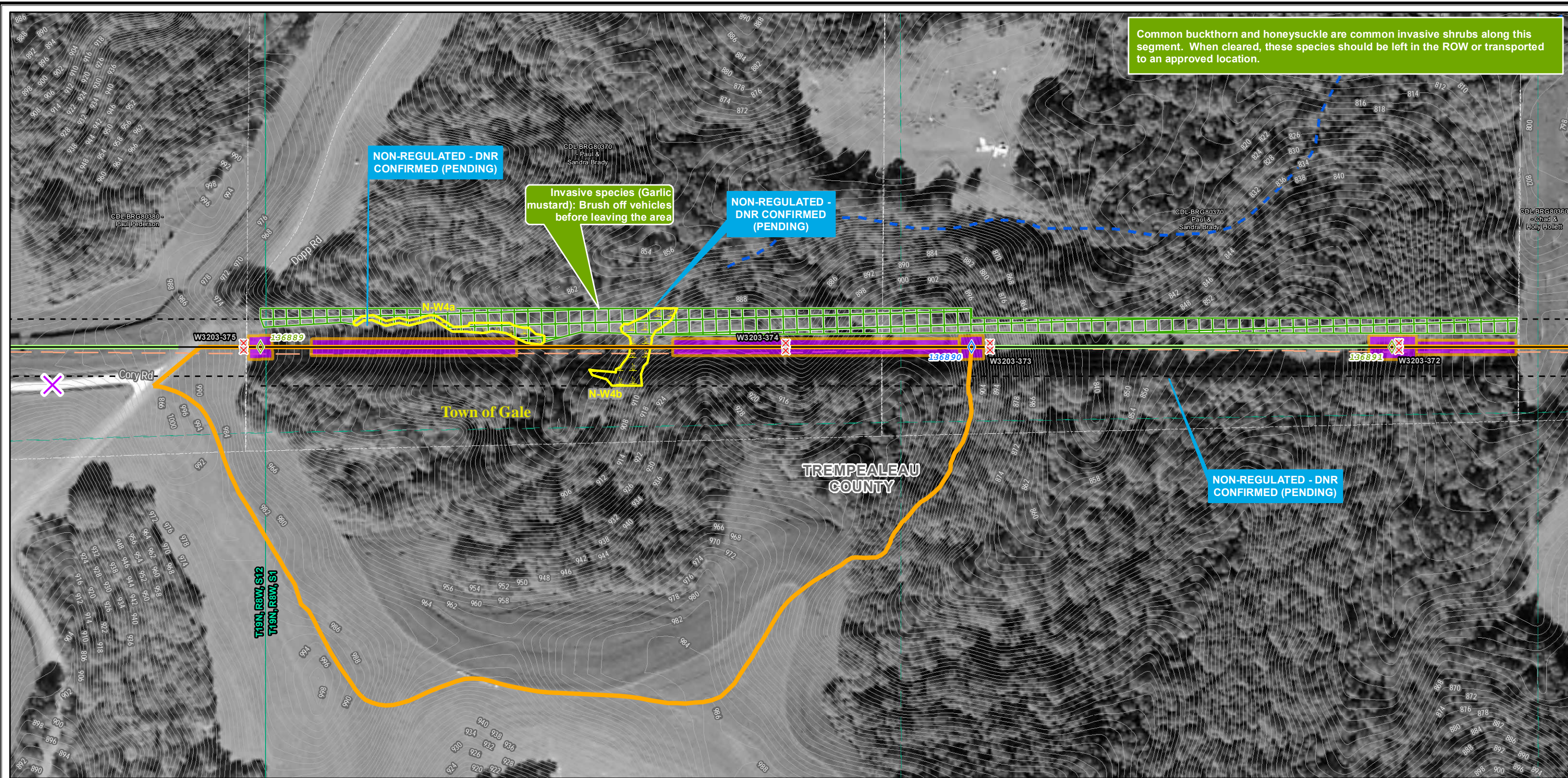
Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.






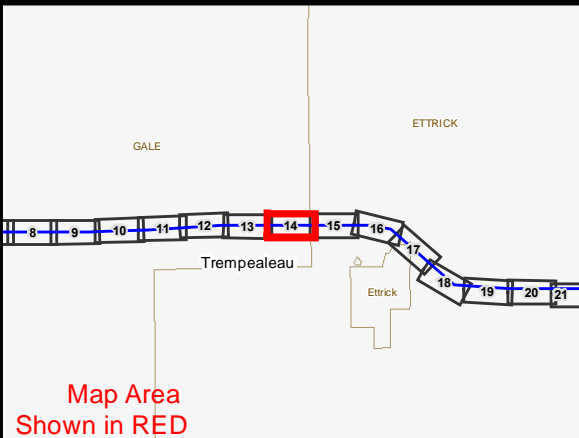
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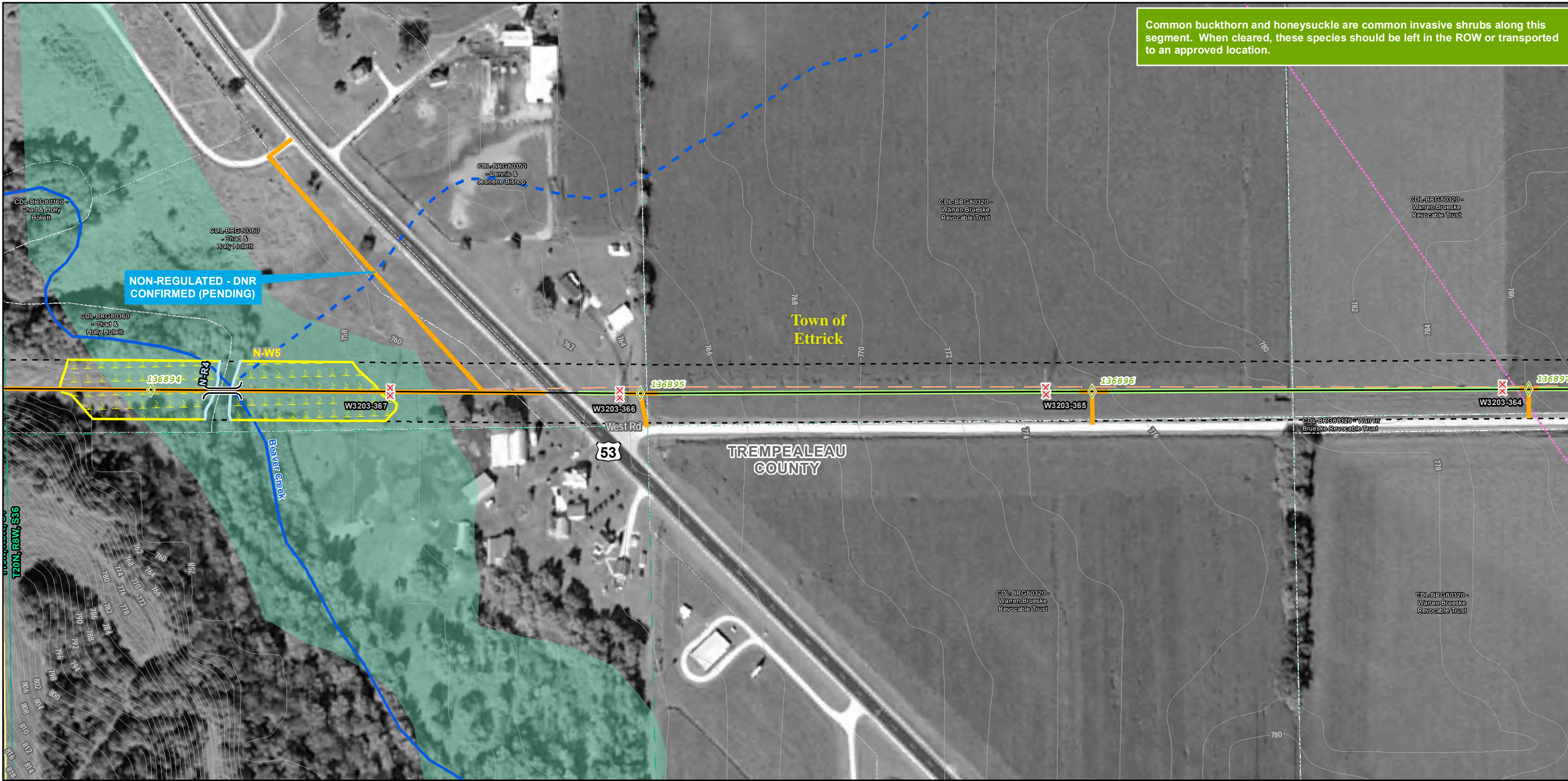
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<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>		<p>Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small></p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP — STOP NO VEHICLE ACCESS FOOT TRAFFIC ONLY STOP</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>200 — Topographic Line Elevation</p> <p>Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>— Invasive Species - Construction Technique Protocol Needed</p>		<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream — WDNR Intermittent Stream</p> <p>— DATCP Identified Soils - Difficult to Decompact</p> <p>— Property Line <small>Shown with: Parcel Number and Owner Name</small></p>		<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>	<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p></p> <p></p> <p></p> <p>0 100 200 Feet</p> <p>3/9/2017</p>		<p>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</p>	
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<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>		<p>Transmission Right-of-Way*</p> <p>*Right-of-Way shown on this map is approximate and is shown for guidance only</p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP — STOP NO VEHICLE ACCESS FOOT TRAFFIC ONLY STOP</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>— Topographic Line</p> <p>— Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>— Invasive Species - Construction Technique Protocol Needed</p>		<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream</p> <p>— WDNR Intermittent Stream</p> <p>— DATCP Identified Soils - Difficult to Decompact</p> <p>— Property Line</p> <p>Shown with: Parcel Number and Owner Name</p>		<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>		<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p>Xcel Energy</p> <p>ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p>		<p>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</p>	
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Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.

NON-REGULATED - DNR
CONFIRMED (PENDING)

Town of
Etrick

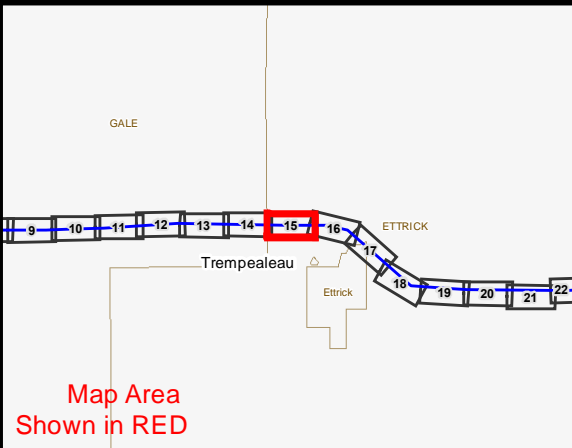
TREMPEALEAU
COUNTY

53

West Rd

T20N, R8W, S36

Bear Creek



Map Area
Shown in RED

	Proposed Centerline		Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>		Possible Wetland (WDNR Wetland)
	Proposed Pole DIRECT EMBED		TCSB Temporary Clear Span Bridge		Delineated Wetland
	Proposed Pole CONCRETE FOUNDATION		STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY		Field Located Waterway
	Proposed Pole ALT FOUNDATION		Approximate wire set up area (Dimensions: Approximately 200' X 400')		WDNR Perennial Stream
	Vehicle Construction Access		Topographic Line Elevation		WDNR Intermittent Stream
	Clearing Access Only		Protected or Sensitive Resource - Construction Technique Protocol Needed		DATCP Identified Soils - Difficult to Decomact
	Approximate Graded Construction Access and Work Pads		Property Line <small>Shown with: Parcel Number and Owner Name</small>		
	Existing Pole to be Removed		Invasive Species - Construction Technique Protocol Needed		
	Existing Pole				
	Existing Substation				
	Existing ATC Transmission Line				
	Existing Non-ATC Transmission Line				

**BADGER COULEE 345 kV
TRANSMISSION LINE PROJECT**

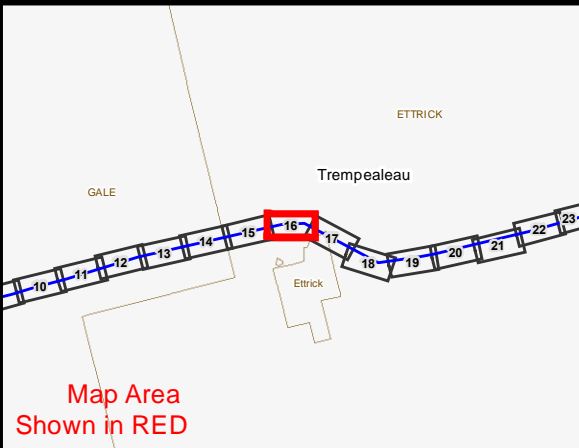
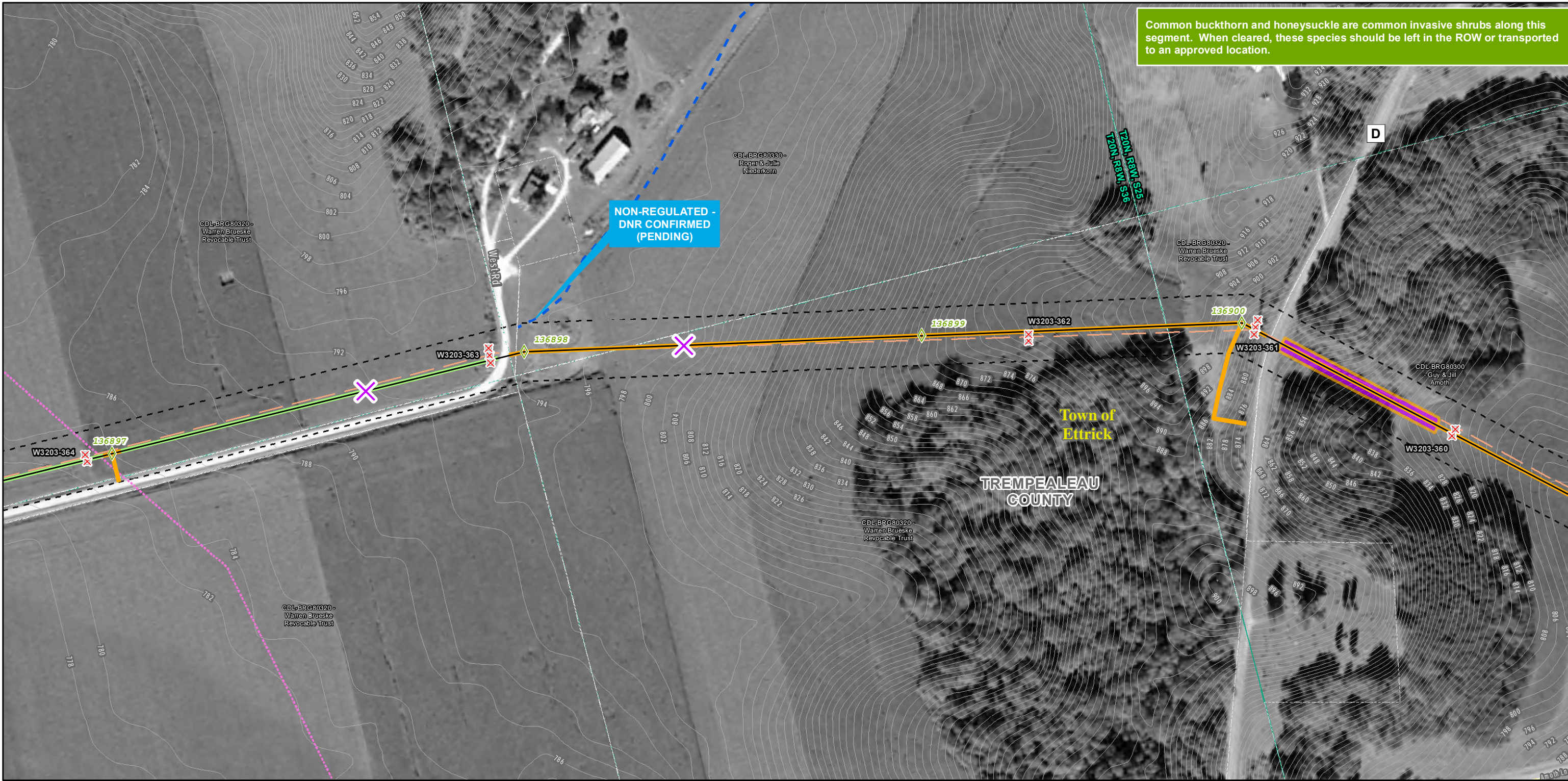
**ENVIRONMENTAL ACCESS PLAN
SEGMENT 8-NORTH**

Orthophotography: NAIP 2010

0 100 200
Feet

3/9/2017

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Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Delineated Wetland	Snowmobile Trails
Proposed Pole ALT. FOUNDATION	TCSB Temporary Clear Span Bridge	Field Located Waterway	
Vehicle Construction Access	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	WDNR Perennial Stream	
Clearing Access Only	Approximate wire set up area (Dimensions: Approximately 200' X 400')	WDNR Intermittent Stream	
Approximate Graded Construction Access and Work Pads	Topographic Line	DATCP Identified Soils - Difficult to Decomact	
Existing Pole to be Removed	Protected or Sensitive Resource - Construction Technique Protocol Needed	Property Line	
Existing Pole	Invasive Species - Construction Technique Protocol Needed	<small>Shown with: Parcel Number and Owner Name</small>	
Existing ATC Transmission Line		<small>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LIOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</small>	
Existing Non-ATC Transmission Line			

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

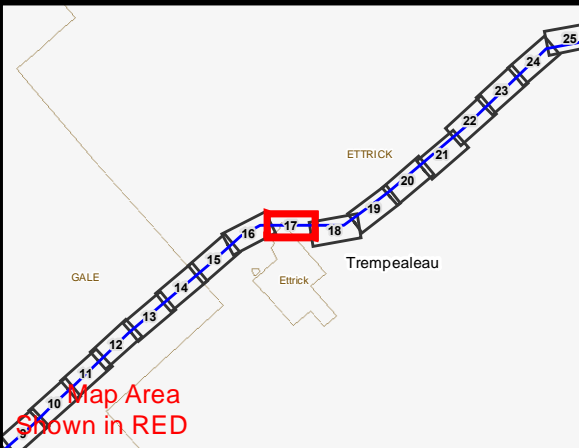
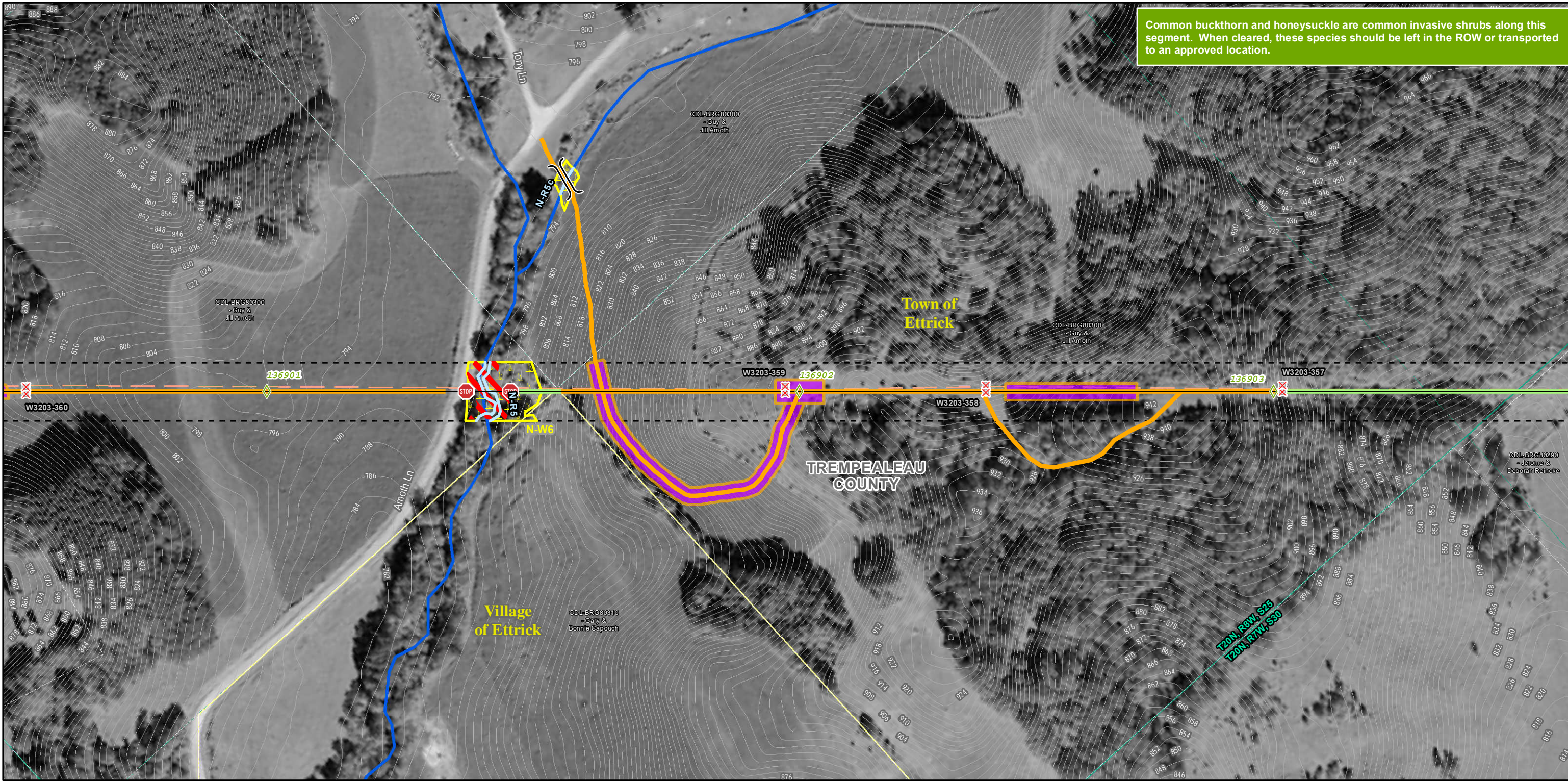
SEGMENT 8-NORTH

Orthophotography: NAIP 2010

0 100 200 Feet

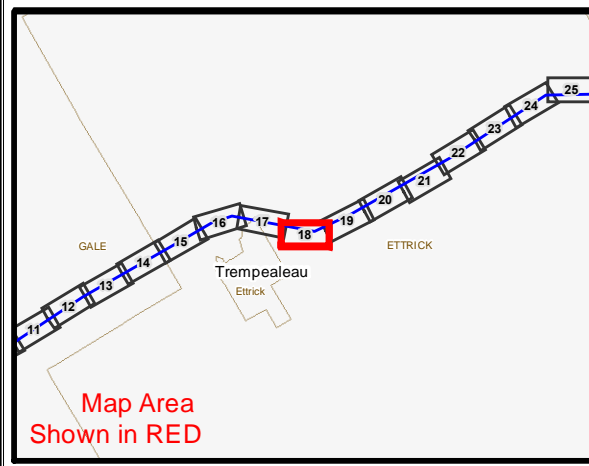
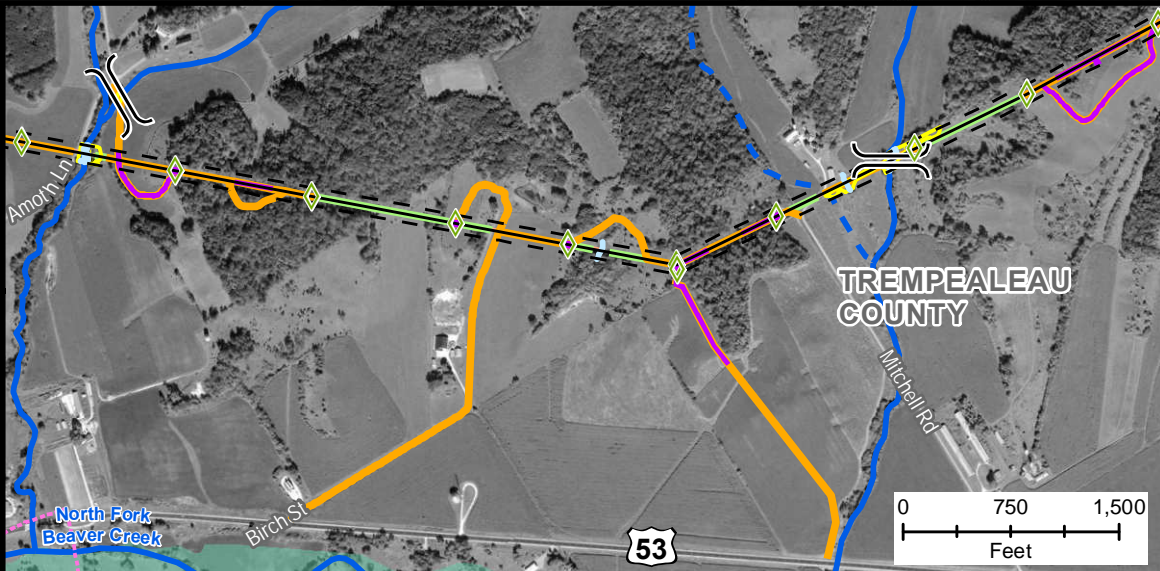
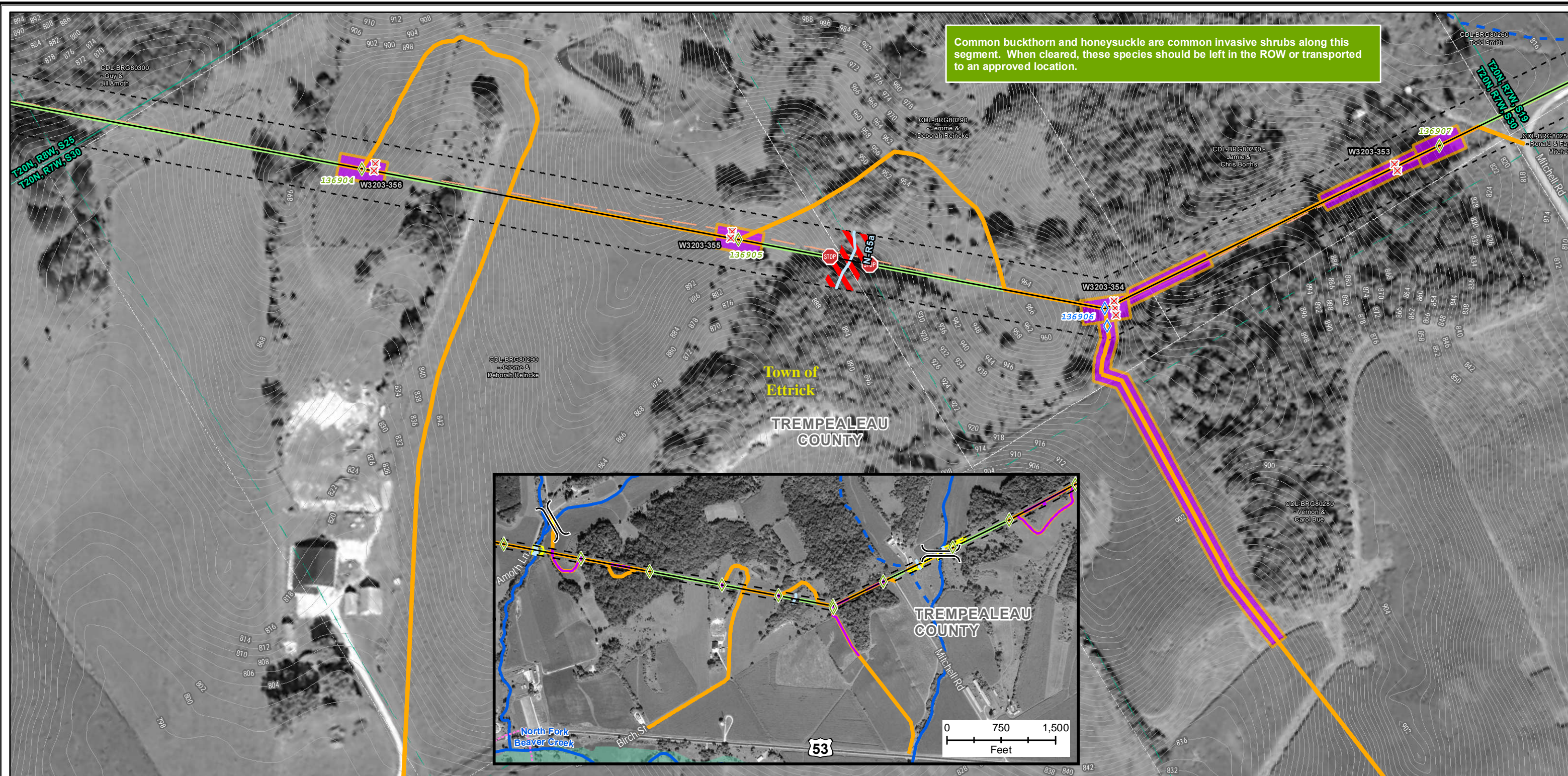
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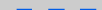

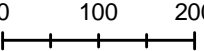
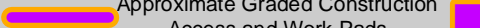









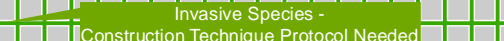
Page 16 of 32

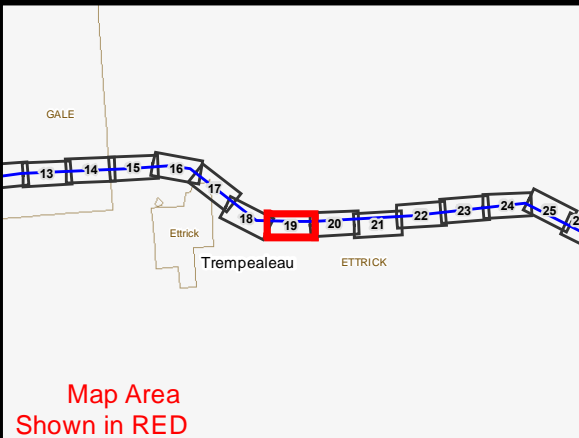
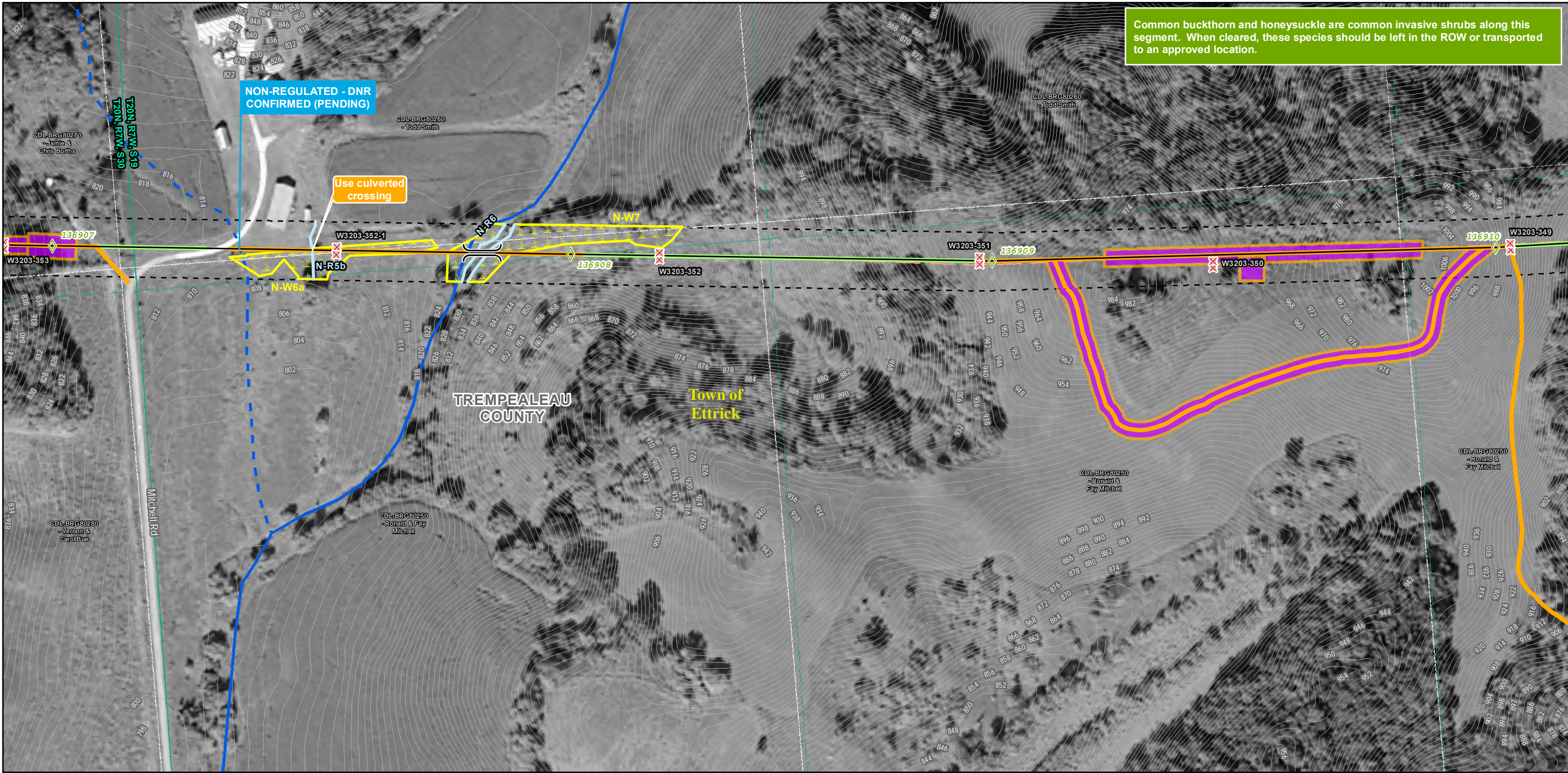


<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>		<p>Transmission Right-of-Way*</p> <p>*Right-of-Way shown on this map is approximate and is shown for guidance only</p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP — NO VEHICLE ACCESS FOOT TRAFFIC ONLY STOP</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>200 — Topographic Line Elevation</p> <p>Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>Invasive Species - Construction Technique Protocol Needed</p>		<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream — WDNR Intermittent Stream</p> <p>DATCP Identified Soils - Difficult to Decompose</p> <p>Property Line</p> <p>Shown with: Parcel Number and Owner Name</p>		<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>		<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p>Xcel Energy</p> <p>ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p>		<p>Page 17 of 32</p>	
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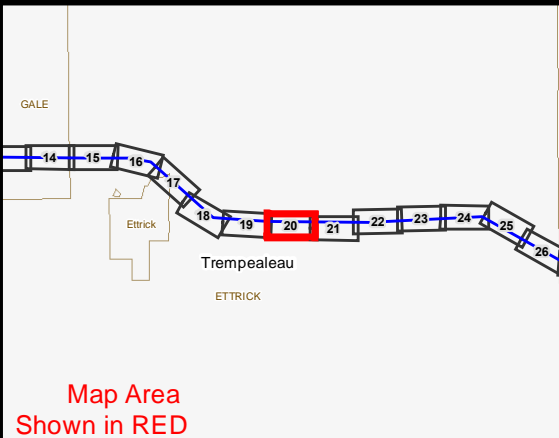
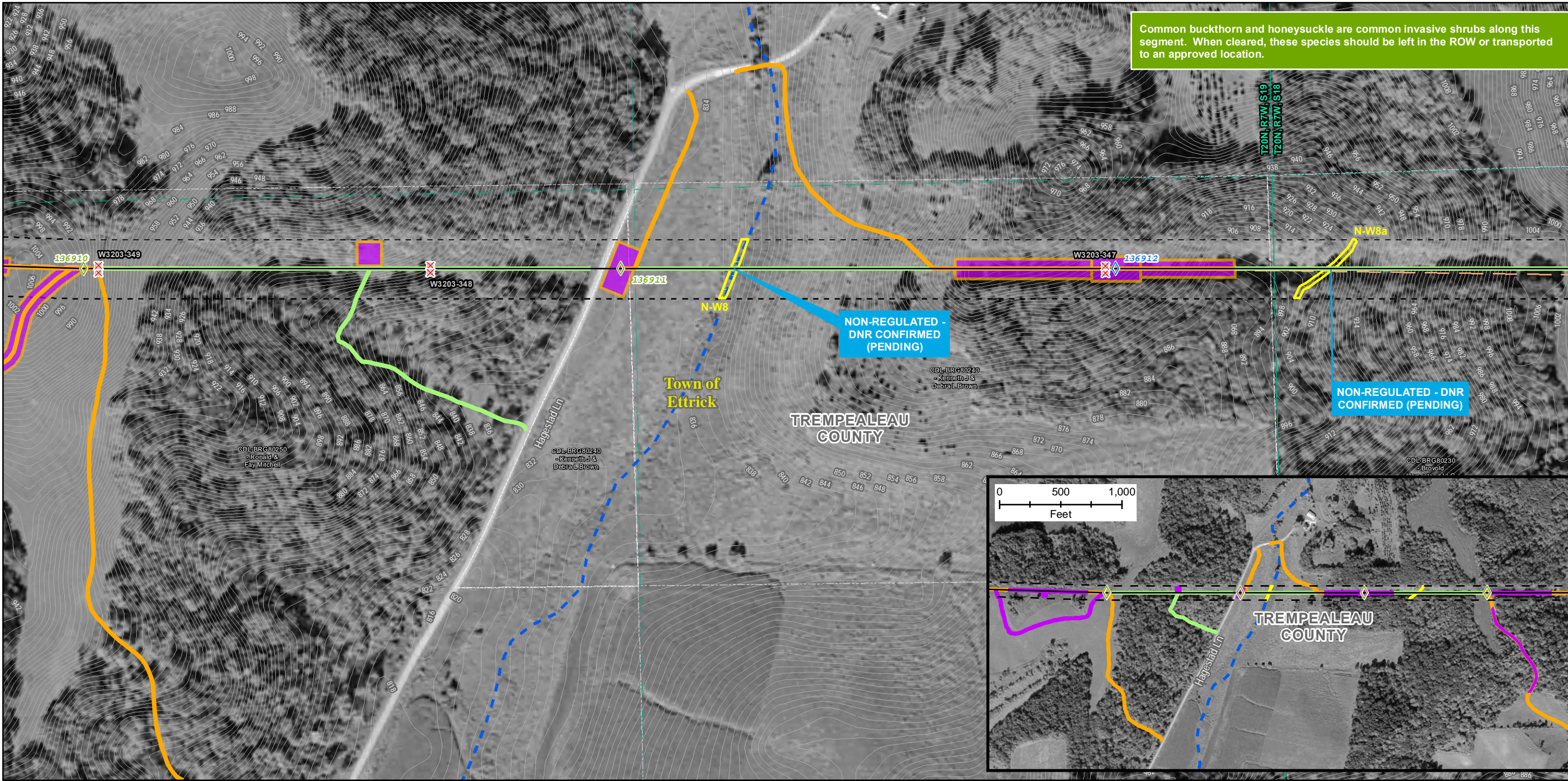


 Proposed Centerline	 Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary	BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH	
 Proposed Pole DIRECT EMBED  Proposed Pole CONCRETE FOUNDATION  Proposed Pole ALT FOUNDATION	 TCSB Temporary Clear Span Bridge	 Delineated Wetland	 Snowmobile Trails	<div>Orthophotography: NAIP 2010</div> <div></div> <div></div>	
 Vehicle Construction Access	 STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	 Field Located Waterway			
 Clearing Access Only	 Approximate wire set up area (Dimensions: Approximately 200' X 400')	 WDNR Perennial Stream  WDNR Intermittent Stream		<div></div> <div></div> <div>0 100 200 Feet</div> <div>3/9/2017</div>	
 Approximate Graded Construction Access and Work Pads	 Topographic Line Elevation	 DATCP Identified Soils - Difficult to Decompile			
 Existing Pole to be Removed  Existing Pole  Existing Substation	 Protected or Sensitive Resource - Construction Technique Protocol Needed	 Property Line <small>Shown with: Parcel Number and Owner Name</small>		<div>Page 18 of 32</div>	
 Existing ATC Transmission Line  Existing Non-ATC Transmission Line	 Invasive Species - Construction Technique Protocol Needed	<div>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</div>			



Proposed Centerline		Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>		Possible Wetland (WDNR Wetland)		City/Village/Town Boundary		BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH			
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	TCSB Temporary Clear Span Bridge	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	Delineated Wetland	Snowmobile Trails		Orthophotography: NAIP 2010		 0 100 200 Feet 3/9/2017	
Vehicle Construction Access			Approximate wire set up area (Dimensions: Approximately 200' X 400')		Field Located Waterway		WDNR Perennial Stream WDNR Intermittent Stream				
Clearing Access Only			Topographic Line Elevation		DATCP Identified Soils - Difficult to Decompose		Property Line <small>Shown with: Parcel Number and Owner Name</small>				
Approximate Graded Construction Access and Work Pads			Protected or Sensitive Resource - Construction Technique Protocol Needed		Invasive Species - Construction Technique Protocol Needed		Existing Pole to be Removed Existing Pole Existing Substation				
Existing ATC Transmission Line Existing Non-ATC Transmission Line											

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	Proposed Centerline		Transmission Right-of-Way*
	Proposed Pole DIRECT EMBED		Proposed Pole CONCRETE FOUNDATION
	Proposed Pole ALT FOUNDATION		TCSB Temporary Clear Span Bridge
	Vehicle Construction Access		STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY
	Clearing Access Only		Approximate wire set up area (Dimensions: Approximately 200' X 400')
	Approximate Graded Construction Access and Work Pads		Topographic Line
	Existing Pole to be Removed		Protected or Sensitive Resource - Construction Technique Protocol Needed
	Existing Pole		Invasive Species - Construction Technique Protocol Needed
	Existing ATC Transmission Line		Field Located Waterway
	Existing Non-ATC Transmission Line		WDNR Perennial Stream
			WDNR Intermittent Stream
			DATCP Identified Soils - Difficult to Decompose
			Property Line

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

SEGMENT 8-NORTH

Orthophotography: NAIP 2010

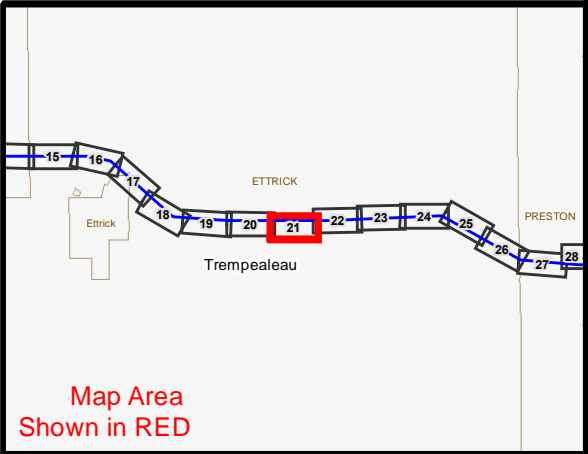
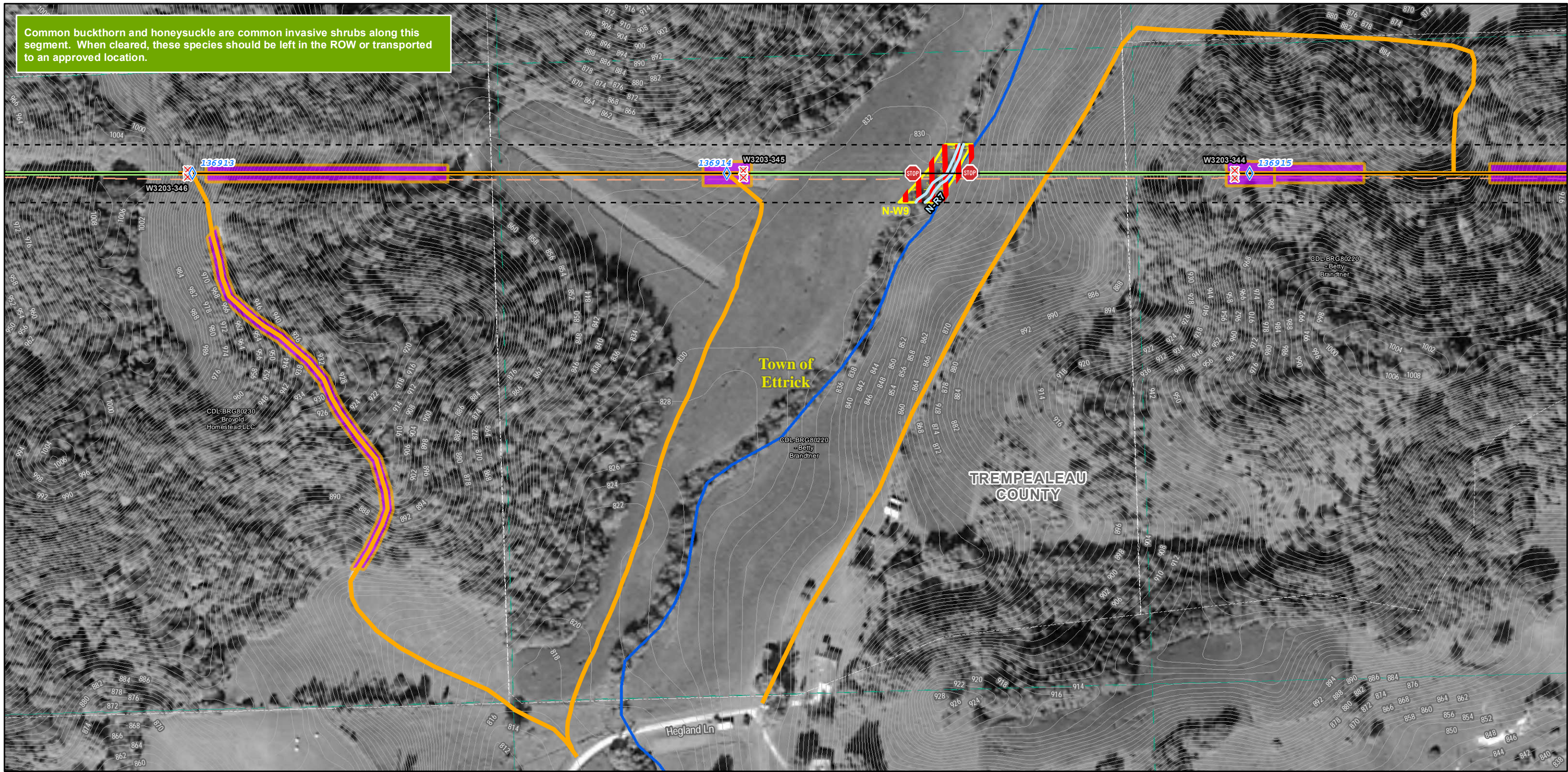
0 100 200 Feet

3/9/2017

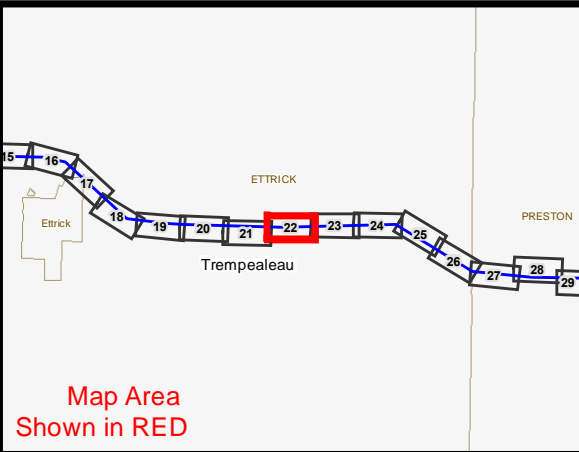
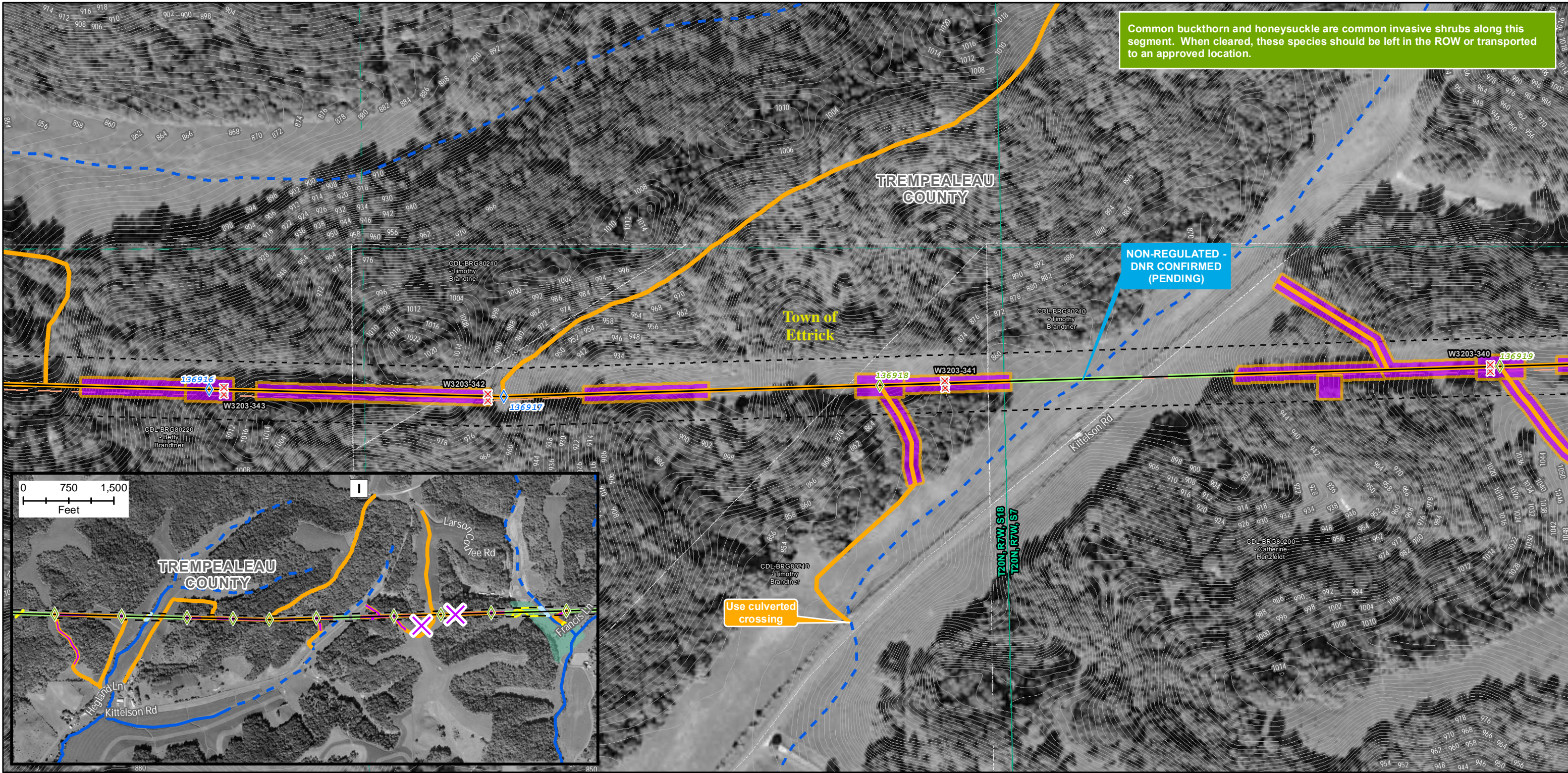
Page 20 of 32

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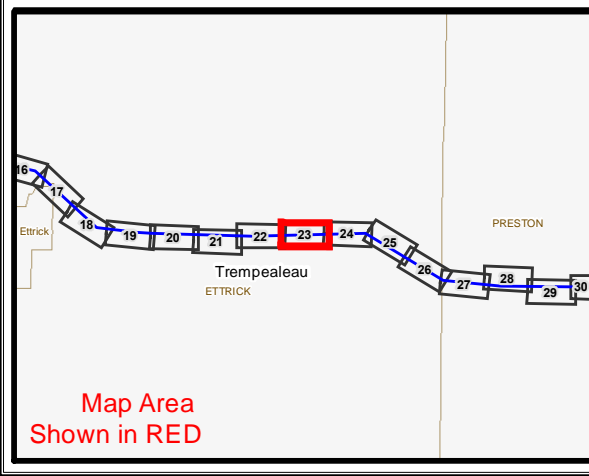
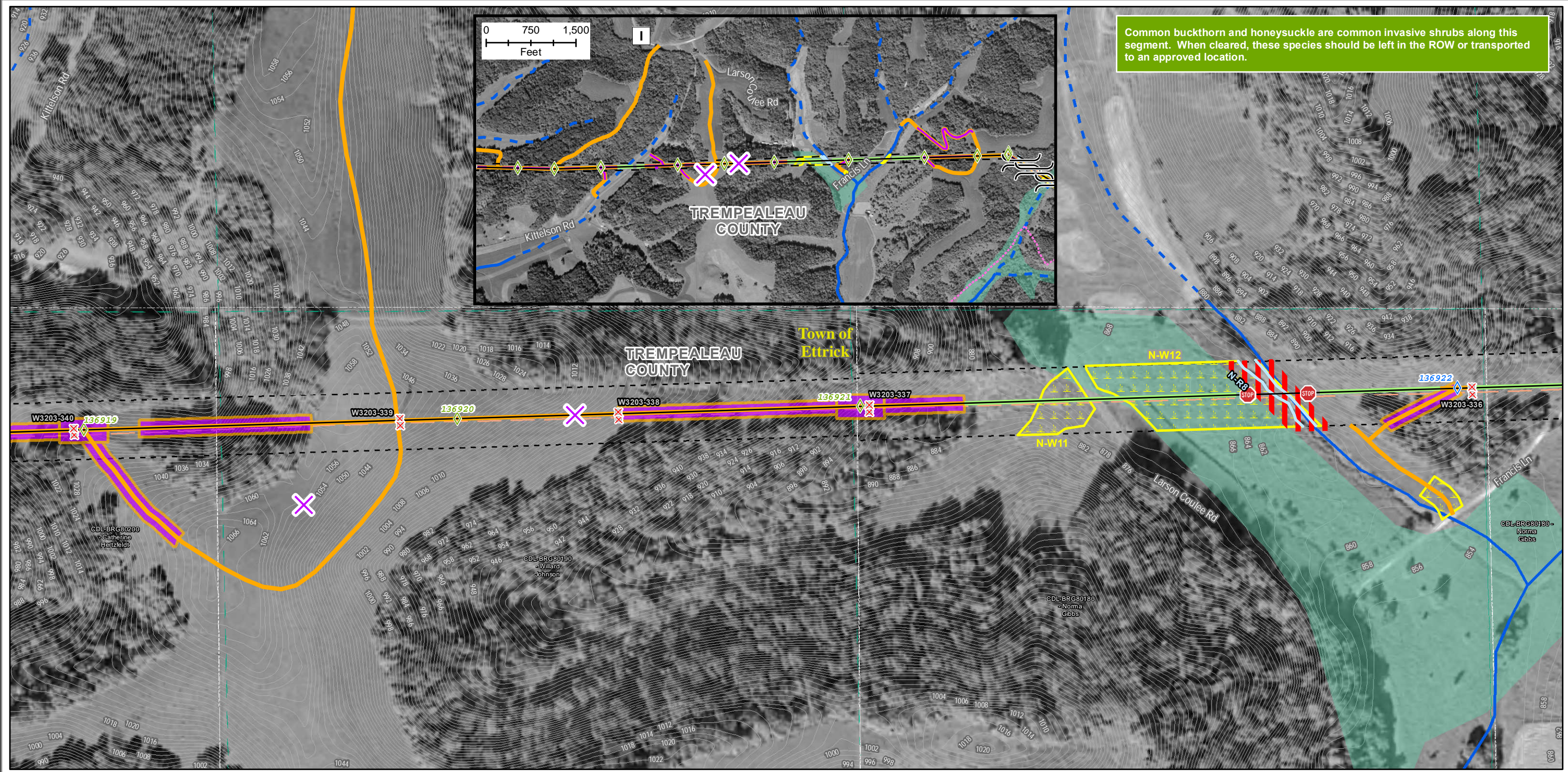
Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.



Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary	BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH	
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	Delineated Wetland	Snowmobile Trails	Orthophotography: NAIP 2010 3/9/2017
Vehicle Construction Access	TCSB Temporary Clear Span Bridge	Field Located Waterway	WDNR Perennial Stream	WDNR Intermittent Stream	
Clearing Access Only	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	Approximate wire set up area (Dimensions: Approximately 200' X 400')	DATCP Identified Soils - Difficult to Decompile	Property Line <small>Shown with: Parcel Number and Owner Name</small>	 0 100 200 Feet 3/9/2017
Approximate Graded Construction Access and Work Pads	Topographic Line <small>Elevation</small>	Protected or Sensitive Resource - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed	The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.	
Existing Pole to be Removed	Existing Pole	Existing Substation	Existing ATC Transmission Line	Existing Non-ATC Transmission Line	



<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>		<p>Transmission Right-of-Way*</p> <p>*Right-of-Way shown on this map is approximate and is shown for guidance only</p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP NO VEHICLE ACCESS FOOT TRAFFIC ONLY STOP</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>200 Topographic Line Elevation</p> <p>Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>Invasive Species - Construction Technique Protocol Needed</p>		<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream — WDNR Intermittent Stream</p> <p>DATCP Identified Soils - Difficult to Decompect</p> <p>Property Line</p> <p>Shown with: Parcel Number and Owner Name</p>		<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>	<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p>Xcel Energy</p> <p>ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p>	
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Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	Snowmobile Trails
Vehicle Construction Access	TCSB Temporary Clear Span Bridge	Delineated Wetland	Field Located Waterway
Clearing Access Only	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	WDNR Perennial Stream	WDNR Intermittent Stream
Approximate Graded Construction Access and Work Pads	Approximate wire set up area (Dimensions: Approximately 200' X 400')	DATCP Identified Soils - Difficult to Decompile	Property Line <small>Shown with: Parcel Number and Owner Name</small>
Existing Pole to be Removed	Topographic Line <small>Elevation</small>	Protected or Sensitive Resource - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed
Existing Pole	Existing Substation	Invasive Species - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed
Existing ATC Transmission Line	Existing Non-ATC Transmission Line	Invasive Species - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

SEGMENT 8-NORTH

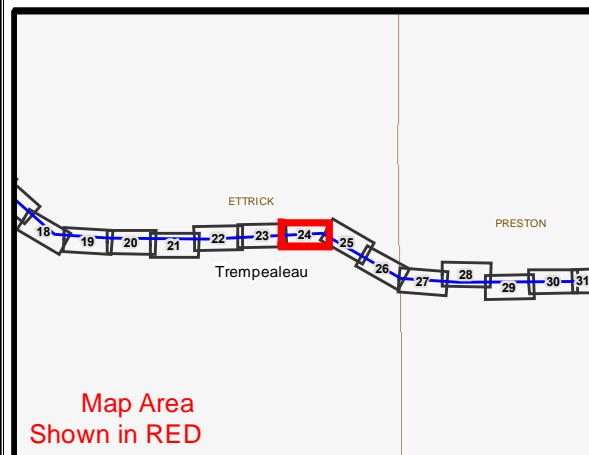
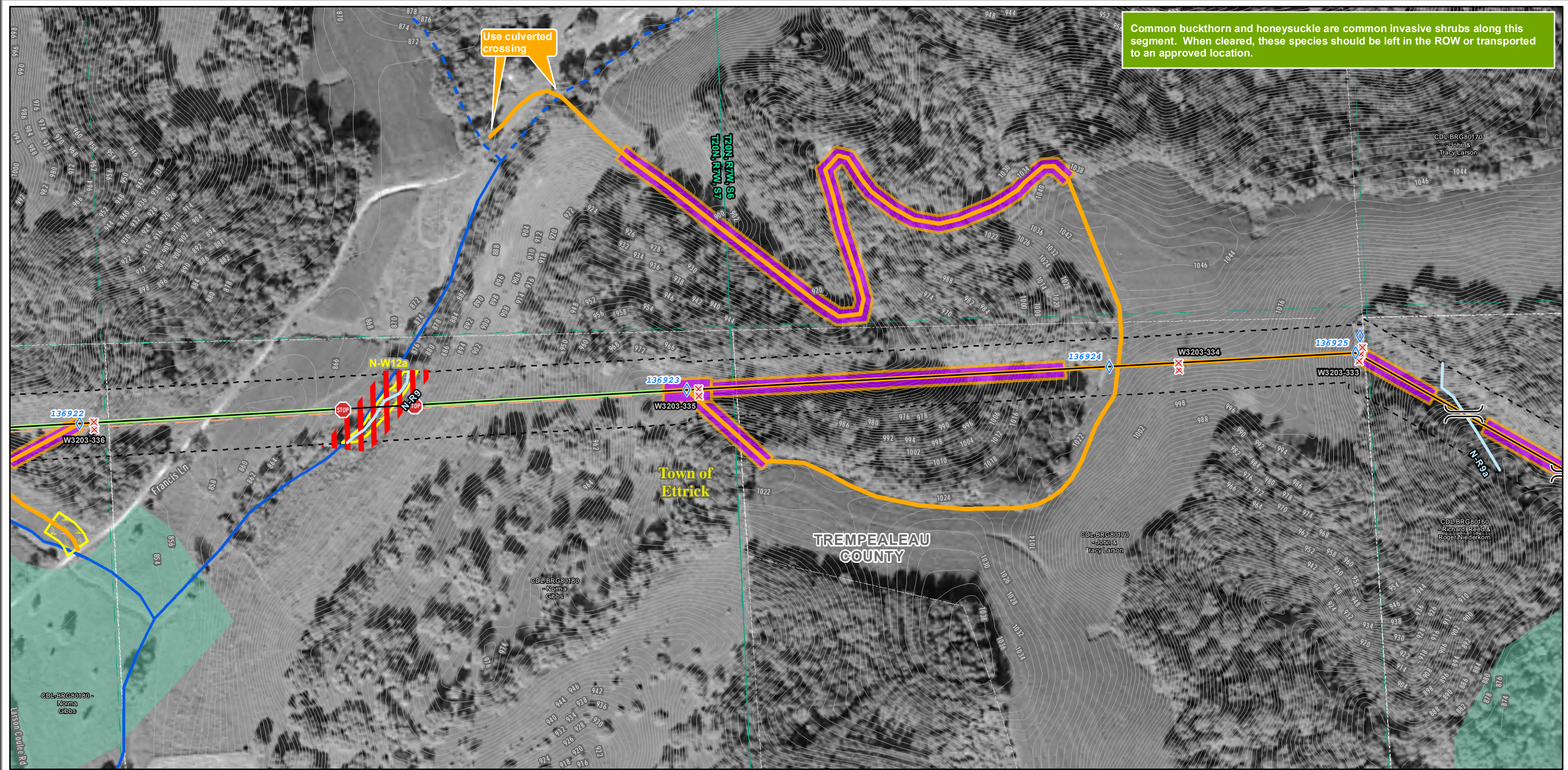
Orthophotography: NAIP 2010

0 100 200 Feet

3/9/2017

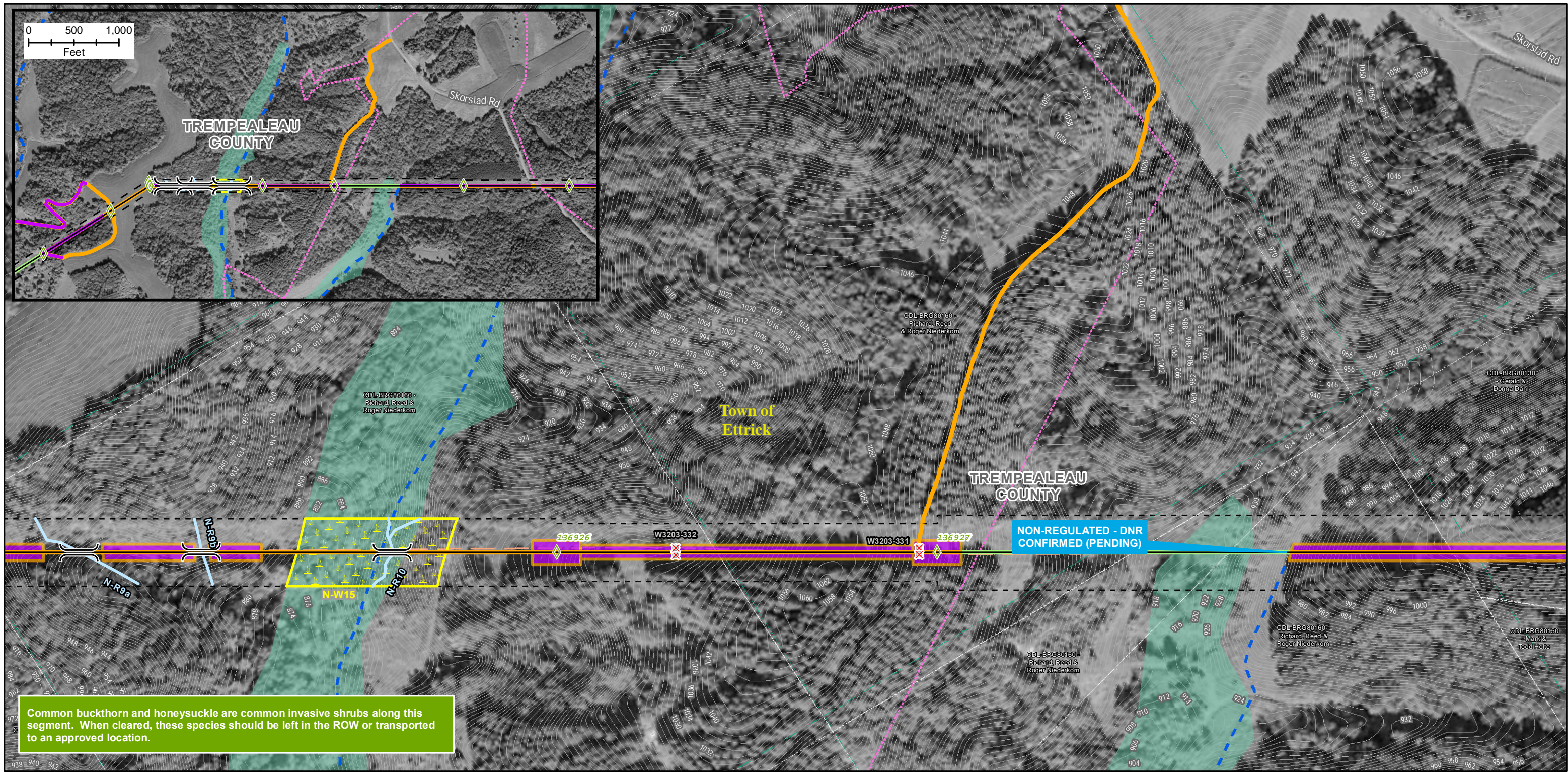
Page 23 of 32

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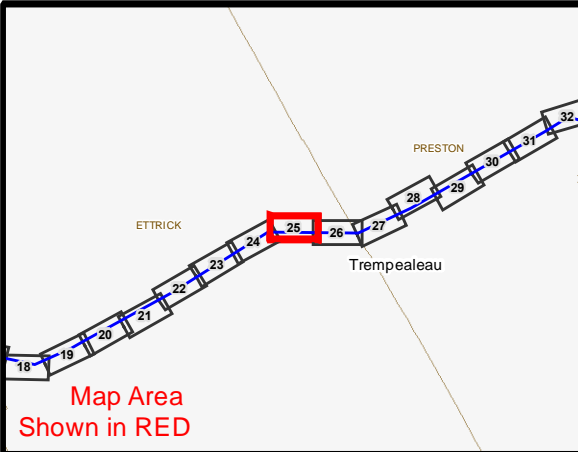


Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary	BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH	
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	Delineated Wetland	Snowmobile Trails	Orthophotography: NAIP 2010 3/9/2017
Vehicle Construction Access	TCSB Temporary Clear Span Bridge	Field Located Waterway	WDNR Perennial Stream	WDNR Intermittent Stream	
Clearing Access Only	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	DATCP Identified Soils - Difficult to Decompact	Property Line <small>Shown with: Parcel Number and Owner Name</small>		 0 100 200 Feet Page 24 of 32
Approximate Graded Construction Access and Work Pads	Approximate wire set up area (Dimensions: Approximately 200' X 400')				
Existing Pole to be Removed	Topographic Line <small>Elevation</small>				
Existing Pole	Protected or Sensitive Resource - Construction Technique Protocol Needed				
Existing Substation	Invasive Species - Construction Technique Protocol Needed				
Existing ATC Transmission Line					
Existing Non-ATC Transmission Line					

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Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.



	Proposed Centerline		Transmission Right-of-Way*
	Proposed Pole DIRECT EMBED		TCSB Temporary Clear Span Bridge
	Proposed Pole CONCRETE FOUNDATION		STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY
	Proposed Pole ALT FOUNDATION		Approximate wire set up area (Dimensions: Approximately 200' X 400')
	Vehicle Construction Access		Topographic Line
	Clearing Access Only		Elevation
	Approximate Graded Construction Access and Work Pads		Protected or Sensitive Resource - Construction Technique Protocol Needed
	Existing Pole to be Removed		Invasive Species - Construction Technique Protocol Needed
	Existing Pole		Property Line
	Existing Substation		Possible Wetland (WDNR Wetland)
	Existing ATC Transmission Line		Delineated Wetland
	Existing Non-ATC Transmission Line		Field Located Waterway
			WDNR Perennial Stream
			WDNR Intermittent Stream
			DATCP Identified Soils - Difficult to Decompose
			Property Line

BADGER COULEE 345 KV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

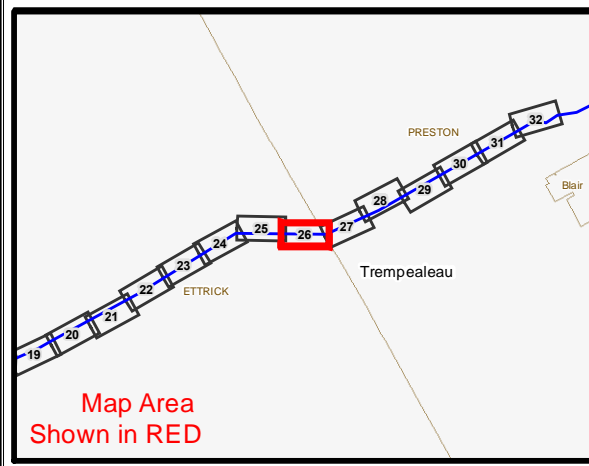
SEGMENT 8-NORTH

Orthophotography: NAIP 2010

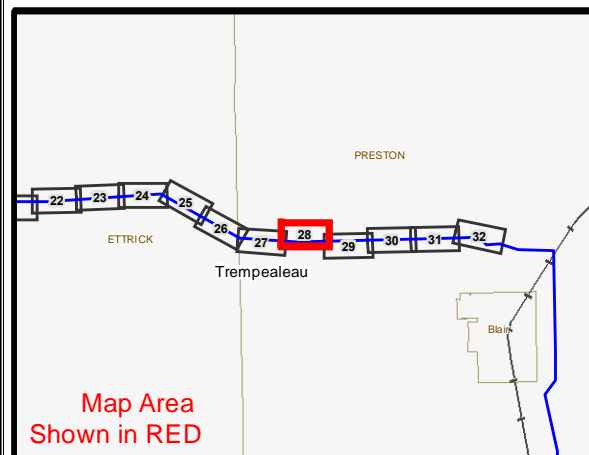
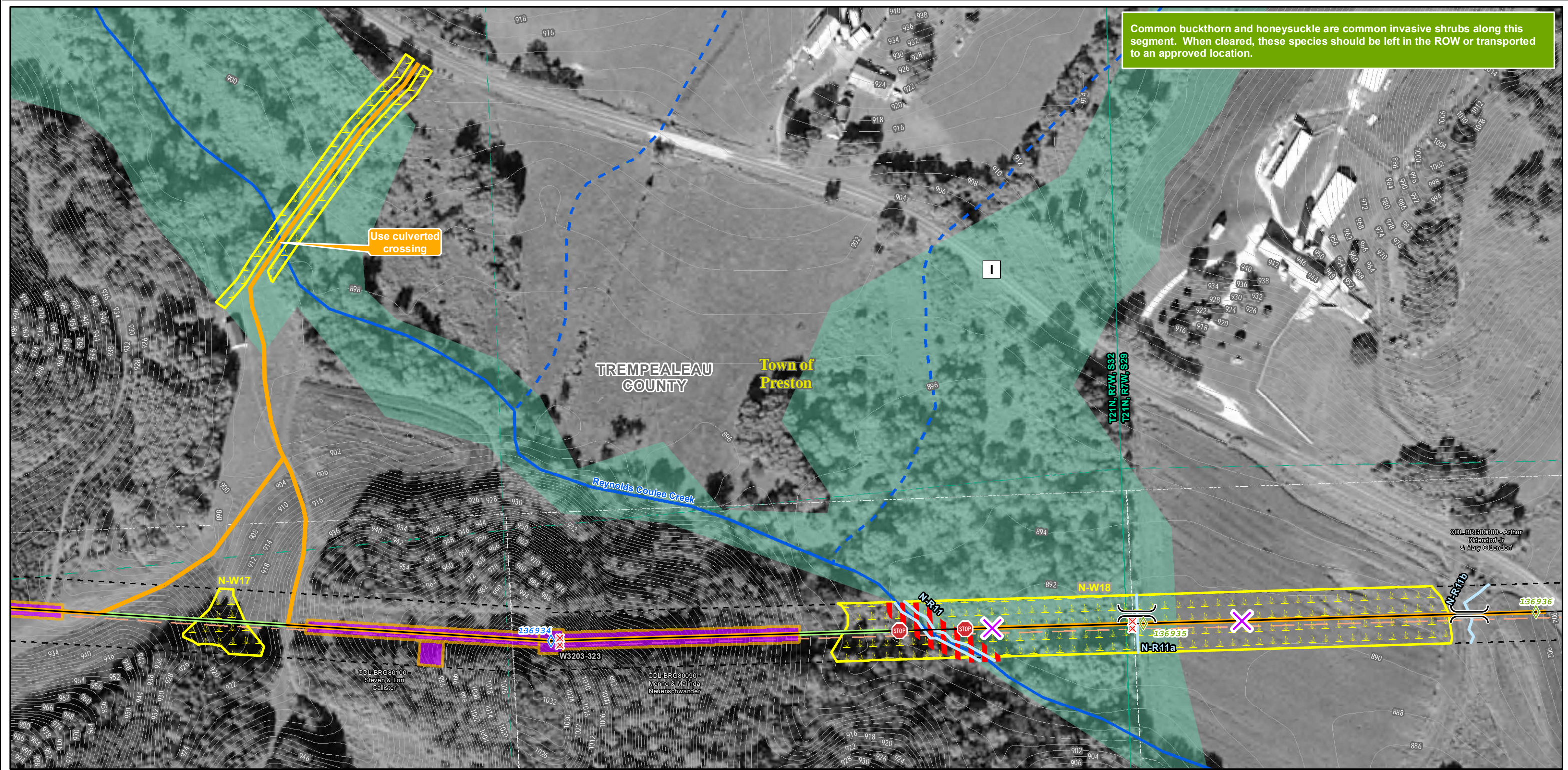
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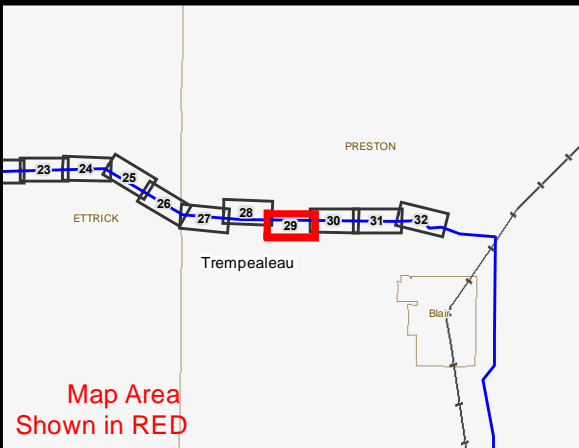
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<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>	<p>Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small></p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP — NO VEHICLE ACCESS FOOT TRAFFIC ONLY STOP</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>200 — Topographic Line Elevation</p> <p>Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>Invasive Species - Construction Technique Protocol Needed</p>	<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream — WDNR Intermittent Stream</p> <p>DATCP Identified Soils - Difficult to Decompact</p> <p>Property Line <small>Shown with: Parcel Number and Owner Name</small></p>	<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>	<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p> Xcel Energy</p> <p> ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p>
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<p>— Proposed Centerline</p> <p>◇ Proposed Pole DIRECT EMBED ◇ Proposed Pole CONCRETE FOUNDATION ◇ Proposed Pole ALT. FOUNDATION</p> <p>— Vehicle Construction Access</p> <p>— Clearing Access Only</p> <p>— Approximate Graded Construction Access and Work Pads</p> <p>✕ Existing Pole to be Removed ○ Existing Pole ■ Existing Substation</p> <p>— Existing ATC Transmission Line — Existing Non-ATC Transmission Line</p>		<p>Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small></p> <p>— TCSB Temporary Clear Span Bridge</p> <p>STOP NO VEHICLE ACCESS FOOT TRAFFIC ONLY</p> <p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p> <p>200 Topographic Line Elevation</p> <p>Protected or Sensitive Resource - Construction Technique Protocol Needed</p> <p>Invasive Species - Construction Technique Protocol Needed</p>		<p>Possible Wetland (WDNR Wetland)</p> <p>— Delineated Wetland</p> <p>— Field Located Waterway</p> <p>— WDNR Perennial Stream — WDNR Intermittent Stream</p> <p>DATCP Identified Soils - Difficult to Decompile</p> <p>Property Line <small>Shown with: Parcel Number and Owner Name</small></p>	<p>City/Village/Town Boundary</p> <p>— Snowmobile Trails</p>	<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN</p> <p>SEGMENT 8-NORTH</p> <p>Orthophotography: NAIP 2010</p> <p>Xcel Energy</p> <p>ATC AMERICAN TRANSMISSION COMPANY</p> <p>0 100 200 Feet</p> <p>3/9/2017</p>	
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<div><div>Proposed Centerline</div></div>		<div><div><div><div><div></div></div></div><div>Transmission Right-of-Way*</div><div><small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small></div></div></div>		<div><div><div>Possible Wetland (WDNR Wetland)</div></div></div>		<div><div><div>City/Village/Town Boundary</div></div></div>	
<div><div><div><div><div>Proposed Pole</div><div>DIRECT EMBED</div></div><div><div>Proposed Pole</div><div>CONCRETE FOUNDATION</div></div><div><div>Proposed Pole</div><div>ALT. FOUNDATION</div></div></div></div></div>		<div><div><div><div><div></div></div><div>TCSB</div><div>Temporary Clear Span Bridge</div></div></div></div>		<div><div><div><div><div></div></div><div>Delineated Wetland</div></div></div></div>		<div><div><div><div><div></div></div><div>Snowmobile Trails</div></div></div></div>	
<div><div><div>Vehicle Construction Access</div></div></div>		<div><div><div><div><div>STOP</div></div><div>STOP - NO VEHICLE ACCESS</div><div>FOOT TRAFFIC ONLY</div><div><div>STOP</div></div></div></div></div>		<div><div><div><div><div></div></div><div>Field Located Waterway</div></div></div></div>			
<div><div><div>Clearing Access Only</div></div></div>		<div><div><div><div><div></div></div><div>Approximate wire set up area</div><div>(Dimensions: Approximately 200' X 400')</div></div></div></div>		<div><div><div><div><div></div></div><div>WDNR Perennial Stream</div></div><div><div><div></div></div><div>WDNR Intermittent Stream</div></div></div></div>			
<div><div><div><div><div></div></div><div>Approximate Graded Construction</div><div>Access and Work Pads</div><div><div></div></div></div></div></div>		<div><div><div><div><div><div>200</div></div><div></div><div>Elevation</div></div></div></div></div>		<div><div><div><div><div></div></div><div>DATCP Identified Soils -</div><div>Difficult to Decompose</div></div></div></div>			
<div><div><div><div><div><div></div></div><div>Existing Pole to be Removed</div></div><div><div><div></div></div><div>Existing Pole</div></div><div><div><div></div></div><div>Existing Substation</div></div></div></div></div>		<div><div><div><div><div><div></div></div><div>Protected or Sensitive Resource -</div><div>Construction Technique Protocol Needed</div></div></div></div></div>		<div><div><div><div><div></div></div><div>Property Line</div><div><div><div>Shown with:</div><div>Parcel Number</div><div>and</div><div>Owner Name</div></div></div></div></div></div>			
<div><div><div><div><div></div></div><div>Existing ATC Transmission Line</div></div><div><div><div></div></div><div>Existing Non-ATC Transmission Line</div></div></div></div>		<div><div><div><div><div><div></div></div><div>Invasive Species -</div><div>Construction Technique Protocol Needed</div></div></div></div></div>		<div><div><div><div><div></div></div><div>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LIOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</div></div></div></div>			

BADGER COULEE 345 kV

TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

SEGMENT 8-NORTH

Orthophotography: NAIP 2010

Xcel Energy

ATC

AMERICAN TRANSMISSION COMPANY

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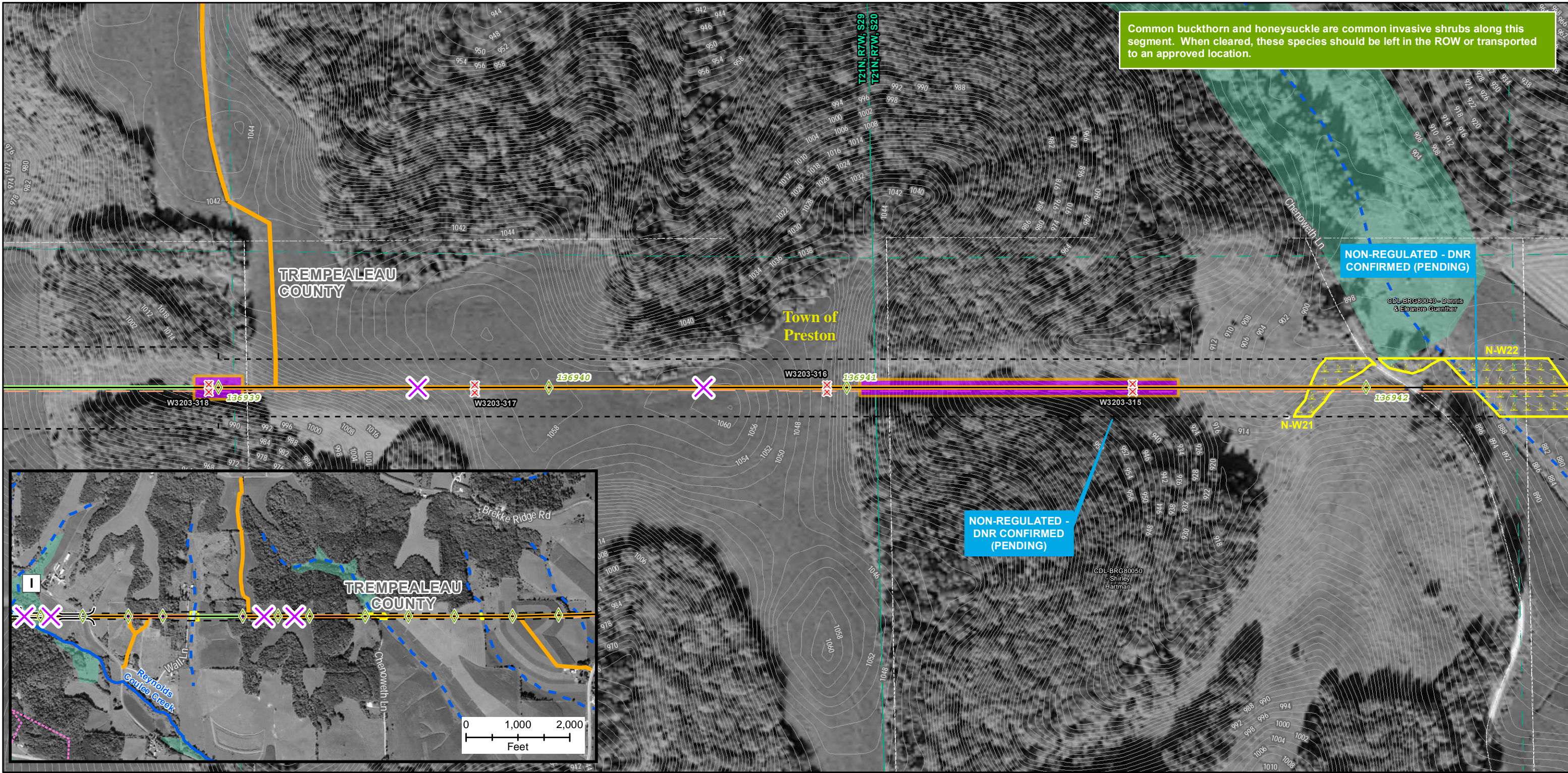
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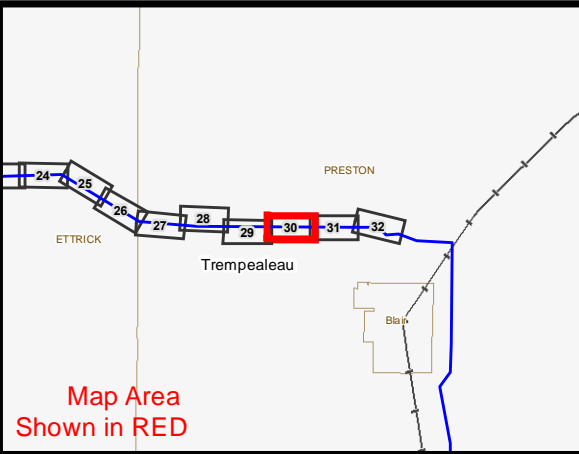
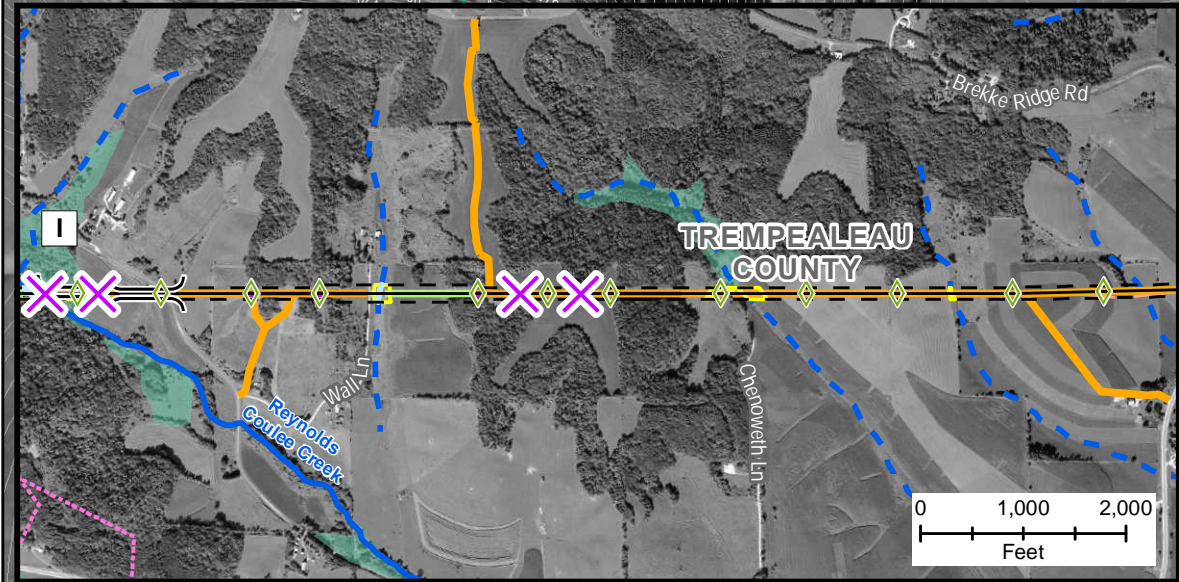
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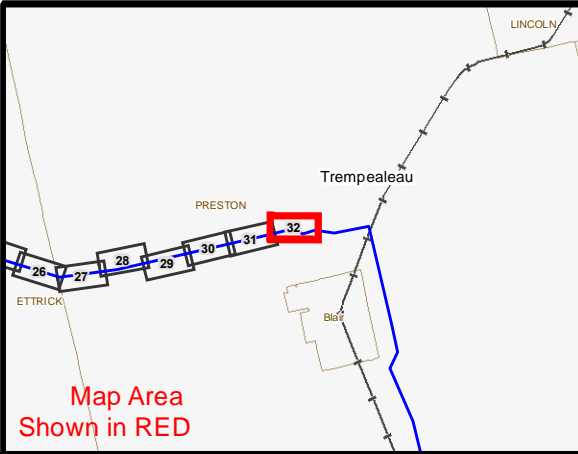
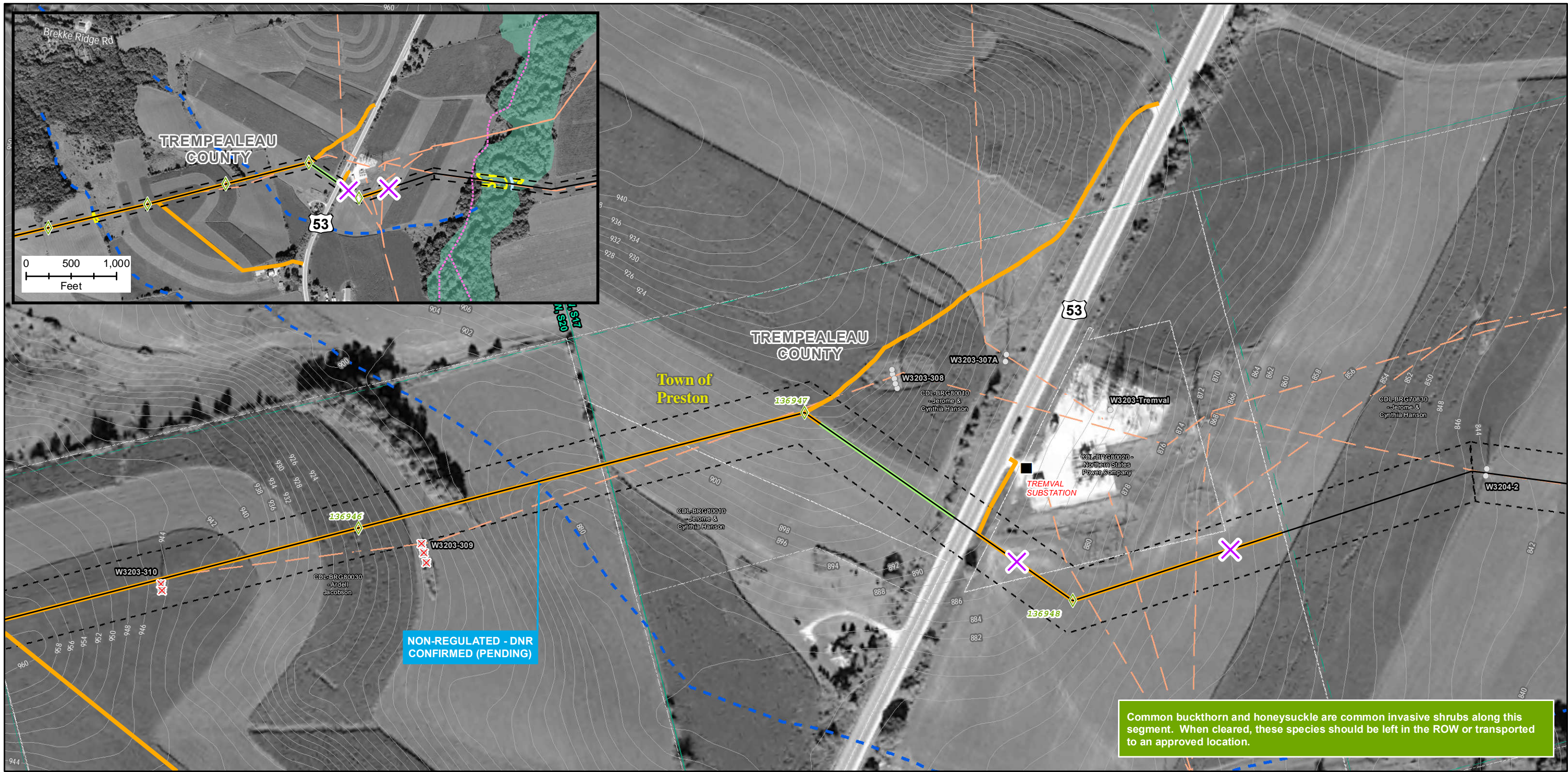
Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.

NON-REGULATED - DNR
CONFIRMED (PENDING)

NON-REGULATED -
DNR CONFIRMED
(PENDING)



<p>— Proposed Centerline</p>		<p>Transmission Right-of-Way*</p> <p>*Right-of-Way shown on this map is approximate and is shown for guidance only</p>		<p>Possible Wetland (WDNR Wetland)</p>		<p>City/Village/Town Boundary</p>		<p>BADGER COULEE 345 kV TRANSMISSION LINE PROJECT</p> <p>ENVIRONMENTAL ACCESS PLAN SEGMENT 8-NORTH</p>	
<p>◇ Proposed Pole DIRECT EMBED</p>		<p>◇ Proposed Pole CONCRETE FOUNDATION</p>		<p>◇ Proposed Pole ALT. FOUNDATION</p>		<p>..... Snowmobile Trails</p>		<p>Orthophotography: NAIP 2010</p>	
<p>— Vehicle Construction Access</p>		<p>— TCSB Temporary Clear Span Bridge</p>		<p>— Delineated Wetland</p>		<p>— Field Located Waterway</p>		<p>Xcel Energy</p>	
<p>— Clearing Access Only</p>		<p>STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY</p>		<p>— WDNR Perennial Stream</p>		<p>— WDNR Intermittent Stream</p>		<p>ATC AMERICAN TRANSMISSION COMPANY</p>	
<p>— Approximate Graded Construction Access and Work Pads</p>		<p>✕ Approximate wire set up area (Dimensions: Approximately 200' X 400')</p>		<p>— DATCP Identified Soils - Difficult to Decomact</p>		<p>— Property Line</p>		<p>0 100 200 Feet</p>	
<p>✕ Existing Pole to be Removed</p>		<p>— Topographic Line</p>		<p>— Invasive Species - Construction Technique Protocol Needed</p>		<p>— Property Line</p>		<p>3/9/2017</p>	
<p>○ Existing Pole</p>		<p>— Existing ATC Transmission Line</p>		<p>— Existing Non-ATC Transmission Line</p>		<p>— Property Line</p>		<p>Page 30 of 32</p>	
<p>— Existing Substation</p>		<p>— Invasive Species - Construction Technique Protocol Needed</p>		<p>— Property Line</p>		<p>— Property Line</p>		<p>The information presented in this map document is advisory and is intended for reference purposes only. Applicants' owned and operated facility locations are approximate. Data Sources: ATC, WDNR, WDOT, PSCW, FAA, Xcel Energy, DPC, County LTOs, MVC, NHLT, NRCS, WI DHS, WI DCF. Imagery NAIP 2010.</p>	



Proposed Centerline	Transmission Right-of-Way* <small>*Right-of-Way shown on this map is approximate and is shown for guidance only</small>	Possible Wetland (WDNR Wetland)	City/Village/Town Boundary
Proposed Pole DIRECT EMBED	Proposed Pole CONCRETE FOUNDATION	Proposed Pole ALT FOUNDATION	Snowmobile Trails
Vehicle Construction Access	TCSB Temporary Clear Span Bridge	Delineated Wetland	Field Located Waterway
Clearing Access Only	STOP - NO VEHICLE ACCESS FOOT TRAFFIC ONLY	WDNR Perennial Stream	WDNR Intermittent Stream
Approximate Graded Construction Access and Work Pads	Approximate wire set up area (Dimensions: Approximately 200' X 400')	DATCP Identified Soils - Difficult to Decompress	Property Line <small>Shown with: Parcel Number and Owner Name</small>
Existing Pole to be Removed	Topographic Line <small>Elevation</small>	Protected or Sensitive Resource - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed
Existing Pole	Existing Substation	Invasive Species - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed
Existing ATC Transmission Line	Existing Non-ATC Transmission Line	Invasive Species - Construction Technique Protocol Needed	Invasive Species - Construction Technique Protocol Needed

BADGER COULEE 345 kV TRANSMISSION LINE PROJECT

ENVIRONMENTAL ACCESS PLAN

SEGMENT 8-NORTH

Orthophotography: NAIP 2010

Xcel Energy

ATC
AMERICAN TRANSMISSION COMPANY

0 100 200 Feet

3/9/2017

Page 32 of 32

Common buckthorn and honeysuckle are common invasive shrubs along this segment. When cleared, these species should be left in the ROW or transported to an approved location.

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix B

Wetland Summary Table

Appendix B. Wetland Summary Table
ATC - Badger Coulee 345 kV Transmission Line Project

Wetland ID	EAP Map Page	Structures in Wetland	Community Description / Observations	Photo Number
P-W4	N/A	N/A	Feature removed during 2016 field investigations. Higher quality woodland with shagbark hickory, white and red oak, and black cherry in the canopy over ironwood and black cherry in the understory, with a herb layer dominated by Virginia creeper, pointed tick-trefoil, wild geranium, Penn sedge, hog peanut, and Canada mayflower.	N/A
P-W5	2	None	Narrow degraded wet meadow fringe along bank of the Black River. Common species include reed canary grass, giant goldenrod, sneezeweed, calico aster, cardinal flower, and a few scattered river birch at the water's edge.	1
			Feature adjusted during 2016 field investigation to remove an area of deciduous woodland on higher topography between river and old ox-bow; dominated by black walnut in the canopy over yellow-bud hickory saplings, prickly ash, snakeroot, and Virginia creeper.	
P-W5a	2	None	Hardwood swamp fringe along old ox-bow dominated by river birch, green ash, stinging nettle, shining sedge, and moneywort.	2
			Feature adjusted during 2016 field investigation. Feature was part of larger P-W5, but separated by area of higher topography dominated by black walnut in the canopy over yellow-bud hickory saplings, prickly ash, snakeroot, and Virginia creeper.	
N-W1	5	None	Shallow marsh within deep ditch receiving water from draitiles, banks 10-12 feet high. Common species include arrowhead, reed canary grass, wool-grass, interrupted fern, with scattered sandbar willow near bottom of ditch.	3
			Feature added during 2016 field investigation. Was previously identified as N-R1, but is comprised of shallow marsh within deep excavated ditch.	
N-W2	8	None	Small open water pond with narrow degraded wet meadow fringe dominated by Pennsylvania smartweed, white panicle aster, and reed canary grass.	4
N-W3	9, 10	None	Sedge meadow dominated by tussock sedge, joe-pye weed, sensitive fern, broad-leaf cattail, arrow-leaf tear-thumb, and softstem bulrush transitioning on the north end into pastured degraded sedge meadow. Degraded sedge meadow with tussock sedge, boneset, arrow-leaf tear-thumb, soft rush, and heal-all common.	5, 6
			Feature extended during 2016 field investigations on the north end to include additional area of pastured sedge meadow; followed distinct topo break.	
N-W4	10	None	Sedge meadow dominated by tussock sedge, jewelweed, giant goldenrod, joe-pye weed, arrow-leaf tear-thumb, lake sedge, sneezeweed, and sensitive fern.	7
N-W4a	13	None	Degraded wet meadow in low depression dominated by stinging nettle, jewelweed, interrupted fern and chickweed, with garlic mustard, stickseed, and reed canary grass less common.	8
			Feature extended during 2016 field investigations to include additional areas of degraded wet meadow within natural drainage swale.	
N-W4b	13	None	Degraded wet meadow within natural drainage dominated by stinging nettle and jewelweed with scattered elderberry, burdock, and angelica.	9
			Extends east and west as a hardwood swamp dominated by box elder, American elm, basswood, clearweed, interrupted fern, and jewelweed.	
			Feature extended during 2016 field investigations to account for widened Project corridor.	
N-W5	14, 15	136894	Predominantly degraded wet meadow with small inclusions of shrub-carr and hardwood swamp along eastern edge. Degraded wet meadow dominated by reed canary grass with stinging nettle, Canada thistle, giant goldenrod, Canada goldenrod and deadly nightshade.	10, 11, 12
			Shrub-carr with sandbar willow over reed canary grass; hardwood swamp dominated by box elder with quaking aspen and green ash over reed canary grass.	

Appendix B. Wetland Summary Table
ATC - Badger Coulee 345 kV Transmission Line Project

Wetland ID	EAP Map Page	Structures in Wetland	Community Description / Observations	Photo Number
N-W6	17	None	Degraded wet meadow dominated by reed canary grass, jewelweed, wild cucumber, and Canada thistle. Transitions east and west into hardwood swamp with common buckthorn, hackberry, box elder stinging nettle, reed canary grass, and jewelweed.	13, 14
N-W6a	19	None	Degraded wet meadow dominated by reed canary grass with some stinging nettle and giant goldenrod.	15
N-W7	19	None	Degraded wet meadow dominated by reed canary grass with some Canada thistle, stinging nettle, jewelweed, and scattered elderberry.	16
N-W8	20	None	Degraded wet meadow dominated by reed canary grass which serves as an agricultural drainage swale.	17
			Feature reduced during 2016 field investigations to drainage swale only; removed higher topo agricultural fields exhibiting no crop stress, hydric soils or hydrophytic weed species.	
N-W8a	20	None	Degraded wet meadow in natural swale dominated by reed canary grass, jewelweed, and stinging nettle.	18
			Feature added during 2016 field investigations. Previously mapped as waterway N-R6b.	
N-W9	21	None	Shrub-carr along waterway dominated by speckled alder, elderberry, reed canary grass, stinging nettle, jewelweed, woolly sedge, riverbank grape, arrow-leaf tear-thumb, and giant goldenrod.	19
			Feature reduced during 2016 field investigations to only include community immediately adjacent to waterway. Adjoining agricultural field showed no signs of crop stress and no hydrophytic weeds were observed.	
N-W11	23	None	Degraded wet meadow dominated by reed canary grass with giant goldenrod, joe-pye weed, sensitive fern, woolgrass, and boneset.	20
N-W12	23	None	Degraded wet meadow dominated by reed canary grass with giant goldenrod, stinging nettle, arrow-leaf tear-thumb, joe-pye weed, sensitive fern, woolgrass, boneset and giant ragweed less common.	21
N-W12a	24	None	Degraded wet meadow along waterway dominated by giant goldenrod, angelica, reed canary grass, elderberry, stinging nettle, giant ragweed, and jewelweed.	22
			Feature added during 2016 field investigations to include the wetland community distinct from the waterway bed/banks.	
N-W15	25	None	Alder thicket with speckled alder and scattered elderberry shrubs over jewelweed, skunk cabbage, and giant goldenrod.	23
N-W15a	26	None	Degraded wet meadow extending beyond cleared ROW into hardwood swamp. Degraded wet meadow dominated by reed canary grass with jewelweed, sensitive fern, woolgrass, Canada thistle, stinging nettle and giant goldenrod less common.	24, 25
			Hardwood swamp with American elm and box elder over jewelweed and interrupted fern.	
			Feature extended during 2016 field investigations to account for widened Project corridor.	
N-W15b	26	None	Degraded wet meadow extending beyond cleared ROW into hardwood swamp. Degraded wet meadow partially mowed by landowner for deer stand access and dominated by reed canary grass with jewelweed, sensitive fern and giant goldenrod less common.	26, 27
			Hardwood swamp with box elder over elderberry, grey dogwood, reed canary grass, jewelweed, stinging nettle, and red raspberry.	
			Feature extended during 2016 field investigations to account for widened Project corridor.	
N-W16	27	None	Degraded wet meadow dominated by reed canary grass with giant goldenrod, stinging nettle and Canada thistle less common. Extends to the west beyond the Project ROW to a shallow open water pond with a fringe of narrow-leaf cattail and willow.	28
N-W17	28	None	Degraded wet meadow in agricultural swale dominated by reed canary grass with pockets of sensitive fern and woolgrass.	29

Appendix B. Wetland Summary Table
ATC - Badger Coulee 345 kV Transmission Line Project

Wetland ID	EAP Map Page	Structures in Wetland	Community Description / Observations	Photo Number
N-W18	28, 29	136935	<p>Larger wetland complex with degraded wet meadow, shrub-carr, hardwood swamp, and farmed wetland communities. Degraded wet meadow at south end of feature dominated by reed canary grass and angelica with stinging nettle, giant goldenrod, and jewelweed less common.</p> <p>Shrub-carr dominated by elderberry over reed canary grass, jewelweed, stinging nettle, and arrow-leaf tear-thumb. Beyond cleared ROW, transitions into hardwood swamp dominated by silver maple, box elder, and black willow over reed canary grass and jewelweed.</p> <p>North half of feature is farmed wetland with areas of stunted/stressed crop observed with hydrophytic weed species including field nutsedge, yellow foxtail, and fall panic grass.</p> <p>Feature extended during 2016 field investigations on south end to bring edge of wetland to abrupt topographic break and include additional degraded wet meadow dominated by reed canary grass and angelica.</p>	30, 31
N-W19	N/A	N/A	Feature removed during 2016 field investigations. Area comprises a depression characterized by old field vegetation dominated by Canada goldenrod, wild parsnip, common milkweed, Queen Anne's-lace and smooth brome with scattered reed canary grass and giant goldenrod. Wetland is present west of the ROW, but does not extend into the Project corridor.	N/A
N-W20	29	None	Degraded wet meadow dominated by reed canary grass with woolgrass, joe-pye weed, giant goldenrod, boneset and sensitive fern less common.	32
N-W21	30	None	Degraded wet meadow dominated by reed canary grass with sensitive fern, arrow-leaf tear-thumb, stinging nettle, spotted lady's-thumb and jewelweed less common.	33
N-W22	30, 31	None	<p>Degraded wet meadow dominated by field nutsedge, woolgrass, giant goldenrod, reed canary grass, boneset, soft rush, jewelweed, and giant ragweed.</p> <p>Feature extended during 2016 field investigations to include additional areas of degraded wet meadow on north and west sides.</p>	34
N-W23	31	None	Degraded wet meadow in natural swale dominated by giant goldenrod, reed canary grass, soft rush and jewelweed, with swamp milkweed less common.	35

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix C

Photographs of Wetlands and Waterways

Wetland Photographs

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 01. P-W5; vW. Aug 2016



Photo 02. P-W5a; vW. Aug 2016



Photo 03. N-W1; vS. Aug 2016



Photo 04. N-W2; vNW. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 05. N-W3 SM; vW. Aug 2016



Photo 06. N-W3 DSM at N end; vE. Aug 2016



Photo 07. N-W4; vN. Aug 2016



Photo 08. N-W4a; vS. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 09. N-W4b DWM at center of feature; vNW. Aug 2016



Photo 10. N-W5 DWM; vS. Aug 2016



Photo 11. N-W5 HS; vE. Aug 2016



Photo 12. N-W5 SC; vNE. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 13. N-W6 DWM; vNE. Aug 2016



Photo 14. N-W6 HS; vNW. Aug 2016



Photo 15. N-W6a; vN. Aug 2016



Photo 16. N-W7; vN. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 17. N-W8; vNW. Aug 2016



Photo 18. N-W8a; vNW. Aug 2016



Photo 19. N-W9; vSE. Aug 2016



Photo 20. N-W11; vS. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 21. N-W12; vN. Aug 2016



Photo 22. N-W12a; vNW. Aug 2016



Photo 23. N-W15; vE. Aug 2016



Photo 24. N-W15a DWM; vNE. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 25. N-W15a HS; vNE. Aug 2016



Photo 26. N-W15b DWM; vW. Aug 2016



Photo 27. N-W15b HS; vNE. Aug 2016



Photo 28. N-W16; vNE. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 29. N-W17; vS. Aug 2016



Photo 30. N-W18 from S end; vN. Aug 2016



Photo 31. N-W18 HS; vNE. Aug 2016



Photo 32. N-W20; vN. Aug 2016

Appendix C. Photographs of Wetlands - Chronological from South to North



Photo 33. N-W21; vNE. Aug 2016



Photo 34. N-W22; vSW. Aug 2016



Photo 35. N-W23; vNW. Aug 2016

Waterway Photographs

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 01. P-R3; vN. Aug 2016



Photo 02. P-R3; vS. Aug 2016



Photo 03. P-R4; vE. Aug 2016



Photo 04. N-R2; vE. Aug 2016

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 05. N-R3; vNE. Aug 2016



Photo 06. N-R4; vW. Aug 2016



Photo 07. N-R5; vSE. Aug 2016



Photo 07a. N-R5c; vN. Jan 2017

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 08. N-R5a; vSE toward feature. Jan 2017



Photo 09. N-R5b; vE. Aug 2016



Photo 10. N-R6; vE. Aug 2016



Photo 11. N-R7; vSE. Aug 2016

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 12. N-R8; vNE. Aug 2016



Photo 13. N-R9; vNW. Aug 2016



Photo 14. N-R9a; vNE. Aug 2016



Photo 15. N-R9b; vE. Aug 2016

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 16. N-R10; vSE. Aug 2016



Photo 17. N-R11; vSW. Aug 2016



Photo 18. N-R11a; vW. Aug 2016



Photo 19. N-R11b; vE. Aug 2016

Appendix C. Photographs of Waterways - Chronological from South to North



Photo 20. N-R11c; vE. Aug 2016

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix D

TCSB Plan and Profile Figures

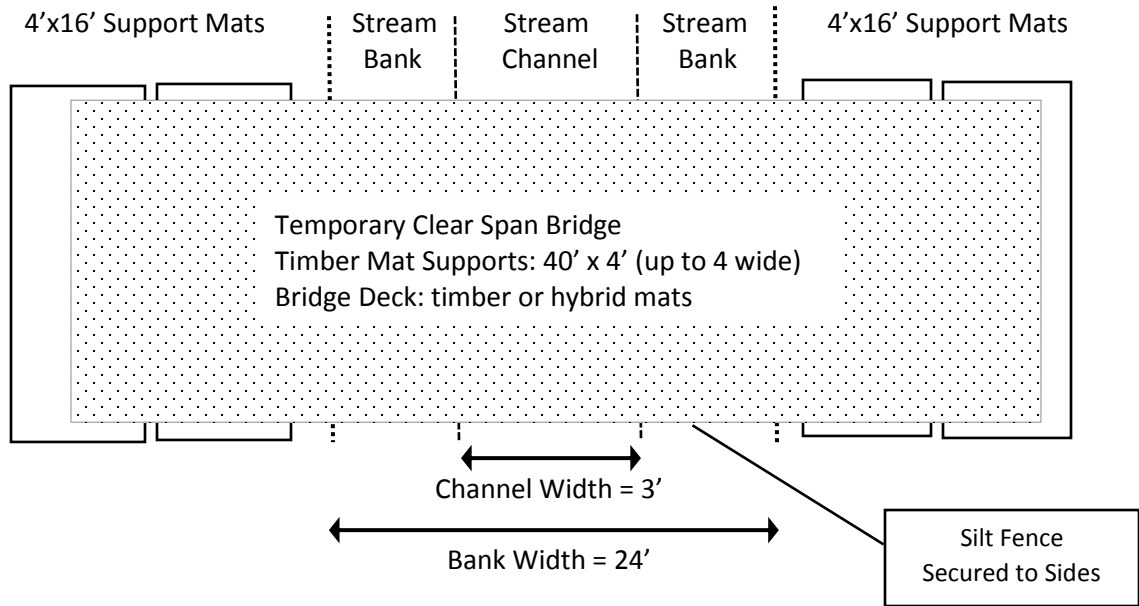
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

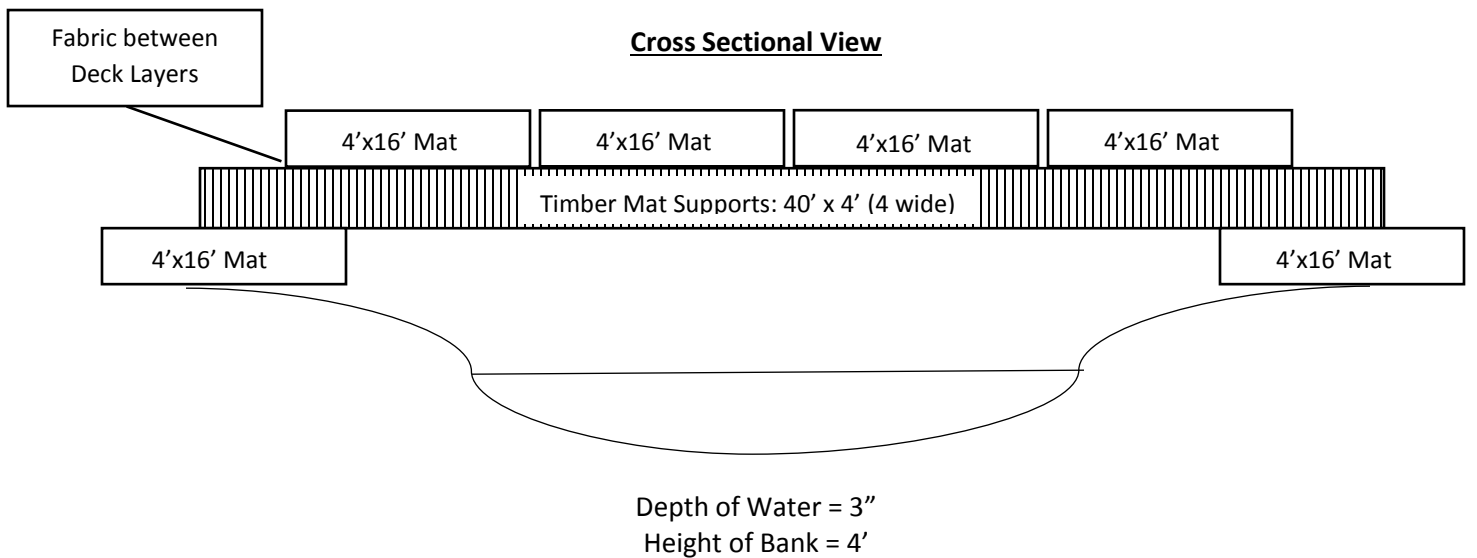
Waterway: N-R2

Nearest Structure: 136881

Plan View



Cross Sectional View



- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

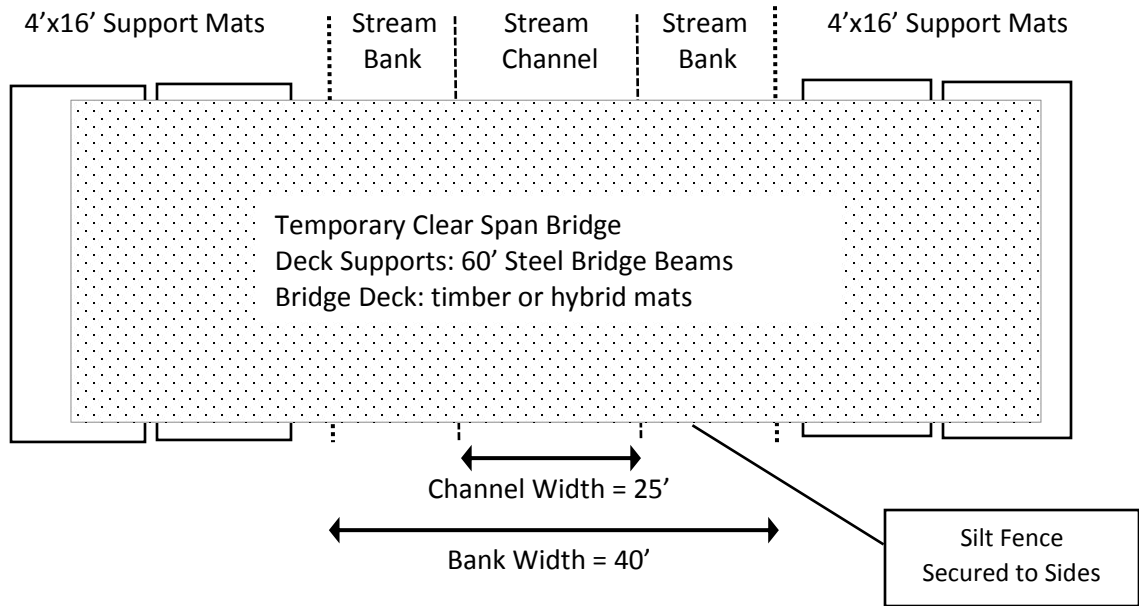
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

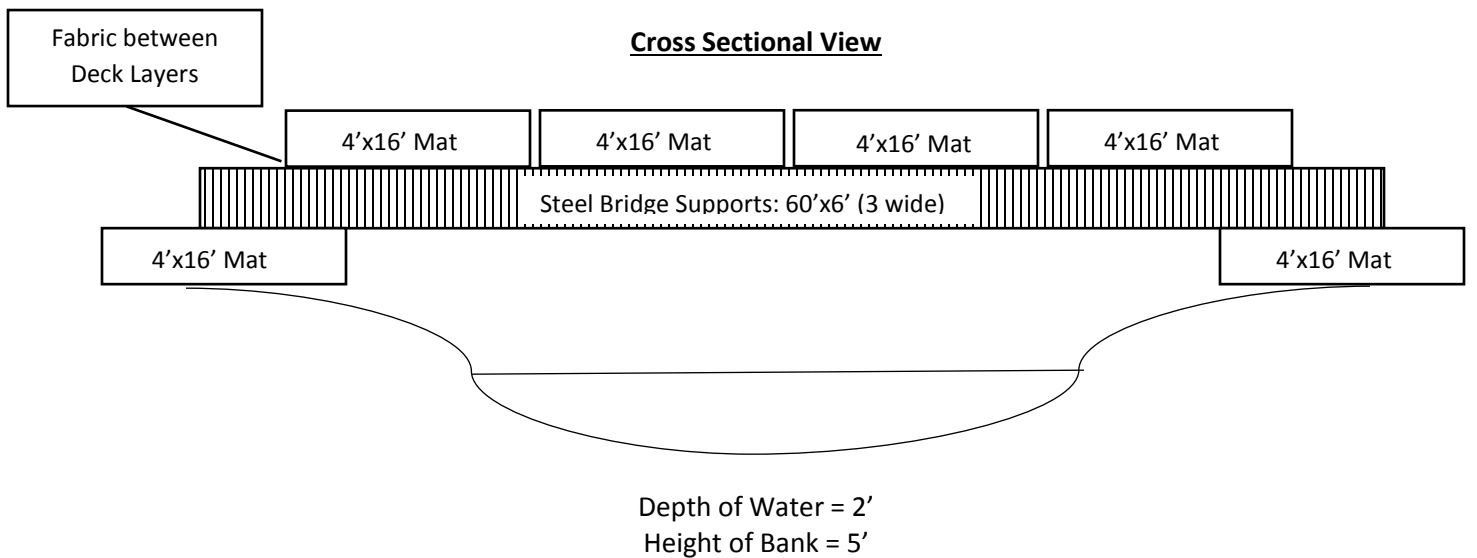
Waterway: N-R4

Nearest Structure: 136894

Plan View



Cross Sectional View



- Drawings are not to scale
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

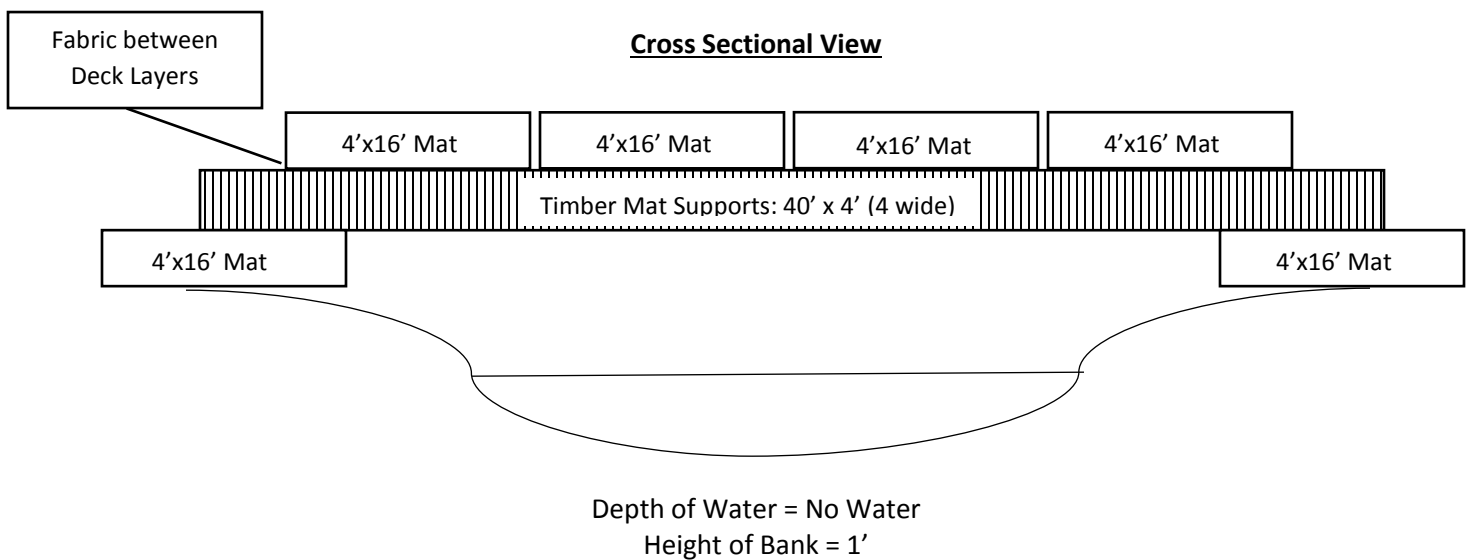
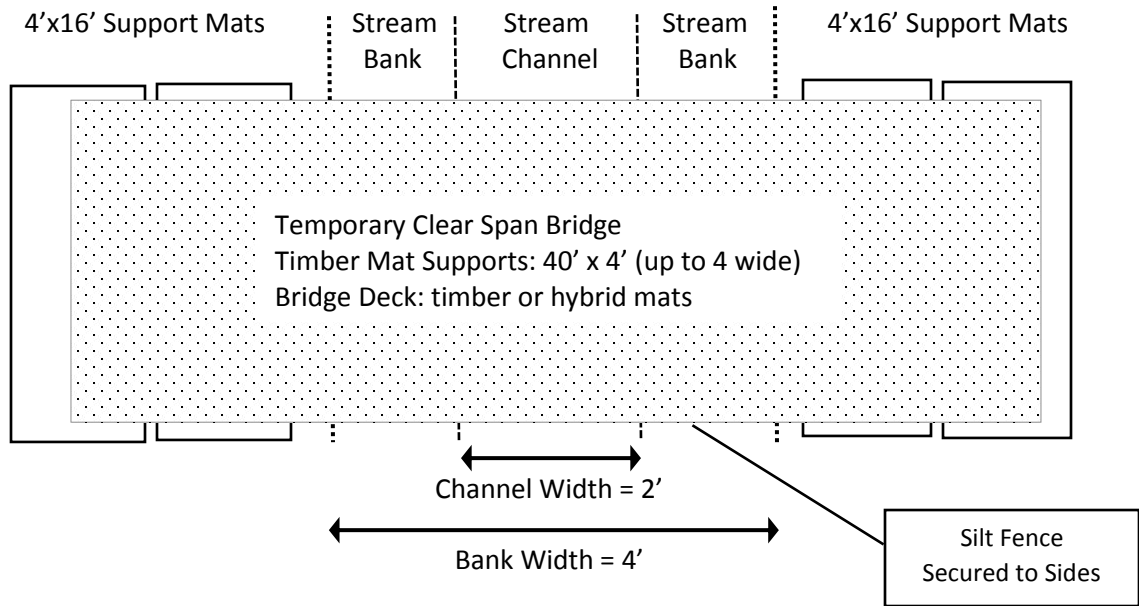
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

Waterway: N-R5c (Along off-ROW access road)

Nearest Structure: 136902

Plan View



- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

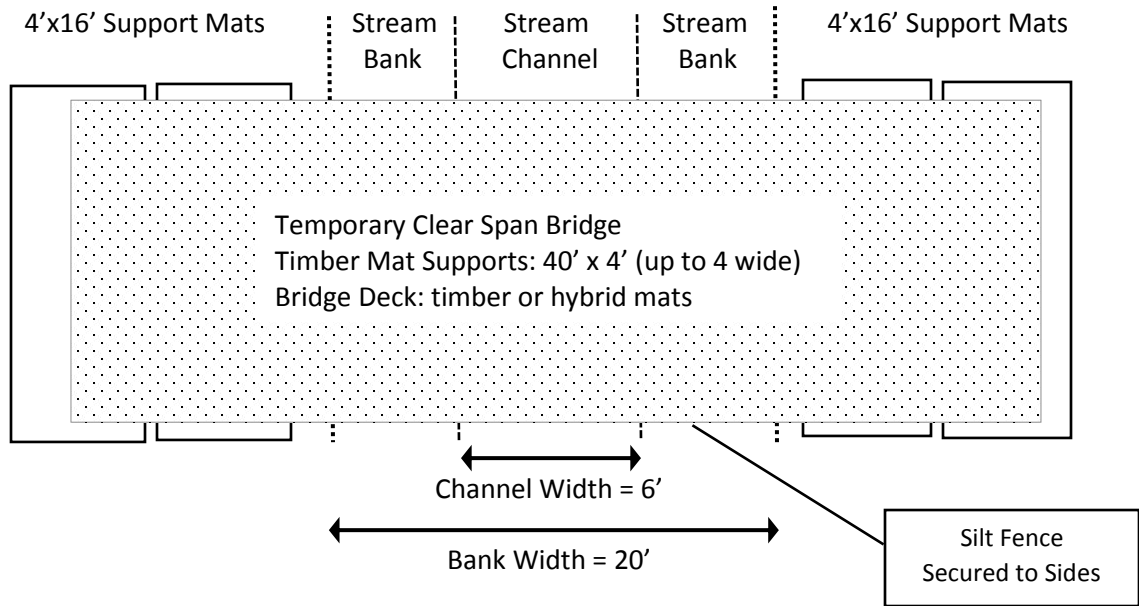
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

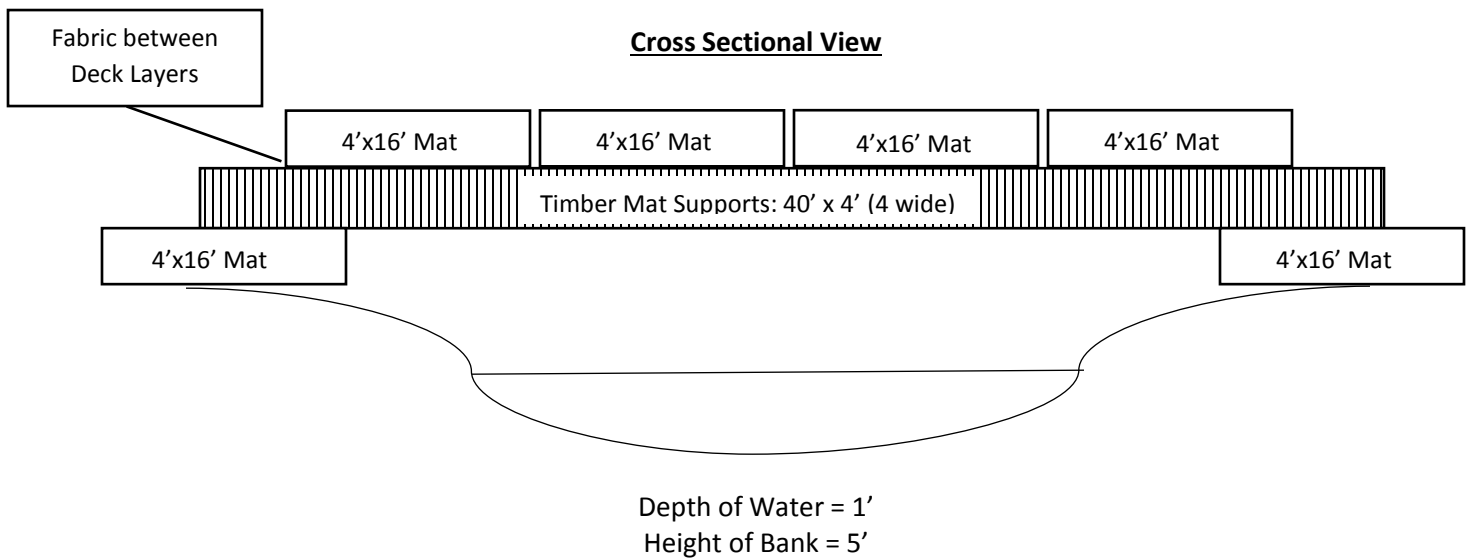
Waterway: N-R6

Nearest Structure: 136908

Plan View



Cross Sectional View



- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

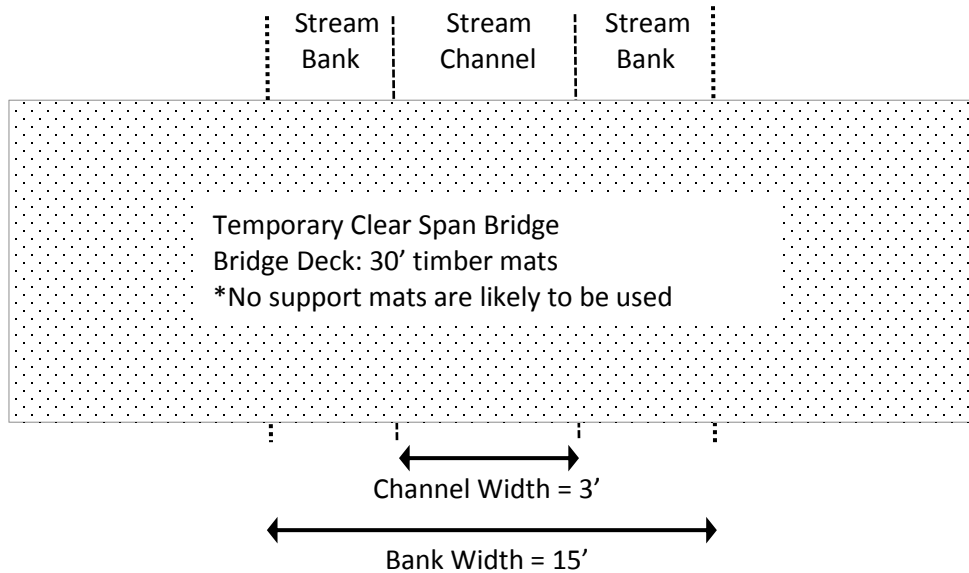
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

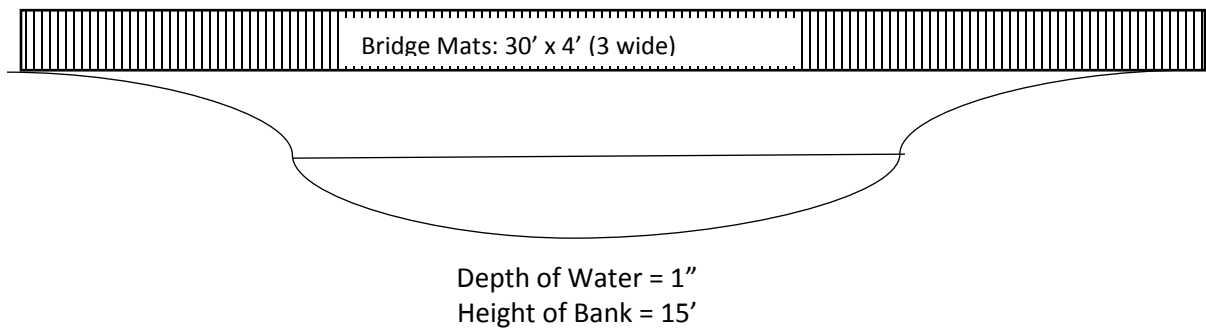
Waterway: N-R9a

Nearest Structure: 136925

Plan View



Cross Sectional View



- Drawings are not to scale
- These mats are for clearing purposes only and will be in place for a short duration (less than one week) and will only be crossed with tracked clearing equipment.
- Anchors: Because these bridges will be in place for short duration, bridge anchors will not be used unless instructed by ATC Environmental Monitors as a result of weather/ground conditions
- Sediment Controls: Because of minimal use of this bridge, no sediment controls will be installed. Crews will be instructed to prevent sediment from entering the waterway.

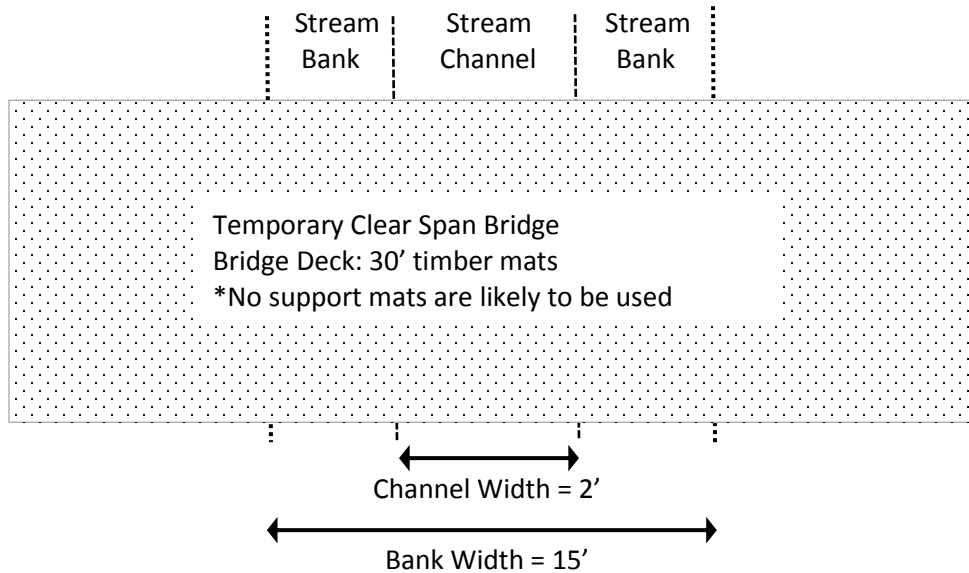
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

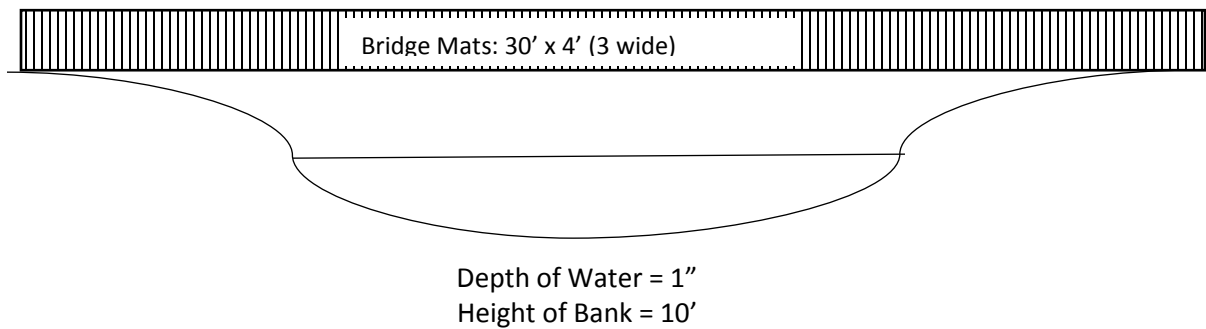
Waterway: N-R9b

Nearest Structure: 136926

Plan View



Cross Sectional View



- Drawings are not to scale
- These mats are for clearing purposes only and will be in place for a short duration (less than one week) and will only be crossed with tracked clearing equipment.
- Anchors: Because these bridges will be in place for short duration, bridge anchors will not be used unless instructed by ATC Environmental Monitors as a result of weather/ground conditions
- Sediment Controls: Because of minimal use of this bridge, no sediment controls will be installed. Crews will be instructed to prevent sediment from entering the waterway.

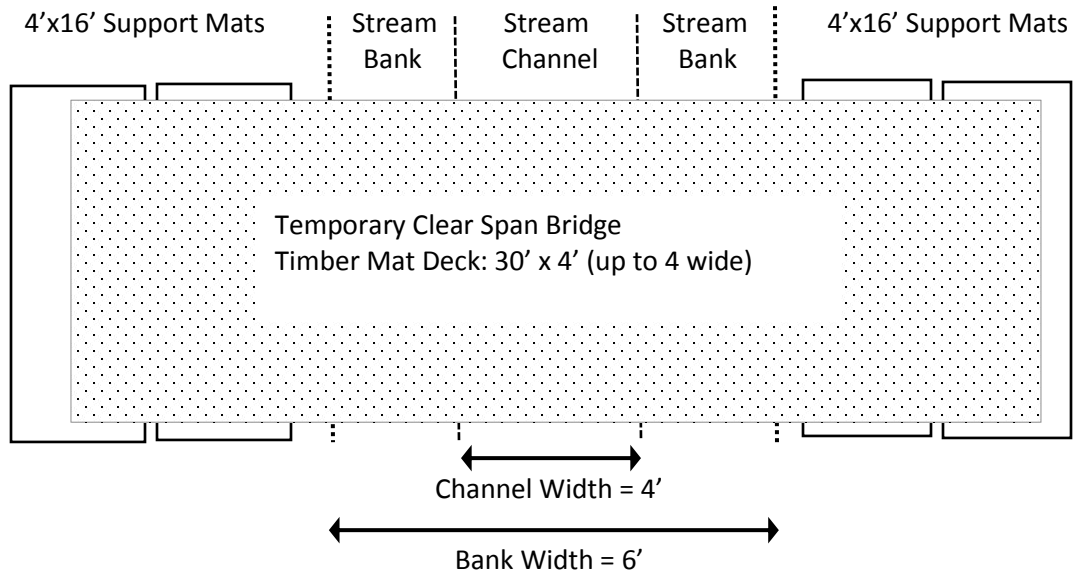
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

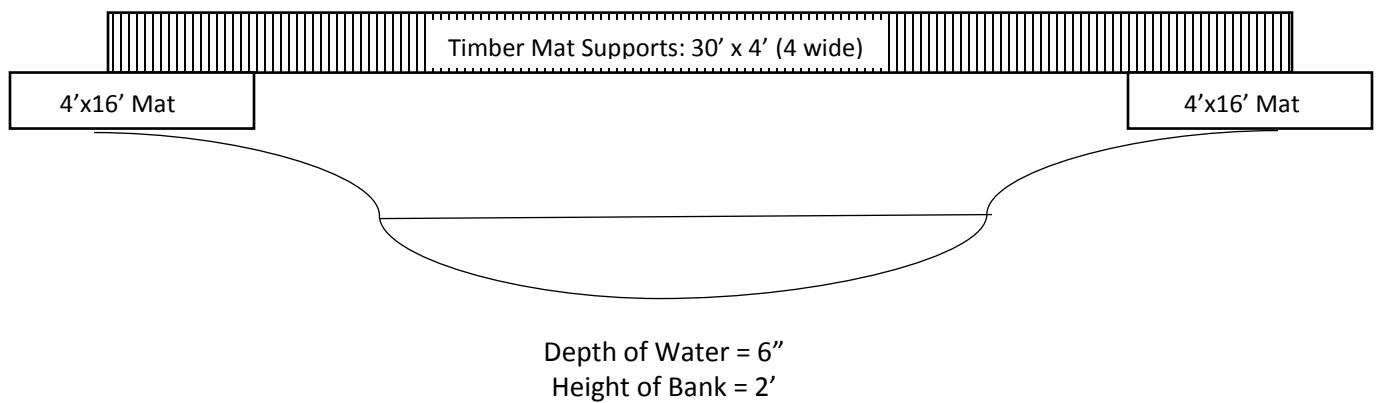
Waterway: N-R10

Nearest Structure: 136926

Plan View



Cross Sectional View



- Drawings are not to scale
- These mats are for clearing purposes only and will be in place for a short duration (less than one week) and will only be crossed with tracked clearing equipment.
- TCSB will be secured to a fixed anchor
- Sediment Controls: Because of minimal use of this bridge, no sediment controls will be installed. Crews will be instructed to prevent sediment from entering the waterway.

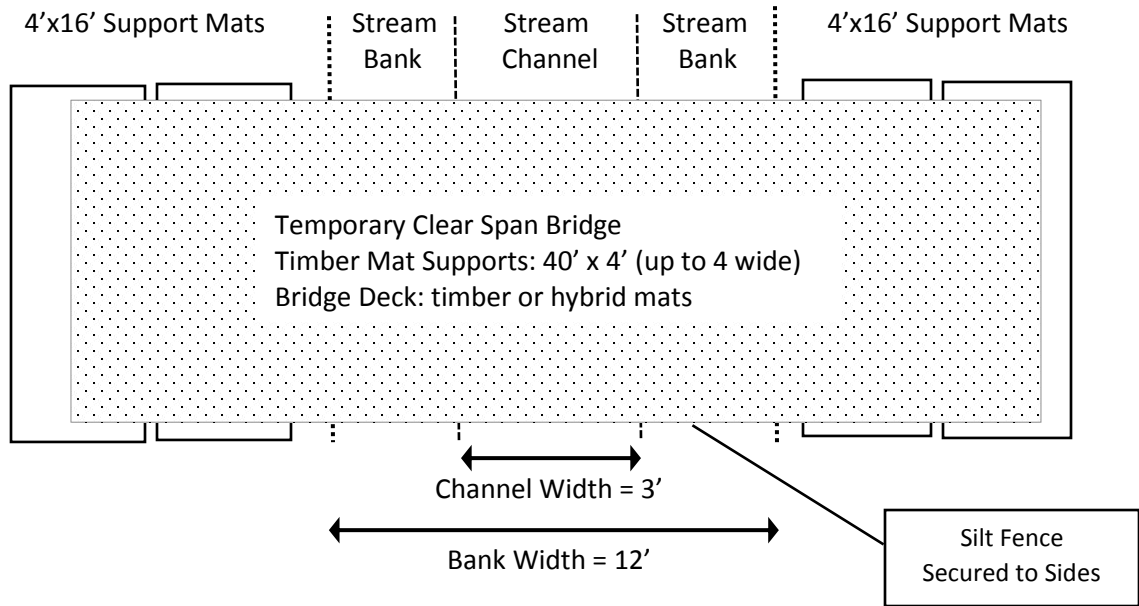
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

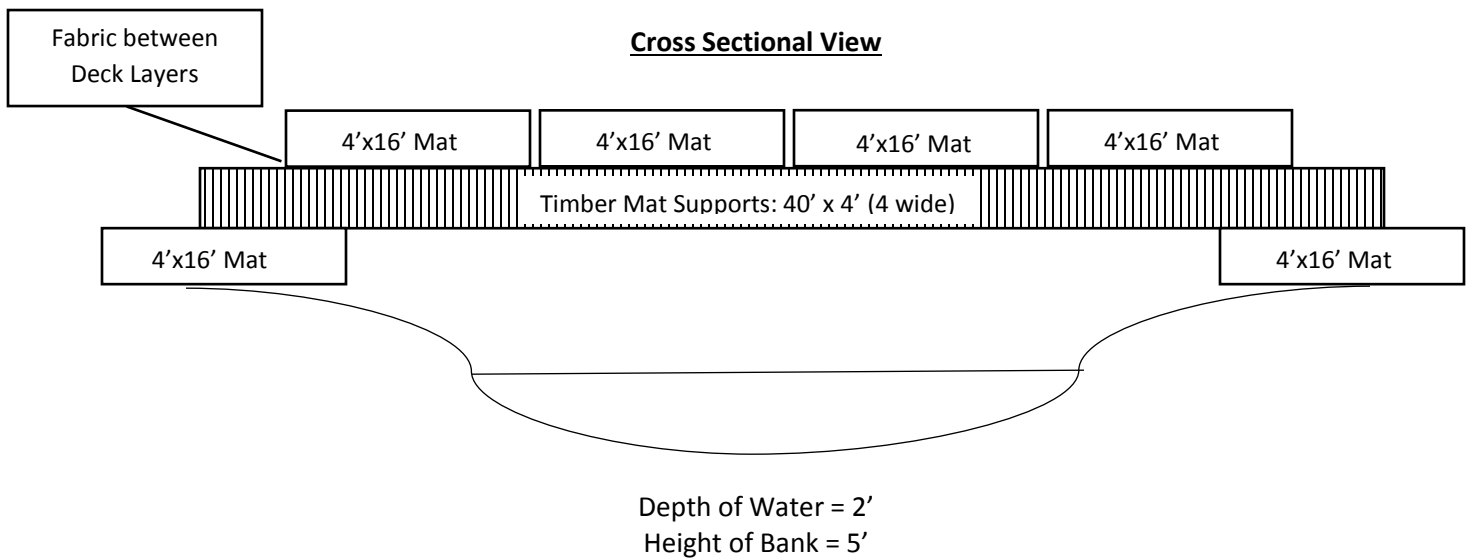
Waterway: N-R11a

Nearest Structure: 136935

Plan View



Cross Sectional View



- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

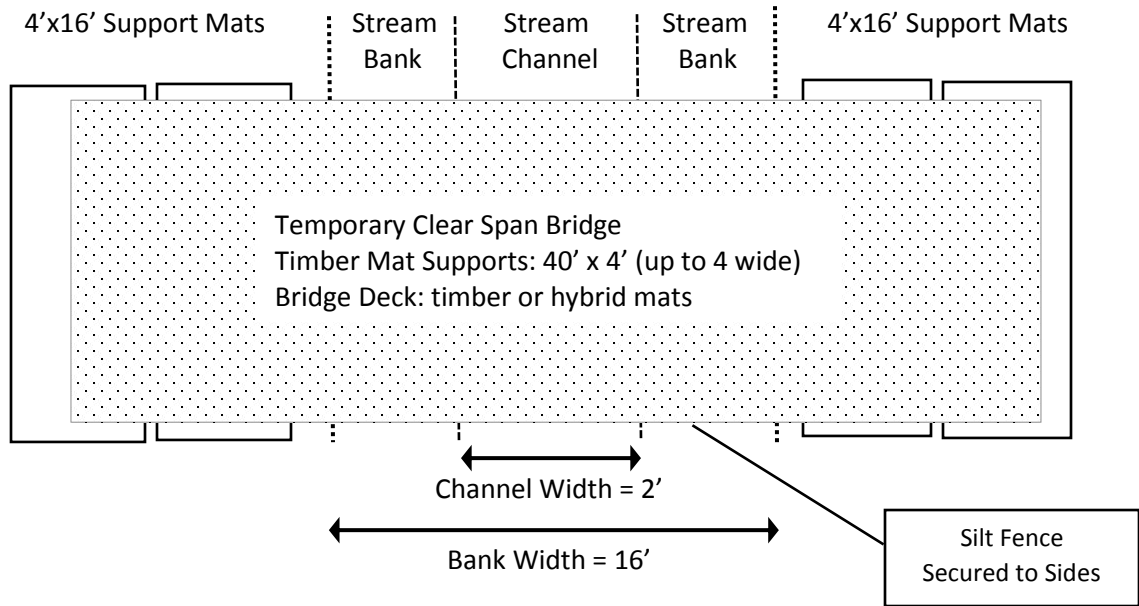
**Badger Coulee
Temporary Clear Span Bridge Typical Drawing**

Segment: 8

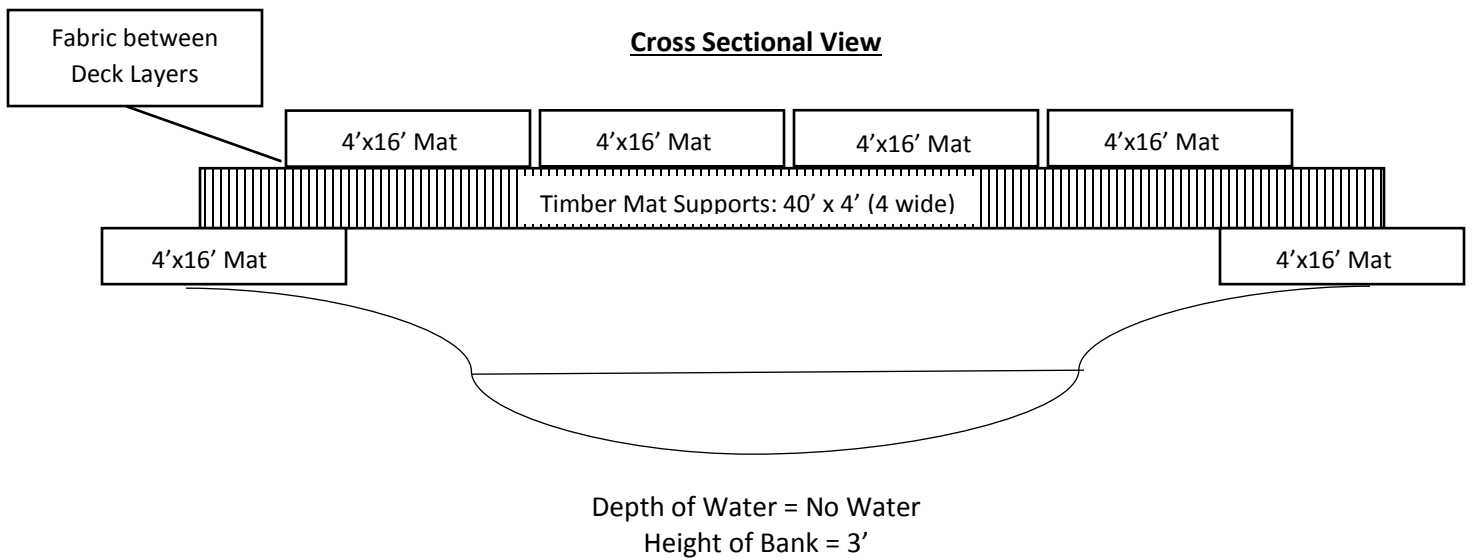
Waterway: N-R11b

Nearest Structure: 136936

Plan View



Cross Sectional View



- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Silt fence shall be attached to the bridge sides and fabric laid between the deck layers.

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix E

Photographs of Waterways Requiring a Navigability Decision

Appendix E. Photographs of Waterways Requiring a Navigability Concurrence - Chronological from South to North



Photo 01. Feature S of STR 136869; vS. Aug 2016



Photo 02 Feature N of STR 136877; vN. Aug 2016



Photo 03. Feature N of STR 136884; vN. Aug 2016



Photo 04. Feature N of STR 136889; vN. Aug 2016

Appendix E. Photographs of Waterways Requiring a Navigability Concurrence - Chronological from South to North



Photo 05. Feature S of STR 136890; vNW. Aug 2016



Photo 06. Feature N of STR 136890; vNW. Aug 2016



Photo 07. Feature N of STR 136894; vNW. Aug 2016



Photo 08. Feature W of STR 136898; vNE. Aug 2016

Appendix E. Photographs of Waterways Requiring a Navigability Concurrence - Chronological from South to North



Photo 09. Feature N of STR 136907; vE. Aug 2016



Photo 10. Feature S of STR 136912; vNW. Aug 2016



Photo 11. Feature N of STR 136912; vNW. Aug 2016



Photo 12. Feature N of STR 136918; vSE. Aug 2016

Appendix E. Photographs of Waterways Requiring a Navigability Concurrence - Chronological from South to North



Photo 13. Feature N of STR 136927; vE. Aug 2016



Photo 14. Feature S of STR 136942; vNW. Aug 2016



Photo 15. Feature S of STR 136943; vSW. Aug 2016



Photo 16. Feature S of STR 136945; vNW. Aug 2016

Appendix E. Photographs of Waterways Requiring a Navigability Concurrence - Chronological from South to North



Photo 17. Feature N of STR 136946; vNE. Aug 2016

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix F

Approved Waivers of Seasonal Limitations for TCSBs

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: NW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 13, Town 19 N, Range 8W

Name of Waterbody: N-R2 (UNT to Dutch Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/~~are not~~ (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

David C. Wathes

Department Fisheries Biologist

3/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: SW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 36, Town 20 N, Range 8W

Name of Waterbody: N-R4 (Beaver Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are are not (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

Daniel C. Hatto

Department Fisheries Biologist

03/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: SE $\frac{1}{4}$, NW $\frac{1}{4}$, Section 25, Town 20 N, Range 8W

Name of Waterbody: N-R5c (UNT to North Fork Beaver Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/are not (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

David C. Walter
Department Fisheries Biologist

03/14/2017
Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: SE SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 19, Town 20 N, Range 7W

Name of Waterbody: N-R6 (UNT to North Fork Beaver Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/are not (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by: David C. Hatt

Department Fisheries Biologist

3/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 6, Town 20 N, Range 7W

Name of Waterbody: N-R9a (UNT to Bear Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are are not (circle one) necessary to protect fish spawning for the proposed project and I approve (circle one) this waiver.

Signed by:

David C. Hall

Department Fisheries Biologist

03/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 6, Town 20 N, Range 7W

Name of Waterbody: N-R9b (UNT to Bear Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/~~are not~~ (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

David C. Hall

Department Fisheries Biologist

3/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 6, Town 20 N, Range 7W

Name of Waterbody: N-R10 (UNT to Bear Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/~~are not~~ (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

David C. Hall

Department Fisheries Biologist

3/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: SW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 29, Town 21 N, Range 7W

Name of Waterbody: N-R11a (UNT to Reynolds Coulee Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/~~are not~~ (circle one) necessary to protect fish spawning for the proposed project and approve/disapprove (circle one) this waiver.

Signed by:

David C. Halls

Department Fisheries Biologist

3/14/2017

Date

APPENDIX 1

Request for Waiver of Construction Season Limits in Waterway General Permits

This checklist shall be used to request a waiver from the time period restrictions and/or fish passage requirements for applicable projects that qualify for WDNR-GP12-2015. The completed waiver request may be submitted with the application where the applicant seeks a waiver from the applicable statewide general permit conditions that place fisheries based restrictions on the project. The signature of the Department Fisheries Biologist on this checklist only waives the time period and/or fish passage restrictions and does not constitute a permit, approval, or other concurrence with the proposed project.

Applicant Name: ATC; NSPW; DPC; SMMPA WI, LLC and WPPI Energy

Proposed Project: Badger Coulee 345 kV Transmission Line Project

Project Location: SW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 29, Town 21 N, Range 7W

Name of Waterbody: N-R11b (UNT to Reynolds Coulee Creek)

County of Waterbody: Trempealeau

FOR DNR USE ONLY

The applicant listed above has consulted with me about their proposed project in navigable waters. Based on their project description, plans and other existing information available to me, I find that:

- ☐ there is suitable habitat at or near the proposed project, or
- ☐ there may be an impact on spawning fish or spawning activities.

Or

- ☐ there is no suitable habitat at or near the proposed project, or
- ☒ there will be no impact on spawning fish or spawning activities.

Consequently, the time period restrictions of the applicable statewide general permit are/are not (circle one) necessary to protect fish spawning for the proposed project and I approve/disapprove (circle one) this waiver.

Signed by:

David C. Hall

Department Fisheries Biologist

3/14/2017

Date

Badger Coulee 345 kV Transmission Line Project

Segment 8-North CMP

Appendix G

Project Wetland Impacts and Compensatory Mitigation Acres

Summary of Wetland Impacts and Compensatory Mitigation Acres - Segment 8-North

Badger Coulee 345 kV Transmission Line Project

Watershed (BSA) ¹	Wetland Cover Types ²	Permanent Impacts (acre) ³					Temporary Impacts (acre) ⁴					Total Credits ⁵ Permanent + Temporary Impacts
		Structure Impacts ^A	Conversion ^A	Mitigation Ratio (structure)	Mitigation Ratio (conversion)	Total Credits Needed	Matting (ROW)	Matting (off-ROW)	Conversion (off-ROW)	Mitigation Ratio	Total Credits Needed	
Upper Mississippi - Black - Root (UMBR)	Farmed Wetland (Seasonally Flooded Basin)	0.004	na	1.45	na	0.006	na	na	na	na	0.000	0.01
	Sedge Meadow	0.000	na	1.45	na	0.000	0.242	na	na	0.25	0.061	0.06
	Wet Meadow (Degraded)	0.003	na	1.45	na	0.004	na	na	na	na	0.000	0.01
	Shrub-Carr	0.000	0.264	1.45	0.50	0.132	na	na	0.000	0.25	0.000	0.13
	Alder Thicket	0.000	0.287	1.45	0.50	0.144	na	na	0.000	0.25	0.000	0.14
	Hardwood Swamp	0.000	0.397	1.45	0.50	0.199	na	na	0.000	0.25	0.000	0.20
	TOTAL	0.007	0.948	na	na	0.484	0.242	0.000	0.000	na	0.061	0.55

Notes/Assumptions:

- 1 Bank Service Areas are based on Guidelines for Wetland Compensatory Mitigation in Wisconsin, Version 1, August 2013.
- 2 Wetland cover types are based on Eggers and Reed, 2011, Wetland Plants and Plant Communities of Minnesota and Wisconsin, Third Edition.
- 3 Permanent wetland impacts include transmission structure placement in wetlands and permanent conversion of shrub or forested wetlands.
- 4 Mitigation is required for temporary matting within high-quality or difficult to replace (DTR) herbaceous wetlands, specifically non-degraded sedge meadow.
- 5 It is anticipated that a combination of the ILF program and wetland mitigation banking will be used for mitigation. Total wetland credits are based on replacement ratios of 0.25:1 for temporary matting of non-degraded sedge meadow, 1.45:1 for permanent structure impacts, and 0.5:1 for permanently converted shrub and forested wetlands. Total credits are rounded to the nearest 0.01, as this is the minimum amount of credits that can be purchased.
- A Impact acreages provided by Stantec Consulting Services Inc.